

THIS FILE IS MADE AVAILABLE THROUGH THE DECLASSIFICATION EFFORTS AND RESEARCH OF:

THE BLACK VAULT

THE BLACK VAULT IS THE LARGEST ONLINE FREEDOM OF INFORMATION ACT / GOVERNMENT RECORD CLEARING HOUSE IN THE WORLD. THE RESEARCH EFFORTS HERE ARE RESPONSIBLE FOR THE DECLASSIFICATION OF THOUSANDS OF DOCUMENTS THROUGHOUT THE U.S. GOVERNMENT, AND ALL CAN BE DOWNLOADED BY VISITING:

[HTTP://WWW.BLACKVAULT.COM](http://www.blackvault.com)

YOU ARE ENCOURAGED TO FORWARD THIS DOCUMENT TO YOUR FRIENDS, BUT PLEASE KEEP THIS IDENTIFYING IMAGE AT THE TOP OF THE .PDF SO OTHERS CAN DOWNLOAD MORE!

DOCUMENT RESUME

ED 103 726

CG 009 576

TITLE Individual Rights and the Federal Role in Behavior Modification; A Study Prepared by the Staff of the Subcommittee on Constitutional Rights of the Committee on the Judiciary, United States Senate, Ninety-third Congress, Second Session.

INSTITUTION Congress of the U.S., Washington, D.C. Senate Committee on the Judiciary.

PUB DATE Nov 74

NOTE 655p.

AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock No. 5270-02620, \$5.35)

EDRS PRICE MF-\$ 1.08 HC-\$33.64 PLUS POSTAGE

DESCRIPTORS Behavioral Objectives; *Behavioral Science Research; *Civil Liberties; *Government Publications; *Government Role; Role Perception; Technological Advancement

ABSTRACT

This report responds to a directive issued to the Senate Subcommittee on Constitutional Rights to conduct an investigation into behavior modification programs, with particular emphasis on the federal government's involvement in the technology of behavior control and the implications of this involvement for individual rights. Two basic considerations motivated the investigation: first, the concern that the rights of human subjects of behavioral research are sufficiently protected by adequate guidelines and review structures; and second, the question of whether the federal government has any business participating in programs that may alter the substance of individual freedom. Although the material included in this report is by no means comprehensive, some initial findings are apparent: (1) there is widespread and growing interest in the development of methods designed to predict, identify, control, and modify individual behavior; (2) few measures are being taken to resolve questions of freedom, privacy, and self-determination; (3) the Federal government is heavily involved in a variety of behavior modification programs ranging from simple reinforcement techniques to psychosurgery; and (4) a number of departments and agencies fund, participate in, or sanction research involving various aspects of behavior modification. (Author/PC)

ED103726

INDIVIDUAL RIGHTS AND THE FEDERAL
ROLE IN BEHAVIOR MODIFICATION

A STUDY PREPARED BY
THE STAFF OF THE SUBCOMMITTEE ON CONSTITUTIONAL RIGHTS
OF THE
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE
NINETY-THIRD CONGRESS
SECOND SESSION

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.



NOVEMBER 1974

Printed for the use of the Committee on the Judiciary

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1974

39-744

CG 009 576

2/3

COMMITTEE ON THE JUDICIARY

JAMES O. EASTLAND, Mississippi, *Chairman*

JOHN L. McCLELLAN, Arkansas
SAM J. ERVIN, Jr., North Carolina
PHILIP A. HART, Michigan
EDWARD M. KENNEDY, Massachusetts
BIRCH BAYH, Indiana
QUENTIN N. BURDICK, North Dakota
ROBERT C. BYRD, West Virginia
JOHN V. TUNNEY, California

ROMAN L. HRUSKA, Nebraska
HIRAM L. FONG, Hawaii
HUGH SCOTT, Pennsylvania
STROM THURMOND, South Carolina
MARLOW W. COOK, Kentucky
CHARLES McC. MATHIAS, Jr., Maryland
EDWARD J. GURNEY, Florida

SUBCOMMITTEE ON CONSTITUTIONAL RIGHTS

SAM J. ERVIN, Jr., North Carolina, *Chairman*

JOHN L. McCLELLAN, Arkansas
EDWARD M. KENNEDY, Massachusetts
BIRCH BAYH, Indiana
ROBERT C. BYRD, West Virginia
JOHN V. TUNNEY, California

EDWARD J. GURNEY, Florida
ROMAN L. HRUSKA, Nebraska
HIRAM L. FONG, Hawaii
STROM THURMOND, South Carolina

LAWRENCE M. BASKIR, *Chief Counsel and Staff Director*

DOROTHY J. GLANCY, *Counsel*

JOSEPH B. C. KLUTZ, *Research Assistant*

ALFRED POLLARD, *Research Assistant*

GEORGE DOWNS, Sr., *Chief Printing Clerk*

PREFACE

When the founding fathers established our constitutional system of government, they based it on their fundamental belief in the sanctity of the individual. They declared:

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain inalienable rights, that among these are Life, Liberty, and the Pursuit of Happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed.

The founding fathers took care to see that these inalienable rights were carefully protected. They understood that self-determination is the source of individuality, and individuality is the mainstay of freedom. As threats to individual freedom have arisen from time to time during our history, laws have been developed to insure that basic constitutional guarantees are assured.

Few of these threats have been direct in nature, attempting to limit in various ways individual freedom of expression or movement. Recently, however, technology has begun to develop new methods of behavior control capable of altering not just an individual's actions but his very personality and manner of thinking as well. Because it affects the ability of the individual to think for himself, the behavioral technology being developed in the United States today touches upon the most basic sources of individuality, and the very core of personal freedom.

To my mind, the most serious threat posed by the technology of behavior modification is the power this technology gives one man to impose his views and values on another. In our democratic society, values such as political and religious preferences are expressly left to individual choice. If our society is to remain free, one man must not be empowered to change another man's personality and dictate the values, thoughts and feelings of another.

This is not to say that all behavior therapy is inherently evil. Many types of therapy which result in the modification of behavior have proved beneficial to our society. But whenever such therapies are applied to alter men's minds, extreme care must be taken to prevent the infringement of individual rights. Concepts of freedom, privacy and self-determination inherently conflict with programs designed to control not just physical freedom, but the source of free thought as well. Moreover, because the power of federal government is limited to the implementation of the Constitution and the protection of constitutional rights, there is a real question whether the government should be involved at all in programs that potentially pose substantial threats to our basic freedoms. The question becomes even more acute when these programs are conducted, as they are today, in the absence of strict controls.

As disturbing as behavior modification may be on a theoretical level, the unchecked growth of the practical technology of behavior

control is cause for even greater concern. In fulfilling its mandate to "examine, investigate, and make a complete study of any and all matters pertaining to constitutional rights," the Constitutional Rights Subcommittee has over the years devoted an increasing portion of its energies to the study of the special questions posed by science and technology with respect to our basic freedoms. As technology has expanded our capacity for meeting society's needs, it has also increased, to a startling degree, our ability to enter and affect the lives of individual citizens. In its continuing study of individual rights, the subcommittee has considered many questions raised with respect to personal freedoms by such technological innovations as computers, polygraphs and wiretapping devices. Similarly, we have watched with growing concern as behavioral research unearths vast new capabilities far more rapidly than we are able to reconcile the many important questions of individual liberties raised by those capabilities. With the rapid proliferation of behavior modification techniques, it is all the more disturbing that few real efforts have been made to consider the basic issues of individual freedom involved, and to minimize fundamental conflicts between individual rights and behavior technology.

In addition, the subcommittee has long been concerned with constitutional issues arising out of the treatment of the mentally ill. This work has found expression in a series of hearings on the constitutional rights of the mentally ill beginning in the early 1960's. In 1965 the Congress enacted The District of Columbia Hospitalization of the Mentally Ill Act, a law developed by the subcommittee to secure procedural and substantive rights to the mentally ill. At the same time, the subcommittee has worked in the area of criminal procedures and rights and has consistently been involved in issues involving the constitutional rights of prisoners. Through these interests the subcommittee became aware of the increasing employment of new scientific techniques of behavior modification directed at these two "captive" populations.

In response to this situation, the staff of the Senate Subcommittee on Constitutional Rights was directed to conduct an investigation of behavior modification programs, with particular emphasis on the federal government's involvement in the technology of behavior control and the implications of this involvement for individual rights. Two basic considerations have motivated our investigation: first, the concern that the rights of human subjects of behavioral research are sufficiently protected by adequate guidelines and review structures; and second, the larger question of whether the federal government has any business participating in programs that may alter the substance of individual freedom.

As these materials were being prepared for publication, I was pleased to see the Congress enact as part of the National Research Act (Public Law 93-348), important legislation designed to initiate serious consideration of the many difficult questions raised by biomedical and behavioral research on human subjects. As a result of the very fine work of Senator Edward M. Kennedy, Congressmen Paul G. Rogers and Richardson Preyer and many other colleagues, title II of the National Research Act establishes a National Commission for the Protection of Human Subjects of Biomedical and Behavioral Experimentation. The Commission will conduct an intensive two-year study

of the implications of advances in biomedical and behavioral research with respect to medical ethics and individual rights. One of the reasons for publishing this report at this time is to make available to the Commission, as well as the Congress and the general public, the information the subcommittee has collected in the course of its study of behavior modification. I hope that the Commission will make good use of this information in developing mechanisms to resolve the many questions raised by behavior control technology and to minimize the threats posed by this technology to individual liberties.

The subcommittee staff has assembled in this report a mass of information concerning government-sanctioned programs designed to predict, control, and modify human behavior. Even though the material included in this report is by no means comprehensive or complete, some initial findings are already apparent:

There is a widespread and growing interest in the development of methods designed to predict, identify, control, and modify individual human behavior.

Few substantive measures have as yet been taken to resolve the important questions of freedom, privacy, and self-determination raised by behavior control technology.

The Federal government is heavily involved in a variety of behavior modification programs ranging from simple reinforcement techniques to psychosurgery.

A number of departments and agencies, including the Department of Justice, the Department of Labor, the Veterans Administration, the Department of Defense, and the National Science Foundation, fund, participate in, or otherwise sanction research involving various aspects of behavior modification in the absence of effective review structures, guidelines or standards for participation.

The Department of Health, Education and Welfare, whose responsibility to provide leadership in the field is perhaps greater than any other department or agency, operates under an inadequate system of regulations, and has only recently begun to take steps to resolve the fundamental constitutional questions raised by federal government involvement in behavior modification and behavior control technology.

Although a great deal of work has gone into the preparation of this report, much remains to be done. I hope that the information we are presenting here will encourage others to ask further questions and to begin to find some answers to the difficult problems federally funded behavior modification programs pose for individual liberties.

A number of individuals have made important contributions to this study during the course of the subcommittee's investigation; they deserve a special note of thanks from the subcommittee. Alfred Pollard, a research assistant on the staff of the subcommittee, began work in the area and made many of the initial inquiries. Joseph Kluttz, also a research assistant, continued and analyzed much of the work begun by Mr. Pollard. Anita Jo Kinlaw, a legal intern with the subcommittee, provided valuable assistance with the legal analysis. Dorothy Glancy, Subcommittee Counsel, was responsible for editorial oversight and coordination of the investigation.

SAM J. ERVIN, JR.,

Chairman, Subcommittee on Constitutional Rights.

C O N T E N T S

	Page
Preface.....	iii
Introduction.....	1
Behavior modification and the courts: The legal background.....	3
Experiments on mental patients.....	5
Experiments on prisoners.....	7
Behavior modification technology.....	11
The Constitutional Rights Subcommittee investigation.....	19
The Federal involvement.....	21
Department of Health, Education, and Welfare.....	21
Department of Health, Education, and Welfare policies concern- ing behavior research.....	22
Behavioral research projects funded by the Department of Health, Education, and Welfare.....	26
Department of Justice.....	31
Bureau of Prisons.....	31
Project START.....	31
Federal Center for Correctional Research.....	33
Law Enforcement Assistance Administration.....	34
Center for the Study and Reduction of Violence.....	35
LEAA review procedures.....	37
Cessation of LEAA funding for behavior and biomedical research.....	38
Veterans Administration.....	39
Other agencies.....	41
Conclusion.....	45

C O N T E N T S O F A P P E N D I X

<i>Item</i>	
I. Department of Health, Education, and Welfare.....	49
A. Correspondence.....	49
1. September 28, 1972, letter from Chairman Sam J. Ervin, Jr., to Senator Warren Magnuson.....	49
2. October 9, 1972, letter from Senator Magnuson to Chairman Ervin.....	49
3. September 22, 1972, letter from Senator Magnuson to Robert Q. Marston, Director of National Institutes of Health.....	50
4. October 2, 1972, letter from Robert Q. Marston to Senator Magnuson.....	50
5. October 26, 1972, letter from Chairman Ervin to Hon. Elliot L. Richardson, Secretary, Health, Education, and Welfare.....	51
6. November 16, 1972, letter from Hon. Elliot L. Richardson to Chairman Ervin.....	51
7. January 24, 1973, letter from Chairman Ervin to Robert Marston.....	52
8. February 7, 1973, letter from Eidon Eagles, Acting Director, National Institute of Neurological Diseases and Stroke, to Chairman Ervin in response to January 24, 1973 letter to Dr. Robert Marston.....	52
9. February 13, 1973, letter from Chairman Ervin to Hon. Caspar W. Weinberger, Secretary, Health, Education, and Welfare.....	53
10. March 26, 1973, letter from Secretary Weinberger to Chair- man Ervin.....	54

Item

1. Department of Health, Education, and Welfare—Continued

A. Correspondence—Continued

11. October 23, 1973, letter from Chairman Ervin to Bertram S. Brown, Director, Alcohol, Drug Abuse, and Mental Health Administration.....	Page 54
12. November 9, 1973, letter from Karst J. Besteman, Deputy Director, National Institute on Drug Abuse, to Chairman Ervin in response to October 23, 1973, letter to Bertram S. Brown.....	55
13. October 19, 1973, letter from D. T. Chalkley, Chief, Institutional Relations Branch, Division of Research Grants, National Institutes of Health, to Chairman Ervin in response to telephone inquiry by subcommittee staff.....	55
14. October 19, 1973, letter from Storm Whaley, Associate Director for Communications, National Institutes of Health, to Chairman Ervin in response to telephone inquiry by subcommittee staff.....	56
15. October 24, 1973, letter from Chairman Ervin to Saleem A. Shah, director, National Center for the Study of Crime and delinquency.....	58
16. December 19, 1973, letter from Bertram S. Brown to Chairman Ervin.....	59
17. January 11, 1974, letter from Chairman Ervin to Secretary Caspar Weinberger.....	63
18. January 30, 1974, acknowledgement by Secretary Caspar Weinberger to Chairman Ervin concerning January 11, 1974, letter.....	64
19. January 15, 1974, letter from Chairman Ervin to Robert Q. Marston.....	65
20. January 30, 1974, letter from Robert Stone, Director, National Institutes of Health, to Chairman Ervin in response to January 15, 1974, letter to Robert Q. Marston.....	65
21. February 22, 1974, letter from Chairman Ervin to Secretary Weinberger.....	66
22. May 10, 1974, letter from Frank Carlucci, Acting Secretary, Health, Education, and Welfare, to Chairman Ervin in response to February 22, 1974, letter to Secretary Weinberger.....	67
23. July 12, 1974, letter from Charles Edwards, Assistant Secretary for Health, to Chairman Ervin.....	68
24. July 12, 1974, letter from Chairman Ervin to Secretary Caspar Weinberger.....	68
25. July 29, 1974, letter from Secretary Weinberger to Chairman Sam J. Ervin, Jr., in response to July 12, 1974, inquiry.....	69
26. July 25, 1974, letter from Acting Secretary Carlucci to Chairman Sam J. Ervin, Jr., in further response to February 22, 1974, letter from Chairman Ervin to Secretary Weinberger.....	70
B. Materials relating to HEW policies concerning Behavioral Research.....	71
1. "The Institutional Guide to DHEW Policy on Protection of Human Subjects," December 1, 1971.....	71
2. HEW regulations concerning the protection of human subjects, Federal Register, Vol. 39, No. 105 (May 30, 1974).....	101
3. Excerpts from the report of the Tuskegee Syphilis Study Ad Hoc Advisory Panel.....	108
4. Draft special policy statement on the protection of human subjects involved in research, development and demonstration (excerpts).....	136
5. Report on the biomedical research aspects of brain and aggressive violent behavior, by the National Institute of Neurological Diseases and Stroke, October 23, 1973 (excerpts).....	137
6. Psychosurgery report of the National Institute of Mental Health, January 21, 1974.....	142
7. Conference report on H.R. 7724 (Public Law 93-348).....	146

Item

	Page
I. Department of Health, Education, and Welfare—Continued	
C. Materials relating to specific projects conducted or funded by HEW	165
1. Abstracts of project descriptions of HEW-funded behavior-related research projects, received May 13, 1974, and July 23, 1974	165
2. The Seed	182
a. Excerpts from grant request by the Seed to the Department of Health, Education, and Welfare, June 20, 1972	182
b. Excerpts from "The Study of the Advisability of the 'Seed' in Dade County," Comprehensive Health Planning Council of South Florida, November 1972	186
c. Letter from Art Barker, president of "The Seed," to the Department of Health, Education, and Welfare, February 19, 1974	192
d. "Two Views of the Seed: For and Against," from The St. Petersburg Times, September 16, 1973, p. D-1	193
3. Center for the Study of Crime and Delinquency—Abstracts of CSCD-funded projects, December 19, 1973	200
4. Statement by Dr. William H. Sweet, before Labor-HEW appropriations hearings, May 23, 1972	210
II. Department of Justice: Bureau of Prisons	217
A. Correspondence	217
1. December 21, 1972, letter from Chairman Ervin to Norman Carlson, Director, U.S. Bureau of Prisons	217
2. February 8, 1973, letter from Norman Carlson to Chairman Ervin	218
3. February 23, 1973, letter from Chairman Ervin to Norman Carlson	221
4. March 23, 1973, letter from Norman Carlson to Chairman Ervin	221
5. May 15, 1973, letter from Chairman Ervin to Norman Carlson	222
6. May 29, 1973, letter from Norman Carlson to Chairman Ervin	223
7. January 7, 1974, letter from Chairman Ervin to Norman Carlson	223
8. February 19, 1974, letter from Norman Carlson to Chairman Ervin	226
9. January 7, 1974, letter from Chairman Ervin to Martin Groder, Director, Federal Center for Correctional Research, Butner, N.C.	228
10. January 24, 1974, letter from Martin Groder to Chairman Ervin	229
11. April 19, 1974, letter from Chairman Ervin to Martin Groder	233
12. April 30, 1974, letter from Martin Groder to Chairman Ervin	233
B. Related materials	234
1. Bureau of Prisons' policy statement on research, October 31, 1967	234
2. Project START	240
a. Operations memorandum, October 25, 1972	240
b. Program plan, October 1972	241
c. START program: Revision, May 1973	251
d. START revised program description, November 1973	262
3. Federal Center for Correctional Research, Butner, N.C.	272
a. Program description, August 22, 1972	272
b. Revised program description, April 1973	275
c. Program master plan, summer 1973	276
d. Program plan, human resources development unit	286
4. Report on research projections, Fort Worth Federal Correctional Institution, February 9-12, 1973	292

<i>Item</i>	<i>Page</i>
III. Department of Justice: Law Enforcement Assistance Administration...	299
A. Correspondence.....	299
1. September 28, 1972, letter from Chairman Ervin to Jerris Leonard, Administrator, Law Enforcement Assistance Administration.....	299
2. October 27, 1972, letter from Jerris Leonard to Chairman Ervin.....	299
3. March 22, 1973, letter from Chairman Ervin to Jerris Leonard.....	299
4. May 10, 1973, letter from Donald E. Santarelli, Administrator, Law Enforcement Assistance Administration, to Chairman Ervin.....	300
5. June 14, 1973, letter from Donald E. Santarelli to Chairman Ervin.....	301
6. April 17, 1973, letter from Chairman Ervin to Dean Pohlenz, Assistant Administrator, Law Enforcement Assistance Administration.....	302
7. April 30, 1973, interim letter from Donald Santarelli to Chairman Ervin concerning April 17, 1973 letter.....	303
8. June 13, 1973, letter from Donald Santarelli to Chairman Ervin.....	303
9. January 14, 1974, letter from Chairman Ervin to Donald Santarelli.....	304
10. March 4, 1974, letter from Donald Santarelli to Chairman Ervin.....	308
11. January 11, 1974, letter from Lawrence M. Baskir, chief counsel, Subcommittee on Constitutional Rights of the Senate Committee on the Judiciary, to Gerald M. Caplan, Director, National Institute of Law Enforcement and Criminal Justice, LEAA.....	309
12. January 24, 1974, letter from Gerald M. Caplan to Lawrence M. Baskir.....	309
13. April 2, 1974, letter from Chairman Ervin to Donald Santarelli.....	310
14. April 23, 1974, letter from Donald Santarelli to Chairman Ervin.....	310
15. May 24, 1974, letter from Geoffrey M. Alprin, Director, Office of Research Programs, to Chairman Ervin in response to a telephone inquiry by the subcommittee staff.....	311
16. June 3, 1974, letter from Chairman Ervin to Donald Santarelli.....	311
17. June 25, 1974, letter from Donald Santarelli to Chairman Ervin.....	311
18. July 15, 1974, letter from Charles Work, Deputy Administrator, Law Enforcement Assistance Administration, to Chairman Ervin.....	312
19. August 29, 1974, letter from Geoffrey M. Alprin, director, Office of Research Programs, to Lawrence M. Baskir, chief counsel and staff director, Subcommittee on Constitutional Rights, Committee on the Judiciary.....	313
B. Related materials.....	314
1. Excerpts from the final report of a study of "The Medical Epidemiology of Criminals," Neuro-Research Foundation, Boston, Mass.....	314
2. Center for the Study and Reduction of Violence, University of California at Los Angeles.....	324
a. Project description, September 1, 1972.....	324
b. Excerpts from grant request to LEAA from the Center for the Study and Reduction of Violence.....	331
c. "Memorandum on the Center for the Study of Violent Behavior," prepared by the Subcommittee Opposing Psychiatric Abuse of Prisoners, April 5, 1973.....	348
d. "The UCLA Project on Life-threatening Behavior: Some Facts," April 4, 1974.....	354

Item

III. Department of Justice: Law Enforcement Assistance Administration—Con.

B. Related materials—Continued

2. Center for the Study and Reduction of Violence, University of California at Los Angeles—Continued	
e. Memorandum from Richard Laws, Ph. D., staff psychologist, Atascadero State Hospital, to the UCLA Center for the Study and Reduction of Violence, March 29, 1973	Page 355
f. January 22, 1973, letter from Louis Jolyon West, M.D., medical director, Neuropsychiatric Institute, UCLA, to J. M. Stubblebine, Ph. D., director of Health, Office of Health Planning, State of California	357
g. Press release from California State Health and Welfare Agency, November 8, 1973	357
3. Closed Adolescent Treatment Center, program description	358
4. Excerpts from additional LEAA grant requests	372
a. "Planning for the Treatment of the Repetitive Violent Offender"	372
b. "Multi-State Treatment of Special Offenders"	376
c. "Assault on Police"	381
d. "Reducing the Incidence of Violence"	382
e. "Neurological Research Project," Puerto Rico Crime Commission	383
f. "Early Prediction of Individual Violence"	384
g. "The Prediction of Delinquency"	392
5. Excerpts from computer printout listing behavior-related projects, April 10, 1974	394
6. News release announcing cancellation of LEAA funds for behavior-related projects and medical research, February 14, 1974	420
7. LEAA Guideline re: Use of LEAA funds for Psychosurgery and Medical Research, February 14, 1974	421

IV. Veterans Administration

A. Correspondence

1. March 28, 1973, letter from Chairman Ervin to Donald E. Johnson, Administrator, Veterans Administration	423
2. May 10, 1973, letter from Donald Johnson to Chairman Ervin	424

B. Related materials

1. Professional services letter IL-11-70-18, March 6, 1970, "Report of Survey of Token Economy Programs in the Veterans Administration"	426
2. Circular 10-73-15 "Surgery for Abnormal Behavior (Psychosurgery)"	436
3. Chief medical director's letter IL-10-72-13, March 3, 1972, "Human Experimentation, R. & E. Committee on Human Studies and Extra-VA Research Funding"	437
4. Statement of M. J. Musser, M.D., at joint hearing on "Psychosurgery in Veterans Administration Hospitals" before the Subcommittee on Health of the Senate Committee on Labor and Public Welfare, and the Subcommittee on Health and Hospitals of the Senate Committee on Veterans Affairs, June 18, 1973	438
5. October 30, 1973, letter from Senator Alan Cranston, chairman, Subcommittee on Health and Hospitals, Senate Veterans Affairs Committee, to M. J. Musser, chief medical director, Veterans Administration	441

V. Other departments and agencies

A. Correspondence

1. Survey letter from Chairman Ervin	443
2. Department of Agriculture—April 26, 1974, response from T. W. Edminster, Administrator, Agricultural Research Service	444
3. Atomic Energy Commission—April 23, 1974, response from Dixy Lee Ray, Chairman	444

Item

V. Other departments and agencies—Continued

A. Correspondence—Continued

4. Department of Commerce—April 22, 1974, response from Frederick B. Dent, Secretary.....	445
5. Department of Defense—April 12, 1974, and May 3, 1974, responses from Malcolm R. Currie, Director, Defense Research and Engineering.....	445
6. Department of Labor—May 1, 1974, response from William H. Kolberg, Assistant Secretary for Manpower..	454
7. Environmental Protection Agency—May 3, 1974, response from Russell E. Train, Administrator.....	505
8. National Science Foundation—April 30, 1974, response from H. Guyford Stever, Director.....	505
9. National Aeronautics and Space Administration—April 10, 1974, response from Gerald D. Griffin, Assistant Administrator for Legislative Affairs.....	506
10. Special Action Office for Drug Abuse Prevention—May 14, 1974, response from Robert L. DuPont, Director.....	507

VI. Additional information.....

A. Nuremberg Code.....

509

B. Court Cases.....

510

1. <i>Kaimowitz v. Michigan Department of Mental Health</i> , Civil No. 73-19434-AW (Cir. Ct. Wayne County, Mich., filed July 10, 1973).....	510
2. <i>Wyatt v. Stickney</i> , 344 F. Supp. 373 and 344 F. Supp. 387, (M.D. Ala. 1972).....	524
3. <i>Knecht v. Gillman</i> , 488 F. 2d 1136 (8th Cir. 1973).....	556
4. <i>Clonce v. Richardson</i> , No. 73 CV 373-S (W.D. Mo. July 31, 1974).....	560

C. Catalogue No. F-72, Farrall Instruments Co., Grand Island, Nebr. (1973) (excerpts).....

571

D. Articles.....

578

1. "Privacy and Behavioral Research," Oscar Reubhausen and Orville G. Brim, Jr., 65 Colum. L. Rev. 1184 (1965).....	578
2. Violence and the Brain, Chapters 11 and 12, Drs. Vernon Mark and Frank Ervin (New York, 1970), pp. 146-161....	596
3. "The Use of Electronics in the Observation and Control of Human Behavior and Its Possible Use in Rehabilitation and Parole," by Barton L. Ingraham and Gerald W. Smith, <i>Issues in Criminology</i> , Vol. 7, No. 2 (1972), pp. 35-53.....	604
4. "Token and Taboo: Behavior Modification, Token Economics, and the Law," David B. Wexler, 61 Calif. L. Rev. 81 (1973).....	615
5. "The Torture Cure," Jessica Mitford, <i>Harpers Magazine</i> , August 1973, pp. 16-30.....	632
6. "The Pacification of the Brain," Stephen L. Chorover, <i>Psychology Today</i> , May 1974, pp. 59-69.....	640

VII. Bibliography.....

649

I. Articles.....

649

II. Books.....

650

III. Reports and Hearings.....

651

INTRODUCTION

Since 1971, the Senate Subcommittee on Constitutional Rights has conducted a continuing investigation into a variety of programs designed to predict, control and modify human behavior. Although the investigation has been primarily concerned with various specific federally funded behavior modification programs, the subcommittee has also been interested in the broader constitutional issues involved.

The field of behavioral technology is comparatively new and, as with any new field, there are problems with the precise definition of key phrases and distinctive elements. Among the various terms associated with the field; the phrase "behavior modification" is the most familiar and generally descriptive. However, "behavior modification" is itself the source of substantial controversy. Some define behavior modification as a specialized type of behavior therapy utilizing physical punishment, shock treatments, drug therapy, and other forms of aversive conditioning. Others argue that any learned response to any stimulus, such as the avoidance of bees after having been stung, is a form of behavior modification. The Department of Health, Education, and Welfare uses "the following operational definition of behavioral modification: the systematic application of psychological and social principles to bring about desired changes in or to prevent development of certain 'problematic' behaviors and responses."¹

The common element of all of the programs investigated by the subcommittee is that each employs methods that depend upon the direct and systematic manipulation by one individual of the personality of another through the use of consciously applied psychological, medical, and other technological methods. Because it is not based upon the reasoned exchange of information, behavior modification is not a traditional learning process. Analogous to a surgeon operating to remove a tumor, the behavior therapist attempts to remove an undesirable aspect of an individual's behavior through direct intervention into the latter individual's basic thought processes. The aim of behavior modification is to restructure personality and the methods range from gold-star-type rewards to psychosurgery. The objective of behavior modification, whatever its form, is that the individual will no longer act in a manner previously determined to be unacceptable.

Two major factors appear to have stimulated the growing popularity of research into behavior control technology: a growing interest in the study of violent behavior, and the increase in government funding of research aimed at violence-reduction and crime prevention at a time when funding for general medical and scientific research had been reduced. The widespread civil disobedience of the

¹ Letter from Frank Carlucci, Acting Secretary of Health, Education, and Welfare, to Chairman Sam J. Ervin, Jr., July 25, 1974, printed as Item I.A.26.

nineteen sixties caused many to despair of more indirect methods of "behavior modification" such as rehabilitation and understanding. Subsequent calls for law and order stimulated the search for immediate and efficient means to control violence and other forms of anti-social behavior. The control of violence replaced more time-consuming attempts to understand its sources. Crime and delinquency have become the motivation for studying the most basic components of human nature. Research directed toward an intrinsic understanding of human behavior has been applied to produce a broad range of sophisticated methods of controlling behavior.

This emphasis placed on violence-control by the federal government has been encouraged by several new agencies whose essential function is the funding of programs dealing with various aspects of violence. Notable among these agencies are the Law Enforcement Assistance Administration of the Justice Department, and the Center for the Study of Crime and Delinquency in the Department of Health, Education and Welfare. Each of these agencies, in addition to others in the federal government, provide funds for a variety of programs dealing with various aspects of human behavior. It is the purpose of this report to outline the nature and extent of the federal involvement in these behavior modification programs and the issues this involvement raises for the rights of citizens.

BEHAVIOR MODIFICATION AND THE COURTS: THE LEGAL BACKGROUND¹

Behavior modification therapies present a complex, and relatively uncharted area of the law. Even now there are but few cases which primarily deal with limitations on behavior modification in institutional settings. The recent appearance of litigation in this field is due largely to two factors: (1) an increase in the number of behavior modification programs in prisons and mental institutions; and (2) an increased willingness on the part of the courts to drop their former "hands-off" doctrine and begin scrutinizing treatment and living conditions in prisons and mental institutions.

Projects designed to predict, control, and modify individual human behavior present the courts with difficult problems of conflicting values. To begin with there is the quest to advance scientific knowledge through experimentation which must be reconciled with our society's belief in the inviolability of a person's mind and body. Moreover, this personal autonomy must be reconciled with the need in certain circumstances, for the state to restrict the individual's choice concerning experimental medical procedures in order to enhance or protect his autonomy and welfare.

The increased activity in the area of behavior modification therapies presents serious constitutional issues, particularly where involuntarily confined populations are involved. To the extent that the first amendment protects the dissemination of ideas and the expression of thoughts, many commentators have argued that it must equally protect the individual's right to generate ideas. Note, *Conditioning and Other Technologies Used to "Treat?" "Rehabilitate?" "Demolish?" Prisoners and Mental Patients*, 45 So. Cal. L.R. 616, 661 (1972); Shapiro, *The Uses of Behavior Control Technologies: A Response*, 7 Issues in Criminology 55, 68-78 (1972). The principle that a person's mental processes come within the ambit of first amendment guarantees is also found in *Stanley v. Georgia*, 394 U.S. 557 at 565-66 (1969):

Our whole constitutional heritage rebels at the thought of giving government the power to control men's minds . . . We are not certain that this argument [protecting the individual's mind from the effects of obscenity] amounts to anything more than the assertion that the State has the right to control the moral content of a person's thoughts . . . Whatever the power of the state to control public dissemination of ideas inimical to the public morality, it cannot constitutionally premise legislation on the desirability of controlling a person's private thoughts.

Opponents of behavior modification therapies argue that the right of privacy found in the first, third, fourth, fifth, and ninth amendments prohibits their use with involuntarily confined populations.

¹ Mr. Richard Ehke of the American Law Division of the Congressional Research Service, Library of Congress, assisted with research for this section.

They argue that the courts have found a right to privacy of the marital bed, *Griswold v. Connecticut*, 381 U.S. 479 (1965); a right to view obscenity in the privacy of one's own home, *Stanley v. Georgia*, 394 U.S. 557 (1969); and the right of a woman to control her own body by determining whether or not she wishes to terminate a pregnancy, *Roe v. Wade*, 410 U.S. 113 (1973). An analogous right to privacy should be found to protect the freedom of an individual's mind when he is a prisoner or mental patient threatened with the application of therapies that drastically intrude into his person and engender gross changes in his behavior and thought patterns. Such a right "would seem to be at the core of any notion of privacy * * * because if one is not guarded in his thoughts, behavior, personality and ultimately, in his identity, then these concepts will become meaningless." Note, *Conditioning and Other Technologies Used to "Treat?" "Rehabilitate?" "Demolish?" Prisoners and Mental Patients*, *supra*, at 663.

The eighth amendment's mandate against cruel and unusual punishment is advanced by many to prohibit the use of various behavior modification therapies. They argue that the procedures used in much of the so-called therapy imposed on involuntarily confined individuals is really a form of torture, *Id.* at 665. See also, Jessica Mitford, *The Torture Cure*, (1973), an excerpt from which is printed in the Appendix as Item VI.D.5.

The due process clauses of the fifth and fourteenth amendments present another constitutional issue where behavior modification experiments using involuntarily confined populations are concerned. The liberty protected by these clauses covers more than those freedoms explicitly named in the Bill of Rights. *Roe v. Wade*, 410 U.S. 113 (1973). As Justice Harlan stated:

[T]he full scope of the liberty guaranteed by the Due Process Clause cannot be found in or limited by the precise terms of the specific guarantees elsewhere provided in the Constitution. This "liberty" is not a series of isolated points pricked out in terms of the taking of property; the freedom of speech, press, and religion; the right to keep and bear arms; the freedom from unreasonable searches and seizures; and so on. It is a rational continuum which, broadly speaking, includes a freedom from all substantial arbitrary impositions and purposeless restraints . . . and which also recognizes, what reasonable and sensible judgment must, that certain interests require particularly careful scrutiny, of the state needs asserted to justify their abridgement. *Poe v. Ulman*, 367 U.S. 497, 543 (1961). [Emphasis added.]

So, the broad question becomes whether institutionally confined individuals have rights to or against various methods of treatment or rehabilitation. The right to treatment or rehabilitation has been discussed in cases such as *Rouse v. Cameron*, 373 F. 2d 451 (D.C. Cir. 1966) and *Holt v. Sarver*, 309 F. Supp. 362 (E.D. Ark. 1970) and will not be examined in detail here. See hearings on *Constitutional Rights of the Mentally Ill, Before the Subcommittee on Constitutional Rights of the Senate Committee on the Judiciary*, 91st Cong., 1st and 2d Sess. (1970) at 41 *et. seq.* The focus of this discussion will be the judicially recognized rights which an institutionally confined individual has to refuse various methods of treatment or rehabilitation and how, if at all, these rights may be waived.

EXPERIMENTS ON MENTAL PATIENTS

There are few legal standards in the area of experimentation on mental patients. One of the first issues raised in the courts involved involuntary sterilization laws. When this issue was before the United States Supreme Court, state laws providing for the involuntary sterilization of mental patients were upheld, *Buck v. Bell*, 274 U.S. 200 (1927). However, strict judicial scrutiny has been applied to such laws:

The power to sterilize, if exercised, may have subtle, far-reaching and devastating effects. . . . Any experiment which the state conducts is to his irreparable injury. . . . We mention these matters not to reexamine the scope of the police power of the States. We advert to them merely in emphasis of our view that strict scrutiny of the classification which a state makes in a sterilization law is essential, lest unwittingly, or otherwise, invidious discriminations are made against groups or types of individuals in violation of the constitutional guaranty of just and equal laws. *Skinner v. Oklahoma*, 316 U.S. 535, 541 (1942).

While sterilization is not considered "experimental" in the same sense as psychosurgery or lobotomy, Justice Jackson, in concurring in *Skinner*, hinted at what the Court's view might be of more exotic medical experimentation:

I also think the present plan to sterilize the individual in pursuit of a eugenic plan to eliminate from the race characteristics that are only vaguely identified and which in our present state of knowledge are uncertain as to transmissibility presents other constitutional questions of gravity. This Court has sustained such an experiment with respect to an imbecile, a person with definite and observable characteristics, where the condition had persisted through three generations and afforded grounds for the belief that it was transmissible and would continue to manifest itself in generations to come. *Buck v. Bell*, 274 U.S. 200

There are limits to the extent to which a legislatively represented majority may conduct biological experiments at the expense of a minority—even those who have been guilty of what the majority define as crimes. But this Act falls down before reaching this problem, which I mention only to avoid the implication that such a question may not exist because not discussed. On it I would also reserve judgment. *Id.*, at 546.

In 1973 a state trial court in Michigan issued a decision in what has been termed a landmark case in the area of medical experimentation and informed consent. *Kaimowitz v. Michigan Department of Mental Health*, Civil No. 73-19434-AW (Cir. Ct., Wayne County, Mich., July 10, 1973).² The issue in *Kaimowitz* was whether legally adequate consent could be obtained from adults involuntarily confined in the state mental health system for experimental or innovative surgery on the brain aimed at the amelioration of violent behavior. This case involved an experiment using criminal sexual psychopaths as subjects. It would compare the effects of surgery on a portion of the brain with the effect of a certain drug on levels of a male hormone to determine which, if either, would be effective in controlling aggression of males in an institutional setting. The court in *Kaimowitz* held that truly voluntary and informed consent was impossible given the status of the patient ("involuntarily committed") and the nature of the experiment ("dangerous, intrusive, irre-

² The opinion is printed in the Appendix as Item VI.B.1.

versible, and of uncertain benefit to the patient and society") and that such experimentation, even if "consent" had been procured, was unconstitutional. The court stated:

The keystone to any intrusion upon the body of a person must be full, adequate and informed consent. The integrity of the individual must be protected from invasion into his body and personality not voluntarily agreed to. Consent is not an idle or symbolic act; it is a fundamental requirement for the protection of the individual's integrity.

We therefore conclude that involuntarily detained mental patients cannot give informed and adequate consent to experimental psychosurgical procedures on the brain.

The three basic elements of informed consent—competency, knowledge, and voluntariness—cannot be ascertained with a degree of reliability warranting resort to use of such an invasive procedure. *Id.* at 31-32.

The court further based its decision on constitutional principles. It stated:

Freedom of speech and expression, and the right of all men to disseminate ideas, popular or unpopular, are fundamental to ordered liberty. Government has no power or right to control men's minds, thoughts, and expressions. This is the command of the First Amendment. And we adhere to it in holding an involuntarily detained mental patient may not consent to experimental psychosurgery. *Id.* at 35.

Citing *Stanley v. Georgia*, 395 U.S. 557 (1969), and *Griswold v. Connecticut*, 381 U.S. 479 (1962), the Court also dealt with the privacy issues involved:

In the hierarchy of values, it is more important to protect one's mental processes than to protect even the privacy of the marital bed. To authorize an involuntarily detained mental patient to consent to experimental psychosurgery would be to fail to recognize and follow the mandates of the Supreme Court of the United States, which has constitutionally protected the privacy of body and mind. *Id.* at 39.

Both the status of an involuntarily detained mental patient and the nature of the experiment involved influenced the court's decision. The court, noting the state of dependence bred by prolonged institutional confinement, recognized that an "involuntarily confined mental patient clearly has diminished capacity for making a decision about irreversible experimental psychosurgery." *Id.* at 26. Furthermore, the voluntariness implicit in informed consent is undermined by the fact "the most important thing to a large number of involuntarily detained mental patients incarcerated for an unknown length of time, is freedom." *Id.* at 27. In conclusion, the court emphasized two points regarding the nature of the experiment and the effect that that factor has on its decision:

First, the conclusion is based upon the state of the knowledge as of the time of the writing of this Opinion. When the state of medical knowledge develops to the extent that the type of psychosurgical intervention proposed here becomes an accepted neurosurgical procedure and is no longer experimental, it is possible, with appropriate review mechanisms, that involuntarily detained mental patients could consent to such an operation.

Second, we specifically hold that an involuntarily detained mental patient today can give adequate consent to accepted neurosurgical procedures. *Id.*, at 40.

In *Winters v. Miller*, 446 F. 2d 65 (2d Cir. 1971), the court also spoke to the issue of forced medical treatment of an involuntarily detained mental patient although medical experimentation was not

involved and the case was complicated by issues of religious freedom (the patient was a Christian Scientist.) The *Winters* court, consistent with the later holding in *Kaimowitz, supra*, rejected the theory of the lower court that "any patient alleged to be suffering from a mental illness of any kind * * * loses the right to make a decision on whether or not to accept treatment." *Winters, supra*, at 68. In terms which indicate that the court saw this right as fundamental and requiring a compelling state interest to overcome it, the court continued:

In the present case, the state purports to find an "overriding secular interest of public health and welfare" in the "care and treatment of persons suffering from a mental disorder or defect and [in] the protection of the mental health of the state." Yet there is no evidence that would indicate that in forcing the unwanted medication on Miss Winters the state was in any way protecting the interest of society or even any third party. *Id.* at 70.

In the related case of *Wyatt v. Stickney*, 344 F. Supp. 373 (M.D. Ala. 1972),³ the court enumerated in great detail basic rights constitutionally guaranteed to hospitalized mental patients. Among these were a right to a "comfortable bed" (*Id.* at 381), a right to "nutritionally adequate meals" (*Id.* at 383), and a right "to wear one's own clothes" (*Id.* at 380). In discussing these constitutional rights, the *Wyatt* court recognized that "patients have a right to the least restrictive conditions necessary to achieve the purposes of commitment." *Id.* at 379. While this principle might be applied to behavior modification programs, the court did not go as far as expressly doing so. See Wexler, *Token and Taboo: Behavior Modification, Token Economies, and the Law*, 61 Cal. Law Rev. 81-109 (1973).

EXPERIMENTS ON PRISONERS

In a non-experimental context, the courts have upheld the administration of *needed* medical treatment and diagnostic procedures without a prisoner's consent. As stated in *Haynes v. Harris*, 344 F. 2d 463 (8th Cir. 1965):

Petitioner argues in effect that he, and he alone, should determine whether he should receive certain medical treatment, and that "forced medical treatment is corporal punishment and cannot be legally inflicted upon anyone confined under a sentence that calls for less than capital punishment." This contention is obviously without merit. One of the paramount purposes for which a defendant is committed to the Medical Center is that he have the benefit of receiving from trained and qualified personnel proper examination, diagnosis, and all necessary and available treatment. *Id.* at 465.

This holding does not prevent a prisoner, however, from bringing an action based on forced treatment which is unnecessary in terms of a valid state or institutional purpose nor does it prevent him from alleging malpractice in the administration of needed medical aid. See *United States v. Muniz*, 374 U.S. 150 (1963) (Negligence of employees of prison to properly tend to medical needs of prisoners); *Irwin v. Arrendale*, 159 S.E. 2d 719 (Ga. 1967) (Suit against the medical director of the prison for assault and battery allegedly occurring when the prisoner was X-rayed without consent.)

³ Both opinions are printed in the Appendix as Item VI.B.1.

In prisoner cases, as in the mental patient cases, the courts have distinguished between accepted medical techniques and more experimental, less widely-approved procedures and treatment. In *Veals v. Ciccone*, 281 F. Supp. 1017 (W.D. Mo. 1968), a federal prisoner brought suit because he was administered an injection without his consent. The court noted:

It is not alleged that the administration of this medication is not sanctioned by approved medical practice. If it is alleged that the nature of the medication or the method of its administration is not sanctioned by any substantial recognized medical authority, a claim for relief would be stated. *Id.* at 1018.

This distinction was reiterated in *Ramsey v. Ciccone*, 310 F. Supp. 600, 605 (W.D. Mo. 1970), where the court stated:

It is negligence (malpractice) to subject a patient to such treatment [treatment causing unusual pain, mental suffering, which was not considered appropriate by any recognized branch of the healing arts] without his consent. Even though the treatment is unusually painful, or causes unusual mental suffering, it may be administered to a prisoner without his consent if it is recognized as appropriate by recognized medical authority or authorities. See, *Anderson v. Kennedy* (W.D. Mo.) Civil Action No. 14099-4.

See also *Lopez Tijerina v. Ciccone*, 324 F. Supp. 1265 (W.D. Mo. 1971); *Ayers v. Ciccone*, 300 F. Supp. 572 (W.D. Mo. 1968).

Many of the constitutional principles discussed in *Kaimowitz v. Department of Mental Health*, *supra*, with reference to mental patients, would arguably be applicable to the involuntarily-detained prison inmate.

In *Knecht v. Gillman*, 488 F. 2d 1136 (8th Cir. 1973),⁴ two residents of the Iowa Security Medical Facility (ISMF) sought to enjoin the use of apomorphine on non-consenting residents. Apomorphine is a morphine base drug which induces vomiting for an extended period when injected. At ISMF apomorphine was used as part of an "aversive conditioning program" for inmates with behavioral problems. Under the program at ISMF, "the drug could be injected for such behavior as not getting up, for giving cigarettes against orders, for talking, for swearing, or for lying." *Id.* at 1137. The patients at the facility who might be "treated" under this program included residents from any institution under the jurisdiction of the Department of Social Services, persons found to be mentally incompetent to stand trial, referrals by the Court for psychological diagnosis and recommendations as part of the pretrial or pre-sentence procedures, and mentally ill prisoners. *Id.* at 1138.

In its reversal of the lower court's dismissal of the case, the Eighth Circuit held that to subject a patient to this type of aversive therapy either without his informed consent or after his consent had been withdrawn violated the Eighth Amendment prohibition against cruel and unusual punishment.

Whether it is called "aversive stimuli" or punishment, the act of forcing someone to vomit for a fifteen minute period for committing some minor breach of the rules can only be regarded as cruel and unusual unless the treatment is being administered to a patient who knowingly and intelligently has consented to it. *Id.* at 1139.

The Court then ordered that all treatment of inmates using apomorphine at ISMF be prohibited unless such treatment conformed

⁴The opinion is printed in the Appendix as Item VI.B.3.

with the following provisions: (1) a written consent was obtained from the inmate which specified the nature, purpose and risks of the treatment and advised the inmate of his right to terminate his consent at any time; (2) a physician certified that the inmate had read and understood the terms of the consent and that the inmate was mentally competent to understand the consent; (3) the consent may be revoked at any time; and (4) each injection is individually authorized by a doctor. *Id.* at 1140.

In *Mackey v. Proconier*, 477 F. 2d 877 (9th Cir. 1973), a state prisoner at Folsom State Prison in California alleged that his constitutional right to be free from cruel and unusual punishment had been violated when he was given succinylcholine (a drug which causes temporary paralysis and inability to breathe) at the California Medical Facility at Vacaville without his consent. On appeal, the Ninth Circuit reversed the dismissal below and remanded for a hearing on the merits. In doing so, the court stated:

It is asserted in memoranda that the staff at Vacaville is engaged in medical and psychiatric experimentation with "aversive treatment" of criminal offenders, including the use of succinylcholine on fully conscious patients. It is emphasized that plaintiff was subject to experimentation without consent.

Proof of such matters could, in our judgment, raise serious constitutional questions respecting cruel and unusual punishment or impermissible tinkering with mental processes. [The court here cited in a footnote, *Eisenstadt v. Baird*, 405 U.S. 438 (1972); *Stanley v. Georgia*, 394 U.S. 557; and *Roe v. Wade*, 410 U.S. 113 (1973).] In our judgment it was error to dismiss the case without ascertaining, at the least, the extent to which such charges can be substantiated. *Mackey v. Proconier*, *supra*, at 878.

A third case, *Adams v. Carlson*, 368 F. Supp. 1050 (E.D. Ill. 1973), involved the confinement of thirty-six prisoners in segregation for a period of sixteen months at the maximum security federal prison in Marion, Illinois, because of their participation in prison work stoppage. The court held here that confinement as restrictive as that imposed in this situation violated the constitutional prohibition against cruel and unusual punishment. The prisoners were denied general prison population privileges and were required to spend over twenty-three hours a day in an individual cell eight feet by six feet. Although *Adams* did not technically involve behavior modification therapy the court's decision regarding cruel and unusual punishment may have some bearing on situations involving behavior modification therapy.

A large number of cases were filed in 1973 to challenge the transfer and retention of prisoners to the START program at the Medical Center for Federal Prisoners at Springfield, Missouri. This program was developed by the United States Bureau of Prisons to deal with offenders who have not, in the Bureau's view, adjusted satisfactorily to life in correctional institutions. START inmates were placed in a ward separated from the regular prison population. It was an involuntary program, which started an inmate out at a base level with only the most basic of necessities. As an inmate's behavior began to conform to what prison officials considered appropriate, he would be advanced to a higher level with more freedoms and privileges.

In the recent decision of *Clonce v. Richardson*, No. 73 CV 373-S (W.D. Mo. July 31, 1974),⁶ a Federal District Court held that when a

⁶ The opinion is printed in the Appendix as Item VI.B.4.

prisoner is transferred into a behavior modification program like START, which involves a major change for the worse in the conditions of confinement, he is entitled to at least minimal due process. The court stated:

* * *, we find and conclude that the transfer of the petitioner to S.T.A.R.T. did involve a major change in the conditions of confinement of each petitioner, even though he may have been in segregation in the institution from whence he was transferred and that each transfer, made without any sort of hearing, violated the minimum requirements of due process to which he was entitled under the Constitution. *Id.* at 22.

The court also spoke in specific terms about prisoners' rights where behavior modification projects are involved:

Forced participation in S.T.A.R.T. was obviously designed to accomplish a modification of the participant's behavior and his general motivation. He was forced to submit to procedures designed to change his mental attitudes, reactions and processes. A prisoner may not have a constitutional right to prevent such experimentation but procedures specifically designed and implemented to change a man's mind and therefore his behavior in a manner substantially different from the conditions to which a prisoner is subjected in segregation reflects a major change in the conditions of confinement. *Id.* at 24.

The court in *Clonce* declined to discuss the constitutional issues raised by a program such as START which requires prisoner participation; instead the court held that the question was mooted by the voluntary termination of the START program. However, the court did voice its concern that the Bureau develop guidelines to cover any future projects:

Because of the obvious and highly commendable concern of the Federal Bureau of Prisons to develop innovative, humane, and effective correctional programs for offenders committed to its custody, we are confident that appropriate consideration will be given to whether procedures under which transfers to programs which will correct the mistakes of S.T.A.R.T. and which will reflect the benefit of the experience gained before the Bureau's voluntary termination of that program, should include much more than the minimal due process requirements mandated by *Wolff v. McDonnell*. [— U.S. — (1974), 42 L.W. 4190] We are confident that the Bureau will give appropriate consideration to whether it will not only comply with *Wolff v. McDonnell's* requirement that written records of the proceedings be maintained (p. 23 of the slip opinion) but that it will also give appropriate consideration to designing new procedures and appropriate Policy Statement guidelines which will insure that those written records will include accurate factual information concerning the nature of the program and the reasons why and the manner in which participants are selected which will tend to establish at the outset that there is no legitimate reasonable basis for the emotional reaction prompted by S.T.A.R.T. *Clonce v. Richardson, supra*, at 26-27.

It seems that the rights of institutionally-confined individuals vis-a-vis behavior modification programs are slowly beginning to be defined by the courts. The question that remains is whether other courts will follow and develop the line of thought voiced in such cases as *Kaimowitz*, *Wyatt*, *Knecht*, and *Clonce*.

In summary, some courts have recently held first, that constitutionally guaranteed rights to due process and personal privacy, as well as first and eighth amendment rights, do apply to institutionalized populations; and, second, at a minimum, that informed consent is required before certain experimental techniques are used on these populations. Some courts have gone even further in holding that because truly voluntary consent is required before a person is subjected to radical experimentation, as a matter of law an involuntarily detained person cannot give the required consent.

BEHAVIOR MODIFICATION TECHNOLOGY

In its broadest definition, the technology of behavior modification ranges from the most benign and indirect of persuasion to psychosurgery. Of all the methods of behavior control and modification, psychosurgery is the most direct, most permanent, and most controversial. Defined in a recent HEW report as the "surgical removal or destruction of brain tissue or the cutting of brain tissue to disconnect one part of the brain from another with the intent of altering behavior," psychosurgery is experiencing a resurgence of popularity following years of discredit.⁶

From 1930 to 1950, psychosurgical techniques known as prefrontal lobotomies were commonly performed in the United States. Estimates have indicated that over fifty thousand individuals were lobotomized during that period for a variety of behavioral disorders ranging from mere cantankerousness to epilepsy.⁷ While lobotomy makes formerly uncontrollable subjects more docile and manageable, it also makes them much more ambivalent, less responsive and less rational. The popularity of the operation was widespread. One practitioner is reported to have used a sterilized ice-pick to perform over four thousand lobotomies under local anesthesia in a special chair in his office.⁸ Disenchantment with the effectiveness of the technique, constitutional and ethical questions concerning its use, and the advent of pharmacological treatments for psychological disorders caused the technique to fall into disuse in the mid-nineteen fifties.

Stimulated by a growing interest in the control of violence, new surgical techniques, and new theories that suggest that violence is controlled and caused by abnormalities deep within the unconscious brain, the popularity of psychosurgery is again returning. Although the technique is not so widespread as it was in the earlier decades of this century, estimates indicate that as many as one thousand psychosurgical operations are being performed in the United States each year.⁹ Although the methods used are far more sophisticated than those of the earlier lobotomies, the operation nevertheless results in the surgical deadening or removal of brain tissue in order to modify behavior.

Present methods may be more sophisticated but the wisdom of such treatment is still in doubt. In one of the more controversial cases of psychosurgery, a subject known as "Thomas R." was given what is referred to as an amygdalotomy, an operation which surgically deadened an area deep inside his brain. In the words of the surgeons, Thomas R. was "a brilliant, 34-year-old engineer" with a long history of violent outburst. In a conversation with his wife, the doctors re-

⁶ Psychosurgery Report of the National Institute of Mental Health, January 21, 1974, printed in the Appendix as Item I.B.6.

⁷ Richard Restak, "The Promise and Peril of Psychosurgery," *Saturday Review/World*, June 25, 1973, pp. 65-66.

⁸ *Id.*, p. 56.

⁹ Psychosurgery Report of the National Institute of Mental Health, *supra*.

ported, Thomas R. "would seize upon some innocuous remark and interpret it as an insult. At first, he would try to ignore what she had said, but could not help brooding, and the more he thought about it, the surer he felt that his wife no longer loved him, and was 'carrying on with a neighbor.' Eventually he would reproach his wife for these faults, and she would hotly deny them. Her denials were enough to set him off into a frenzy of violence."¹⁰ According to the report, Thomas did not respond to other treatments, and ultimately was persuaded to undergo the operation. The surgeons later reported that "four years have passed since the operation, during which time Thomas has not had a single episode of rage. He continues, however, to have an occasional epileptic seizure with periods of confusion and disordered thinking."¹¹ In 1973, a law suit was filed in behalf of Thomas charging that "the plaintiff was permanently injured and incapacitated, [and] has suffered * * * great pain of body and mind."¹²

In addition to the very nature of the operation itself, the rationale accompanying the resurgence of the popularity of psychosurgery is a source of further concern about the rights of subjects. Dr. Orlando J. Andy, a controversial neurosurgeon, recently expressed his views in an address before a conference on psychosurgery sponsored by the National Institute of Mental Health:

It is unfortunate that our institutions are constantly filled with patients having behavioral disorders which do not respond to psychiatric and medical therapy and which would respond to surgery but are denied appropriate treatment for a variety of rational and irrational reasons. My own clinical interest has been in the realm of controlling aggressive, uncontrollable, violent and hyperactive behavior which does not respond to medical or psychiatric therapy. . . . These are the patients who need surgical treatment. In addition, there are others; patients who are a detriment to themselves and to society; custodial patients who require constant attention, supervision and an inordinant amount of institutional care. It should be used in children and adolescents in order to allow their developing brain to mature with as normal a reaction to its environment as possible.¹³

With respect to the ethics of behavior control, Dr. Andy continued:

The ethics involved in the treatment of behavioral disorders is no different from the ethics involved in the treatment of all medical disorders. The medical problems involving behavior have a more direct impact on society than other medical problems such as coronary or kidney disease. Still, if treatment is desired it is neither the moral nor the legal responsibility of society what type of treatment should be administered. The ethics for the diagnosis and treatment of behavioral illness should remain in the hands of the treating physician.¹⁴

Such a view would leave in the hands of the psychosurgeon exclusive discretion to determine what thoughts, attitudes, emotions, behavior and personality an individual is to be allowed.

Although psychosurgery is the most controversial of behavior modification techniques, it by no means is the only technique that raises important constitutional and ethical questions concerning

¹⁰ Stephan L. Chorover, "The Pacification of the Brain," *Psychology Today*, May, 1974, p. 64. This article is printed in the Appendix as Item VI.D.6.

¹¹ *Id.*

¹² *Id.*, pp. 66-67.

¹³ Statement of Orlando J. Andy, M.D., before panel discussion of National Institutes of Health-National Institute of Mental Health Ad Hoc Committee on Psychosurgery, Washington, D.C., January 18, 1973, as quoted in Richard Restak, "The Promise and Peril of Psychosurgery," *supra* at 64-65.

¹⁴ *Id.* at 65.

its use and application. A major component of the emerging methods of behavior control is a specialized technology of electrophysiology that employs the use of mechanical devices to control various aspects of human behavior. A particularly popular concept in the new behavior technology is biofeedback, through which bodily functions can be monitored and controlled through electronic devices worn by the subject himself. Biofeedback has been used with great success in the treatment of epilepsy and heart disease. Now there is a growing interest in the use of biofeedback for behavior modification. A device worn by the subject can monitor various bodily functions that are considered indicators of behavior, such as muscular tension, heart beat, and alpha and beta brain waves. The device can also be used to prevent a suspected behavior from occurring.

Present uses of biofeedback appear to depend upon the voluntary cooperation of the subjects. For example, a sexual offender can use the device to monitor his own behavior, and to administer a shock to himself as soon as deviant behavior is detected. But more direct, involuntary, and automatic electrophysiological controls are being considered and tested. For example, one recent proposal stated that it is possible, through a radio transmitter-receiver implanted in the brain of a known offender, constantly to monitor and control his behavior through a computer:

Certain other physiological data, however, such as respiration, muscle tension, the presence of adrenalin in the blood stream, combined with a knowledge of the subject's location, may be particularly revealing—e.g., a parolee with a past record of burglaries is tracked to a downtown shopping district (in fact, is exactly placed in a store known to be locked up for the night) and the physiological data reveals an increased respiration rate, a tension in the musculature and an increased flow of adrenalin. It would be a safe guess, certainly, that he was up to no good. The computer in this case, weighing the probabilities, would come to a decision and alert the police or parole officer so that they would hasten to the scene; or, if the subject were equipped with a radiotelemeter, it could transmit an electrical signal which could block further action by the subject by causing him to forget or abandon his project.¹⁵

The Center for the Study and Reduction of Violence at the University of California at Los Angeles, a project that has requested funding from the federal government, will be concerned at least indirectly with electrophysiology as it relates to the control and modification of behavior. In an early draft of the proposal for the Center, it was suggested that surgically implanted remote monitoring devices could be tested in an effort to determine the feasibility of "large scale screening that might permit detection of violence-predisposing brain disorders prior to the occurrence of a violent episode."¹⁶

Although psychosurgery and certain forms of electrophysiology are perhaps the most highly sophisticated methods of behavior control, there are now being tested a number of other techniques based on more traditional psychological principles. These techniques pose similar questions with respect to individual liberties. A major seg-

¹⁵ Barton L. Ingraham and Gerald W. Smith, "The Use of Electronics in the Observation and Control of Human Behavior and Its Possible Use in Rehabilitation and Parole," *Journal of Criminal Law, Vol. 7, No. 2 (1972) p. 42*. This article is printed in the Appendix as Item VI.D.3.

¹⁶ Center for the Study and Reduction of Violence, Project Description, September 1, 1972, printed in the Appendix as Item III.B.2.a.

ment of the emerging behavior control technology is concerned with conditioning, through which various forms of persuasion are used to stimulate certain types of behaviors while suppressing others. The two major categories of conditioning, in general terms, are positive reinforcement and negative reinforcement. Positive reinforcement involves giving the subject rewards for correct behavior; negative reinforcement involves punishing him for incorrect or improper attitudes or behavior. Positive reinforcement uses incentives provided through token economies and other programs; negative reinforcement is based on the aversion of the subject to painful or other adverse consequences of improper behavior.

Negative reinforcement, or aversive conditioning, is generally considered the more troublesome of the conditioning techniques. In its milder forms, negative reinforcement deprives an individual of privileges because of inappropriate behavior. In its more coercive forms, negative reinforcement, through what is referred to as "aversion therapy" or "aversive conditioning," uses drugs, beatings, and electric shocks as painful punishment for violation of rules or accepted norms. For example, a program in Iowa that stimulated court action against its continuation employed the use of the drug apomorphine which can cause uncontrolled vomiting for up to an hour. Whenever a prisoner broke a rule by using abusive language or smoking illegally, he would be injected with the nausea-inducing drug. Another drug frequently used in aversive conditioning is anectine, which causes a prolonged seizure of the respiratory system that some have described as "worse than dying." An aversion therapy program at the Vacaville, California, state mental facility was described by the chief researchers in the program as follows:

[The program was] an attempt to evaluate the effectiveness of an aversive treatment program using Succinylcholine (anectine) as a means of suppressing such hazardous behavior [e.g., repeated assaults, attempted suicide]. The drug was selected for use as a means of providing an extremely negative experience for association with the behavior in question. Succinylcholine, when injected intramuscularly, results in complete muscular paralysis including temporary respiratory arrest. Onset of the effects are rapid and the reaction can be controlled by the amount injected. It avoids many of the strenuous features which characterize other chemical aversion procedures [i.e., uncontrolled vomiting caused by the drug, apomorphine] * * *, allows for more precise control temporarily, and is almost free of side effects. It was hypothesized that the association of such a frightening consequence (respiratory arrest, muscular paralysis) with certain behavioral acts would be effective in suppressing these acts * * *.

How severe is the anectine experience from the point of view of the patient? Sixteen likened it to dying. Three of these compared it to actual experiences in the past in which they had almost drowned. The majority described it as a terrible, scary, experience.¹⁷

In this program at Vacaville some of the patients were subjected to the program involuntarily:

A few subjects were given the anectine treatment following the occurrence of an episode of aggressive acting out without prior warning that they would receive such a treatment. . . . Of five patients, consent was not received from

¹⁷ Mattocks & Jew, Assessment of an Aversive Treatment Program with Extreme Acting-Out Patients in a Psychiatric Facility for Criminal Offenders (Unpublished Manuscript prepared for the California Department of Corrections, on file with the University of Southern California Law Library, undated), as quoted in Michael H. Shapiro, "Legislating the Control of Behavior Control: Autonomy and the Coercive Use of Organic Therapies," 47 So. Calif. L. Rev. 237, 245 (1974).

the patient himself, but was granted by the institution's special treatment Board. Thus, five patients were included in the program against their will.¹⁸

Apomorphine and anectine are but the more familiar of a variety of similar drugs causing varying degrees of discomfort which are used in aversive conditioning programs.

Other forms of aversive conditioning using artificial choice situations attempt to suppress specific attitudes, while stimulating others. The systematic application of electric shocks is, for example, widely used in the treatment of alcoholism, homosexuality and other forms of so-called deviant behavior. For instance, an alcoholic, wired to a shock-generating device will be presented with two choices: a mixed alcoholic drink or a soft drink such as ginger ale. If the subject reaches for the alcoholic drink, he will automatically be shocked. If he reaches instead for the soft drink, no shock will be administered. In the catalogue of a firm specializing in shock treatment apparatuses, the therapy is described as follows:

Aversive conditioning has proven an effective aid in the treatment of child molesters, transvestites, exhibitionists, alcoholics, shop lifters and other people with similar problems. Stimulus slides are shown to the patient intermixed with neutral slides. Shock is delivered with stimulus scenes but not with neutral scenes. In reinforcing heterosexual preference in latent male homosexuals, male slides give a shock while the stimulus relief slides of females do not give shock. The patient is given a "Slide Change" handbutton which enables him to escape or avoid a shock by rejecting a shock cue scene.¹⁹

Other forms of behavior modification techniques employ intensive "encounter sessions" in which individuals are required to participate in group therapy discussions where intensive pressure is often placed on the individuals to accept the attitudes of the group. More intensive forms of encounter groups begin first by subjecting the individual to isolation and humiliation in a conscious effort to break down his psychological defenses. Once the individual is submissive, his personality can begin to be reformed around attitudes determined by the program director to be acceptable. Similar to the highly refined "brainwashing" techniques employed by the North Koreans in the early nineteen fifties, the method is used in the treatment of drug abusers. In an article supporting this type of brainwashing as a behavior modification technique published in 1962, Professor Edgar Schein suggested that:

In order to produce marked change of behavior and/or attitude, it is necessary to weaken, undermine or remove the supports of the old pattern of behavior and the old attitudes. Because most of these supports are the face-to-face confirmation of present behavior and attitudes which are provided by those with whom close emotional ties exist, it is often necessary to break those emotional ties. This can be done either by removing the individual physically and preventing any communication with those whom he cares about, or by proving to him that those whom he respects are not worthy of it and, indeed, should be actively mistrusted.²⁰

"The Seed", a drug abuse treatment program in Florida that, until recently, received funding from the Department of Health,

¹⁸ *Id.* at 246.

¹⁹ Catalogue No. P-72, Farrall Instruments Company, Grand Island, Nebraska, Company Catalogue, 1973, printed in the Appendix as Item VI.C.

²⁰ Edgar H. Schein, "Man Against Man: Brainwashing," *Corrective Psychiatry and Journal of Social Therapy*, Vol. 8, No. 2, (1962), pp. 91-92.

Education, and Welfare, is based on a similar philosophy. The grant request from the program to HEW describes the process as follows:

* * * new clients entering the program are placed in a temporary foster home environment during the first phase * * * of the program. It has been evidenced that it is necessary to remove the client from his home environment as there might be existing problems that would prohibit normal progression during this phase of the program, and this procedure also eliminates any outside interference that might hamper the client's progress.²¹

The "client" is committed to the program either by the courts or his parents, and in both cases becomes the temporary ward of "The Seed." Once in the program, the client is placed in a graduated social structure where he is subjected to intensive peer pressure and where acceptable attitudes win progression to more agreeable levels of the program. As stated in the grant request,

For the first three days, the client is placed in the first row. During this period he is not permitted to relate his feelings and his experiences. He is watched closely by the group and Staff with detailed notes recorded regarding his behavior.

On the fourth day, the client moves back a few rows. He is permitted to participate in group discussions. His attitude begins to change with a softening of facial features, attention focused on discussions, and loss of hostility.²²

Of all the methods of behavior modification presently being employed in the United States, positive reinforcement is perhaps the most benign. But as with all other forms of behavior modification, positive reinforcement seeks to restructure personality through artificially applied techniques. In its simplest form, positive reinforcement amounts to the use of "gold-star" incentives for appropriate behavior. More elaborate systems are based on what are referred to as "token economies". In such a program, so-called tokens are given as rewards for good behavior, e.g., showing respect for authority, greater productivity, or greater responsiveness. The tokens may, in turn, be exchanged for items not normally available in that particular environment such as candy, extra time off, an hour of television, etc. In a token economy program funded by LEAA, for example, subjects are initially placed in a base group with limited privileges. As the subject expresses a willingness to cooperate with authority and to adopt behavior determined to be more acceptable, he is progressively moved to higher levels, with each level bringing with it a new range of privileges. But if a subject is uncooperative or engages in undesired behavior a number of times, he may be placed in what is called "Monad," a more coercive program. Base privileges in one such "Monad" were described as follows:

1. Mattress on floors in room (that's all).
2. Pajamas or nightgown only.
3. Nutritious meals, but not appetizing (e.g., mush, pureed meals, granola, other cereal, soup, vitamin pills).
4. Doing menial, monotonous work or calisthenics several times a day in order to earn concrete reinforcement.
5. Emergency phone calls only.
6. Communication with staff only.²³

²¹ See "Excerpts from Grant Request by 'the Seed' to the Department of Health, Education and Welfare, June 20, 1972" printed in the Appendix as Item I.C.2.a.

²² *Id.*

²³ See "Closed Adolescent Treatment Center, Program Description," printed in the Appendix as Item III.B.3.

Good behavior in the program earns:

1. Cigarettes (no more than 5 a day).
2. Regular meals (in room).
3. Bed.
4. State clothes.
5. One or two hours of recreation a day.
6. The privilege to participate in the program.²⁴

In addition to the range of behavior modification techniques described above, there is another aspect of behavior technology designed to develop "scientific" methods of predicting violent behavior before it occurs. A number of theories have stimulated interest in this relatively new science. For example, some suggest that individuals with a particular chromosome configuration, certain fingerprint patterns, or certain brain malfunctions are more likely to commit acts of violence than others. Although many of the research programs involved with violence prediction are not initially concerned with the modification of behavior, they often provide bases for future applications of behavior modification techniques. For example, a program description in the list of LEAA-funded projects relating to behavior modification printed in the Appendix states:

The study is confined to three specific dimensions: Phase I: the testing of a research instrument to prove effectiveness in identifying and diagnosing the behavior patterns of violence-prone offenders; Phase II: the administration of the instrument which is composed of a series of statements designed to elicit inmate responses concerning self-perception of covert and overt aggressive tendencies, the capacity to control aggressivity and to subjectively evaluate the meaning of past or present assaultive tendencies; Phase III: will involve the collection and evaluation of data to be used in the construction of a base violence expectancy scale. Such a predictive scale can be used in selecting the type of custody the inmate can best use as well as some of the behavioral or characterological problems with which custody and treatment staff must deal.²⁵

At the Boston City Hospital project, also funded by LEAA, efforts were made to identify correlations between chromosome configurations and violent or aggressive behavior. Tests were made to determine whether fingerprint classifications could be used as indicators of chromosome patterns prevalent among violent individuals. Tests of "Dermatoglyphic Analysis" were described in the final report as follows:

This is a physical (anthropometric) measure of patterns formed by sweat gland ridges on the hands and feet. They represent the embryological development of the skin surface in these regions. They are known to differ between sexes and races, but are unrelated to age. They exhibit specific variations in known genetic diseases including chromosomal abnormalities of the kind found in habitually aggressive offenders. They are also valuable as a screen for cases on whom (more expensive) chromosomal tests are likely to be valuable.²⁶

Although violence-prediction does not always result in the actual application of behavior modification techniques, it is a significant component of the emerging behavior control technology. Many of the research projects dealing with behavior prediction are designed to provide a framework through which individuals are to be screened for behavior modification.

²⁴ *Id.*

²⁵ Excerpts from LEAA Computer Printout Listing Behavior-Related Projects, April 10, 1974, printed in the Appendix as Item III.B.5.

²⁶ Excerpts from the Final Report of a study of "The Medical Epidemiology of Criminals," Neuro-Research Foundation, Boston, Massachusetts, printed in the Appendix as Item III.B.1.

THE CONSTITUTIONAL RIGHTS SUBCOMMITTEE INVESTIGATION

Late in 1971, several seemingly unrelated programs under investigation by the staff began to point collectively to the emergence of a new technology of behavior control which posed serious questions with regard to the protection of the constitutional rights of individuals. At that time, the psychosurgery controversy was reappearing, and a number of questions were being raised regarding the propriety of federal funding for psychosurgical operations. Of particular concern was a controversial study of the relationship between brain disease and violent behavior at Boston City Hospital funded jointly by the Law Enforcement Assistance Administration and the Department of Health, Education, and Welfare.

During the same period, the subcommittee became aware of the Bureau of Prisons' proposed Center for Behavioral Research to be constructed at Butner, North Carolina. Plans for the Center had been closely guarded and there were concerns that psychosurgery and other forms of radical behavior modification were being contemplated. Presidential veto of the appropriations bill that provided additional funds for the Boston City Hospital project added to speculation that similar programs might be reinstated at Butner. The Boston and Butner projects, both to have been financed in part by LEAA, led the subcommittee to inquire into other LEAA projects, which may involve some aspect of behavior modification.

Apart from LEAA, which funded projects at the state and local level, the inquiry also involved other federal agencies which were involved in funding or operating their own behavioral programs. Of primary interest were the activities of the Department of Health, Education, and Welfare, the federal agency most directly involved with biomedical and behavioral research. The inquiry spread to other agencies, however, such as the Veterans Administration, when it became apparent that they, too, administered programs involving some aspect of behavioral modification.

The inquiry sought to establish what programs and studies dealing with behavior modification were being carried out under the auspices of the federal government. Beyond this, it was the intent of the subcommittee to determine what rights were being accorded those individuals subject to such programs, and under what regulations and controls the programs were being administered.

At the time of this report's publication, many of the responses to subcommittee inquiries appear to be incomplete, and further inquiry and investigation is needed. A great deal of information has, however, been assembled concerning both the nature of the federal government's involvement in behavior modification and the specific programs themselves. This report, however, records the results of the subcommittee's inquiry thus far and can form the basis for further investigation and study in the next Congress.

FEDERAL INVOLVEMENT

In the course of its investigation, the subcommittee found that a wide variety of behavior modification techniques ranging from simple positive reinforcement to psychosurgery are presently being employed in the United States under the auspices of the federal government. The nature and rapid growth of some of the projects continue to be the cause of concern. The Department of Health, Education, and Welfare funds the most substantial amount of research into human behavior, but other departments sponsor and conduct extensive behavioral research programs as well. Notably, it was found that the Department of Justice, through the Bureau of Prisons and the Law Enforcement Assistance Administration, the Veterans' Administration, the Defense Department, the Labor Department and the National Science Foundation all support various behavior modification programs.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

A substantial portion of the investigation into behavior control technology has been concerned with the Department of Health, Education, and Welfare. The Department participates in a very large number of projects dealing with the control and alteration of human behavior. The Department does provide some degree of monitoring for the projects that it conducts, and has made some attempts to resolve some of the questions posed by behavior control techniques with regard to individual liberties.

However, despite extensive departmental guidelines concerning the rights of human subjects and other ethical questions raised by biomedical and behavioral research, abuses have occurred. For example, in a study of syphilis funded by the Department of Health, Education, and Welfare in Tuskegee, Alabama, researchers did not obtain the informed consent of participants prior to their participation in the program.¹ The Tuskegee study serves as an example of the kinds of abuses that can occur in the absence of strict constitutional and ethical guidelines. In the case of behavioral research, where the researcher may have virtually complete control over the well-being of the individual subject, the most definite of guidelines are essential. Although the Department of Health, Education, and Welfare has made several gestures to strengthen its guidelines, it is unclear whether these guidelines are sufficient to prevent further abuses of individual rights and well-being.

¹ In the experiment, individuals who were led to believe that they were being treated for syphilis were actually allowed to go untreated for as long as twenty years so that the researchers involved could study the effects of the disease in its most advanced stages. See Excerpts from the Report of the Tuskegee Syphilis Study Ad Hoc Advisory Panel, 1973, printed in the Appendix as Item I.B.3.

Department of Health, Education, and Welfare. Policies Concerning Behavioral Research

The Department of Health, Education and Welfare has devoted forty pages of its Grants Administration Manual² to a detailed description of the ethics approval process necessary for an institution or individual to become eligible for HEW research grants. In addition departmental regulations³ are applicable to all HEW grants and contracts supporting activities in which human subjects may be at risk. Generally, the responsibility for the protection of human subjects lies with individual institutions. The Department's control over individual projects relies on a certification process through which institutional review committees for each institution are established and approved. Before an institution can become eligible for a HEW grant, that institution must submit an "assurance" which, in turn, must be approved by the Department. Among other things, an assurance must include a statement of intent to comply with departmental guidelines concerning the rights of human subjects. In addition, an assurance must provide for the establishment of a local review committee, whose "maturity, experience, and expertise must be such as to justify respect for its advice and counsel." The assurance must also outline the means by which informed consent is to be obtained from individual participants. Although HEW requirements for the assurances are described in some detail, HEW approval of the assurances provides the sole mechanism for HEW to supervise the research conducted at individual institutions. Once an assurance for an institution is approved, HEW has no direct supervisory authority over that institution, nor over the ways in which the projects are carried out. The Department conducts no oversight to ensure that the commitments in the "assurance" are adhered to.

Critics of HEW policy have pointed out that there are some distinct weaknesses which render this review process relatively ineffectual. Although an institutional assurance appears to be an understanding of some substance, it does not provide for the kind of binding contract and continuing supervision necessary to protect the rights of human subjects. Overall, the process depends for enforcement almost entirely upon the good faith of researchers. Because of the overriding interest of a researcher in the program he is conducting, there is some question as to whether his good faith alone can be depended upon for adequate protection of the interests of his subjects.

Responding, at least in part, to pressure from the Congress, HEW has made several attempts to improve its guidelines concerning biomedical and behavioral research. In an effort to add force to existing policy, HEW promulgated the guidelines in the form of departmental regulations.⁴ The action gave the guidelines added force but the same weaknesses remained.

Prior to issuance, Secretary Weinberger solicited comments on the regulations. In a letter to the Secretary, Chairman Ervin expressed his

² "The Institutional Guide to DHEW Policy on Protection of Human Subjects," December 1, 1971, printed in the Appendix as Item I.B.1.

³ HEW Regulations Concerning the Protection of Human Subjects, *Fed. Reg.*, Vol. 39, No. 105 (May 30, 1974), printed in the Appendix as Item I.B.2.

⁴ HEW Regulations Concerning the Protection of Human Subjects, *supra*.

serious reservations about the guidelines and the potential damage that the new regulations could inflict on pending legislation :

When medical research is conducted with human subjects there is a real danger that purely scientific interests may lead some researchers to give insufficient attention to the rights of persons who are experimental subjects * * *. Minimum standards concerning informed consent and other ethical considerations must be defined and enforced, not just for the Department of Health, Education and Welfare, but for all experimentation involving human beings that is conducted under grant or sponsorship from the Federal government. Regrettably, the proposed guidelines do not clearly define many of the ethical problems that are faced in medical research, they do not provide for adequate continuing review by HEW, and of course they can be applied only to experiments that relate to the Department of Health, Education, and Welfare * * *. HEW has a responsibility to establish the strongest possible guidelines in the field of the protection of the rights of human subjects to serve as a model for other federal, state, or private research * * *.⁵

Opposition to HEW's merely codifying in regulations the guidelines already proved to be inadequate came from throughout the academic and medical communities. Dr. Jay Katz, Adjunct Professor of Law and Psychiatry at Yale Law School, is a member of the Department's own Tuskegee Syphilis Study Advisory Panel which submitted detailed recommendations for revision of existing HEW policies regarding protection of human subjects. They summarized the major objections to the codification of existing HEW guidelines in a letter to the Department. Dr. Katz criticized the regulations because they "do not reflect any new thought by DHEW and, instead, merely enact the current, often criticized and inadequate departmental regulations into law."⁶ Referring Secretary Weinberger to Charge III of the report of the Tuskegee Syphilis Study Ad Hoc Advisory Panel (printed in the Appendix as Item I.B.3.), Dr. Katz outlined three important lines of criticism:

1. The proposed regulations do not provide mechanisms for the review and publication of the important decisions made by Institutional Review Committees. As I have argued repeatedly, procedures must be established for publication and review in order to radically change the currently uninformed and secretive climate which pervades research decisionmaking. At present decisionmaking in human research remains divorced from pertinent prior decisions of other committees or from scholarly and public evaluation and criticism. I regard such an omission as a serious and fatal defect which will defeat the objective of providing workable standards for the regulation of the human experimentation process.

2. The proposed rules do not make provisions for the participation of "outsiders" in the formulation of research policies. (By "outsiders" I mean members of professions not directly engaged in human research as well as representatives of the general public.) It is left unclear in the proposed rules whether "outsiders" must be represented on the institutional review committees or whether this is optional; however, even if their inclusion were to become a requirement, it would not place them in the most strategic position to have a significant impact. At the level of the institutional review committees, where decisions have to be made expeditiously and on a case-by-case basis, outsiders cannot make an effective contribution to the formulation of basic policies. Thus in essence the proposed regulations continue to leave decisionmaking to members of the research community and do not provide for participation in overall decisionmaking by representatives of society. I believe that outsiders who represent and protect individual and societal values must participate in

⁵ Letter from Chairman Sam J. Ervin, Jr., to Caspar Weinberger, Secretary of Health, Education and Welfare, January 11, 1974, printed in the Appendix as Item I.A.17.

⁶ Letter from Jay Katz, M.D., to Chief, Institutional Relations Branch, Division of Research Grants, National Institutes of Health, October 30, 1973 (copy on file in Senate Constitutional Rights Subcommittee Offices).

the formulation of research policy as well as in the review of decisions. The recent Senate debate on psychosurgery and fetal research make the need for participation of outsiders in formulation of research policies abundantly clear.

3. Most important, the proposed rules delegate the responsibility of formulating the specific policies required to give meaning and substance to the proposed regulations to the institutional review committees. The Secretary of Health, Education, and Welfare must know that these committees have neither the capacity nor the time nor the resources nor the interest to confront this complex assignment. For that reason alone the proposed rules are dangerous to the welfare of research subjects and to the objectives of science. The committees cannot fulfill the obligations which the proposed rules seek to impose on them. Moreover, even if the committees could rise to this task, it would be a repetitive and burdensome assignment for each committee to formulate its own policies.⁷

Dr. Katz urged HEW "to withdraw the proposed rules from consideration at this time and instead to revise them carefully before proposing their enactment into law. In their present form they will only invite disregard of the law. Neither law nor medicine is well served by such an approach to the complex problems raised by the regulation of human research."⁸

Despite this and other similar criticism, the regulations were promulgated as proposed. The Department has, however, also initiated several special studies of specific ethical problems raised by biomedical and behavioral research. One such study investigated limitations on informed consent in certain inherently coercive situations, and proposed that special guidelines be established and applied where experimental techniques are used in the treatment of children, prisoners, or the mentally infirm.⁹ A second report investigated special aspects of sterilization programs involving mentally incompetent individuals. This second report was initiated, in part, in response to the disclosure of unethical testing procedures of certain birth control drugs conducted under grant from the Department.¹⁰

Two additional studies were of particular interest to the subcommittee because of their direct bearing on behavior research: a report on the biomedical research into the brain and aggressive violent behavior,¹¹ and a detailed study of the merits and implications of psychosurgery.¹²

The Report on Biomedical Research Aspects of Aggressive Violent Behavior, released on October 23, 1973, was divided into two parts: a review of the present state of such research, and recommendations for future action in the area. The report recognized the sensitivity of many of the issues involved in research aimed at controlling violent behavior through biomedical means. The report's recommendations include the following: that the Department's position on the biomedical therapy of violent and rage behavior be that the scientific and medical literature available at this time is incon-

⁷ *Id.*

⁸ *Id.* See also "Excerpts from the Report of the Tuskegee Syphilis Study Ad Hoc Advisory Panel, printed in the Appendix as Item I.B.3.

⁹ Protection of Human Subjects—Policies and Procedures, DHEW-NIH, *Fed. Reg.*, Vol. 38, No. 221 (November 16, 1973).

¹⁰ Sterilization Restrictions—Federally Funded Programs and Projects, DHEW-PHS-SHS, *Fed. Reg.*, Vol. 39, No. 26 (February 6, 1974).

¹¹ Report on the Biomedical Research Aspects of Brain and Aggressive Violent Behavior, by the National Institute of Neurological Disorders and Stroke, October 23, 1973. Excerpts are printed in the Appendix as Item I.B.5.

¹² Psychosurgery Report of the National Institute of Mental Health, *supra*.

clusive in regard to the efficacy of these procedures;¹³ and that funding under existing procedures of violent behavior research as "necessary concerns of biomedical investigation" be continued.¹⁴ The report also recommended the establishment of a case-by-case review of the rights of subjects involved in the research:

To ensure that the interests of the individual are adequately protected in investigative situations in which issues of either the adequacy of being informed or the appropriateness of giving consent can be questioned, a Human Subject Advocacy Committee (HUSAC) should be involved. The HUSAC should comprise members of society (e.g. theologians, jurists, community representatives) drawn from the local geographic area who are selected for their dedication to the protection of the individual rights of the human subject * * *. On a case-by-case basis, the HUSAC should rule on the participation of every human subject in an investigative procedure that cannot benefit the subject or in which a question is posed about the ability of the subject to give informed consent.¹⁵

The report made several general recommendations concerning the protection of the rights of human subjects of violence. However, it did not specifically deal with the questions raised by research designed to develop methods of predicting human behavior on a large scale in an effort to control that behavior before it is manifested.

Because of the sharp controversy surrounding psychosurgery, a special study of psychosurgery was conducted by the National Institute of Mental Health in conjunction with the National Institute for Neurological Diseases and Stroke.¹⁶ Among its conclusions, the Psychosurgery Report recommended that "[p]sychosurgery should be regarded as an experimental therapy at the present time. As such, it should not be considered to be a form of therapy which can be made generally available to the public because of the peculiar nature of the procedure and of the problems with which it deals."¹⁷ The report further recommended that a moratorium be placed on psychosurgery until detailed guidelines concerning its use can be implemented.

This report was particularly interesting because in a series of correspondence with the Department of Health, Education, and Welfare, Chairman Ervin had been assured that no psychosurgery or violent behavior research would be conducted under grant from the Department until the report was completed. In a letter from Dr. Robert S. Stone, director of the National Institute of Health, the chairman was told on January 30, 1974, that the report had not been completed.¹⁸ In an article that appeared in *The Washington Post* six months later, it was disclosed that the report had in fact been completed on January 21, 1974, but had not been released because it was critical of psychosurgery and recommended that the practice be discontinued until ethical questions surrounding its use had been fully considered. "HEW spokesmen said the report is being considered but that no action has been taken and that none is likely soon," the article stated.¹⁹ In a letter to Secre-

¹³ Report on the Biomedical Research Aspects of Brain and Aggressive Violent Behavior, *supra* at 167.

¹⁴ *Id.* at 167.

¹⁵ *Id.* at 166.

¹⁶ Psychosurgery Report, *supra*.

¹⁷ *Id.*

¹⁸ Letter from Robert S. Stone to Chairman Sam J. Ervin, Jr., January 30, 1974, printed in Appendix as Item I.A.20.

¹⁹ Craig A. Palmer, "Surgery Report Bottled Up," *Washington Post*, June 5, 1974, p. A-9.

tary Weinberger protesting the failure of the Department to act on the report. Chairman Ervin stated his view that:

Psychosurgery is a practice that poses a profound threat to individual privacy and freedom. I am disturbed that the Department of Health, Education, and Welfare has not taken the steps recommended in the report of its study to minimize this threat, and thereby provide the leadership it should as the premiere health organization in the world. While the merits of psychosurgery may be debatable, the rights and well-being of individual citizens cannot be compromised. I suggest that action on the recommendations be taken at once, and that a formal moratorium be placed on the practice until the vital questions concerning its use can be thoroughly considered and resolved.²⁰

Secretary Weinberger replied that the NINDS Report on the Biomedical Research Aspects of Brain and Aggressive Violent Behavior and the NIMH Psychosurgery Report, discussed above, were available to the public, but were not the final word with respect to HEW policy on the subject:

Let me stress again that these reports were prepared at the request of, and to provide advice to, the Assistant Secretary. They do not, at this time, have my endorsement of all their details. As you clearly point out, they raise a number of medical, legal, ethical, and administrative issues and provide recommendations concerning those issues. However, the Department does not now nor will we in the foreseeable future support research efforts involving surgery on the human brain solely for the treatment of psychiatric or behavioral problems.²¹

At present the Department of Health, Education, and Welfare appears to be awaiting the findings of the newly-created National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research before definitive departmental policies are promulgated.

Behavioral Research Projects Funded By the Department of Health, Education and Welfare

While a substantial portion of the subcommittee's interest in the Department of Health, Education, and Welfare was concerned with agency guidelines concerning human experimentation, a major portion of the investigation focused on various projects involving human behavior participated in by the department. Because of the larger number of such projects, the subcommittee has thus far looked into only part of the behavioral research being conducted.

Of primary interest is the National Center for the Study of Crime and Delinquency (NCSCD), an agency under the auspices of the Alcohol, Drug Abuse and Mental Health Administration. The Center is primarily a funding organization which supports and conducts an extensive number of projects involved with various aspects of delinquent behavior. In a detailed response to an inquiry from the chairman, Bertram Brown, then Director of the National Institute of Mental Health, stated that the "Center places primary emphasis on efforts to understand and cope with problems of mental health as these are or may be reflected in various types of deviant, maladaptive, aggressive and violent behaviors that frequently involve violations of criminal or juvenile law."²² Dr. Brown further

²⁰ Letter from Chairman Sam J. Ervin, Jr., to Secretary Caspar Weinberger, July 12, 1974, printed in the Appendix as Item I.A.24.

²¹ Letter from Secretary Caspar Weinberger to Chairman Sam J. Ervin, Jr., July 20, 1974, printed in the Appendix as Item I.A.25.

²² Letter from Bertram Brown to Chairman Sam J. Ervin, Jr., December 10, 1973, printed in the Appendix as Item I.A.10.

described the Center as the "focal point in NIMH for research, training, and related activities in the areas of crime and delinquency, individual violent behavior, and law and mental health interactions."²³

The Center conducts a wide spectrum of behavioral research with a particular emphasis on the development of methods of controlling abnormal or asocial attitudes. In response to the subcommittee's inquiry, the director listed a total of nineteen projects conducted in three environments—schools, mental institutions and prisons—where special questions would be raised concerning informed consent. Among these projects are programs involving the use of experimental drugs, encephalographic research involving the external activation of brain waves, and various behavior modification projects designed to "improve academic and social skills of children with problem behaviors."²⁴ NCSCD also conducts a number of projects dealing with the prediction of violent behavior, including studies of chromosome abnormalities, and the repetition of criminal behavior in families. The Center for the Study of Crime and Delinquency therefore presents many of the basic questions to be considered in what many consider the inherent conflict between behavior control technology and constitutional rights.

Based on information assembled during the subcommittee's investigation, there is some question as to whether the rights of the human subjects of such research and treatment are adequately protected. A cardinal principle of the HEW guidelines is that a subject must be determined to be "at risk" before he is to be accorded the minimal protection of the regulations. A number of projects investigated by the subcommittee, although posing no direct physical danger to the individuals involved, presented questions with respect to the constitutional rights of the subjects. For example, a study funded by the Center attempting to link chromosome configurations to the prediction of violent behavior involved the arbitrary separation of individuals into physical typologies. As described in the project description received from HEW:

The proposed research would hope to answer the following questions: 1) are previously noted anomalies in 47,XYY [chromosome] males (e.g., neurological abnormalities, body asymmetries, homosexuality) more frequent in such males than in controls matched for several factors including height? 2) Are there significant differences between 47,XYY males and matched controls in regard to type of crime, age at first arrest, family background, and other social and psychological variables? 3) within a particular state (Wisconsin), are there differences in the frequency of XYY males in the population of institutionalized juvenile offenders, adult offenders hospitalized for mental illness and/or mental retardation, and other prisoners? 4) Do tallness or any other traits develop sufficiently early to be of value in the early recognition of XYY males? And 5) how does the frequency of the 47,XYY condition in adult and juvenile offenders vary with height?²⁵

Such identification and separation is the first step toward unequal treatment of otherwise innocent individuals.

Moreover, several of the programs conducted by the Center for the Study of Crime and Delinquency are so unproven as to raise the question whether the federal government should be involved at all. Al-

²³ *Id.*

²⁴ *Id.*

²⁵ Center for the Study of Crime and Delinquency—Abstracts of CSCD-Funded Projects, December 10, 1973, printed in the Appendix as Item I.C.3.

though project descriptions are general and couched in scientific terms, it appears that some projects are being conducted under grant from HEW that involve direct electrical stimulation of the brain in an effort to discover and neutralize neurological sources of violence. Although such experiments are not classified as psychosurgery under the classic definition, the effect of the practice is the same: in both instances, the brain itself is manipulated in order to identify and control conscious functions. For example, in one such electrical stimulation project funded by the Center for the Study of Crime and Delinquency conducted at the Patuxent Institution in Maryland:

One specific hypothesis to be tested is that chloralose activation of the EEG (electroencephalogram) will correlate positively with epileptoid impulsivity. Data will be collected in such manner as to determine the reliability of psychiatric, psychometric, and EEG measures of epileptoid and hysteriod impulsivity, and to allow later quantitative computer analysis of both psychologic and electroencephalographic data. Finally, the clinical usefulness of the anticonvulsant primidone (Mysoline) will be tested in a double-blind study, and the results compared with those of a previous study in which diphenylhydantoin was used with a similar group at the same institution.²⁶

Through various other sub-agencies, HEW funds a number of programs designed to modify various forms of behavior. One such program that until recently received substantial funding from the Department is "The Seed," a Florida-based drug treatment program that uses intensive peer-group pressure to reform both known and suspected drug abusers. The Seed is a private organization, and the program is admittedly highly coercive. Though the program claims a substantial cure rate, the types of therapy employed have attracted much controversy and publicity.²⁷ Most "seedlings," as subjects are called, are committed to the program either by their parents, their schools, or the courts. Because the program produces pronounced changes in the general attitudes and behavior of former drug users, it receives considerable approval from various elements of the community. For example, in a testimonial letter from the Nova University Institute of Human Development, the associate director stated:

I am happy to have the opportunity to write a letter in support of the activities of the Seed with young people who are experimenting with, using, and abusing dangerous drug substances.

I have referred a number of my patients to the Seed with dramatic results, not only in terms of getting off the use of drugs but also in terms of positive attitude changes. The attitude changes have made possible family and school adjustments which were completely rejected prior to the experience at the Seed.²⁸

Once in the program, participants are subjected to a regimen which several individuals have referred to as brain-washing. Seedlings are required to dress, act, and think in more socially acceptable manners. Once out of the program, graduates are encouraged to observe fellow Seedlings, and to report any vacillation from accepted modes of behavior. In a statement critical of the program, a guidance counselor from a South Florida high school described Seedlings when they return to school after participation in the program:

²⁶ *Id.*

²⁷ See "Two Views of the Seed: For and Against," from *The St. Petersburg Times*, September 16, 1973, p. D-1, printed in the Appendix as Item I.C.2.d.

²⁸ Included in Excerpts from Grant Request by the Seed to the Department of Health, Education and Welfare, June 20, 1972, printed in the Appendix as Item I.C.2.a.

When they return, they are "straight," namely, quiet, well-dressed, short hair, and not under the influence of drugs compared to their previous appearance of [being] stoned most of the time. However, they seem to be living in a robot-like atmosphere, they won't speak to anyone outside of their own group. They sit in a class together, and the classes become divided of Seedlings opposing non-Seedlings. . . .

Seedlings seem to have an informing system on each other and on others that is similar to Nazi Germany. They run in to use the telephone daily, to report against each other to the Seed and it seems that an accused Seedling has no chance to defend himself because if enough persons accuse him of something, he is presumed guilty. The Seedlings also make numerous false accusations about drug behavior concerning non-Seedlings.²⁹

Following an inquiry to the Department of Health, Education, and Welfare concerning funding for the program, the subcommittee received a number of letters from members of the community in praise of the Seed. The majority of the letters in support of the Seed repeatedly referred to the remarkable and positive changes that have occurred in the individuals referred to the program. One such writer, describing the Seed as a "fantastically successful youth drug program" stated:

I am writing as a Seed parent—our 15 year old daughter has just completed the program—who has been involved with the Seed for eight months. My wife and I both feel that it is the most wonderful and worthwhile endeavor that we have ever had the privilege of being a part of. . . . The Seed has a cure rate of approximately 90% which I believe is by far the best of any drug program in the country. The children in this program basically learn to live the Golden Rule. They also learn what is good and bad for themselves and to work hard in school or in whatever job they may have. Senator, as a parent of a Seedling and as an employer of five others. I can vouch that the Seed is a tremendous force for good in our community.³⁰

Because of the controversy raised and because of growing pressure from various groups who question the techniques upon which the Seed is based, early in 1974 the Seed decided to forego Federal funding.³¹

The exact extent of involvement by the Department of Health, Education, and Welfare in behavioral research and behavior modification programs has not yet been ascertained. In an effort to compile comprehensive information on the department's activities in this area an inquiry was directed to the department on February 22, 1974.³² Because of the vast number of such projects, an agency-by-agency canvass took a great deal of time.

The Department first provided information concerning only the Public Health Service, one of the major organizations within HEW. In listing some forty-five Public Health Service research projects that dealt in some manner with the modification or control of behavior, the Department noted:

The projects included in the enclosed listing fall within the defined area of behavioral modification, *i.e.* the systematic application of psychological and social principles to bring about desired changes in or to prevent development of certain "problematic" behaviors and responses. Among the many types of projects included in our response are those designed to teach narcotic addicts

²⁹ Excerpts from "The Study of the Advisability of the 'Seed' in Dade County," Comprehensive Health Planning Council of South Florida, printed in the Appendix as Item I.C.2.b.

³⁰ Letter received by the Subcommittee on Constitutional Rights, in subcommittee files.

³¹ Letter from Art Barker, President of "The Seed," Department of Health, Education and Welfare, February 19, 1974, printed in the Appendix as Item I.C.2.c.

³² Letter from Chairman Sam J. Ervin, Jr., to Secretary Caspar Weinberger, February 22, 1974, printed in the Appendix as Item I.A.21.

or alcoholics to develop self-control over their drug-taking behavior; to alter behavior of persons with serious psychiatric or behavioral problems such as chronic schizophrenia, autism, or learning disabilities; and develop methods for training persons responsible for children, such as parents, teachers or child welfare workers, to use behavioral principles in fostering child development and preventing or dealing with problem behaviors.³³

The projects listed in this phase of the canvass appear to deal primarily with the less direct forms of behavior modification such as token economies and other forms of positive reinforcement. A number of the project descriptions, however, also relate to the pre-termination and prediction of behavior. For example, in one of these programs:

Children with cross-gender (sex role) problems are being studied to improve the understanding and treatment of sexual deviation in its nascent stages. The subjects, boys five to eight years of age who have exhibited various signs of a cross gender problem. (cross-dressing, playing with girl's toys, feminine mannerisms), participate in a variety of studies. The investigator is attempting to develop reliable and objective data on the behavior of these children in the home and in the clinic. Based upon this data, treatment is developed for helping children to adopt normal gender behavior. This treatment is based on principles of "behavior contingency management," in which subjects are given token rewards for displaying behavior appropriate to their gender. The investigator is also trying to identify the environmental conditions under which sex role problems are likely to occur. Long-term studies attempt to follow the subjects over crucial development years into adulthood.³⁴

Finally, on July 25, 1974, the department reported the results of "a canvass of non-health-related agencies of the Department" and "identified ten projects" related to behavior modification. "One project is supported by the National Institute of Education (NIE), one by the Office of Child Development (OCD), and eight by the Social and Rehabilitation Service (SRS)."³⁵

In addition, "all programs under the responsibility of the Office of Education and the National Institute of Education (NIE) have been reviewed, and biomedical and behavioral research designed to alter the behavior of human subjects is not being supported."³⁶ One NIE project funding educational systems "which serve to remediate the [disadvantaged] child or correct deficiencies in the educational environment" was considered a possible exception.³⁷

The length of time and apparent difficulties involved in preparing a response to the subcommittee's February 22, 1974, inquiry may itself indicate that the Department is ill-equipped to provide the kind of monitoring and review that is essential in research situations that raise serious questions of individual privacy, freedom and self-determination. Quite clearly, the first step toward devising and then applying adequate standards for HEW-sponsored programs is for the department to have complete knowledge of the programs it is actually funding.

³³ Letter from Acting Secretary Frank Carlucci to Chairman Sam J. Ervin, Jr., May 10, 1974, printed in the Appendix as Item I.A.22.

³⁴ Abstracts of Project Descriptions of HEW-Funded Behavior-Related Research projects, received May 10, 1974, and July 25, 1974, printed in the Appendix as Item I.C.1.

³⁵ Letter from Acting Secretary Frank Carlucci to Chairman Sam J. Ervin, Jr., July 25, 1974, printed in the Appendix as Item I.A.26.

³⁶ *Id.*

³⁷ Abstracts of Project Descriptions of HEW-Funded Behavior-Related Research Projects, *supra*.

THE DEPARTMENT OF JUSTICE

The Department of Justice participates in a wide variety of controversial behavior-related projects primarily through the Bureau of Prisons and the Law Enforcement Assistance Administration, under guidelines and procedures which are ineffective at best. By comparison with the Department of Health, Education, and Welfare, which has devoted some energy to the resolution of the ethical and constitutional issues involved in behavior modification and behavioral research, the Department of Justice has made virtually no effort either to provide the necessary monitoring of research projects or to resolve important questions relating to individual liberties. This conclusion is inescapable in view of the policy innovations made in response to legal challenges and other objections to Department programs.

Bureau of Prisons

The Bureau of Prisons' involvement in behavior modification and behavioral research was of special interest to the staff both because of the nature of the projects it conducts and because of the special problems raised when behavior modification techniques are applied in a coercive environment. Recent court cases have raised serious questions concerning informed consent in a coercive environment, the rights to minimum standards of treatment, and the constitutional prohibition of cruel and unusual punishment, all in addition to the more fundamental questions of individual rights to privacy and freedom of thought. Two projects conducted by the Bureau were of special concern to the subcommittee: Project START (an acronym for Special Treatment and Rehabilitative Training), and the Federal Center for Correctional Research presently under construction at Butner, North Carolina (originally named the "Center for Behavioral Research").

Project START was a prototype behavior modification program conducted at the Federal Medical Center for Prisoners at Springfield, Missouri. Its goal was to rehabilitate unmanageable prisoners. Roughly fifteen prisoners were required to participate in the program involuntarily; no attempt was made to obtain the consent of the prisoners involved. In fact, because the program was designed to rehabilitate incorrigible offenders, volunteers were precluded from participation on the grounds that willingness to participate would lessen the effectiveness of the program on the individual. In a Bureau of Prisons operations memorandum, START was described as follows:

In an attempt to develop behavioral and attitudinal changes in offenders who have not adjusted satisfactorily to institutional settings, the Bureau has recently initiated a Special Treatment and Rehabilitative Training (START) Program at Springfield. The program is designed to provide care, custody, and correction of the long-term adult offender in a setting separated from his home institution.³⁹

³⁹ Project START Operations Memorandum, October 25, 1972, printed in Appendix as Item 11.B.2.a.

In the operations memorandum, selection criteria for the START program were outlined in detail. Each participant:

- (a) Will have shown repeated inability to adjust to regular institutional programs—not just minor offenses.
- (b) Will be transferred from the sending institution's segregation unit.
- (c) Generally, will have a minimum of two years remaining on his sentence.
- (d) Will not be overtly psychotic (overtly psychotic inmates are at appropriate referrals from the regular medical center psychiatric program).
- (e) Will have had experience in an adult penitentiary.
- (f) Will not be a continuous escape risk and in terms of personality characteristics, shall be aggressive, manipulative, resistive to authority, etc.³⁹

Project START was based on classical concepts of behavior modification involving the use of both positive and negative reinforcement as a means of altering behavior. Once in the program, an inmate would be placed in a solitary cell and allowed out of the cell only twice a week for showers and only once for exercise. After twenty days of what was determined to be good behavior, a prisoner would be graduated to the next level where his privileges would increase, i.e., he would be allowed out of his cell for one and one-half hours a day. The object of the program was the effective use of basic privileges as incentives for acceptable behavior. Privileges were accorded on the basis on accumulated "good days." "Good days" were earned, depending upon the level in the program, on the basis of compliance with twelve "good day" criteria which included "neat and clean personal appearance," "shower and shave according to guidelines on designated days," "follow[ing] directions and instructions in a willing manner without bickering," and "communicat[ing] with others in a reasonable tone of voice without belittling, agitating or using abusive language."⁴⁰

Because an inmate's movement to a higher level depended upon value judgments by individual guards, various inequities appeared. Moreover, the coercive nature of the program, the fact that it used basic privileges as incentives, and numerous allegations of abuse of prisoners by prison guards, attracted a great deal of controversy to Project START. In one case brought by the National Prison Project of the American Civil Liberties Union on behalf of several of the participants in the program, START was described in plaintiff's Post-Trial Memorandum of Law as "humiliating" and "unlawful." One incident was described in the memorandum as follows:

* * * the managerial staff, in response to petitioners' complaints, stripped petitioners of their clothing and shackled them to their beds for one day. Neither petitioner ever received a disciplinary report or charge, in spite of the shackling and in spite of their placement in a specially constructed strip cell whose lighting, heat and ventilation and bedding were markedly inferior to the already inadequate solitary cell furnishings within Unit 10-D.⁴¹

Following several adverse court rulings and while other cases were pending, the Bureau of Prisons quietly cancelled the program in February 1974.

³⁹ *Id.*
⁴⁰ START Revised Program Description, November 1973, printed in the Appendix as Item II.B.2.d.
⁴¹ Post-Trial Memorandum of Law, at 4, *Sanchez v. Glaccone*, Nos. 20182-4, 3061-4 (D.W.Mo., filed April 23, 1973). See also *Glaccone v. Richardson*, *supra*, printed in the Appendix as Item VI.B.4.

The Center for Correctional Research at Butner, North Carolina, has also generated considerable public interest partly as a result of the controversy surrounding Project START. In an effort to find out more about the proposed facility, the subcommittee addressed a series of inquiries to Norman Carlson, director of the Bureau, and to Dr. Martin Groder, the psychiatrist named to head the Butner facility. These inquiries were addressed primarily to issues concerning the Center for Correctional Research, but the subcommittee was also concerned about other Bureau of Prisons research programs and about agency mechanisms for the protection of human subjects.⁴²

Due to the controversy surrounding Project START as well as the atmosphere of secrecy surrounding the Butner project, subcommittee mail from ordinary citizens and federal prisoners alike indicated that the specter had been raised of an isolated enclave in which various forms of radical experimentation would be conducted using prisoners as subjects. In response to its various inquiries, the subcommittee has received repeated assurances that no psychosurgery, no chemotherapy, and no aversive conditioning of any kind will be tested or used at the Butner facility. The subcommittee has also been assured that a mental health facility to be located in the same compound at Butner will be separate and distinct from the Center for Correctional Research. According to Dr. Groder, all participants in the Center for Correctional Research will be volunteers, as the project depends upon willing cooperation for its success.

However, a number of important questions concerning the Center remain to be considered. For example, serious questions of voluntariness in a prison setting have been raised in recent court cases, as discussed above. Further, detailed ethical guidelines and a workable, effective review structure have not yet been developed for the Center. Chairman Ervin stated in a recent letter to Dr. Groder that such mechanisms are essential to the constitutional operation of the program.⁴³

Although the precise design of specific programs to be developed and tested at Butner has not yet been determined, it appears that several treatment modalities involving various forms of indirect behavior therapy are to be tested. In a meeting with the subcommittee staff on January 25, 1974, Dr. Groder described the plans for the Butner facility as really two separate institutions in a single location. A separate section will be devoted to the treatment of acutely psychotic prisoners; a second section will be used to conduct an experimental program that will seek to evaluate several experimental approaches to corrections. The experimental program will be a "multiple integrated treatment approach," which Dr. Groder described as an attempt to structure the environment of prisoners in such a way as to include all those supporting services that have been demonstrated to have a positive effect on the prisoner's chances of succeeding in the outside world.

⁴² See Bureau of Prisons' Policy Statement on Research, October 31, 1967, printed in the Appendix as Item II.B.1.

⁴³ Letter from Chairman Sam J. Ervin, Jr. to Martin Groder, April 19, 1974, printed in the Appendix as Item II.A.11.

Dr. Groder enumerated four experimental programs to be tested at Butner: (1) "Asklepion," a self-help transactional analysis program Dr. Groder himself developed at the Marion Federal Penitentiary; (2) a "Human Resources Development Program" developed by Dr. R. R. Carkhuff and based on the theory that physical, social, and intellectual fitness are all interrelated; (3) "Psychodrama," a program that employs the use of role-playing as a means of reducing anxiety and rebuilding personality; (4) a program as yet to be determined, possibly one based on the "rational emotive therapy" approach of Dr. Albert Ellis. Dr. Groder was emphatic that all of the participants in the program will be volunteers. The nature of the research design, according to Dr. Groder, requires that the participants be motivated to cooperate with the program. In correspondence with the subcommittee, Dr. Groder has repeatedly indicated that the mechanisms for deriving informed consent have not yet been developed.⁴⁴ It is also unclear what the status of the participants will be if sufficient numbers of inmates do not volunteer for the program. As of August of 1974, no information had been received by the subcommittee indicating how these questions are to be resolved, and when and how an institutional review structure for the Center is to be established.

Law Enforcement Assistance Administration

In the course of its investigation, the subcommittee became aware of a number of programs dealing with the prediction, identification, and control of various forms of abnormal behavior funded by the Law Enforcement Assistance Administration. As the widespread urban riots of the late 1960's and the resulting calls for law and order led to a growing preoccupation in the research community with studies of violent behavior, LEAA, because of its law enforcement mission and large appropriations, attracted a wide variety of grant requests dealing with this type of research. Many of these research projects involved the study and use of coercive methods designed to deal with violence which appear to pose substantial threats to the privacy and self-determination of the individuals against whom the methods are directed.

For example, a description by the researchers of one LEAA-funded project states that:

The goal of the project for early prevention of individual violence is the development of effective tools with which to bring about prevention of individual violent behavior. It is the primary objective of this project to identify potential early warning signs of individual violent behavior, to determine appropriate community and individual responses to these signs, and to make this and other preventive action program information identified during the project available to community resources and to individuals who can utilize the information for early prevention of individual violent behavior * * *. The project is also concerned with the development of a central computerized information bank that will provide bibliographic references on potential early warning signs and individual violent crime as well as preventive action information regarding community resources and responses to individual violence and crime.⁴⁵

⁴⁴ See, e.g., letter from Dr. Martin Groder to Chairman Sam J. Ervin, Jr., April 30, 1974, printed in the Appendix as Item II.A.12.

⁴⁵ Excerpts from Computer Printout Listing Behavior-Related Projects, April 10, 1974, printed in the Appendix as Item III.B.5.

Other behavioral research projects funded by LEAA appear to pose similarly difficult questions concerning individual rights. One LEAA funded project conducted at the Massachusetts General Hospital investigated various causes and predictors of violence. Theories were tested that suggested that fingerprint classifications and a particular chromosome configuration indicate that certain individuals were more prone to commit acts of violence than others. Although such projects as this appear to pose no direct, immediate threat to individual rights if conducted under ethical principles, critics point out that potential applications of such theories to label or isolate persons thought to be potentially violent from society raise profound questions with respect to due process, privacy, and individual liberties.

Center for the Study and Reduction of Violence.—It was the proposed grant request by the Center for the Study and Reduction of Violence to be established under the auspices of the Neuropsychiatric Institute of the University of California at Los Angeles that first attracted the subcommittee's attention to LEAA behavioral research programs. Of particular concern were reports that the Center planned to test various radical forms of behavior modification, including chemotherapy, electro-physiology, and several other forms of direct behavior control. In an in-house memorandum describing methods of dealing with violent sexual offenders, a staff psychologist of one of the institutions participating in the planned UCLA Center described a wide variety of applications of present methods for the modification of the behavior of sexually deviant individuals:

Within our electro-physiological laboratory we presently have the capability of (1) programming the wide variety of audio-visual stimuli, with concurrent recording of (2) heart rate, both directly and in beats per minute, (3) galvanic skin response, (4) changes in penis volume, (5) electromyographic responses, and (6) alpha and beta brain waves. We presently are in the process of developing portable bio-feedback devices which can be used for self-monitoring *in vivo*.⁴⁶

The planned use of a number of satellite facilities outside of UCLA, notably Atascadero, Camarillo, and Vacaville state hospitals, raised additional questions of control, and made it more difficult to monitor carefully the activities of the CSRV. Moreover, Vacaville and Atascadero were state facilities that had attracted substantial notoriety for allegedly unethical procedures over the past several years.⁴⁷

Moreover, among the principal figures involved in the formulation of plans for the Center were a number of controversial researchers in the field of behavior control technology, notably, several psychosurgeons and proponents of electrophysiological methods of behavior control. One was a researcher who had conducted substantial research into methods of electronic control of human behavior, in-

⁴⁶ Memorandum from Richard Laws, Ph. D., Staff Psychologist, Atascadero State Hospital, to the UCLA Center for the Study and Reduction of Violence, March 29, 1973, printed in the Appendix as Item III.B.2.e.

⁴⁷ "Memorandum on the Center for the Study of Violent Behavior," Prepared by the Committee Opposing Psychiatric Abuse of Prisoners, April 6, 1973, printed in the Appendix as Item III.B.2.e.

cluding the use of radio transmitter-receivers to determine the location, activities, and even thoughts of the individual using the device.⁴⁸

Responding to reports of these controversial projects, the subcommittee directed a series of inquiries to LEAA Administrator Donald E. Santarelli concerning possible LEAA funding for the Center for the Study and Reduction of Violence and other behavioral research projects. In response to initial inquiries, Mr. Santarelli indicated that LEAA funded seven behavioral research programs, and included a copy of a proposed grant request to LEAA for funding for the Center for the Study and Reduction of Violence. After further investigation, the subcommittee found that several programs of a controversial nature were being considered for the Center, and that each of the various programs under consideration raised a number of questions concerning the rights of the subjects. In one letter, Dr. Louis Jolyon West, director of the proposed Center, discussed the possible acquisition of an old Nike missile base for the location of the Center:

Such a Nike missile base is located in the Santa Monica Mountains, within a half-hour's drive of the Neuropsychiatric Institute. It is accessible, but relatively remote. The site is securely fenced, and includes various buildings and improvements making it suitable for prompt occupancy.

If this site were made available to the Neuropsychiatric Institute as a research facility, perhaps as an adjunct to the new Center for the Prevention of Violence, we could put it to very good use. Comparative studies could be carried out there, in an isolated but convenient location, of experimental or model programs for the alteration of undesirable behavior.⁴⁹

Actual plans for the Center for the Study and Reduction of Violence have gone through several revisions and remain somewhat unclear. But it is apparent that several radical forms of behavior modification were considered originally for experimental tests at the Center. An early project description dated September 1972 stated:

Considerable attention will focus on violent individuals who, because of biological, emotional, or characterological disturbances, are prone to life-threatening behavior. The Center's mission will be to reduce manifestations of violence by such people. To accomplish this, they must be studied carefully. Methods of preventing or modifying their violent behavior must be developed. Furthermore, the Center should be organized and operated in such a way that is continually translating new research into positive action, and transmitting new knowledge to others.⁵⁰

This project description outlined five major lines of research: (1) "epidemiological" attempts to develop statistical means whereby violence can be predicted; (2) "biological factors" research both to determine whether chromosome abnormalities and inherited characteristics can be used to predict predisposition toward violent behavior, and to test biochemical methods of controlling violence; (3) "neurological and neuropsychological" studies to determine the relationship between the brain and violent behavior; (4) "psychological factors" research to determine what external influences on

⁴⁸ See, Center for the Study and Reduction of Violence, Project Description, September, 1, 1972, printed in the Appendix as Item III.B.2.a.; and Excerpts from Grant Request to LEAA from the Center for the Study and Reduction of Violence, printed in the Appendix as Item III.B.2.b.

⁴⁹ Letter from Louis Jolyon West, M.D., Medical Director, Neuropsychiatric Institute, UCLA, to J. M. Stubblebine, Ph. D., Director of Health, Office of Health Planning, State of California, January 22, 1973, printed in the Appendix as Item III.B.2.f.

⁵⁰ Center for the Study and Reduction of Violence, Project Description, *supra*.

personality have a bearing on violent behavior; and (5) animal models, using animal behavior studies to provide information for the study of aggressive behavior by humans.⁵¹

A number of radical approaches to diminishing violence were also apparently intended to be tested at the Center. For example, the project description describes possible testing of violence-controlling drugs:

New drugs now being tested in Europe and (very recently) America hold promise for diminishing violent outbursts without dulling other brain processes. These drugs should be tested in the laboratory and then in the prisons, mental hospitals, and special community facilities. Preliminary studies reported thus far have been largely clinical without rigorous scientific controls. Proper experiments must be done as soon as possible.⁵²

One group expressed concern that one of the drugs to be tested in this particular project would be cyproterone acetate, a chemical castration drug.⁵³

The neurological and neurophysiological section of the Center apparently did intend to study various aspects of violent behavior as caused and controlled by brain functions, with emphasis placed on the practical control of such violence. For example:

It is even possible to record bioelectrical changes in the brains of freely moving subjects, through the use of remote monitoring techniques. These methods now require elaborate preparation. They are not yet feasible for large-scale screening that might permit detection of violence predisposing brain disorders prior to the occurrence of a violent episode. A major task of the Center should be to devise such a test, perhaps sharpened in its predictive powers by correlated measures of psychological test results, biomedical changes in urine or blood, etc.⁵⁴

Studies of hyperkinetic children were also planned as part of the Center's research.

LEAA Review Procedures.—In response to the subcommittee's questions concerning review structures for LEAA-funded research projects such as the Center for the Study and Reduction of Violence, LEAA informed the subcommittee that LEAA policy concerning rights of human subjects consisted solely of the following:

Medical research conducted by any grantee or subgrantee financed by LEAA and not specifically detailed in state plans as to type of research; place and persons conducting the research; amount of research funds available; and research methodology, including data on use of chemical agents or medical procedures, use of human volunteers or animal subjects, and a description of any anticipated experiments, must receive prior approval by LEAA.⁵⁵

By comparison with the Department of Health, Education, and Welfare's forty pages of guidelines, LEAA's solitary sentence appears inadequate at best.

One major factor behind the inadequacy of LEAA's ability to protect the rights of human subjects of its funded research projects is the philosophy behind the agency. Established as a revenue-sharing mechanism for local law enforcement agencies, LEAA distributes grants on a decentralized basis. A product of the "New Federalism," its basic philosophy is the decentralization of government control over local law enforcement matters, and a minimum of authority is main-

⁵¹ *Id.*

⁵² *Id.*

⁵³ "Memorandum on the Center for the Study of Violent Behavior," *supra*.

⁵⁴ Center for the Study and Reduction of Violence, Project Description, *supra*.

⁵⁵ Letter from Administrator Donald Santarelli to Chairman Sam J. Ervin, Jr., May 10, 1973, printed in the Appendix as Item III.A.4.

tained over individual grantees. This is true even in the case of so-called discretionary grants that are administered directly by LEAA.⁶⁶ Because it depends primarily upon indirect means of providing funds for individual research projects, the agency has never developed the extensive review mechanisms and guidelines necessary for the adequate protection of the rights of human subjects of LEAA-funded programs.

Cessation of LEAA Funding for Behavioral and Biomedical Research.—In January, 1974, Chairman Ervin wrote to Administrator Santarelli and asked for detailed information about LEAA funding for behavioral research and the agency's review procedures.

As you are aware, HEW and the Congress are now subjecting the question of federal financing of human behavioral research to close scrutiny. A series of ethical and administrative standards have been developed both in legislation and in regulations. I believe that LEAA ought to consider a moratorium on the further use of its funds for these purposes until it develops guidelines at least as comprehensive as those now under consideration by the Congress and HEW. These guidelines should provide for specific approval by a special committee on research and ethics within LEAA and the Administrator's Office of any project, whether funded by block or discretionary grant, in the field of human behavior research.⁶⁷

In a press release four weeks later, Administrator Santarelli responded by announcing the cancellation of all LEAA funding for medical research, chemotherapy, psychosurgery, and behavior modification because, in his words, there "are no technical skills on the staff to screen, evaluate, or monitor such projects."⁶⁸

In response to a request for information detailing the nature and extent of LEAA-funded behavioral research projects, the agency produced a computer printout describing some 537 research projects dealing in some way with the modification of human behavior.⁶⁹ This printout indicates that LEAA funds a substantial number of projects that fall within the subcommittee's sphere of interest in addition to the seven described in the agency's response to the subcommittee's initial inquiry regarding violent behavior research. Among the projects listed in the printout, there were many that would require a thorough technical evaluation of the kind Director Santarelli indicated that LEAA was not able to conduct.

The intention of the agency's February, 1974 press release seems clear—all biomedical and behavioral research conducted by LEAA would be curtailed immediately. But the policy statement subsequently drafted to implement the new directive is more ambiguous:

[I]t is LEAA policy not to fund grant applications that involve the use of research of such procedures (for the modification or alteration of criminal and other antisocial behavior) particularly applications that involve any aspect of psychosurgery, behavior modification (e.g. aversion therapy), chemotherapy, except as part of routine clinical care, and physical therapy of mental disorders * * *. This policy does not apply to a limited class of programs involving procedures generally recognized and accepted as not subjecting the patient to

⁶⁶ LEAA employs two basic systems of grant disbursement: discretionary grants and block grants. Discretionary funds are granted and administered directly by the main office in Washington. Block grants are distributed to individual state criminal justice planning agencies, which, in turn, distribute funds to individual grantees.

⁶⁷ Letter from Chairman Sam J. Ervin, Jr. to Administrator Donald B. Santarelli, January 14, 1974, printed in the Appendix as Item III.A.9.

⁶⁸ News Release Announcing Cancellation of LEAA Funds for Behavior-Related Projects and Medical Research, February 12, 1974, printed in the Appendix as Item III.B.6.

⁶⁹ Excerpts from Computer Printout Listing Behavior-Related Projects, *supra*.

physical or psychological risk (e.g. methadone maintenance and certain alcoholism treatment programs), as specifically approved in advance by the Office of the administration, after appropriate consultation with and advice of the Department of Health, Education, and Welfare.⁶⁰

In an effort to ascertain the effectiveness of the LEAA policy, Chairman Ervin addressed an inquiry to the agency on June 3, 1974. In that inquiry, the chairman requested:

By way of providing further information for the subcommittee's investigation of biomedical and behavioral research, would you please forward a list of all projects described in the printout whose funding has been canceled pursuant to the LEAA press release of February 14 and the resulting guideline.⁶¹

LEAA responded on June 25, 1974, by stating that only two or three grants had been cancelled, and that this had occurred prior to the February guideline. When the subcommittee requested LEAA to respond to the question asked, the agency replied by stating that a thorough review would now be conducted of all of the projects listed in the printout in an effort to determine whether any should be discontinued.

In a letter to the Subcommittee, dated August 29, 1974, LEAA responded with the results of the survey it conducted. According to its findings, of the 537 projects listed on the computer print-out which dealt in some way with behavior modification, 390 had been terminated prior to the issuance of the LEAA guideline. Of the remaining 147, 110 were found to involve no medical procedures, and 35 involved only routine medical procedures. Of the two remaining projects, LEAA has determined that one did not violate the February guideline, and has requested further information to evaluate the legality of the other.⁶²

VETERANS ADMINISTRATION

As it became apparent that the Federal Government funds a large number of behavioral research and modification programs, the subcommittee discovered that a number of other departments and agencies were involved in activities relating to the modification of human behavior. The most notable of these is the Veterans Administration, which, in testimony at joint hearings before the Senate Health Subcommittee, and the Subcommittee on Health and Hospitals of the Senate Committee on Veterans' Affairs, admitted conducting numerous psychosurgical operations.⁶³ Of particular note are the following aspects of the Veterans Administration's policy concerning psychosurgery:

Approval for individual operations is secured from the central office of the Veterans Administration. No higher authority is required.

⁶⁰ LEAA Guideline re: Use of LEAA funds for Psychosurgery and Medical Research, February 14, 1974, printed in the Appendix as Item III.B.7.

⁶¹ Letter from Senator Sam J. Ervin, Jr. to Administrator Donald E. Santarelli, June 3, 1974, printed in the Appendix as Item III.A.16.

⁶² Letter from Geoffrey M. Alprin, Director, Office of Research Programs, LEAA, to Lawrence M. Baskie, Chief Counsel, Subcommittee on Constitutional Rights, August 29, 1974, printed in the Appendix as Item III.A.19.

⁶³ Joint Hearing on Psychosurgery in Veterans Administration Hospitals Before the Subcomm. on Health of the Senate Comm. on Labor and Public Welfare and the Subcomm. on Health and Hospitals of the Senate Comm. on Veterans Affairs, 93d Cong., 1st Sess. at 17018 (1973).

Although the Veterans Administration has guidelines restricting the use of psychosurgery, it considers the practice to be therapy and not an experimental technique.

The Veterans Administration participated in HEW's studies of psychosurgery and violent behavior research, discussed above. The nature of the Veterans Administration's response to the two HEW studies has not yet been determined.

In testimony at the joint hearings, the Veterans Administration stated that the lobotomies popular in the 1950's were a poor method of behavior therapy; but the agency presented no evidence that present methods of psychosurgery aimed at producing a more "normal" human being were any more effective.

At the joint hearings, the Veterans Administration indicated that it considered drug users and alcoholics as potentially violent patients, and therefore possible subjects for psychosurgery.

In response to the Constitutional Rights Subcommittee's inquiries, the Veterans Administration confirmed that it participates in various forms of biomedical and behavioral research, and that it employs a wide variety of behavioral modification techniques, including psychosurgery, as therapy. In the year prior to the subcommittee's inquiry, five psychosurgical operations were conducted in Veterans Administration hospitals.⁶⁴ Shortly before the Veterans Administration received the subcommittee's inquiry, a new agency policy had been implemented placing stricter controls on the use and practice of psychosurgery, and limiting the number of hospitals where it could be conducted to four.⁶⁵ Before further revising its own policies with respect to psychosurgery, the Veterans Administration indicated that it was awaiting release of the HEW psychosurgery report. It is not clear at present whether the Veterans Administration is continuing to perform psychosurgical operations, nor is it clear whether any substantive efforts are being made by the agency to implement the HEW policy recommendations.

The agency told the subcommittee that its guidelines concerning human behavior were similar, but not identical to those used by HEW. No centralized control is maintained over individual research projects. The Veterans Administration emphasized the therapeutic nature of the activities the Veterans Administration undertakes, and the policy that no technique will be applied to a patient unless it is in his best interest.⁶⁶

The subcommittee was concerned both by the fact that Veterans Administration research is decentralized and subject to no agency-wide coordination and control, and by the fact that many techniques employed by the VA are considered "therapy" even though other federal departments and agencies consider the same techniques "experimental." Moreover, the agency indicates that a patient could be subjected against his will to a process designed to alter his behavior:

As to whether a patient might refuse psychotropic or behavioral modifications programs or psychosurgery drugs, this must be determined by the same criteria

⁶⁴ Letter from Administrator Donald E. Johnson to Chairman Sam J. Ervin, Jr., May 10, 1973, printed in the Appendix as Item IV.A.2.

⁶⁵ Circular 10-73-18, "Surgery for Abnormal Behavior (Psychosurgery)," printed in the Appendix as Item IV.B.2.

⁶⁶ Letter from Administrator Donald E. Johnson, *supra*.

that determines the patient's capacity to give informed consent for any treatment. Good professional practice seeks to find a way to engage the patient in doing those things which are likely to be beneficial to him, recognizing that at times the individual's capacity to form sound judgments for himself is seriously impaired. Under these latter circumstances, a variety of considerations must be reviewed by the physician with the conclusion, at times, that treatment must be insisted upon despite the patient's temporary objections. In many circumstances, it may be that a judgment will have to be made by a responsible person legally entitled to act on behalf of the patient.⁶⁷

The Veterans Administration's guidelines concerning research appear to be more advanced than those of the Law Enforcement Assistance Administration, but less elaborate than those of the Department of Health, Education, and Welfare. The decentralized nature of Veterans Administration research programs, the accepted use of psychosurgery, and the notion that many of the behavioral modification techniques that it uses are therapeutic and not experimental, all raise questions about the extensive involvement of the Veterans Administration in a variety of methods of altering the behavior of individuals, possibly in violation of their rights. Clearly the involvement of the Veterans Administration requires further inquiry.

OTHER AGENCIES

A letter of inquiry was sent ten other departments and agencies which the subcommittee reasonably felt could be involved in research connected with the modification or control of behavior. The letter stated:

The Senate Subcommittee on Constitutional Rights is currently engaged in a survey of federally-funded biomedical and behavioral research projects which are designed to alter the behavior of individual subjects. Our purpose is to determine the nature and extent of such research in order that we may better evaluate the need for legislative action in this area.⁶⁸

Each department was asked to list and describe briefly every behavioral research project that it participated in and to:

Describe the review procedures which apply to such research projects, both prior to [the department's] participation and during the course of such research, with particular emphasis on ethical considerations, such as informed consent. Include copies of all relevant guideline manuals, regulations, and other documents which set forth these procedures.⁶⁹

Of the ten departments queried, the Atomic Energy Commission, the Department of Agriculture, the National Aeronautics and Space Administration, the Special Action Office for Drug Abuse Prevention, the Environmental Protection Agency, and the Department of Commerce all responded by stating that these departments conduct no projects designed to "alter the behavior of individual subjects."⁷⁰

⁶⁷ Survey Letter from Chairman Sam J. Ervin, Jr., printed in the Appendix as Item V.A.1.

⁶⁸ *Id.*
⁶⁹ Each Agency's response is printed in the Appendix: Atomic Energy Commission—April 23, 1974, response from Dixy Lee Ray, Chairman, Item V.A.3.; Department of Agriculture—April 26, 1974, response from T. W. Edulister, Administrator, Agricultural Research Service, Item V.A.2.; National Aeronautics and Space Administration—April 10, 1974, response from Gerald D. Giffin, Assistant Administrator for Legislative Affairs, Item V.A.6.; Special Action Office for Drug Abuse Prevention—May 14, 1974, response from Robert L. DuPont, Director, Item V.A.10.; Environmental Protection Agency—May 3, 1974, response from Russell E. Train, Administrator, Item V.A.7.; Department of Commerce—April 22, 1974, response from Frederick B. Dent, Secretary, Item V.A.4.

Several departments did, however, respond affirmatively to the subcommittee's inquiry. The Department of Defense listed thirteen projects that it felt fell within the parameters of the subcommittee's concern. Generally, the projects listed were concerned with endurance, and means of preventing such natural occurrences as frost-bite and sleepiness.⁷¹

The Department of Labor informed the subcommittee that it conducts several experiments dealing with behavior modification methods of increasing individual responsiveness and production. Using mainly token economy techniques, the department's research was conducted in prisons. The department has also devoted a great deal of effort to the legal and ethical issues involved in the use of these techniques.⁷²

Of particular interest was the response from the National Science Foundation, an independent agency that provides funds on a decentralized basis for the advancement of science. The Foundation responded by saying:

We can state that the National Science Foundation does not support any biomedical or behavioral research designed to alter the behavior of human subjects. The Foundation does, however, support a substantial amount of research in social sciences, psychobiology, and neurobiology directed at understanding human behavior, and this research often requires the participation of human subjects.⁷³

Although the National Science Foundation indicated that it conducted a substantial amount of research dealing with "understanding human behavior," it did not include information concerning these projects in its response. Further, the National Science Foundation indicated that its guidelines concerning the rights of human subjects and the propriety of individual research projects are very general in nature. Similar to the Law Enforcement Assistance Administration, the National Science Foundation guidelines consist of a single paragraph under the miscellaneous section of the National Science Foundation Grants Administration Manual:

Safeguarding the rights and welfare of human subjects involved in activities supported by NSF Grants is the responsibility of the grantee institution. Pending promulgation of NSF guidelines, grantees are referred to DHEW publication (NIH) 72-102, the "Institutional Guide to DHEW Policy on Protection of Human Subjects." NSF grantees shall not conduct or support research on a human fetus which is outside the womb of its mother and which has a beating heart.⁷⁴

National Science Foundation policy concerning human subjects is further governed by the following resolution adopted in 1967 by the National Science Board:

The Board unanimously authorized the Foundation to (1) make known to grantees engaged in biomedical, social, or behavioral research its concern over the rights of privacy of persons individually or collectively involved in such

⁷¹ Letter from Malcolm R. Currie, Director, Defense Research and Engineering, Department of Defense, to Chairman Sam J. Ervin, Jr., May 3, 1974, printed in the Appendix as Item V.A.5.

⁷² Letter from William H. Kolberg, Assistant Secretary for Manpower, Department of Labor, to Chairman Sam J. Ervin, Jr., May 1, 1974, printed in the Appendix as Item V.A.6.

⁷³ Letter from H. Guyford Stever, Director, National Science Foundation, to Chairman Sam J. Ervin, Jr., April 30, 1974, printed in the Appendix as Item V.A.8.

⁷⁴ NSF Grants Administration Manual, paragraph 272, printed in the Appendix as part of Item V.A.8.

research, and (2) as necessary, satisfy itself that grantees are taking appropriate measures for securing the subject's informed consent, maintaining the confidentiality of data, and otherwise safeguarding his right to privacy.⁷⁶

As with LEAA, the subcommittee is concerned that a mere statement of intent on the part of the National Science Foundation falls short of minimum standards for the adequate protection of the rights of human subjects and the propriety of individual behavioral research projects. Although grantees are referred to HEW policies concerning the protection of human subjects, it is not known whether grantees are bound by the same system of assurances and institutional review boards as HEW. In short, from its response, the National Science Foundation does not utilize a system of review mechanisms adequate to protect the constitutional rights of persons involved in National Science Foundation-funded research.

As experience with the Department of Justice and other agencies has demonstrated, there is wide variation in the understanding of what behavior modification is. One might expect each of the ten agencies to have difficulty in deciding which programs fell within the scope of the subcommittee's inquiry. It is also reasonable to expect that other agencies besides LEAA might have difficulty discovering all its pertinent projects. These considerations point to the need for an intensive legislative inquiry into behavior modification throughout the government.

⁷⁶ Letter from H. Guyford Stever, Director, National Science Foundation, *supra*.

CONCLUSION

The focus of the Constitutional Rights Subcommittee's study of the federal involvement in behavior control technology in the United States has been both on the rights of human subjects, and on the propriety of government funding for research into methods designed to alter individual behavior. No attempt has been made to evaluate the efficacy of individual projects from a scientific viewpoint. It is clear that a large number of the projects that have come to the subcommittee's attention raise important and immediate questions of constitutional rights, and should be subject to the most careful and continued review. Nevertheless, the subcommittee found that the federal government, through a number of departments and agencies, is going ahead with behavior modification projects, including psychosurgery, without a review structure fully adequate to protect the constitutional rights of the subjects. Public concern that many of the ethical and constitutional problems of medical research have not yet been fully considered is growing as behavioral control technologies are rapidly being developed. The newly created National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research will, hopefully, be able to consider and resolve many of these important issues. In any case, as psychological and biological research continues, it may well be that Congress may have to define by law the limits of scientific research in these fields as they affect the constitutional guarantees of liberty.

Certainly continuing legislative oversight is necessary to ensure that constitutional rights and privacy are well protected in this field of science.

Respectfully submitted by

LAWRENCE M. BASKIR,
Chief Counsel and Staff Director.

October 3, 1974.

(45)

APPENDIX

I. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

A. Correspondence

[Item I.A.1]

SEPTEMBER 28, 1972.

HON. WARREN G. MAGNUSON,
Subcommittee on Labor-HEW Appropriations,
Washington, D.C.

DEAR WARREN: It has come to my attention that funding for the Departments of Labor and Health, Education, and Welfare and related agencies (H.R. 16654), now under consideration before your Subcommittee, includes a one million dollar appropriation for a study of violent behavior.

As you know, the Subcommittee on Constitutional Rights has done extensive research and expended much time on preserving privacy of individuals and human dignity. Our survey of data banks has brought attention to the federal funding of psychological testing and its invasion of the individual's right of privacy and the threat to other civil liberties.

As the report on the bill (Senate Report No. 92-804) makes no mention of what the money will fund—exactly what type of program or to what purpose, I feel it is important for the Subcommittee on Labor-HEW Appropriations to clarify and set forth more specifically to what ends the appropriations are directed with a view toward the possible impact on the civil liberties of American citizens.

My best wishes to you.
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.2]

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C., October 9, 1972.

HON. SAMUEL ERVIN,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: This is in response to your letter of September 28 regarding the study of violent behavior and brain disease. In view of the information and misinformation circulating about this issue, I can readily understand your concern.

The Committee, in its report on the Labor-HEW bill, earmarked one million dollars for biomedical research into violent behavior and brain disease. This amount was subsequently reduced to \$400,000 in the House-Senate conference bill that the President vetoed and is included at the same amount in the new Labor-HEW appropriation bill that was recently considered by the Senate.

I want to assure you that the selection of specific grantees and the specific areas of research continue to be left to the usual peer review process used by the National Institutes of Health in awarding all their grants. This process is designed to result in selection of the best research proposals on the basis of scientific merit as judged by nongovernmental experts. The NIH also uses other safeguards to protect any human subjects who may participate in medical research projects.

For your information, I am enclosing an exchange of correspondence with Dr. Robert Q. Marston, Director, National Institutes of Health. I hope this will reassure you that any funds in the Labor-HEW bill added by this Committee for research into brain disease and violent behavior will be awarded to com-

pefent scientists and only after such scientists meet the high ethical and medical science standards demanded by the established NIH peer review process.

Sincerely,

WARREN G. MAGNUSON,
Chairman, Subcommittee on Labor-
Health, Education, and Welfare.

[Item I.A.3]

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C., September 22, 1972.

Dr. ROBERT Q. MARSTON,
Director, National Institutes of Health,
Bethesda, Md.

DEAR Dr. MARSTON: This is to call your attention to a passage on page 55 of the Senate report (92-804) accompanying the first 1973 Labor-HEW appropriation bill. The report had earmarked \$1 million to continue and expand studies of violent behavior related to brain disease.

Subsequent to Senate action on the first 1973 Labor-HEW bill, the Committee has received several disturbing published reports regarding the use of an earlier appropriation of \$500,000 for this work. Consequently, it would be appreciated if NIH would delay the funding of this work at this time. It is the desire of the Committee that, as a condition precedent to the award of any funds to continue such work, the NIH should thoroughly study the earlier work conducted with appropriated funds and determine that the adverse reports regarding this project are without merit.

In the interim, the Committee would also appreciate receiving from you a statement on NIH policy concerning research into the relationships between brain disease and violent behavior.

Thank you for your cooperation.

Sincerely,

WARREN G. MAGNUSON,
Chairman, Subcommittee on Labor-
Health, Education, and Welfare.

[Item I.A.4]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
NATIONAL INSTITUTES OF HEALTH,
Bethesda, Md., October 2, 1972.

Hon. WARREN G. MAGNUSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MAGNUSON: Thank you for your letter of September 22 about the funding of research on the relationship of brain disease to violent behavior.

We are well aware of the criticism that has been directed toward earlier research projects in this field which were supported by other agencies. We are also, of course, anxious to ensure that there shall be no valid basis for similar criticism in any future work that NIH might support through the appropriation for the National Institute for Neurological Diseases and Stroke.

The policy of NIH, briefly stated, is as follows:

1. There is evidence that some kinds of uncontrolled violence and other forms of unacceptable human behavior are due to abnormal brain development or brain disease. However, the evidence is fragmentary, scattered, and equivocal. We believe that further research is necessary but that a first step should be to collect, correlate, and assess the evidence currently available in order to determine what direction further research should take.

2. Consequently, the National Institute of Neurological Diseases and Stroke has established a task force, as a subcommittee of its Advisory Council, to plan a series of workshops on brain disease in relation to violence. The National Institute of Mental Health—which is not part of NIH but which has previously supported research in this field—has set up a similar task force to study the more restricted topic of psychosurgery. Close liaison is being maintained between these two task forces.

3. Research projects on abnormal behavior and on the physiological factors affecting behavior in animals, including non-human primates, will be supported if they are of high scientific merit and appear to be relevant to the elucidation of behavioral problems in man.

4. Research projects on the genetic, hormonal, biochemical, and neurological factors in abnormal human behavior will be considered only if they conform to the established guidelines governing all research involving human subjects. These guidelines will be most rigorously enforced. The conditions include (a) a thorough initial review and continued surveillance by a multi-disciplinary committee at an institution of high repute that can, and does, accept responsibility for the protection of the subjects involved; and (b) specific grant or contract terms providing for the protection of human subjects including the right of privacy, and requiring their informed consent.

I can give you a firm assurance that no commitment to fund research projects using human subjects for the study of the relationship between brain disease and violent behavior will be made until the results of the discussions now being initiated by the NINDS task force have been completed and considered.

Please be assured of my personal concern in this matter and of my full appreciation of the committee's interest in it.

Sincerely yours,

ROBERT Q. MARSTON, M.D.,
Director.

[Item I.A.5]

OCTOBER 26, 1972.

HON. ELLIOT L. RICHARDSON,
Secretary,
Department of Health, Education, and Welfare,
Washington, D.C.

DEAR MR. SECRETARY: Part of Title II of H.R. 16054, the recently passed Labor-HEW appropriations bill, proposes to provide \$400,000 to fund projects, under the direction of the National Institute of Neurological Disease and Stroke (NINDS), which would explore the sources of human violence and develop some form of testing and identification.

The appropriation has caused apprehension among members of Congress, medical authorities and the press. Senator Magnuson has expressed his concern in a letter to Dr. Marston of NIH. One source of worry is that a book, *Violence and the Brain*, by three potential grant recipients, Drs. Vernon Mark, Frank Ervin and William Sweet, reveals some insensitivity to the principles of the First and Fifth Amendments. I understand that their study, funded by LEAA and NIMH concerning violent behavior classification, has been completed. I would appreciate your sending a copy of this report to the Subcommittee on Constitutional Rights.

I want at this time to express my hope that any funding under this section would be preceded by consideration of such constitutional questions. Could you therefore send copies of all proposals submitted under this section as they are received, as well as those projects accepted for funding as they are approved, to the Subcommittee.

Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.6]

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., November 16, 1972.

HON. SAM J. ERVIN, JR.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: Thank you for your letter of October 26 about studies of violent behavior. I, too, am particularly concerned about this subject.

With respect to the research project supported by the National Institute of Mental Health (NIMH) which you mention, the termination date has been extended until March 31, 1973. As a result, no final report is available, but when it is, the Institute will provide you with a copy. NIMH staff has closely monitored the project via quarterly reports, three site visits, and frequent

communication by telephone and mail. No psychosurgical procedures have been carried out under this contract. There is some indication that nonsurgical treatment using psychotherapy may be effective in helping patients control their violent behavior.

As you know, the President vetoed the Labor-Health, Education and Welfare appropriations bill. Before the President's action on the appropriations bill, Dr. Marston wrote to Senator Magnuson about funding of research on the relationship of brain disease to violent behavior. He indicated to the Senator that the National Institutes of Health will make no commitment to fund research of this nature until the task force established by the National Institute of Neurological Diseases and Stroke (NINDS) has completed its review of the relationship of brain disease to violence. Dr. Marston's letter is enclosed for your information.

The NINDS does not have on hand any applications for this type of research at the present time. However, you will be kept informed of the results of the NINDS task force study. In addition, we will keep you apprised of the efforts of a study group which the NIMH has established to look into the subject of psychosurgery. It will work along with the NINDS group. When the groups have completed their work, I will be pleased to share the results with you.

With kindest regards,
Sincerely,

ELLIOT L. RICHARDSON,
Secretary.

[Item I.A.7]

JANUARY 24, 1973.

Dr. ROBERT Q. MARSTON,
*Director, National Institutes of Health,
Bethesda, Md.*

DEAR DR. MARSTON: It is my understanding that the financial authorization for the violent behavior research project currently supported by the National Institute of Mental Health will expire on March 31, 1973. Should the Labor-HEW appropriations bill be passed by the Congress before that time, it is likely that an appropriation to the National Institute of Neurological Disease and Stroke for a study of violent behavior, called for in Senate Report 92-894, will be made.

On October 2, 1972, in response to Senator Magnuson's inquiry of September 22, 1972, you stated that NINDS would create a task force to study the problem of brain disease and violence. If this task force has completed its work, I would appreciate a copy of any reports prepared by the group.

Senator Magnuson asked that NIH study the earlier work done in this area and show that all adverse criticism was false. I would appreciate a copy of any NIH or NINDS study discussing NIMH research or any earlier work in the area of violent behavior research.

It was reassuring to note that all research grants would provide for the protection of the right of privacy and for the assurance of informed consent. These protections of basic civil liberties are imperative in a situation where layman and physician meet.

Your cooperation in this matter which affects the constitutional rights and civil liberties of all Americans will be appreciated.

Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.8]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
NATIONAL INSTITUTES OF HEALTH,
Bethesda, Md., February 7, 1973.

Hon. SAM J. ERVIN, Jr.,
*U.S. Senate,
Washington, D.C.*

DEAR SENATOR ERVIN: This is in answer to your letter of January 24 to Dr. Marston concerning an item in the National Institute of Neurological Diseases and Stroke (NINDS) appropriation for a study of violent behavior

and a request for a report from the task forces established to study the problem.

As you have stated, should the Labor-HEW appropriation bill, as vetoed, be passed, it would contain \$1 million for NINDS for a study of violent behavior. Under this appropriation, NINDS was to receive \$130,403,000. At the present time, as you undoubtedly know, the NINDS is operating on a Continuing Resolution at a level of \$107,640,000. This amount, of course, will not provide funding for new programs such as the one to which you refer. Additionally, as shown in the correspondence between Senator Magnuson and Dr. Marston and reprinted in the Congressional Record (attached), Dr. Marston assured Senator Magnuson that "no commitment to fund research projects using human subjects for the study of the relationship between brain disease and violent behavior will be made until the results of the discussions now being initiated by the NINDS task force have been completed and considered."

The NINDS Council Subcommittee on the Neurological Bases of Violent Behavior is holding a series of four workshops to examine the existing knowledge. This includes the anatomical and physiological aspects; biochemical, genetic and pharmacologic factors; behavioral studies, including both animal and human studies; and the clinical aspects including neurology, neurosurgery, EEG, neuropathology and psychiatry.

Medical and research experts in each of these fields are participating in these workshops. They will be completed by June of this year, at which time a review committee composed of at least two representatives from each of the workshops will meet in Princeton, New Jersey and draft a final report on the findings and conclusions.

A similar procedure has been initiated by the NIMH task force on psychosurgery, which will be investigating all prior research on this subject. This task force, together with the NINDS task force are maintaining a close liaison and operating under what is called the Joint NINDS-NIMH Inter-Institute Planning Work Group on Brain and Behavior.

At the present time, research projects on abnormal behavior in animals and on the physiological factors affecting behavior in animals, including non-human primates, may be supported if they are of high scientific merit and appear to be relevant to understanding behavioral problems in man.

In addition, research projects on the genetic, hormonal, biochemical and neurological factors in abnormal human behavior will be considered only if they conform to the established guidelines governing all research involving human subjects. These guidelines will be rigorously enforced. They include a thorough initial review and continued surveillance by a multi-disciplinary committee at an institution of high repute that accepts responsibility for the protection of the subjects involved, and specific grant or contract terms providing for the protection of human subjects, including the right of privacy and requiring their informed consent.

We share with you the strong conviction that the rights of privacy and informed consent are imperative, and appreciate your concern and interest in this matter in regard to clinical research on violent behavior.

Sincerely yours,

ELDON L. EAGLES, M.D., C.M., Dr. P.H.,
Acting Director, National Institute of
Neurological Diseases and Stroke.

[Item I.A.9]

FEBRUARY 13, 1973.

Hon. CASPAR W. WEINBERGER,
Secretary,
Department of Health, Education, and Welfare,
Washington, D.C.

DEAR MR. SECRETARY: In a letter of November 16, 1972, Secretary Elliot Richardson informed me that his office was monitoring the work of the National Institute of Mental Health and the National Institute of Neurological Diseases and Stroke in relation to violence behavior research. Secretary Richardson noted that reports would be forthcoming concerning the NIMH project conducted during the past year by Dr. William Sweet and the findings of a task force at NINDS investigating psychosurgery.

If any of the expected information concerning this project is available now, I would appreciate your forwarding it to the Subcommittee on Constitutional Rights.

Thank you for your cooperation in this matter.

With kindest wishes,

Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.10]

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., March 26, 1973.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.*

DEAR SENATOR ERVIN: This is in further response to your letter of February 13, requesting information on the National Institute of Mental Health (NIMH) project conducted during the past year by Dr. William Sweet, and on the National Institute of Neurological Diseases and Stroke (NINDS) task force findings on psychosurgery.

I assume that by now you have received the February 7 letter from Dr. Eldon L. Eagles, Deputy Director of the National Institute of Neurological Diseases and Stroke, explaining that the information from NINDS in which you are interested will not be available until about June of this year. The report will be based on findings of four workshops in which leading experts will participate.

The NIMH task force which will be reviewing all prior research on psychosurgery will be following a similar procedure. A close liaison is being maintained between these two task forces under the Joint NINDS-NIMH Inter-Institute Planning Work Group on Brain and Behavior.

Presently, support may be extended to research projects on abnormal behavior only if they are of high scientific merit and appear relevant to understanding behavioral problems in man.

Research projects on neurological, biochemical, genetic or hormonal factors in abnormal human behavior will be considered only if they conform to the established guidelines governing all research involving human subjects.

We appreciate and share your strong interest in the task force reports, and will make them available to you as soon as they are presented.

Sincerely,

CASPAR W. WEINBERGER,
Secretary.

[Item I.A.11]

OCTOBER 23, 1973.

Dr. BERTRAM S. BROWN,
*Director, Alcohol, Drug Abuse, and Mental Health Administration,
Parklawn Building, Rockville, Md.*

DEAR DR. BROWN: Recently it has been brought to my attention that a program known as "The Seed," directed by Mr. Art Barker, has been operating under a \$230,000 grant from N.I.M.H. in Ft. Lauderdale and Miami, Florida.

I would appreciate your forwarding to me copies of all the grant proposals, requests, awards, and contracts pertaining to Mr. Barker and "The Seed." I would also like you to send a photocopy of the institutional assurance required by chapter 1-40-40-A of the D.H.E.W. Grants Administration Manual.

I look forward to your cooperation in this matter.

With kindest wishes,

Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.12]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
Rockville, Md., November 9, 1973.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: Your letter of October 23 to Dr. Bertram S. Brown, Director, National Institute of Mental Health, requesting certain information regarding a drug abuse service grant awarded to The Seed, Inc., Fort Lauderdale, Florida, has been referred to me for reply.

Enclosed is a complete copy of the grant application and appendices submitted by The Seed, and related grant award documents, in support of the drug abuse services project grant funded initially on January 18, 1972, by the National Institute on Drug Abuse (NIDA). The material enclosed is in reply to your request for ". . . copies of all grant proposals, requests, awards, and contracts . . ." and is submitted in compliance with the Freedom of Information Act (P.L. 901-23), and the implementing Department of Health, Education, and Welfare regulation.

Your letter also requested a copy of the institutional assurance required by the Department's Grants Administration Manual, Chapter 1-40, Protection of Human Subjects. Chapter 1-40 of the Grants Administration Manual provides that an institutional assurance be negotiated with the Department if the grant application or contract proposal involves human subjects "at risk." The final determination of "at risk" resides with the awarding agency based on the provisions of Chapter 1-40, Section 1-40-30 Applicability. It was determined during the programmatic review process that the grant application from The Seed did not involve human subjects "at risk," and, therefore, a negotiated institutional assurance under Chapter 1-40, Section 1-40-40 was not applicable.

The issue and policy requirements regarding the "protection of human subjects," however, are reviewed and monitored by NIDA staff during on-site evaluation of drug abuse project grants, and at the time that applications for continuation support are received and evaluated for continued NIDA support.

If I can be of any further assistance, please let me know.

Sincerely yours,

KARST J. BESTEMAN,
Deputy Director,
National Institute on Drug Abuse.

[Item I.A.13]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
NATIONAL INSTITUTES OF HEALTH,
Bethesda, Md., October 19, 1973.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: In response to a telephone request by Mr. Joseph Kluttz of the staff of the Subcommittee on Constitutional Rights, we are enclosing copies of the 1966, 1969, and 1971 versions of the Department of Health, Education, and Welfare policy on protection of human subjects, the most recent list of institutions in compliance with the policy, and, most recent, a proposed rule making codifying the 1971 policy as 45 CFR 46.

Also included is the "Institutional Guide" to the HEW policy which interprets those parts of the policy applicable to institutions. Not included are the implementing documents of the National Institutes of Health and other component organizations, and the operating guides for internal review groups at the NIH and other Federal agencies.

Basically, the policy requires two review systems: first, one at the institution which provides for initial review of the proposal before its submission and for continuing review of any supported project; second, a system providing for review in depth by DHEW prior to award of support. The two review systems are complementary. One does not substitute for the other. Institutional review requires a committee broadly based both in scientific and non-scientific areas. It reflects local concerns. The review at the Department is essentially limited to science and to the ethics of the professional groups involved in that review. It reflects national standards in these areas.

The policy applies to all grant and contract supported activities in which subjects are "at risk" of exposure to other than standard and accepted procedures applied to meet the needs of subjects. While such risks occur primarily in the course of research and development activities, they may occur in other settings, notably during the spread of a practice from a region in which it is "standard and accepted" to a new region. There are also types of service so poorly developed medically that there are no naturally "standard and accepted" practices. Here too the policy may be applicable.

Three review criteria are outlined. The availability of adequate and appropriate informed consent procedures is the third of these criteria. We recognize this as a professional courtesy and a legal necessity. However, past experience indicates that it is entirely possible to obtain consent to involvement in some very poor research, not because the investigator failed to inform the subject of known risks, but because certain risks were not known or appreciated by the investigator himself. For this reason we feel that our first two criteria, concerned with the provision of adequate safeguards for the physical, mental, and social well being of the subject, and a determination of the risk/benefit ratio, are necessary preliminaries to a decision that the subject can even be approached with a request for consent.

If you have any further questions in this regard, we will be glad to reply to them.

Sincerely yours,

D. T. CHALKLEY, Ph.D.,
Chief, Institutional Relations Branch,
Division of Research Grants.

[Item I.A.14]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
NATIONAL INSTITUTES OF HEALTH,
Bethesda, Md., October 19, 1973.

Hon. SAM J. ERVIN, Jr.,
U. S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: Mr. Joe Kluttz of the staff of the Subcommittee on Constitutional Rights of the Senate Committee on the Judiciary has asked for information on additional regulations now in preparation for the protection of human subjects in biochemical research. Mr. Kluttz asked for an outline of the general issues addressed by the DHEW/NIH Study Group on the Protection of Human Subjects in Biomedical and Behavioral Research. Specifically, he requested a copy of the Study Group's draft report.

To fully explain the activities of the Study Group it is necessary to sketch in the background of current policies and practices dating from the mid-sixties when the Public Health Service compiled and issued guidelines on the protection of human subjects. These policies have governed the activities of NIH grantees since that time, though they were not formalized as Departmental Regulations.

Proposed formal regulations, based on a tightened version of the current DHEW policy, were first published in the Federal Register on October 9 under

rule-making procedures. The proposed new rules are basic and encompass all research activity involving human subjects. However, we recognize the desirability of, if not the necessity for further elaboration of policy with respect to the validity of informed consent by or on behalf of children, prisoners and the mentally infirm.

The Study Group was set up to deal with the policy issues related to informed consent and to propose appropriate additional regulations. A draft report by the group has been submitted to the Office of the Director, NIH. After preliminary discussions, it was decided to redraft the introductory and explanatory section of the Study Group's submission. This redraft and the proposed regulations will be subjected to final review and amendment by the NIH Director's staff, and submitted to the Assistant Secretary for Health, DHEW, and subsequently to the Secretary, DHEW, for final approval and publication in the Federal Register under rule-making procedures.

The "redraft" will be made available to the Subcommittee as soon as it is completed, but as pointed out in our telephone conversations with Mr. Kluttz, it seems quite likely that this document will be subjected to extensive modifications in the review process. We will ask, therefore, that the subcommittee consider it as preliminary and tentative, and subject to revision as to form and content.

The draft policies now being reviewed by the NIH are supplemental to the above mentioned proposed regulations and are concerned almost exclusively with the issues surrounding consent. The philosophical approach of the working group to the problems of consent is stated in the introduction to its draft report.

"An uncoerced person of adult years and sound mind may consent to the application of standard medical procedures in the case of illness, and when fully and properly informed, may legally and ethically consent to accept the risks of participating in research activities. Parents and legal guardians have authority (in fact, a duty) to consent on behalf of their child or ward to established therapeutic procedures when the patient is suffering from an illness, even though the treatment may involve some risk to the patient.

"There is no legal basis, however, for parental or guardian consent to participation in research on behalf of subjects who are incompetent, by virtue of age or mental state, to understand the information provided and to formulate the judgments on which valid consent must depend. In addition, current guidelines for clinical research afford them inadequate protection. Nonetheless, to proscribe research on all such subjects, simply because existing protections are inadequate, would be to deny them potential benefits, and is therefore no solution. Knowledge of some diseases and therapies can be obtained only from those subjects (such as children) who suffer from the disease or who will be receiving therapy. Without their participation in research, progress in those fields of medicine cannot be made. These subjects need protection not currently offered, when their participation in research is considered.

"There are other individuals who may be able to comprehend the nature of the research, but who are involuntarily confined in institutions. Insofar as incarceration may diminish their freedom of choice, and thus limit the degree to which informed consent can be freely given, they too need protection. Current regulations do not recognize the limitations on voluntariness which emanate from incarceration."

The draft regulations prescribe an additional step in the review process when the research proposal involves human subjects. Supplemental to the review by advisory groups concerned with the merit and other scientific considerations related to the individual proposal, the draft regulations call for review by committee to be established at the Federal and institutional level. The new committees would approve proposals and monitor research performance in the light of ethical considerations.

Under the proposal, the consent of these new Institutional Committees would be required for research involving children, in addition to parental consent. When the subjects are more than six years of age they too must consent.

Similarly, additional protections are proposed for prisoners through the establishment of committees concerned with the conditions under which prisoners' consent is elicited.

The proposal would limit research involving the mentally infirm to projects which deal with the diagnosis, treatment, prevention or etiology of the disability from which the subject may suffer or to studies concerning institutional life *per se*.

While extended discussions of the proposals have been confined so far to the working group, it appears that subsequent review will focus on the proposed mechanisms for carrying out the agreed-upon objective; that is, to provide better protection for research subjects whose ability to give voluntary and informed consent may be impaired or unclear.

If additional information would be helpful at this time, please let me know.

Sincerely yours,

STORM WHALEY,
Associate Director
for Communications.

[Item I.A.15]

OCTOBER 24, 1973.

DR. SALEEM A. SHAH,
Director, National Center for the Study of Crime and Delinquency,
Rockville, Md.

DEAR DR. SHAH: In recent months, a great deal of concern has been expressed about the use of human subjects in biomedical and behavioral research. As chairman of the Senate Subcommittee on Constitutional Rights, this has been an area of particular concern to me.

In a recent telephone conversation with an official at the Department of Health, Education, and Welfare, a member of my staff learned that the National Center for the Study of Crime and Delinquency is conducting a series of behavioral research projects at various prisons around the country. As recent cases have recognized, biomedical and behavioral research on human subjects in coercive environments raises difficult constitutional issues. By way of providing general information, I would appreciate your response to the following questions:

1. Would you please give brief descriptions of the types of behavioral and biomedical research projects involving human subjects conducted by, sponsored by, or participated in by N.C.S.C.D. Please describe in detail any such projects conducted in prisons, mental institutions, or schools. For each of these institutions, would you please include in the description a photocopy of the written assurance required by part 1, chapter 40-40-A of the D.H.E.W. Grants Administration Manual.

2. What measures has N.C.S.C.D. taken to safeguard the rights of subjects of these research projects? Please supply copies of all policy statements N.C.S.C.D. may have issued concerning research on human subjects.

3. Are uninformed subjects ever used in such projects? If so, would you please describe in detail those situations in which informed consent is not obtained.

4. Has N.C.S.C.D. ever sanctioned the use of any experimental drug (or experimental drug dosage) or experimental surgical technique in any agency-sponsored research project?

5. To what extent does N.C.S.C.D. conduct research in Federal Prisons? Particularly, is N.C.S.C.D. involved in any capacity with the Bureau of Prisons research facilities at Springfield, Missouri (Project START) or at Butner, North Carolina (under construction)? Is N.C.S.C.D. involved in any capacity with "The Seed," a Florida-based program directed by Mr. Art Barker?

6. What is N.C.S.C.D.'s general policy on interdepartmental cooperation with respect to research involving human subjects? Specifically, has your agency ever collaborated with the Law Enforcement Assistance Administration of the Justice Department?

Please allow me to stress the general fact-seeking nature of this inquiry, and to emphasize that I have received no indication of any unethical practices conducted under N.C.S.C.D. sanction. Though I realize these questions are wide-ranging and require a significant amount of information, I will appreciate your thoughtful response.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

(Item I.A.161)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
ALCOHOL, DRUG ABUSE, AND
MENTAL HEALTH ADMINISTRATION,
Rockville, Md., December 19, 1973.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: This is a further response to your letter of October 24 in which you requested information on several questions pertaining to the use of human subjects in biomedical and behavioral research supported by the Center for Studies of Crime and Delinquency of the National Institute of Mental Health. We appreciate this opportunity to provide you with information about particular projects relevant to your query, as well as about the policies and procedures currently employed regarding the protection of human subjects involved in research supported by the Center.

Before proceeding to your particular questions you may be interested in the following general information about the Center for Studies of Crime and Delinquency. It is the focal point in NIMH for research, training, and related activities in the areas of crime and delinquency, individual violent behavior, and law and mental health interactions. The Center places primary emphasis on efforts to understand and cope with problems of mental health as these are or may be reflected in various types of deviant, maladaptive, aggressive, and violent behaviors that frequently involve violations of criminal or juvenile law. The Center's conceptualization of its mission further requires that attention be given both to the individuals who engage in the behaviors mentioned and to the larger social contexts in which the behaviors develop, are observed, and are responded to in accordance with prevailing social norms and legal rules. The programs supported by the Center encompass problems in areas of individual and community mental health that are also of concern to law enforcement agencies, criminal justice agencies, schools, social welfare agencies, and other public and private agencies at national, State, and local levels.

Since the Center for Studies of Crime and Delinquency is part of the National Institute of Mental Health, the research projects supported by the Center are subject to Institute and Departmental policies and requirements regarding the protection of human subjects. This Center and the Division of Special Mental Health Programs, of which the Center is a part, have been particularly concerned with the rights of human subjects including issues of confidentiality, informed consent, and potential risks to research subjects. As a result, special precautions and considerations have been taken and every effort continues to be made to strengthen these safeguards. Further elaboration of these procedures is reflected in the response to your second question.

The following information responds to the specific questions posed in your letter:

1. Would you please give brief descriptions of the types of behavioral and biomedical research projects involving human subjects conducted by, sponsored by, or participated in by N.C.S.C.D. Please describe in detail any such projects conducted in prisons, mental institutions, or schools. For each of these institutions, would you please include in the description a photocopy of the written assurance required by part 1, chapter 40-40-A of the D.H.E.W. Grants Administration Manual.

The NIMH Center for Studies of Crime and Delinquency supports a variety of biomedical, psychological and social research studies in the area of crime and delinquency, individual violence, and law and mental health interactions. The major research areas include: (1) the development of needed scientific knowledge on sources and patterns of crime and delinquency-related behaviors; (2) the development, testing, and evaluation of new program models for handling and coping with delinquent, criminal and violent behaviors; (3) special studies on critical issues in the area of law and mental health interactions.

The research supported by this Center takes place in a variety of settings, such as community based and institutional correctional facilities, schools, courts, community agencies, hospitals, natural homes, and within the com-

munity at large. The setting is very much dependent upon the nature of the study and the specific objectives to be accomplished.

Nineteen of the Center's currently active research projects fall within areas of particular concern to you. For convenience in organizing the material, we have divided the projects into those in which all or part of the research populations come from (1) prisons and correctional institutions, (2) mental institutions, and (3) schools. A description of each of the 19 projects is attached. (See Appendix A1-3). A copy of the general or special assurance filed by each institution and the policies and procedures used by each institution in the review and monitoring of each project for which it is responsible is also attached. (See Appendix B).

(1) There are 11 research projects which are conducted either entirely or in part within correctional institutions. These studies are generally concerned with efforts to improve mental health assessment and prediction procedures and development of appropriate treatment approaches. In particular, these studies include research to learn about: the prevalence rates for chromosomal and other genetic abnormalities; improved prediction of antisocial, aggressive and violent behavior; the design and evaluation of treatment strategies and alternatives; and differential attitudes and responses of incarcerated populations to criminal sanctions and filmed aggression. It should be noted that with the advent of such criminal justice support programs as the Office of Law Enforcement Assistance and the Law Enforcement Assistance Administration in the U.S. Department of Justice, the number of research projects with prison populations supported by the Center, especially studies in the area of improved case management and correctional programs has declined.

(2) Three of the 19 studies draw populations from mental institutions and from patients released from mental hospitals. These studies are focused on efforts to improve criteria and decision-making with regard to psychiatric and psychological assessments of dangerousness of mentally disordered offenders. Various assessments typically are used by mental health and legal professions and by courts for making rather critical decisions about mentally disordered offenders. There is reason to believe that over-use of involuntary commitment often results because these assessments are not presently scientifically well founded. The research the Center is supporting is designed to improve the scientific quality of assessment techniques and thus to reduce involuntary and indeterminate commitments. Another study in this area is attempting to improve the criteria by which the adequacy of treatment provided to offenders can be more accurately and reliably determined by mental health, legal, and judicial personnel.

(3) Finally, five studies which include school populations are concerned with efforts to improve academic and social skills of children with problem behaviors; also, to strengthen the existing school programs to enable them to handle problem behaviors without resorting to juvenile justice processing. By not removing such children from the school and by working with an entire school population, it is possible to avoid attaching stigmatizing labels.

2. What measures has N.C.S.C.D. taken to safeguard the rights of subjects of these research projects? Please supply copies of all policy statements N.C.S.C.D. may have issued concerning research on human subjects?

In December 1971, a brochure was issued entitled, "The Institutional Guide to DHEW Policy on Protection of Human Subjects," a copy of which is attached (Appendix C). This document details the Department of Health, Education, and Welfare's policy and criteria regarding the protection of human subjects and specifies certain procedures which must be implemented by grantee institutions with respect to the provision of assurances that the rights and welfare of human subjects will be protected in any projects they sponsor.

In addition to the general requirements followed by the National Institute of Mental Health, the Center for Studies of Crime and Delinquency helped to develop and has been using special guidelines and forms to ensure that the rights of human subjects involved in research projects supported by the Center are being protected. The Center is keenly aware of its responsibility to ensure that proper procedures are followed in this regard on *all* projects supported by the Center.

In 1970, a form specifically addressing issues of confidentiality, informed consent and potential risks to human subjects was developed and subsequently revised. In January 1971, this form (MH-284, see Appendix D) was incorpo-

rated into the grant review process of the Center for Studies of Crime and Delinquency and the Division of Special Mental Health Programs.

As explained by the covering instruction letter (see Appendix F), this Human Subjects form requires every applicant seeking research funds from the Center for projects involving human subjects to provide information concerning the characteristics of the research subjects, the data source, the confidentiality of the data, permission and informed consent obtained, and the possible risks involved. Both the staff of the Center and the Crime and Delinquency Review Committee at the time of initial review use this information to evaluate the adequacy of the procedures to be taken by the investigator to protect the rights and welfare of human subjects. In some cases, the Center staff request further information from applicants, and staff may also seek additional opinions from appropriate Institute and Departmental staff (e.g., legal consultation) on problematic legal and ethical issues. Consideration of this matter is also given by the National Advisory Mental Health Council as part of their review prior to funding. In any case, no grant will be funded before there is adequate and sufficient assurance that the rights and welfare of human subjects will be protected.

Largely as a result of the experimental use of the Protection of Human Subjects Guides for Grant Review (MH-254) by the Center for Studies of Crime and Delinquency and the Division of Special Mental Health Programs, the National Institute of Mental Health developed two forms (MH-440 and MH-441) in September 1973 related to the protection of human subjects (see Appendix G 1-2). The Center has contributed to the development of these new forms. Use of these forms by research grant applicants and by the Review Committee is mandatory for all projects involving human subjects submitted to the Center for Studies of Crime and Delinquency and the Division of Special Mental Health Programs. The evaluation of the Human Subjects forms by Review Committee members and the active involvement and review by Center and Departmental staff detailed above are followed for *all* research grants.

It is important to emphasize that these procedures followed by the Center for Studies of Crime and Delinquency are *in addition* to the general or special assurances filed by grantee institutions as required by the Department of Health, Education, and Welfare.

3. Are uninformed subjects ever used in such projects? If so, would you please describe in detail those situations in which informed consent is not obtained.

With few exceptions, as noted below, informed consent is obtained by the grantee from subjects participating in *all* research projects supported by the Center for Studies of Crime and Delinquency. As noted in the policy statement, "An Institutional Guide to DHEW Policy on Protection of Human Subjects" and the instructions on the various Human Subjects Review Forms, informed consent should be obtained whenever possible from subjects of research projects. Informed consent is to include a fair explanation of the procedures to be followed; a description of discomforts, possible risks or side effects the subject might experience; a description of the benefits to be expected; an offer to answer inquiries concerning the procedures; and an instruction that participation is voluntary and that the subject may withdraw his participation at any time. In addition, the Center requires that the researchers disclose to subjects the confidential nature of information obtained on or disclosed by subjects. Also, the researchers are urged to provide to subjects or others (viz., parents) any medical or other useful information resulting from a subject's participation in the study. *Written* consent is the general rule. However, in those cases where written consent may endanger anonymity or confidentiality *oral* consent is permissible.

In two research projects, MH18468 "A Program of Research on Antisocial Behavior," and MH23075 "The XYY Syndrome" (see attachment A-1), some of the subjects are not directly informed of the research nature of their participation in taking various tests. In both cases these subjects are subjected *routinely* at intake to a battery of psychological and/or medical screening. The information which is gathered by the correctional and other authorities for their purposes is the same information used by the researcher to meet the research objectives. Informed consent is obtained, however, from subjects who are subjected to any additional or non-routine tests, such as was the case with

the psycho-physiological testing conducted under the research grant MH18408. Similarly, informed consent was obtained from the Denmark sample in the grant MH23076, because they would not have been subjected to any such routine data gathering. It might be noted that although both these projects were approved and funded prior to the formal adoption by the Department and the Center for Studies of Crime and Delinquency of more stringent criteria, the procedures are indeed adequate. Furthermore, data gathering from research subjects is either completed or near completion for both projects.

In another project (MH21303 "Assessment of Adequacy of Treatment," see attachment A-2) informed consent is obtained for all research groups included in the study except In this instance, the routine, daily activities on the ward of approximately 40 patients are observed primarily by hospital personnel for two to three weeks on a time-sampling basis. All the observational data is anonymously coded as part of the standard ward procedure, and individual written permission is specifically not obtained in order to protect identity. Any patients who object are excluded from the study.

Finally, informed consent is obtained from the parents or legal guardians, but not from the students themselves, for the research projects conducted with school populations. The Center for Studies of Crime and Delinquency is now insisting that wherever possible, especially with older youth, permission and informed consent also be obtained from the students *in addition* to parental consent. Such is the case, for example, with MH19706 "Behavioral Programs in Learning Activities for Youth" (see Appendix H).

4. Has N.C.S.C.D. ever sanctioned the use of any experimental drug (or experimental drug dosage) or experimental surgical technique in an agency-sponsored research project?

The Center for Studies of Crime and Delinquency does not generally support research projects in which experimental drugs or surgical techniques are used. In one active project, however, two drugs are used as part of the research MH21035, "Clinical Prediction and Treatment of Episodic Violence" being conducted at the Patuxent Institution in Maryland. This project involves identifying subgroups of aggressive inmates utilizing the electroencephalogram and other more clinical psychiatric techniques. Subsequent differential treatment is offered to the patients on the basis of these findings. An experimental drug, alpha-chloralose, is employed to produce activation of the electroencephalogram for initial diagnostic purposes. This is essentially a safe procedure but one which may have certain minor side effects, such as sleepiness, which the experimenter explicitly explains to the subject in obtaining informed consent. The inmate signs a separate permission form which is witnessed by a third party. Participation in the study is voluntary, and the inmate is free to withdraw from the study at any time.

A later phase of the study requires the inmate to take a medication, Primidone (Mysoline) which is a medically recognized and accepted anti-convulsant drug used for the treatment of seizure disorders. The use of the drug for non-classical seizure disorders would still be considered experimental. The present research is designed partly to test whether such a drug is useful for the treatment of certain types of aggressive behavior manifested by persons whose activated electroencephalographic patterns are abnormal. A written consent form is obtained from the study subject which stipulates his agreement to take medication as well as to participate in other parts of the study. Minor side effects of the drug, such as dizziness or allergic skin reactions, which may occur are explained to the inmate prior to obtaining consent. Participation is voluntary. Moreover, very careful monitoring of drug effects is undertaken while the Mysoline is given; administration of the drug is stopped in the event of discomfort or other side effects. To date there have been no serious side effects from the drug regimen. The regimen has been discontinued on two subjects, even though their complaints were ultimately thought not to be related to the drug treatment.

5. To what extent does N.C.S.C.D. conduct research in Federal Prisons? Particularly, is N.C.S.C.D. involved in any capacity with the Bureau of Prisons research facilities at Springfield, Missouri (Project START) or at Butner, North Carolina (under construction)? Is N.C.S.C.D. involved in any capacity with "The Seed," a Florida-based program directed by Mr. Art Barker?

The Center for Studies of Crime and Delinquency is supporting only one research project in a Federal prison. This project is MH18468, "A Program

of Research on Antisocial Behavior and Violence," which is in its terminal year and is a multi-dimensional research program to examine personality factors involved in antisocial and aggressive behavior. In addition to the review process of the NIMH Center for Studies of Crime and Delinquency, this project was also subjected to review by the Federal Bureau of Prisons of the U.S. Department of Justice prior to NIMH funding. The Bureau of Prisons contributed financially to the project by assuming the costs of the alterations in the building to accommodate the research component.

The Center for Studies of Crime and Delinquency is not involved in any capacity with the Bureau of Prisons research facilities at Springfield, Missouri, at Butner, North Carolina, or with "The Seed" project in Florida.

6. What is N.C.S.C.D.'s general policy on interdepartmental cooperation with respect to research involving human subjects? Specifically, has your agency ever collaborated with the Law Enforcement Assistance Administration of the Justice Department?

Other than the research project noted in response to Question 5, the NIMH Center for Studies of Crime and Delinquency is not involved with any other Federal Department in the support of any research projects. If any such research projects were to be considered for support in the future, the projects would be subjected to the same Departmental and Institute/Center guidelines and policies detailed earlier in this letter.

The NIMH Center for Studies of Crime and Delinquency does have close communication with the Law Enforcement Assistance Administration, particularly with the research arm of LEAA, viz., the National Institute of Law Enforcement and Criminal Justice. However, the Center has never collaborated with LEAA in the support of any research project. The Center and the National Institute of Mental Health have collaborated with LEAA on several conferences and workshops, such as the Joint Conference on Alcohol Abuse and Alcoholism, jointly sponsored with the U.S. Department of Transportation. In addition, the Center has provided technical assistance and consultation on several applications dealing with research in biomedical and physiological areas submitted to the National Institute of Law Enforcement and Criminal Justice.

Once again, we appreciate having the opportunity to respond to your thoughtful questions. As we hope we have indicated, the issues of protection of the rights and welfare of human subjects are very much of concern to us. We will continue our efforts to see that our investigators conscientiously guarantee and protect their subjects' right. If we can provide any additional information, please feel free to contact us.

Sincerely yours,

BERTRAM S. BROWN, M.D.
Director.

(Item I.A.17)

JANUARY 11, 1974.

Hon. CASPAR WEINBERGER,
*Secretary, Department of Health, Education, and Welfare,
Washington, D.C.*

DEAR MR. SECRETARY: I have noted with interest that the Department of Health, Education, and Welfare has proposed the codification of existing Departmental guidelines concerning experimentation on human beings. As chairman of the Senate Subcommittee on Constitutional Rights, I wish to urge that the final regulations provide increased protection of the rights of the subjects of such experimentation.

There are two major weaknesses in the Department's proposal: First, it is based upon existing guidelines that have been demonstrated to be inadequate a number of times, perhaps most convincingly in the recent report of the HEW Investigative panel. Unfortunately, the department has not seen fit to implement the recommendation of its own expert committee. Second, the codification of these guidelines is significantly weaker than legislation which is presently pending in the House. This legislation also includes needed statutory remedies that HEW itself lacks the authority to implement.

The field of biomedical and behavioral research concededly is very complex. Forward thinking researchers have made startling breakthroughs and they must be encouraged to continue to do so. But when medical research is con-

ducted with human subjects there is a real danger that purely scientific interests may lead some researchers to give insufficient attention to the rights of the persons who are experimental subjects. Great care must be taken to anticipate potential abuses, and to insure that individual rights take the first priority whenever human subjects are used in medical research. Scientific interests alone cannot be seen as a justification for the violation of constitutionally protected rights.

Minimum standards concerning informed consent and other ethical considerations must be defined and enforced, not just for the Department of Health, Education, and Welfare, but for all experimentation involving human beings that is conducted under grant or sponsorship from the Federal government. Regrettably, the proposed guidelines do not clearly define many of the ethical problems that are faced in medical research, they do not provide for adequate continuing review by HEW and of course they can be applied only to experiments that relate to the Department of Health, Education, and Welfare. There have already been indications that other government departments and agencies which look to your Department for guidance are considering adopting the HEW proposals. HEW has a responsibility to establish the strongest possible ethical guidelines in the field of the protection of the rights of human subjects to serve as a model for other federal, state and private research.

The proposed rules are not a substitute for important legislation that is now pending in the House. Two of these bills are especially attractive, and neither would place unwarranted restrictions upon the ability of the researcher to make the kinds of scientific breakthroughs that are so essential. Senator Kennedy's amendment to H.R. 7724 incorporates many of the suggestions of the HEW panel. Among other things, it would establish a central review board within HEW whose purpose it would be to define present ethical standards to review further problems that will arise, as most assuredly they will. H.R. 10573, introduced in the House by Congressman Richardson Preyer, represents a stronger version of H.R. 7724. Most important, it expands the jurisdiction of a National Human Experimentation Standard Board to cover all research projects that receive federal funds. Both of these bills represent significant improvements over the HEW proposals.

Because it conducts more experimentation than perhaps any other research organization in the United States, the Department of Health, Education, and Welfare is in a position to exert strong leadership in this field. I would urge that the proposed HEW ethical rules be changed to provide the greatest possible protection for Americans who are the subjects of medical research.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.18]

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., January 30, 1974.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.*

DEAR SENATOR ERVIN: Thank you for your letter of January 11 regarding the proposed regulations for experimentation on human beings.

I share your concerns for the care that must be exercised in order to prevent potential abuses, and to insure the individual rights of human subjects used in medical research. All comments on the draft proposed rules are now being studied by my staff at the National Institutes of Health as part of their general review of responses to the notice published in the November 16, 1973, *Federal Register*. I can assure you that your views will be considered during this period preceding the issuance of final regulations.

With kindest regards,
Sincerely,

CASPAR WEINBERGER,
Secretary.

[Item I.A.19]

JANUARY 15, 1974.

ROBERT Q. MARSTON,
 Director, National Institutes of Health,
 Bethesda, Md.

DEAR DR. MARSTON: In a letter to former HEW Secretary Elliot Richardson dated October 26, 1972, I expressed my concern that psychosurgery and other forms of behavior modification raise fundamental moral and ethical questions, particularly with regard to the Bill of Rights. As Chairman of the Senate Subcommittee on Constitutional Rights, I expressed my opinion that every effort should be made to protect the rights of the human subjects of such medical techniques.

In his response, Secretary Richardson enclosed a copy of a letter dated October 2, 1972 which you gave in response to an inquiry from Senator Warren Magnuson. In the letter you stated that "I can give you a firm assurance that no commitment to fund research projects using human subjects for the study of the relationship between a brain disease and violent behavior will be made until the results of the discussions now being initiated by the NINDS task force have been completed and considered." The NINDS task force mentioned was an *ad hoc* committee set up to study the propriety of research involving psychosurgery. I understand that while a rough draft of the report of the task force has been completed, the final version of the report will not be issued for some time.

In a draft of guidelines recently proposed for the Law Enforcement Assistance Administration concerning psychosurgery, the director, Donald E. Santarelli, has said that "application involving psychosurgery and the criminal personality should be directed to the National Institutes of Health for funding consideration." Has NIH funded, participated in, sanctioned, or in any way become involved in programs using psychosurgery since October of 1972? What is the status of the corresponding studies of psychosurgery being conducted by the National Institute for Neurological Diseases and Stroke and the National Institute of Mental Health? If any reports or drafts have been completed by either of the committees, would you please include copies. Also, would you please include project descriptions and grant requests for all violence studies or behavior modification programs that NIH is presently associated with in any capacity?

Thank you for your cooperation, and I look forward to hearing from you.

With kindest wishes,
 Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.20]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
 PUBLIC HEALTH SERVICE,
 NATIONAL INSTITUTES OF HEALTH,
 Bethesda, Md., January 30, 1974.

HON. SAM J. ERVIN, JR.,
 U.S. Senate,
 Washington, D.C.

DEAR SENATOR ERVIN: Thank you for your letter of January 15, 1974, in regard to National Institutes of Health participation in and support of research in the area of psychosurgery. In order to be precise in reply to your questions, I will use the term "psychosurgery" as meaning research on human subjects whose primary objective is the surgical diagnosis or treatment of behavioral or psychiatric disorders.

Since October 1972, the NIH has not participated in or funded research in the area of psychotherapy. The National Institute of Neurological Diseases and Stroke, a division of the NIH, has completed a "Report on the Biomedical Research Aspects of Brain and Aggressive Violent Behavior." A condensed version of the scientific aspect of the NINDS Report has been published in the January 1974 issue of the *Archives of Neurology*, Volume 30, Number 1, pages 1-36. The full Report is being reviewed by the Office of the Assistant

Secretary for Health, Department of Health, Education, and Welfare. Enclosed is a copy of the NINDS Report. The National Institute of Mental Health, a division of the Alcohol, Drug Abuse, and Mental Health Administration, is preparing a report on the clinical aspects of psychosurgery. It is my understanding that the NIMH Report is not yet completed.

The NIH presently is not supporting or reviewing any proposals for research on the biomedical aspects of violence.

If we can provide additional information please call on us.

Sincerely yours,

ROBERT S. STONE, M.D.,
Director.

[Item I.A.21]

FEBRUARY 22, 1974.

HON. CASPAR WEINBERGER,
Secretary, Department of Health, Education, and Welfare,
Washington, D.C.

DEAR MR. SECRETARY: Over the past year I have conveyed to you my increasing concern about the many difficult problems raised by biomedical and behavioral research designed to alter the behavior of human subjects. Although forward-thinking researchers must be enthusiastically encouraged to continue their work, strong ethical guidelines must be applied in order to preserve the individual liberties of persons affected by that research.

The Senate Subcommittee on Constitutional Rights is currently engaged in a survey of federally-funded biomedical and behavioral research projects which are designed to alter the behavior of individual subjects. Our purpose is to determine the nature and extent of such research in order that we may better evaluate the need for legislative action in this area.

Various federal agencies are being surveyed on this subject, including the Law Enforcement Assistance Administration. As you may know, LEAA recently accepted my suggestion to terminate their programs because it lacks the administrative structure and expertise to give adequate review to the extraordinary projects that were being conducted under its direct and indirect grants. All LEAA grant requests concerning biomedical and behavioral research are now being forwarded to the Department of Health, Education, and Welfare for funding consideration.

In light of these recent developments, the subcommittee has decided to conduct a comprehensive survey of all federal involvement in research aimed at altering the behavior of human beings. Because the Department of Health, Education and Welfare conducts or sponsors a substantial percentage of the biomedical and behavioral research funded by the federal government and will now apparently be responsible for even more, your cooperation in providing the subcommittee information pertaining to departmental involvement in behavioral and biomedical research designed to alter human behavior is particularly important.

Although the subcommittee has made some specific inquiries of certain DHEW operating agencies, I would appreciate your collecting the following information for each of the DHEW operating agencies which supports or conducts biomedical and/or behavioral research which is designed to alter the behavior of human subjects:

1. List each research project by:

(a) Name of grantee and principal researcher (individual and institution); (b) dates of DHEW involvement; (c) amounts of money involved (total and FE-74); and (d) a brief description of the project.

2. Describe the review procedures which apply to such research projects, with particular emphasis on ethical considerations. Include copies of all relevant guidelines, manuals, regulations and other documents which set forth these procedures.

I realize that DHEW and certain of its operating agencies (such as the Center for the Study of Crime and Delinquency) have in the past supplied information similar to that now requested by the subcommittee. However, it is important for the subcommittee to have up-to-date, complete information regarding all DHEW agencies and programs (including the Center) in the format described above.

The subcommittee expects to use the information we have requested in preparing a report on the federal involvement in biomedical and behavioral research aimed at altering human behavior. Since this report is to be published within the very near future, the subcommittee would appreciate your cooperation in making sure that we will receive this information no later than March 22, 1974. Though this request may appear to involve considerable information, I am confident that your existing review procedures will enable you to gather this information expeditiously.

Let me take this opportunity to commend DHEW for taking substantial steps toward the protection of human subjects. As I noted in my letter of January 11, 1974, I sincerely hope that DHEW will continue to assert its leadership in this endeavor as we search for answers to the very many difficult questions raised by biomedical and behavioral research designed to alter human behavior.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item I.A.22]

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., May 10, 1974.

Hon. SAM J. ERVIN, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: This is in further response to your letter of February 22 requesting information about Departmental research programs aimed at altering human behavior. I am enclosing with this letter the pertinent information for the Public Health Service; and, as soon as we finish canvassing the other agencies of the Department, I will be in touch with you. I am sorry about the long delay in gathering this information.

The projects included in the enclosed listing fall within the defined area of behavioral modification, i.e., the systematic application of psychological and social principles to bring about desired changes in or to prevent development of certain "problematic" behaviors and responses. Among the many types of projects included in our response are those designed to teach narcotic addicts or alcoholics to develop self-control over their drug-taking behavior; to alter behavior of persons with serious psychiatric or behavioral problems such as chronic schizophrenia, autism, or learning disabilities; and develop methods for training persons responsible for children, such as parents, teachers or child welfare workers, to use behavioral principles in fostering child development and preventing or dealing with problem behaviors.

A number of types of research, which might fall within a wider interpretation of research designed to alter human behavior, were not included in this inventory. Investigations of medical, surgical and psychological procedures addressing a known organic etiology or a known organic syndrome (such as coronary artery disease or peptic ulcer) have not been included; studies of the medical or surgical therapy of brain tumor and the psychological therapy of aphasia will not be found in the attached list. Other examples of research not included are studies of psycho-social therapies which are based on psychoanalysis and other nonlearning theories; studies involving treatment with tranquilizers, psychoactive drugs and other somatic treatment such as electroconvulsive therapy; and bio-feedback studies, such as those which explore methods for teaching people to voluntarily control such problems as asthma attacks or gastric hyperacidity. Also excluded are health education studies aimed at increasing community and personal attention to problems such as smoking, dental caries, or the control of hypertension. The Public Health Service is not supporting research involving human subjects on psychosurgery or on other medical-surgical methods for the control of behavioral disorders.

If our operational definition omits projects of major interest to you, we would, of course, be happy to provide information on additional categories of projects should you so desire. Please contact my office if you or your staff would like to discuss these and other projects with knowledgeable staff in the Public Health Service.

The second part of your request has to do with the Department of Health, Education, and Welfare procedures that provide for the protection of human subjects who are part of research projects. I am enclosing for your use the current Departmental administrative chapter addressing those procedures. As you noted in your letter to me of January 11, we are formally codifying these procedures as Departmental regulations; as soon as those are available, I will make sure you get a copy.

Let me reaffirm my view that the protection of the individual rights of those participating in research is a major concern of this Department. The development of our policy has evolved over many years and will continue to be modified and developed into the future in response to the concerns articulated by the research community, the Department and the American public.

Sincerely,

FRANK CARLUCCI,
Acting Secretary.

[Item I.A.23]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
OFFICE OF THE SECRETARY,
Washington, D.C., July 12, 1974.

HON. SAM J. ERVIN, JR.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: This is in further response to Secretary Weinberger's letter to you of May 10 concerning the protection of human subjects. Please forgive the delay in providing you with this information.

Enclosed are copies of the document published in the *Federal Register* of May 30 which sets forth procedures governing the protection of those human subjects who participate in research projects sponsored by the Federal government. This issuance, which constitutes Part 46 of Title 45 of the *Code of Federal Regulations*, became effective July 1.

Sincerely yours,

CHARLES C. EDWARDS, M.D.
Assistant Secretary for Health.

[Item I.A.24]

JULY 12, 1974.

HON. CASPAR W. WEINBERGER,
Secretary, Department of Health, Education, and Welfare,
Washington, D.C.

DEAR SECRETARY WEINBERGER: I was concerned to learn in a *Washington Post* article of June 5 that no definitive action has been taken concerning the findings of a study of psychosurgery conducted by the Mental Health Division of the Alcohol, Drug Abuse, and Mental Health Administration. To quote from the January 21 report of the study, "Psychosurgery should be defined as an experimental therapy at the present time. As such it should not be considered to be a therapy which can be made generally available to the public because of the peculiar nature of the procedure and of the problem with which it deals." I would like to know why the report has not yet been formally released, and why no action concerning its recommendations has been taken.

Psychosurgery is a practice that poses a profound threat to individual privacy and freedom. I am disturbed that the Department of Health, Education, and Welfare has not taken the steps recommended in the report of its study to minimize this threat, and thereby provide the leadership it should as the premiere health organization in the world. While the merits of psychosurgery may be debatable, the rights and well-being of individual citizens cannot be compromised. I suggest that action on the recommendations of the study be taken at once, and that a formal moratorium be placed on the practice until the vital questions concerning its use can be thoroughly considered and resolved.

This report would have an important and positive impact on the growing controversy surrounding psychosurgery. As such, it should be made generally avail-

able to all those concerned. This, I am sure you will agree, will serve the public interest better than a piecemeal and possibly distorted release through newspaper articles. For that reason, I believe it would serve a useful purpose to insert the report in the *Congressional Record*. A formal endorsement by the Secretary of the Department would add to the positive influence of this very important report.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, JR., *Chairman.*

[Item I.A.25]

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., July 29, 1974.

Hon. SAM J. ERVIN, JR.,
*Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.*

DEAR SENATOR ERVIN: Thank you for your letter of July 12 about issues of individual rights and psychosurgery, referring to an article which appeared in the *Washington Post* on June 5.

First, let me tell you how the study came to be made. There are two reports, not one. In 1972, then Assistant Secretary for Health Merlin K. DuVal asked the Director, National Institute of Mental Health (NIMH) and the Director, National Institute of Neurological Diseases and Strokes (NINDS), to jointly provide him with their professional advice concerning brain surgery and socially undesirable behavior. As a result of this request and of discussions with the National Academy of Sciences, two groups were established to provide that advice. The major task of the groups was similar, i.e., to study the many issues involved in therapeutic approaches to abnormal behavior with a view to laying the scientific framework as a basis for recommendations and policy formation. There were differences between the groups in specific focus or intensity of analysis. The NIMH group focused more on the clinical and psychological issues on brain surgery and behavior, while the NINDS group emphasized our current state of knowledge regarding brain function as related to human clinical applications. It should be stressed, however, that these are not mutually exclusive concerns and cannot be considered in isolation from each other.

The NINDS report was submitted to the Office of the Assistant Secretary on October 5, 1973; the NIMH report was submitted on January 21, 1974. Each report has been reviewed officially by the other Institute, and comments have been received. I am enclosing copies of both reports with this letter for your use. Part I of the NINDS report has been published as a supplement to the *Archives of Neurology*, January 1, 1974. We have been providing copies of both reports to the public on request.

Let me stress again that these reports were prepared at the request of, and to provide advice to, the Assistant Secretary. They do not, at this time, have my endorsement of all their details. As you clearly point out, they raise a number of medical, legal, ethical, and administrative issues and provide recommendations concerning those issues. However, the Department does not now nor will we in the foreseeable future support research efforts involving surgery on the human brain solely for the treatment of psychiatric or behavioral problems.

P.L. 93-348, "The National Research Act," provides for a National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. One of the duties of that Commission is to consider the use of psychosurgery, evaluate the need for it, and recommend to me policies defining the circumstances (if any) under which its use may be appropriate. We anticipate that the Commission will use these reports and other proposals we may develop during the course of its deliberations. We will, of course, work closely with the Commission during its lifetime to consider and propose policies for the broad range of issues involved in the protection of human subjects of biomedical and behavioral research.

I greatly appreciate the support you have given us in earlier letters. Let me assure you that the Department will continue to provide leadership on these issues.

Sincerely,

CASPAR W. WEINBERGER,
Secretary.

[Item I.A.26]

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington, D.C., July 25, 1974.

HON. SAM J. ERVIN, JR.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: This is in further response to your letter of February 22 requesting information about Departmental research programs aimed at altering human behavior.

A canvass of non-health-related agencies of the Department has identified ten projects to which your request is applicable. One project is supported by the National Institute of Education (NIE), one by the Office of Child Development (OCD), and eight by the Social and Rehabilitation Service (SRS).

All programs under the responsibility of the Office of Education and the National Institute of Education (NIE) have been reviewed, and biomedical and behavioral research designed to alter the behavior of human subjects is not being supported. One project supported by NIE may be a possible exception; I am enclosing a description of it for your use. [See Item I.C.1.]

Broadly interpreted, your request could include all education programs since all attempt, through a learning environment, to modify human behavior. As was the case in my reply of May 10, 1974, however, we are using the following operational definition of behavioral modification: the systematic application of psychological and social principles to bring about desired changes in or to prevent development of certain "problematic" behaviors and responses. Thus, descriptions of a number of types of research have not been included in our inventory. Such research covers development of new knowledge and improved materials and techniques; studies observing and analyzing human behavior; improving the components of the educational process (structure, dynamics, materials, teaching techniques, etc.); interventions (e.g., new curriculum materials, specialized environments) to examine freely expressed and untreated behaviors in response to interventions that lead to the development of educational interactions and environments most encouraging to the fullest development of natural (and socially approved) behaviors; and research focused upon a defined subset of human behavior—that specifically delineated area of cognitive skills and social competencies expected to be developed during the school years. NIE is also currently supporting a small number of research projects dealing with problematic or handicapped behavior. These projects are designed to monitor and analyze the characteristics and effects of such behavior upon the learning abilities of the individuals involved; neither the design nor the effect of the projects is to alter the behavior of the individuals under study.

Here too, if our operational definition omits projects of major interest to you, we would, of course, be happy to provide information on additional categories of projects should you so desire.

The OCD project is focused upon "Modification of Children's Racial Attitudes." This project is investigating some of the attitudinal and behavioral components of racial prejudice in elementary school children, and assessing the relative efficacy of various modification procedures upon these attitudes and intergroup behavior at different age levels.

The SRS projects are entitled as follows:

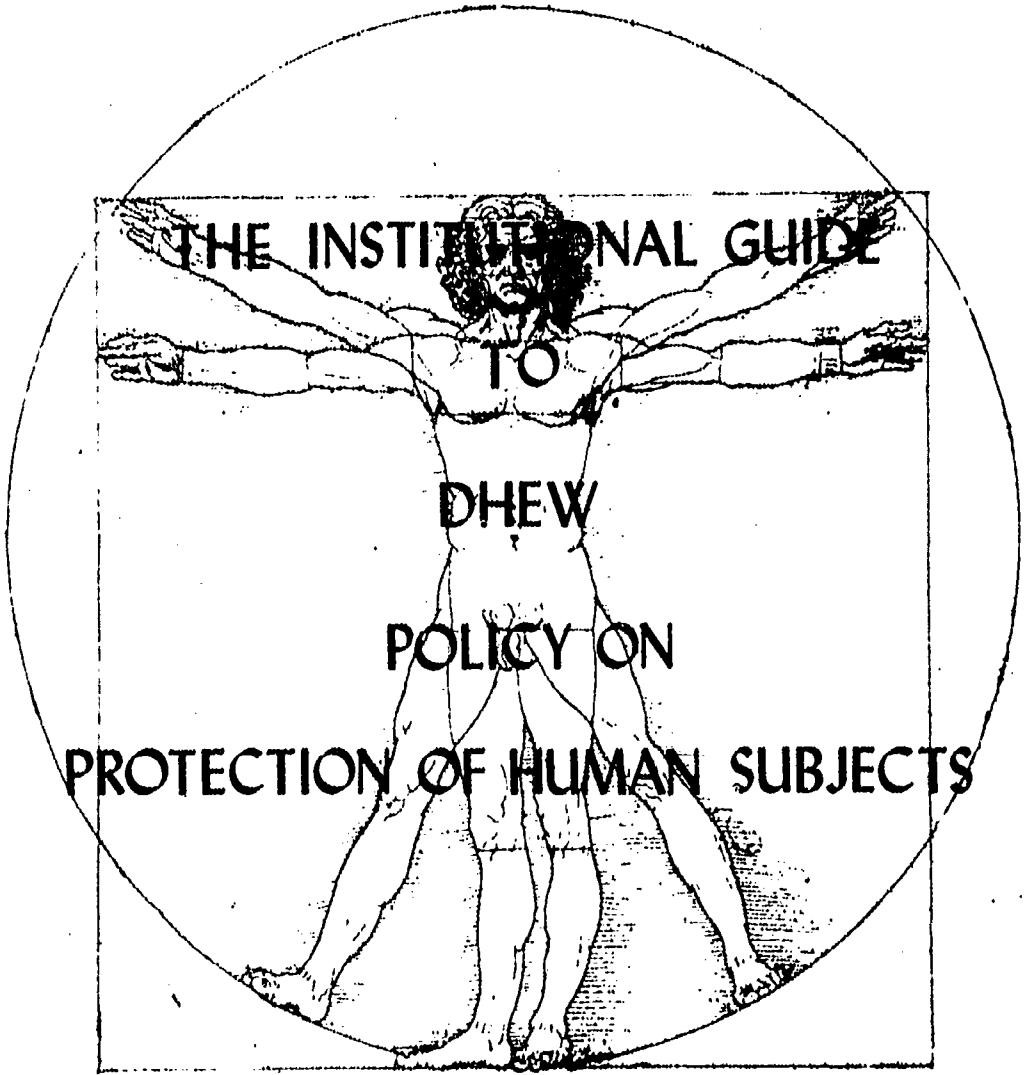
1. "Evaluation of Automated Training System for Wheelchair Pushups."
2. "Contingency Management Systems in Medical Rehabilitation."
3. "Operant Conditioning Methods in the Management of Chronic Pain."
4. "Testing of an Automated Training System for Wheelchair Pushups."
5. "Shaping Self-Care Behaviors in Children with Chronic Disabilities."
6. "Management of Behavior in Extended Living Facilities for the Retarded."
7. "Functional Skill Remediation in Hemiplegia; Behavioral Learning Approach Applied to Physical Therapy."
8. "Development and Evaluation of Self Help Groups of Mothers of Children with Birth Defects."

I understand that Dr. Edwards has recently sent you copies of the document published in the *Federal Register* of May 30 which sets forth procedures governing the protection of those human subjects who participate in research projects sponsored by the Department. This then represents the current listing of Department projects pursuant to your request.

Sincerely,

FRANK CARLUCCI,
Acting Secretary.

B. Materials Relating to HEW Guidelines
[ITEM. I.B.1]



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service **National Institutes of Health**

DHEW Publication No. (NIH) 72-102

December 1, 1971

FOREWORD

The Department's basic policy, quoted in the first few paragraphs of this Guide, is simple in concept. However, simplicity in conception is not always easily translated into simplicity in application. Many of the basic terms of the policy, such as subject, risk, and informed consent, are differently understood in the several professions that participate in the varied grant and contract programs supported by the Department. This Guide provides working definitions of the policy's more critical terms, and outlines flexible operating procedures which can be adapted to a variety of grant and contract mechanisms.

A flexible policy is essential. Research, development, and the reduction to practice of new ideas are not carried out in a practical, ethical, or legal vacuum. The public interest obviously would not be served by an inflexible approach to what can or should be done. Ultimately, the decisions required by this policy must depend upon the common sense and sound professional judgment of reasonable men. The Department's policy and the Guide are intended to provide room for the exercise of this judgment.

In its present form, the Guide reflects several years' experience with an earlier Public Health Service policy. It incorporates many comments and suggestions by representatives of grantee and contractor institutions, and by consultants and staff of the operating agencies of the Department. Future experience in the application of the policy in the fields of health, education, and welfare will simultaneously raise questions and suggest changes. Correspondence should be addressed to the Chief, Institutional Relations Branch, Division of Research Grants, National Institutes of Health, Bethesda, Md. 20014.

D. T. Chalkley, Ph. D.
Chief, Institutional Relations Branch
Division of Research Grants, NIH, DHEW

CONTENTS

	Page
FOREWORD -----	iii
POLICY: Grants and Contracts -----	1
APPLICABILITY -----	1
A. General -----	1
B. Subject—Definition -----	1
C. At Risk—Definition -----	2
D. Types of Risks and Applicability of the Policy -----	2
E. Established and Accepted Methods -----	3
F. Necessity to Meet Needs -----	3
INSTITUTIONAL REVIEW -----	4
A. Initial Review of Projects -----	4
1. Committee, Composition and Functions -----	4
2. Statement of Principles -----	5
3. Review Process -----	5
a. Rights and Welfare of Subjects: Identity of Sub- jects, Confidentiality and Privacy, Legal Rights --	5
b. Risk/Benefit Considerations: Benefits to Subjects— Substantial or Negligible, Volunteers, Motivation..	6
c. Informed Consent: Basic Elements; Institutional Liability for Negligence, Debriefing -----	7
B. Continuing Review -----	8
C. Communication of the Committee's Action, Advice, and Counsel -----	9
D. Maintenance of an Active and Effective Committee -----	9
ASSURANCES -----	9
A. Negotiation of Assurances -----	9
B. Types of Assurances -----	10
1. General Assurance -----	10
2. Special Assurance -----	10
C. Minimum Requirements for General Assurances -----	10
1. Statement of Compliance -----	10
2. Implementing Guidelines -----	10
a. Statement of Principles -----	10
b. Committee Membership -----	10
c. Specific Procedures, Review of Proposals -----	10
d. Specific Procedures, Advice to and Reports from Project Directors -----	11
e. Specific Procedures, Institutional Follow-up on Committee Action -----	11
D. Minimum Requirements for Special Assurance -----	11

	Page
TIMING AND CERTIFICATION OF INSTITUTIONAL REVIEW	11
A. General Assurances	11
1. Timely Review	11
2. Pending Review	11
3. Completion of Pending Review	12
4. Proposals Lacking Definite Plans	12
5. Proposals Submitted With No Intent of Involving Human Subjects	12
B. Special Assurances	13
COOPERATIVE ACTIVITIES	13
A. Institutions With General Assurances	13
1. Institutional Review Relationships	13
a. Cooperating Institutions With Accepted General Assurances	13
b. Cooperating Institutions With No Accepted Gen- eral Assurance	14
c. Interinstitutional Joint Reviews	14
B. Institutions With Special Assurances	14
INSTITUTIONAL ADMINISTRATION OF ASSURANCES	14
A. Institutional Responsibility	14
B. Executive Functions	15
C. Assurance Implementation	15
D. Documentation	15
1. General	15
2. Informed Consent	16
a. Written Consent	16
b. Oral Consent "Short" Form	16
c. Modification of Written or Oral Consent Forms	16
3. Reporting to DHEW	16
ENFORCEMENT	17
DEPARTMENTAL REVIEW OF ASSURANCES	17
ATTACHMENT	
A EXAMPLE OF A STATEMENT OF COMPLIANCE (PART ONE OF A GENERAL INSTITUTIONAL ASSURANCE)	18
B SPECIAL INSTITUTIONAL ASSURANCE IN CONNECTION WITH SINGLE PROJECTS INVOLVING HUMAN SUBJECTS	19
INSTRUCTIONS FOR PREPARING SPECIAL ASSURANCE	21
C LIST OF CODES OR STATEMENTS OF PRINCIPLES	23

NOTE

Bold face indicates policy as stated in DHEW Grant Administration Manual Chapter 1-40.

Light face indicates interpretation of DHEW policy.

POLICY

Safeguarding the rights and welfare of human subjects involved in activities supported by grants or contracts from the Department of Health, Education, and Welfare is the responsibility of the institution which receives or is accountable to the DHEW for the funds awarded for the support of the activity.

In order to provide for the adequate discharge of this institutional responsibility, it is the policy of the Department that no grant or contract for an activity involving human subjects shall be made unless the application for such support has been reviewed and approved by an appropriate institutional committee.

This review shall determine that the rights and welfare of the subjects involved are adequately protected, that the risks to an individual are outweighed by the potential benefits to him or by the importance of the knowledge to be gained, and that informed consent is to be obtained by methods that are adequate and appropriate.

In addition the committee must establish a basis for continuing review of the activity in keeping with these determinations.

The institution must submit to the DHEW, for its review, approval, and official acceptance, an assurance of its compliance with this policy. The institution must also provide with each proposal involving human subjects a certification that it has been or will be reviewed in accordance with the institution's assurance.

No grant or contract involving human subjects at risk will be made to an individual unless he is affiliated with or sponsored by an institution which can and does assume responsibility for the protection of the subjects involved.

Since the welfare of subjects is a matter of concern to the Department of Health, Education, and Welfare as well as to the institution, no grant or contract involving human subjects shall be made unless the proposal for such support has been reviewed and approved by an appropriate professional committee within the responsible component of the Department. As a result of this review, the committee may recommend to the operating agency, and the operating agency may require, the imposition of specific grant or contract terms providing for the protection of human subjects, including requirements for informed consent.

APPLICABILITY

A. General

This policy applies to all grants and contracts which support activities in which subjects may be at risk.

B. Subject

This term describes any individual who may be at risk as a consu-

2

quence of participation as a subject in research, development, demonstration, or other activities supported by DHEW funds.

This may include patients; outpatients; donors of organs, tissues, and services; informants; and normal volunteers, including students who are placed at risk during training in medical, psychological, sociological, educational, and other types of activities supported by DHEW.

Of particular concern are those subjects in groups with limited civil freedom. These include prisoners, residents or clients of institutions for the mentally ill and mentally retarded, and persons subject to military discipline.

The unborn and the dead should be considered subjects to the extent that they have rights which can be exercised by their next of kin or legally authorized representatives.

C. At Risk

An individual is considered to be "at risk" if he may be exposed to the possibility of harm—physical, psychological, sociological, or other—as a consequence of any activity which goes beyond the application of those established and accepted methods necessary to meet his needs. The determination of when an individual is at risk is a matter of the application of common sense and sound professional judgment to the circumstances of the activity in question. Responsibility for this determination resides at all levels of institutional and departmental review. Definitive determination will be made by the operating agency.

D. Types of Risks and Applicability of the Policy

1. Certain risks are inherent in life itself, at the time and in the places where life runs its course. This policy is not concerned with the ordinary risks of public or private living, or those risks associated with admission to a school or hospital. It is not concerned with the risks inherent in professional practice as long as these do not exceed the bounds of established and accepted procedures, including innovative practices applied in the interest of the individual patient, student or client.

Risk and the applicability of this policy are most obvious in medical and behavioral science research projects involving procedures that may induce a potentially harmful altered physical state or condition. Surgical and biopsy procedures; the removal of organs or tissues for study, reference, transplantation, or banking; the administration of drugs or radiation; the use of indwelling catheters or electrodes; the requirement of strenuous physical exertion; subjection to deceit, public embarrassment, and humiliation are all examples of procedures which require thorough scrutiny by both the Department of Health, Education, and Welfare and institutional committees. In general those projects which involve risk of physical or psychological injury require prior written consent.

2. There is a wide range of medical, social, and behavioral projects and activities in which no immediate physical risk to the subject is involved; e.g., those utilizing personality inventories, interviews, questionnaires, or the use of observation, photographs, taped records, or stored data. However, some of these procedures may involve varying degrees of discomfort, harassment, invasion of privacy, or may constitute a threat to the

subject's dignity through the imposition of demeaning or dehumanizing conditions.

3. There are also medical and biomedical projects concerned solely with organs, tissues, body fluids, and other materials obtained in the course of the routine performance of medical services such as diagnosis, treatment and care, or at autopsy. The use of these materials obviously involves no element of physical risk to the subject. However, their use for many research, training, and service purposes may present psychological, sociological, or legal risks to the subject or his authorized representatives. In these instances, application of the policy requires review to determine that the circumstances under which the materials were procured were appropriate and that adequate and appropriate consent was, or can be, obtained for the use of these materials for project purposes.

4. Similarly, some studies depend upon stored data or information which was often obtained for quite different purposes. Here, the reviews should also determine whether the use of these materials is within the scope of the original consent, or whether consent can be obtained.

E. Established and Accepted Methods

Some methods become established through rigorous standardization procedures prescribed, as in the case of drugs or biologicals, by law or, as in the case of many educational tests, through the aegis of professional societies or nonprofit agencies. Acceptance is a matter of professional response, and determination as to when a method passes from the experimental stage and becomes "established and accepted" is a matter of judgment.

In determining what constitutes an established and accepted method, consideration should be given to both national and local standards of practice. A management procedure may become temporarily established in the routine of a local institution but still fail to win acceptance at the national level. A psychological inventory may be accepted nationally, but still contain questions which are disturbing or offensive to a local population. Surgical procedures which are established and accepted in one part of the country may be considered experimental in another, not due to inherent deficiencies, but because of the lack of proper facilities and trained personnel. Diagnostic procedures which are routine in the United States may pose serious hazards to an undernourished, heavily infected, overseas population.

If doubt exists as to whether the procedures to be employed are established and accepted, the activity should be subject to review and approval by the institutional committee.

F. Necessity to Meet Needs

Even if considered established and accepted, the method may place the subject at risk if it is being employed for purposes other than to meet the needs of the subject. Determination by an attending professional that a particular treatment, test, regimen, or curriculum is appropriate for a particular subject to meet his needs limits the attendant risks to those inherent in the delivery of services, or in training.

On the other hand, arbitrary, random, or other assignment of subjects

4

to differing treatment or study groups in the interests of a DHEW supported activity, rather than in the strict interests of the subject, introduces the possibility of exposing him to additional risk. Even comparisons of two or more established and accepted methods may potentially involve exposure of at least some of the subjects to additional risks. Any alteration of the choice, scope, or timing of an otherwise established and accepted method, primarily in the interests of a DHEW activity, also raises the issue of additional risk.

If doubt exists as to whether the procedures are intended solely to meet the needs of the subject, the activity should be subject to review and approval by the institutional committee.

INSTITUTIONAL REVIEW

A. Initial Review of Projects

1. Review must be carried out by an appropriate institutional committee. The committee may be an existing one, such as a board of trustees, medical staff committee, utilization committee, or research committee, or it may be specially constituted for the purpose of this review. Institutions may utilize subcommittees to represent major administrative or subordinate components in those instances where establishment of a single committee is impracticable or inadvisable. The institution may utilize staff, consultants, or both.

The committee must be composed of sufficient members with varying backgrounds to assure complete and adequate review of projects and activities commonly conducted by the institution. The committee's membership, maturity, experience, and expertise should be such as to justify respect for its advice and counsel. No member of an institutional committee shall be involved in either the initial or continuing review of an activity in which he has a professional responsibility, except to provide information requested by the committee. In addition to possessing the professional competence to review specific activities, the committee should be able to determine acceptability of the proposal in terms of institutional commitments and regulations, applicable law, standards of professional conduct and practice, and community attitudes.¹ The committee may therefore need to include persons whose primary concerns lie in these areas rather than in the conduct of research, development, and service programs of the types supported by the DHEW.

If an institution is so small that it cannot appoint a suitable committee from its own staff, it should appoint members from outside the institution.

Committee members shall be identified by name, occupation or position, and by other pertinent indications of experience and competence in areas pertinent to the areas of review such as earned degrees, board certifications, licensures, memberships, etc.

Temporary replacement of a committee member by an alternate of comparable experience and competence is permitted in the event a mem-

¹ In the United States, the regulations of the Food and Drug Administration (21 CFR 130) provide that the committee must possess competencies to determine acceptability of the project in these terms in order to review proposals for investigational new drug (IND) studies.

ber is momentarily unable to fulfill committee responsibility. The DHEW should be notified of any permanent replacement or additions.

2. The institution should adopt a statement of principles that will assist it in the discharge of its responsibilities for protecting the rights and welfare of subjects. This may be an appropriate existing code or declaration or one formulated by the institution itself.² It is to be understood that no such principles supersede DHEW policy or applicable law.

3. Review begins with the identification of those projects or activities which involve subjects who may be at risk. In institutions with large grant and contract programs, administrative staff may be delegated the responsibility of separating those projects which do not involve human subjects in any degree; i.e., animal and nonhuman materials studies. However, determinations as to whether any project or activity involves human subjects at risk is a professional responsibility to be discharged through review by the committee, or by subcommittees.

If review determines that the procedures to be applied are to be limited to those considered by the committee to be established, accepted, and necessary to the needs of the subject, review need go no further; and the application should be certified as approved by the committee. Such projects involve human subjects, but these subjects are not considered to be at risk.

If review determines that the procedures to be applied will place the subject at risk, review should be expanded to include the issues of the protection of the subject's rights and welfare, of the relative weight of risks and benefits, and of the provision of adequate and appropriate consent procedures.

Where required by workload considerations or by geographic separation of operating units, subcommittees or mail review may be utilized to provide preliminary review of applications.

Final review of projects involving subjects at risk should be carried out by a quorum of the committee.³ Such review should determine, through review of reports by subcommittees, or through its own examination of applications or of protocols, or through interviews with those individuals who will have professional responsibility for the proposed project or activity, or through other acceptable procedures that the requirements of the institutional assurance and of DHEW policy have been met, specifically that:

a. The rights and welfare of the subjects are adequately protected.

Institutional committees should carefully examine applications, protocols, or descriptions of work to arrive at an independent determination of possible risks. The committee must be alert to the possibility that investigators, program directors, or contractors may, quite unintentionally, introduce unnecessary or unacceptable hazards, or fail to provide adequate safeguards. This possibility is particularly true if the project crosses disciplinary lines, involves new and untried procedures, or involves established and accepted procedures which are new to the personnel applying them. Committees must also assure

² Some of the existing codes or statements of principles concerned with the protection of human subjects in research, investigation, and care are listed in attachment C.

³ In the United States, the quorum reviewing investigational new drug studies must satisfy requirements of the Food and Drug Administration (21 CFR 130).

themselves that proper precautions will be taken to deal with emergencies that may develop even in the course of seemingly routine activities.

When appropriate, provision should be made for safeguarding information that could be traced to, or identified with, subjects. The committee may require the project or activity director to take steps to insure the confidentiality and security of data, particularly if it may not always remain under his direct control.

Safeguards include, initially, the careful design of questionnaires, inventories, interview schedules, and other data gathering instruments and procedures to limit the personal information to be acquired to that absolutely essential to the project or activity. Additional safeguards include the encoding or enciphering of names, addresses, serial numbers, and of data transferred to tapes, discs, and printouts. Secure, locked spaces and cabinets may be necessary for handling and storing documents and files. Codes and ciphers should always be kept in secure places, distinctly separate from encoded and enciphered data. The shipment, delivery, and transfer of all data, printouts, and files between offices and institutions may require careful controls. Computer to computer transmission of data may be restricted or forbidden.

Provision should also be made for the destruction of all edited, obsolete or depleted data on punched cards, tapes, discs, and other records. The committee may also determine a future date for destruction of all stored primary data pertaining to a project or activity.

Particularly relevant to the decision of the committees are those rights of the subject that are defined by law. The committee should familiarize itself through consultation with legal counsel with these statutes and common law precedents which may bear on its decisions. The provisions of this policy may not be construed in any manner or sense that would abrogate, supersede, or moderate more restrictive applicable law or precedential legal decisions.

Laws may define what constitutes consent and who may give consent, prescribe or proscribe the performance of certain medical and surgical procedures, protect confidential communications, define negligence, define invasion of privacy, require disclosure of records pursuant to legal process, and limit charitable and governmental immunity (see, e.g., the University of Pittsburgh Law Manual).

b. The risks to an individual are outweighed by the potential benefits to him or by the importance of the knowledge to be gained.

The committee should carefully weigh the known or foreseeable risks to be encountered by subjects, the probable benefits that may accrue to them, and the probable benefits to humanity that may result from the subject's participation in the project or activity. If it seems probable that participation will confer substantial benefits on the subjects, the committee may be justified in permitting them to accept commensurate or lesser risks. If the potential benefits are insubstantial, or are outweighed by risks, the committee may be justified in permitting the subjects to accept these risks in the interests of humanity. The committee should consider the possibility that subjects, or those authorized to represent subjects, may be motivated to accept risks for unsuitable or inadequate reasons. In such instances the consent procedures adopted should incorporate adequate safeguards.

Compensation to volunteers should never be such as to constitute an undue inducement.

No subject can be expected to understand the issues of risks and benefits as fully as the committee. Its agreement that consent can reasonably be sought for subject participation in a project or activity is of paramount practical importance.

"The informed consent of the subject, while often a legal necessity is a goal toward which we must strive, but hardly ever achieve except in the simplest cases."

(Henry K. Beecher, M.D.)

c. The informed consent of subjects will be obtained by methods that are adequate and appropriate.

Note.—In the United States, adherence to the regulations of the Food and Drug Administration (21 CFR 130) governing consent in projects involving investigational new drugs (IND) is required by law.

Informed consent is the agreement obtained from a subject, or from his authorized representative, to the subject's participation in an activity.

The basic elements of informed consent are:

1. A fair explanation of the procedures to be followed, including an identification of those which are experimental;
2. A description of the attendant discomforts and risks;
3. A description of the benefits to be expected;
4. A disclosure of appropriate alternative procedures that would be advantageous for the subject;
5. An offer to answer any inquiries concerning the procedures;
6. An instruction that the subject is free to withdraw his consent and to discontinue participation in the project or activity at any time.

In addition, the agreement, written or oral, entered into by the subject, should include no exculpatory language through which the subject is made to waive, or to appear to waive, any of his legal rights, or to release the institution or its agents from liability for negligence.⁴

Informed consent must be documented (see Documentation, p. 16).

Consent should be obtained, whenever practicable, from the subjects themselves. When the subject group will include individuals who are not legally or physically capable of giving informed consent, because of age, mental incapacity, or inability to communicate, the review committee should consider the validity of consent by next of kin, legal guardians, or by other qualified third parties representative of the subjects' interests. In such instances, careful consideration should be given by the committee not only to whether these third parties can be presumed to have the necessary depth of interest and concern with the subjects' rights and welfare, but also to whether these third parties will be legally authorized to expose the subjects to the risks involved.

⁴ Use of exculpatory clauses in consent documents is considered contrary to public policy. *Tunkl vs. Regents of University of California*, 60 Cal. 2d 92, 32 Cal. Rptr.33, 383 P. 2d 441 (1963), Annot., 6 A.L.R. 3d 693 (1966).

The review committee will determine if the consent required, whether to be secured before the fact, in writing or orally, or after the fact following debriefing, or whether implicit in voluntary participation in an adequately advertised activity, is appropriate in the light of the risks to the subject, and the circumstances of the project.

The review committee will also determine if the information to be given to the subject, or to qualified third parties, in writing or orally, is a fair explanation of the project or activity, of its possible benefits, and of its attendant hazards.

Where an activity involves therapy, diagnosis, or management, and a professional/patient relationship exists, it is necessary "to recognize that each patient's mental and emotional condition is important . . . and that in discussing the element of risk, a certain amount of discretion must be employed consistent with full disclosure of fact necessary to any informed consent."⁵

Where an activity does not involve therapy, diagnosis, or management, and a professional/subject rather than a professional/patient relationship exists, "the subject is entitled to a full and frank disclosure of all the facts, probabilities, and opinions which a reasonable man might be expected to consider before giving his consent."⁶

When debriefing procedures are considered as a necessary part of the plan, the committee should ascertain that they will be complete and prompt.

B. Continuing Review

This is an essential part of the review process. While procedures for continuing review of ongoing projects and activities should be based in principle on the initial review criteria, they should also be adapted to the size and administrative structure of the institution. Institutions which are small and compact and in which the committee members are in day-to-day contact with professional staff may be able to function effectively, with some informality. Institutions which have placed responsibility for review in boards of trustees, utilization committees, and similar groups that meet on frequent schedules may find it possible to have projects re-reviewed during these meetings.

In larger institutions with more complex administrative structures and specially appointed committees, these committees may adopt a variety of continuing review mechanisms. They may involve systematic review of projects at fixed intervals, or at intervals set by the committee commensurate with the project's risk. Thus, a project involving an untried procedure may initially require reconsideration as each subject completes his involvement. A highly routine project may need no more than annual review. Routine diagnostic service procedures, such as biopsy and autopsy, which contribute to research and demonstration activities generally require no more than annual review. Spot checks may be used to supplement scheduled reviews.

Actual review may involve interviews with the responsible staff, or

⁵ *Salgo vs. Leland Stanford Jr. University Board of Trustees* (154 C.A. 2nd 560; 317 P. 2d 1701).

⁶ *Halushka vs. University of Saskatchewan*, (1965) 53 D.L.R. (2d).

review of written reports and supporting documents and forms. In any event, such review must be completed at least annually to permit certifications of review on noncompeting continuation applications.

C. Communication of the Committee's Action, Advice, and Counsel

If the committee's overall recommendation is favorable, it may simultaneously prescribe restrictions or conditions under which the activity may be conducted, define substantial changes in the research plans which should be brought to its attention, and determine the nature and frequency of interim review procedures to insure continued acceptable conduct of the research.

Favorable recommendations by an institutional committee are, of course, always subject to further appropriate review and rejection by institution officials.

Unfavorable recommendations, restrictions, or conditions cannot be removed except by the committee or by the action of another appropriate review group described in the assurance filed with the Department of Health, Education, and Welfare.

Staff with supervisory responsibility for investigators and program directors whose projects or activities have been disapproved or restricted, and institutional administrative and financial officers should be informed of the committee's recommendations. Responsible professional staff should be informed of the reasons for any adverse actions taken by the institutional committee.

The committee should be prepared at all times to provide advice and counsel to staff developing new projects or activities or contemplating revision of ongoing projects or disapproved proposals.

D. Maintenance of an Active and Effective Committee

Institutions should establish policy determining overall committee composition, including provisions for rotation of memberships and appointment of chairmen. Channels of responsibility should be established for implementation of committee recommendations as they may affect the actions of responsible professional staff, grants and contracts officers, business officers, and other responsible staff. Provisions should be made for remedial action in the event of disregard of committee recommendations.

ASSURANCES

A. Negotiation of Assurances

An institution applying to the DHEW for a grant or contract involving human subjects must provide written assurance that it will abide by DHEW policy. The assurance shall embody a statement of compliance with DHEW requirements for initial and continuing committee review of the supported activities; a set of implementing guidelines, including identification of the committee, and a description of its review procedures or, in the case of special assurances concerned with single projects or activities, a report of initial findings and pro-

10

posed continuing review procedures. Institutions that have not previously filed assurances should request instructions for the preparation of an assurance from the Division of Research Grants, National Institutes of Health.

Negotiation of assurances is the responsibility of the DRG, NIH. Negotiation will be initiated on receipt of a copy of a grant application, a contract proposal, or other documentation identifying the project and the offeror or sponsoring institution.

Assurances will not be accepted from institutions or institutional components which do not have control over the expenditure of DHEW grant or contract funds unless they are an active part of a cooperative project or activity.

An assurance will be accepted only after review and approval by the DRG, NIH.

B. Types of Assurance

Assurances may be one of two types:

1. *General assurance.*—A general assurance describes the review and implementation procedures applicable to all DHEW-supported activities within an institution, regardless of the number, location, or types of its components (see attachment A). General assurances will be required from institutions having a significant number of concurrent DHEW projects or activities involving human subjects.

2. *Special assurance.*—A special assurance will, as a rule, describe those review and implementation procedures applicable to a single project or activity (see attachment B). Special assurances may also be approved in modified forms to meet unusual requirements either of the operating agency or of the institution receiving a grant or contract. Special assurances are not to be solicited from institutions which have accepted general assurances on file.

C. Minimum Requirements for General Assurances

1. *Statement of compliance.*—A formal statement of compliance with DHEW policy must be executed by an appropriate institutional official.

2. *Implementing guidelines.*—The institution must include as part of its assurance implementing guidelines that specifically provide for:

a. The statement of principles that will assist the institution in the discharge of its responsibilities for protecting the rights and welfare of subjects. This may be an appropriate existing code or declaration or one formulated by the institution itself.

b. A committee or committee structure which will conduct initial and continuing reviews. Committee members shall be identified by name, occupation or position, and by other pertinent indications of experience and competence in areas pertinent to the areas of review such as earned degrees, board certifications, licensures, memberships, etc.

c. The procedures which the institution will follow in carrying out its initial and continuing review of proposals and activities to insure that:

- (1) The rights and welfare of subjects are adequately protected;
- (2) The risks to subjects are outweighed by potential benefits;
- (3) The informed consent of subjects will be obtained by methods that are adequate and appropriate.

d. The procedures which the committee will follow to provide advice and counsel to project and program directors with regard to the committee's actions as well as the requirement for reporting to the committee any emergent problems or proposed procedural changes.

e. The procedures which the institution will follow to maintain an active and effective committee and to implement its recommendations.

D. Minimum Requirements for Special Assurance

An acceptable special assurance covering a single activity consists of a properly completed statement of compliance, similar to that illustrated by attachment B. This assurance shall identify the specific grant or contract involved by its number, if known; by its full title; and by the name of the project or program director, principal investigator, fellow, or other person immediately responsible for the conduct of the activity. The assurance shall be signed by a committee of not fewer than three members and executed by an appropriate institutional official. The committee shall describe in general terms those risks to the subject that it recognizes as inherent in the activity. Consent procedures to be used are to be described. Any consent statement to be signed, heard, or read by the subject or responsible third parties should be attached. The assurance should outline the circumstances under which the director or investigator will be required to inform the committee of proposed changes in the activity, or of emergent problems involving human subjects. The assurance should also indicate whether the director or investigator will be required to submit written reports, appear for interview, or be visited by the committee or committees to provide for continuing review. It should also indicate the intervals at which such reviews will take place.

TIMING AND CERTIFICATION OF INSTITUTIONAL REVIEW

A. General Assurances

1. *Timely review.*—All proposals involving human subjects submitted by institutions with accepted general assurances should, whenever possible, be given institutional review and approval prior to submission to the DHEW. The proposal or application should be appropriately marked in the spaces provided on forms, or the following statement should be typed on the lower or right hand margin of the page bearing the name of the institutional official authorized to sign or execute applications or proposals for the institution:
"HUMAN SUBJECTS—REVIEWED AND APPROVED ON ____ (date) ____."
 (This date should be no more than 90 days prior to the submission date, and must not be more than 12 months prior to the proposed starting date.)

2. *Pending review.*—If it will be necessary to delay the review, the

proposal is to be appropriately marked in the spaces provided on forms, or the following statement is to be typed in the lower or right hand margin of the page bearing the name of the institutional official authorized to sign or execute applications or proposals for the institution:

"HUMAN SUBJECTS—REVIEW PENDING ON ____ (date) ____."

(This date should be at least one month earlier than the proposed starting date of the project to avoid possible conflict with the award date.)

3. Completion of pending review.—Review should be initiated as soon as possible after the submission of the proposal so that final action can be completed prior to the pending review date. If this final action is disapproval, or is approval contingent on substantive changes in the proposal, the operating agency is to be notified promptly by telegram; an immediate confirmatory letter; and, where appropriate, by withdrawal of the application from further consideration by the agency.

4. Institutional review of proposals lacking definite plans or specifications for the involvement of human subjects.—Certain types of proposals are submitted with the knowledge that human subjects are to be involved within the project period, but definite plans for this involvement cannot properly be included in the proposal. These include (1) certain training grants where trainee projects remain to be selected, and (2) research, pilot, or developmental studies in which involvement depends upon such things as the completion of instruments, or of prior animal studies, or upon the purification of compounds.

Such proposals should be reviewed and certified in the same manner as more complete proposals. The initial certification indicates institutional approval of the applications as submitted, and commits the institution to later review of the plans when completed. Such later review should be completed prior to the beginning of the budget period during which actual involvement of human subjects is to begin.

5. Institutional review of proposals not submitted with the intent of involving human subjects.—If a proposal, at the time it is submitted to the DHEW, does not anticipate involving or intend to involve human subjects, no certification should be submitted. In those instances, however, where funds are awarded in response to the proposal and it later becomes appropriate to use all or parts of these funds for activities which will involve human subjects, such use must be reviewed and approved in accordance with the institutional assurance prior to the use of subjects:

a. Where support is provided by project grants or contracts, review and approval of such changes must be certified to the awarding agency or contracting agency, together with a description of the proposed change in the project plan or contract workscope. Subjects should not be used prior to receipt of approval from agency staff or from the project officer concerned.

b. Where support is provided by a mandatory grant or institutional grant, in which cases the institution determines within broad guidelines the project or activities supported, including the use of human

subjects (i.e., general research support grants, clinical research center projects), review must be carried out in accordance with the institutional assurance. Certification for individual projects need not be forwarded to the awarding agency.

Whenever the committee is uncertain as to whether a change should or should not be reported, the question should be referred to the operating agency concerned.

All certifications are subject to verification by DHEW representatives authorized to examine institutional and committee records.

B. Special Assurances

When a special assurance is submitted, it provides certification for the initial grant or contract period concerned. No additional documentation is required. If the terms of the grant or contract provide for additional years of support, with annual obligation or funds, the noncompeting renewal application or proposal shall be certified in the manner described in the preceding section.

COOPERATIVE ACTIVITIES

Cooperative activities are those which involve other than the grantee or prime contractor (such as a contractor under a grantee or a subcontractor under a prime contractor). In such instances the grantee or prime contractor may obtain access to all or some of the human subjects involved through the cooperating institution. Regardless of the distances involved and the nature of the cooperative arrangement, the basic DHEW policy applies and the grantee or prime contractor remains responsible for safeguarding the rights and welfare of the subjects. The manner in which this responsibility can be discharged depends on whether the grantee or contractor holds an institutional general assurance or an institutional special assurance.

A. Institutions with General Assurances

1. Initial and continuing institutional review may be carried out by one or a combination of procedures:

- By the grantee's or contractor's committee;
- By the committee reviews conducted at both institutions; or
- Through cooperation of appropriate individuals or committees representing the cooperating institution.

The procedures to be followed must be made a matter of record in the institutional files for the grant or contract before funds are released by the grantee or contractor for the cooperative project. There are three relationships that may govern in reference to the cooperating institution:

a. Cooperating institutions with accepted general assurances
When the cooperating institution has on file with the DHEW an accepted general assurance, the grantee or contractor may request the cooperator to conduct its own independent review and to report to the grantee's or contractor's committee the cooperating committee's recommendations on those aspects of the activity that concern indi-

viduals for whom the cooperating institution has responsibility in accordance with its own assurance. The grantee or contractor may, at its discretion, concur with or further restrict the recommendations of the cooperating institution. It is the responsibility of the grantee or contractor to maintain communication with the cooperating institutional committees. The cooperating institution should promptly notify the grantee or contracting institution whenever the cooperating institution finds the conduct of the project or activity within its purview unsatisfactory.

b. Cooperating institution with no accepted general assurance
When the cooperating institution does not have an accepted assurance on file with the DHEW, the awarding agency concerned may request the DRG, NIH, to negotiate an assurance.

c. Interinstitutional joint reviews.—The grantee or contracting institution may wish to develop an agreement with cooperating institutions to provide for a review committee with representatives from cooperating institutions. Representatives of cooperating institutions may be appointed as *ad hoc* members of the grantee or contracting institution's existing review committee or, if cooperation is on a frequent or continuing basis as between a medical school and a group of affiliated hospitals, appointments may be made permanent. Under some circumstances component subcommittees may be established within cooperating institutions. All such cooperative arrangements must be accepted by the Department as part of a general assurance, or as an amendment to a general assurance, or in unusual situations as determined by the DRG, NIH, as a special assurance.

B. Institutions with Special Assurances

While responsibility for initial and continuing review necessarily lies with the contractor, the DHEW will also require acceptable assurances from those cooperating institutions having immediate responsibility for subjects.

If the cooperating institution has on file with the DHEW an accepted general assurance, the contractor shall request the cooperator to conduct its own independent review of those aspects of the project or activity which will involve human subjects for which it has immediate responsibility. Such a request shall be in writing and should provide for direct notification of the contractor's committee in the event that the cooperator's committee finds the conduct of the activity unsatisfactory.

If the cooperating institution does not have an accepted general assurance on file with the DHEW, the operating agency concerned must request the DRG, NIH, to negotiate an assurance.

INSTITUTIONAL ADMINISTRATION OF ASSURANCES

A. Institutional Responsibility

The grantee or contracting institution's administration is accountable to the Department for effectively carrying out the provisions of the institutional assurance for the protection of human subjects as ac-

cepted and recognized by the Department. Revisions in the institutional assurance, including the implementing procedures, are to be reported to the Department prior to the date such revisions become effective. Revision without prior notification may result in withdrawal of departmental recognition of the institution's assurance.

B. Executive Functions

Specific executive functions to be conducted by the institutional administration include institutional policy formulation, development, promulgation, and continuing indoctrination of personnel. Appropriate administrative assistance and support must be provided for the committee's functions. Implementation of the committee's recommendations through appropriate administrative action and followup is a condition of acceptance of an assurance. Committee approvals and recommendations are, of course, subject to review and to disapproval or further restriction by institutional officials. Committee disapprovals, restrictions, or conditions cannot be rescinded or removed except by action of the committee or another appropriate review group as described and accepted in the assurance filed with the Department.

C. Assurance Implementation

Under no circumstances shall proposed activity plans, not approved by the committee, be implemented with Department funds. The principal investigator, program or project director, or other responsible staff must be notified as promptly as possible of committee actions, including any restrictive recommendations made by the institutional committee or the administration. They must also be informed and reminded of their continuing responsibility to bring to the attention of the committee any proposed significant changes in project or activity plans or any emergent problems that will affect human subjects. Where continuing review of projects involves the channels of administrative authority in the institution, notification of committee actions should be sent through these channels. Establishment of mechanisms for consultation and appeal by investigators and subjects may be an important condition of acceptance of an assurance by the Department.

D. Documentation

1. *General.*—Development of appropriate documentation and reporting procedures is an essential administrative function. The files must include copies of all documents presented or required for initial and continuing review by the institutional review committee and transmittals on actions, instructions, and conditions resulting from review committee deliberations addressed to the activity director are to be made part of the official institutional files for the supported activity. Committee meeting minutes including records of discussions of substantive issues and their resolution are to be retained by the institution and be made available upon request to representatives of the DHEW.

2. Informed consent.—An institution proposing to place any individual at risk is obligated to obtain and document his informed consent; the terms "at risk" and "informed consent" will apply as defined previously.

The actual procedure in obtaining informed consent and the basis for committee determinations that the procedures are adequate and appropriate are to be fully documented. The documentation will follow one of the following three forms:

a. Provision of a written consent document embodying all of the basic elements of informed consent. *This form is to be signed by the subject or his authorized representative.* A sample of the form as approved by the committee is to be retained in its records. Completed forms are to be handled in accordance with institutional practice.

b. Provision of a "short" form written consent document indicating that the basic elements of informed consent have been presented orally to the subject. Written summaries of what is to be said to the patient are to be approved by the committee. *The "short" form is to be signed by the subject or his authorized representative and an auditor-witness to the oral presentation and to the subject's or his authorized representative's signature.* A copy of the approved summary, annotated to show any additions, is to be signed by the persons obtaining the consent on behalf of the institution and by the auditor-witness. Sample copies of the consent form and of the summaries as approved by the committee are to be retained in its records. Completed forms are to be handled in accordance with institutional practice.

c. Modification of either of the above two primary procedures. *All such modifications must be approved by the committee in the minutes signed by the committee chairman.* Granting of permission to use modified procedures imposes additional responsibility upon the review committee and the institution to establish that the risk to any subject is minimum, that use of either of the primary procedures for obtaining informed consent would surely invalidate objectives of considerable immediate importance, and that any reasonable alternative means for attaining these objectives would be less advantageous to the subject.

The committee's reasons for permitting modification or elimination of any of the six basic elements of informed consent, or for altering requirements for a subject's signature, or for signature of an auditor-witness, or for substitution (i.e., debriefing), or other modification of full, complete, written prior consent, must be individually and specifically documented in the minutes and in reports of committee actions to the institutional files. Approval of any such modifications should be regularly reconsidered as a function of continuing review and as required for annual review, with documentation of reaffirmation, revision, or discontinuation as appropriate.

3. Reporting to DHEW.—No routine reports to DHEW are required. Significant changes in policy, procedure, or committee structure shall, however, be promptly reported to the DRG, NIH, for review and acceptance. Review of these changes or of institutional and other records of performance under the terms and conditions of DHEW

policy, may require renegotiation of the assurance or such other action as may be appropriate.

ENFORCEMENT

The DRG, NIH, will follow up reports by reviewers, evaluators, consultants, and staff of the DHEW indicating concern for the welfare of subjects involved in approved and funded grants or contracts, and of subjects potentially involved in activities approved but not funded, and in disapproved proposals. On the basis of these reports and of other sources of information, the DRG, NIH, may, in collaboration with the operating agency concerned, correspond with or visit institutions to discuss correction of any apparent deficiencies in its implementation of the procedures described in its institutional assurance.

If, in the judgment of the Secretary, an institution has failed in a material manner to comply with the terms of this policy with respect to a particular DHEW grant or contract, he may require that it be terminated in the manner provided for in applicable grant or procurement regulations. The institution shall be promptly notified of such finding and of the reason therefor.

If, in the judgment of the Secretary, an institution fails to discharge its responsibilities for the protection of the rights and welfare of the individuals in its care, whether or not DHEW funds are involved, he may question whether the institution and the individuals concerned should remain eligible to receive future DHEW funds for activities involving human subjects. The institution and individuals concerned shall be promptly notified of this finding and of the reasons therefor.

DEPARTMENTAL REVIEW OF ASSURANCES

All assurances submitted for approval are to be forwarded to the DRG, NIH, for review and acceptance on behalf of the Department. Review will be principally concerned with the adequacy of the proposed committee in the light of the probable scope of the applicant institution's activities, and with the appropriateness of the proposed initial and continuing review in the light of the probable risks to be encountered, the types of subject populations involved, and the size and complexity of the institution's administration. Institutions submitting inadequate assurances will be informed of deficiencies. The appropriate operating agency will be kept informed, on request, of the status and acceptance of an assurance.

ATTACHMENT A
EXAMPLE OF A STATEMENT OF COMPLIANCE
PART ONE OF A GENERAL INSTITUTIONAL ASSURANCE

The (name of institution) will comply with the policy for the protection of human subjects participating in activities supported directly or indirectly by grants or contracts from the Department of Health, Education, and Welfare. In fulfillment of its assurance:

This institution will establish and maintain a committee competent to review projects and activities that involve human subjects. The committee will be assigned responsibility to determine for each activity as planned and conducted that:

The rights and welfare of subjects are adequately protected.

The risks to subjects are outweighed by potential benefits.

The informed consent of subjects will be obtained by methods that are adequate and appropriate.

This institution will provide for committee reviews to be conducted with objectivity and in a manner to ensure the exercise of independent judgment of the members. Members will be excluded from reviews of projects or activities in which they have an active role or a conflict of interests.

This institution will encourage continuing constructive communication between the committee and the project directors as a means of safeguarding the rights and welfare of subjects.

This institution will provide for the facilities and professional attention required for subjects who may suffer physical, psychological, or other injury as a result of participation in an activity.

This institution will maintain appropriate and informative records of committee reviews of applications and active projects, of documentation of informed consent, and of other documentation that may pertain to the selection, participation, and protection of subjects and to reviews of circumstances that adversely affect the rights or welfare of individual subjects.

This institution will periodically reassure itself through appropriate administrative overview that the practices and procedures designed for the protection of the rights and welfare of subjects are being effectively applied and are consistent with its assurance as accepted by the Department of Health, Education, and Welfare.

Official signing for the Institution

Signature _____

Title _____

Date _____

Enclosure: Implementing Guidelines, Part Two of a General Institutional Assurance.

ATTACHMENT B
EXAMPLE OF A SPECIAL INSTITUTIONAL ASSURANCE
AND CERTIFICATION OF REVIEW OF
SINGLE PROJECTS INVOLVING HUMAN SUBJECTS

- (0) The (name of institution) will comply with the provisions of the Department of Health, Education, and Welfare policy as outlined in the "Institutional Guide to DHEW Policy on Protection of Human Subjects." This institution has established a committee competent to review the project or activity identified below. The committee's membership, maturity, and expertise assure respect for its advice and counsel. No member of the committee has a vested professional interest in the project or activity that will conflict with the need for independent review for the purpose of safeguarding the rights and welfare of subjects.
- The initial review of the proposal identified as (give proposed title, project director's or investigator's or fellow's name, and grant or contract or RFP number as applicable) indicates that:
- (1) In the opinion of this committee the risks to the rights and welfare of the subjects in this project or activity are:
The committee agrees that the following safeguards against these risks are adequate:
 - (2) In the opinion of the committee the potential benefits of this activity to the subjects outweigh any probable risks. This opinion is justified by the following reasons:
 - (3) In the opinion of the committee the following informed consent procedures based upon the six elements of informed consent as noted will be adequate and appropriate. Documentation is attached:
 - (4) The committee agrees to arrange for a continuing exchange of information and advice between itself and the investigator or director, particularly to the criteria cited above. This exchange will be implemented by the following procedures:
 - (5) The signatures, names, and occupations or titles of the members of the committee are listed below. None of these signatories have a vested or professional interest in this project or activity that conflicts with the need for independent review.

Signature	Name	Occupation or Title
Signature	Name	Occupation or Title
Signature	Name	Occupation or Title
Signature	Name	Occupation or Title

20

(Add as many signature spaces as necessary. Review of projects involving investigational new drugs (IND's) requires a minimum of two persons licensed to administer drugs and one person not so licensed. Review for other purposes should utilize committees of equal or greater breadth.)

Date of Committee Approval _____

I certify that this review was carried out in accordance with the provisions of DHEW policy.

(6) Official signing for institution _____

Signature

Name

Title

Institution

Address

Telephone Number

Date

ATTACHMENT B

INSTRUCTIONS

An acceptable special institutional assurance consists of a properly completed formal statement of compliance with Department of Health, Education, and Welfare policy (see attachment B), signed by a committee of not less than three members and by an official authorized to sign for the institution. The explanatory paragraphs which follow refer to the corresponding section of the attachment.

- (0) This should identify the application for a grant, contract, or award by its identifying number, where known, or by its full title. The name should be that of the investigator, program director, fellow, or other individual immediately responsible for the conduct of the work.
- (1) The committee should identify in general terms those risks that it recognizes as probable occurrences; i.e., "Aggravation of anxiety status through contact with interviewers," "Preservation of confidentiality of data," "Renal injury subsequent to multiple biopsy," "Possibility of side reactions to drugs," "Possible local hematosis and nerve injury associated with venipuncture."
- (2) The committee should identify the benefits to the subject or to mankind in general that will accrue through the subject's participation in the project. This should be followed by a brief discussion, weighing the risks against the benefits.
- (3) Consent procedures should be described and the minimum statement to be used should be attached. "Students responding to the attached advertisement will be interviewed." "The project outline will be submitted to the executive council of the PTA." "Individual teachers will be asked to allow an observer in the rooms chosen." "Superintendents of several State mental hospitals will be approached. The attached statement to the next of kin or guardian will be signed by the principal investigator and the superintendent." "The following special consent form will be signed by each subject and his or her spouse or next of kin before acceptance of the subject." "No prior consent will be sought. The following debriefing schedule will be followed within 30 minutes after completion of the test."
- (4) This should indicate whether the investigator or director will be required to submit written reports, or to appear for interviews, or will be visited by the committee or committee representatives, and at approximately what intervals these steps will be carried out.
- (5) No further explanation is necessary. (The committee must be composed of sufficient members with varying backgrounds to assure complete and adequate review of the project. The committee may be an existing one, or one especially appointed for the purpose. The institution may utilize staff, consultants, or both. The membership should possess not only broad competence to comprehend the nature of the project, but also other competencies necessary in the judgments as to acceptability of the project or activity in terms of institutional regulations, relevant law, standards of professional practice, and community acceptance. The com-

22

mittee's maturity and experience should be such as to justify respect for its advice and counsel.)

(No individual involved in the conduct of the project shall participate in its review, except to provide information to the committee.)

(Committee members should be identified in the assurance by name, positions, earned degrees, board certifications, licensures, memberships, and other indications of experience, competence, and interest.)

The completed assurance should be attached to the application, or returned directly to the office requesting its submission.

ATTACHMENT C

Codes or statements of principles which are concerned with the protection of human subjects in research, investigation, and care have been issued by:

<u>Organization</u>	<u>Code; adoption date</u>	<u>Reference</u>
World Medical Association 10 Columbus Circle New York, N.Y. 10019 (code available from AMA; see address listed herein)	The Declaration of Hel- sinki; Recommendations Guiding Doctors in Clini- cal Research; 1964	J.A.M.A., 197(11):32, Sept. 12, 1966
Nuernberg Military Tri- bunals; U.S. v. Karl Brandt	Text from which the "Nuernberg Code" is derived.	Trials of War Criminals Before the Nuernberg Military Tribunals, vol. II, pp. 181-82; GPO 1949
American Medical Associa- tion 535 North Dearborn Street Chicago, Ill. 60610	AMA Ethical Guidelines for Clinical Investiga- tion; Nov. 30, 1966	←
(British) Medical Research Council 20 Park Crescent London W.1, England	Responsibility in Investiga- tions on Human Sub- jects; 1964	Report of the Medical Re- search Council for 1962- 1963, (Cmnd. 2382), pp. 21-25
(Canadian) Medical Re- search Council Montreal Road Ottawa 7, Ontario, Canada	Medical Research Council; Extramural Programme; 1966	←
American Association on Mental Deficiency 5201 Connecticut Avenue, N.W. Washington, D. C. 20015	Statement on the Use of Human Subjects for Re- search; May 1969	American Journal of Mental Deficiency, 74 (1):157, July 1969
American Nurses' Associa- tion 10 Columbus Circle New York, N.Y. 10019	The Nurse in Research; ANA Guidelines on Ethi- cal Values; January 1968	←
American Personnel and Guidance Association 1607 New Hampshire Ave- nue, N.W. Washington, D.C. 20009	American Personnel and Guidance Association; Code of Ethical Stand- ards; no date specified	←
American Psychological As- sociation, Inc. 1200 17th Street, N.W. Washington, D.C. 20036	Ethical Standards of Psy- chologists; Copyrighted January 1963	American Psychologist, 18 (1):56-60, January 1963
International League of Societies for the Men- tally Handicapped 12 Rue Forestiere. Brussels 5, Belgium	Declaration of General and Special Rights of the Mentally Retarded; Oct. 24, 1968	←

24

<u>Organization</u>	<u>Code; adoption date</u>	<u>Reference</u>
National Association of Social Workers 2 Park Avenue New York, N.Y. 10016	NASW Code of Ethics; Oct. 13, 1968	←
American Anthropological Association 1703 New Hampshire Avenue, NW. Washington, D.C. 20009	Principles of Professional Responsibility; May, 1971	←
American Sociological Association 1722 N Street, NW; Washington, D.C. 20036	Code of Ethics September 1, 1971	←
Catholic Hospital Association St. Louis, Missouri 63104	Ethical and Religious Directives for Catholic Health Facilities September, 1971	←
Commission on Synagogue Relations Federation of Jewish Philanthropies of New York 130 East 59th Street New York, N.Y. 10022	A Hospital Compendium 1969	←

[ITEM I.B.2]

18914

RULES AND REGULATIONS

Title 45—Public Welfare

SUBTITLE A—DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, GENERAL ADMINISTRATION

PART 46—PROTECTION OF HUMAN SUBJECTS

In the *Federal Register* of October 9, 1973 (38 FR 27882), a notice of proposed rulemaking was published in which it was proposed to amend Subtitle A of the Department's regulations to codify, with some changes, an existing Departmental policy set forth in Chapter 1-40 of the DHEW Grants Administration Manual. These regulations would provide that no activity involving any human subjects at risk supported by a DHEW grant or contract shall be undertaken unless a committee of the applicant or offering organization has reviewed and approved such activity and submitted to DHEW a certification of such review and approval. In addition any organization receiving a grant or contract must establish a mechanism to provide for continuing review of the supported activity to insure its continued acceptability. The notice provided for the filing of comments within 30 days, ending November 8, 1973.

Comments were received from more than 140 representatives of grantee and contractor organizations, from approximately 20 public groups or organizations, and from over 40 individuals. They include over 500 criticisms of individual sections of the proposed rules. These comments and the Department's conclusions are principally as follows:

A. The applicability and scope of the policy were challenged by several respondents. Suggestions included limiting the policy to physical risks only, differentiation of biomedical risks from behavioral risks, expanding the policy to protect all persons regardless of the nature of the risk or source of support, and unequivocal limitation of the policy to DHEW grants and contracts as contrasted to other organizational activities. Requests were also made for the provision of special exemptions for subject groups such as prisoners, academic colleagues, students, and laboratory personnel; or exemptions for specific procedures such as those involving manipulation of the diet within normal ranges, the taking of blood and urine samples, surgical and autopsy specimens, and the use of hair, nail clippings, and placental materials.

It was also proposed that the policy deal specifically with certain subjects such as the prisoner, the child, the fetus, the abortion, and the candidate for sterilization or psychosurgery.

The Department, having considered these frequently conflicting recommendations, concludes that the language of the regulations should be changed to emphasize their concern with the risks involved in research, development, and related activities. It concludes that the arguments advanced for specifically including or exempting certain activities and procedures from the scope of the policy frequently reflect considerations applicable only to individual projects or

conditions in particular institutions and lack broad applicability. It therefore seems appropriate to reserve to the Secretary the right to designate activities whose regulations or to which the regulations are inapplicable. Such designations will be made only following careful study and through publication in the *Federal Register*. These changes are incorporated in § 46.1. At the same time it should be noted that the Department is now developing policies dealing more specifically with research, development, and related activities involving the prisoner, the child, the fetus, the abortion, and institutionalized individual with mental disability. The Department intends to issue one or more notices of proposed rule making in the *Federal Register* no later than July 30, 1974, dealing with these subjects. Policies are also under consideration which will be particularly concerned with the candidate for psychosurgery, the candidate for sterilization and, separately, with the subject of social science research.

B. Criticisms of the basic policy statement centered about the requirement that organizational committees review that "the risks to an individual are outweighed by the potential benefits to him, or by the importance of the knowledge to be gained." Suggestions included inserting the word "significant" before "risks" and adding after the word "gained" such phrases as "provided the experimental procedure accords decent respect for the opinion of mankind" and "or by the potential benefit to society." Objections were also raised concerning the requirement that informed consent be qualified as "adequate" and to the omission of a requirement that it be "legally effective." It was also argued that the sole purpose of the review should be to determine that the subject is fully informed.

The Department, having considered these comments, concludes that the addition of the term "significant" would tend to weaken, not to strengthen the requirement, and that the intent of the proposed change is better served by provisions, in § 46.1 giving the Secretary authority to designate activities, including methods and procedures, to which the policy is inapplicable. The suggested changes in the risk-benefit clause appear to be more admonitory than substantive. Objections to the use of the term "adequate" appeared to be based on an assumption that the term was used in the sense of "barely sufficient" rather than "lawfully and reasonably." The Department concurs that the requirement is strengthened by the substitution of the phrase "legally effective." It does not agree that the sole purpose of the review should be to determine that the subject is fully informed. It is essential that the committee, representing a wide spectrum of those expert professional skills essential to a clear recognition of an activity's inherent risks and probable benefits, carefully weigh such risks and benefits before determining that the benefits favor a decision to allow the subject to accept these risks. It is also important that the committee determine that the

subject will receive adequate protection against known risks. These conclusions and certain editorial changes are reflected in § 46.2.

C. Objections were raised to several of the definitions incorporated into the regulations: (i) since the DHEW may make grants to certain Federal agency components only on the same terms as to non-Federal institutions, it was suggested that the term "Organization" should be expanded to include Federal agencies; (ii) objections were also raised to the term "sociological harm" as meaningless, and to the use of the term "harm" rather than the common legal term "injury"; (iii) the definition of "informed consent" was challenged on several counts. It was suggested that the definition should be couched in terms similar to those of the Nuremberg Code which provides that "the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion." It was also suggested (iv) that the requirement for an instruction that the subject be free to withdraw his consent be amended to read additionally "without prejudice to his future care."

Additional suggestions included: (v) add to each of the elements of informed consent the initial phrase "full and fair"; (vi) eliminate the requirement for a description of "any appropriate alternative procedures" since there might not be any such procedures; (vii) add a requirement that the patient be informed of alternatives if he is unable or refuses to continue as a research subject; and (viii) that patients be informed of the consequences should the research fail.

The recommendations having been duly considered it is concluded that suggested changes (i) through (iv) should be incorporated into the regulations with some editorial changes, particularly elimination of the phrase "to his future care" from the addition suggested in (iv) above. Prejudice could extend to other matters such as reimbursement of expenses, compensation, employment status, etc. The remaining recommendations (v-viii) are considered for the most part redundant and additional changes appear unnecessary.

These conclusions are reflected in § 46.3. Definitions of certain additional terms have been included as required by change made elsewhere in this part.

D. With regard to the submission of assurances, criticisms were voiced concerning the requirement that the organization report to DHEW any emergent problems. Respondents emphasized that the term "emergent problems" was vague and, if strictly interpreted, could lead to enormous amounts of unnecessary paperwork at great cost both to the organization and to the DHEW. Respondents were also critical of the requirement for "immediate notification" and questioned the value of such data.

These comments having been considered, it is concluded that they have some merit. The requirement has been modi-

RULES AND REGULATIONS

18915

led, removed from its original position in the regulations, and inserted elsewhere. The terms "emergent problems" and "immediate notification" have been eliminated. These changes are reflected in §§ 46.1, 46.6(d), and 46.7(e).

Comments were also concerned with the previous requirement that no "committee or quorum of a committee shall consist entirely of employees of the organization." Respondents stated that in most institutions it would be difficult, and in some impossible, to find, attract, and hold qualified, interested nonemployees; that the absence of such a person from a quorum could block consideration of unexpected problems, make difficult the scheduling of meetings to meet DHEW imposed deadlines for the preparation of grants and contracts, and invest such persons with "absentee veto" power. Also, that the provision would deny reasonable compensation to outsiders currently or possibly serving on committees, and deny legal protection and the protection of organizational liability insurance to outsiders who were not in an employee status while serving on a committee subject to suit.

Most suggestions for alternate wordings of the provision would either drop the mandatory requirement for nonemployees, or suggest that the requirement be made optional, the choice to "depend upon the judgment of the Secretary or the organizational committee as to whether or not such non-employee representation was necessary. Other recommendations suggested that "nonemployees" be defined in terms of sole employment by the organization, full or part-time employment, or short-term employment. Some respondents suggested more restrictive requirements, providing that the nonemployee group be defined to include nonhealth professionals who would either represent population groups, or subject populations. Finally, objections were raised to the requirement that the committee be able to ascertain acceptability of the proposal in terms of community attitudes. It was suggested that such attitudes are vague, nebulous, and fluctuating and, since a wide range of communities may be involved, impossible of representation.

These comments having been considered, it is concluded that the requirement for nonemployee members on organizational committees is an essential protection against the development of insular or parochial committee attitudes, that it assists in maintaining community contacts, and would augment the credibility of the committee's independent role in protection of the subject. However, it is agreed that the requirement that nonemployees be included in quorums appears to be impractical, and that the requirement should not be so phrased as to prevent a committee member from being considered an employee within the scope of the organization's liability coverage or legal protection. The arguments against committee consideration of community attitudes are considered generally to be offset by equally strong rea-

sons for taking these attitudes into consideration. It should be emphasized that the term "community" is intended to be applied in the sense of the larger community served by the organization, not necessarily the smaller community involved in a particular supported activity or project; that this is a requirement for overall committee membership, and not a requirement that must be varied proposal by proposal. The Department's conclusions are reflected by §§ 46.6(b) (2), (4), (5), and (6).

K. Comments on the requirements for special assurances were largely editorial. It is concluded that changes should be made so as to insure better agreement between the wording of these requirements and those for general assurances. These changes are reflected in § 46.7.

F. Comments on the obligation to secure informed consent pointed out that there appeared to be conflict between this requirement and the section on documentation of informed consent, since the latter permits some modification of written procedures. Other respondents suggested changes in language similar to that found in the Muenberg Code and already incorporated into the definition of informed consent in § 46.3(e), or sought changes to define conditions under which substituted consent could be obtained on behalf of individuals who are incompetent, either because of age or mental incapacity, to consent for themselves. Among other matters it was suggested that such substituted consent should only be given by a court of competent jurisdiction.

These comments having been considered, it is concluded that there is no substantial conflict between this section and the documentation requirements, that the suggestion of inclusion of the Muenberg Code language has been met elsewhere, and that problems relating to participation by minors, the mentally ill and mentally retarded, and by prisoners and others are already the subject of a draft proposed rulemaking (See 35 FR 21733 et seq.).

G. Objections were raised to the clause prohibiting the use of exculpatory language on the grounds that it makes organizational review committees subject to suit as agents of the organization and negates any protection offered by organizational liability insurance. The Department's Office of General Counsel has been able to find no legal support for this unsubstantiated assertion concerning limitations on insurance protection and has advised that the use of exculpatory language should be prohibited as a matter of public policy.

H. Comments on documentation of informed consent centered largely about the term "authorized representative." Suggestions included substitution of the term "legal representative" or use of "authorized representative," variously defined with any organization having custody of the subject, or proposing to seek the subject's consent, or having simultaneous responsibility for the subject's health

and welfare. Additional comments focused on the concept of the "availability," emphasizing the impracticality of implementing such a concept in mass surveys and in emergency situations. Others raised doubts as to the need for written consent procedures in connection with low risk procedures. Several respondents suggested that it be required that the subject receive a copy of the completed consent document. One respondent suggested a 24-hour lapse between the time of receiving information and the time of giving consent.

The Department, having considered these comments, concludes that the substitution of "legally authorized representative," as defined in § 46.3(h) for "authorized representative" and that the provisions for modification of either of the two primary methods of informed consent allow all necessary flexibility for the development of consent procedures. The suggestions that a copy of the completed consent document be provided to the subject, and that provision be made for a 24-hour waiting period, are matters to be left to the discretion of the organization. The necessary changes have been made in § 46.10.

I. Various commentators raised questions with regard to the review and approval of assurances. An additional section describing evaluation and disposition of assurances has been inserted as § 46.16. The language of this section is consistent with current policy as stated in DHEW Grants Administration Manual Chapter 1-40.

J. A large number of organizations were concerned with the proposed requirement that organizational review and approval be completed and certified prior to the submission of proposals to DHEW. Although the majority of respondents favored retaining the present policy, an almost equal number suggested that they could complete all of their reviews within a few weeks following submission to DHEW. Emphasis was laid on the need for time for revision, resubmission, and review of proposals found unacceptable at the time of first submission.

A few public groups commended this requirement as a substantial improvement over present policy which, in their opinion, presented a local committee with an impossible task in questioning a project which had already received review and approval at a national level.

These comments having been considered, it is concluded that the right to relax this requirement, and to extend a grace period for completion and certification of review after submission of the proposal should be reserved to the Secretary. In no event will processing of a proposal by DHEW be completed until such certification has been received by DHEW. These conclusions are reflected by changes in §§ 46.11 and 46.12.

By separate notice, the Department will provide that for a period of one year from the effective date of these regulations, organizations having approved general assurances may give proposals

review and approval after submission to DHEW provided that such certification is received by DHEW no later than 30 days following the deadline for which the proposal was submitted, or, if no deadline is specified, 30 days following the submission date of the proposal. Organizations not having a significant number of concurrent DHEW-supported activities must submit a special assurance and certification of review and approval to DHEW within 30 days of the date of a letter requesting such submission.

K. With regard to the section on proposals lacking definite plans for involvement of human subjects, a majority of respondents objected to the provision calling for submission of completed plans to DHEW for its prior review and approval. Commentators pointed out the problems inherent in delay in the implementation of short-term projects, and the problems to be encountered by DHEW in providing adequate review of such projects on a demand basis. Suggestions included: (i) a requirement for institutional review without submission to DHEW; (ii) review with notification to DHEW; and (iii) review and submission of plans to DHEW, such plans to be implemented if no DHEW objections were interposed within 30 days of submission.

These comments having been considered, it is concluded that the proposed requirement for DHEW review of final stage plans for previously reviewed and approved proposals is impractical and unrealistic. Section 46.13 has been rewritten to require institutional review and approval, and for certification of such action to DHEW prior to involvement of human subjects.

L. Comments on the requirements for organizational and DHEW review of proposed plans to involve human subjects in activities initially funded with the understanding that human subjects would not be involved, were similar to those described in the preceding paragraphs. Again, respondents objected that the requirement for DHEW review would unnecessarily delay research, create unnecessary paperwork, and create substantial fiscal and administrative burdens. Suggestions were made for submission of plans to DHEW, such plans to be implemented if no DHEW objections were interposed within 30 days of submission.

These comments, having been considered, the Department sees no viable alternative to the rules as proposed. Where the DHEW is aware of the intent to involve human subjects, as in the type of proposal described in § 46.13, it can take into consideration the probable nature of the involvement and the probable risks and benefits to the subjects. If necessary, it may acquire additional information prior to review, or make any such approval contingent on submission of final stage plans. These opportunities are not available to DHEW if it is not informed in advance of potential involvement of human subjects.

No changes have been made in § 46.14.

M. In order to emphasize the Secretary's authority to conduct further evaluation of proposed activities involving human subjects and to disapprove, defer, or approve such proposals, and to impose conditions on such approvals, § 46.25 has been inserted. The language of this section is consistent with current policy in DHEW Grants Administration Manual Chapter 1-40.

N. Comments on the proposed regulations governing cooperative activities were in frequent conflict. Alternative suggestions included: (i) changes making it possible for a prime contractor or grantee to assume all responsibility for the conduct of work by cooperating organizations, (ii) changes which would eliminate all responsibility by the prime contractor or grantee for work done by cooperating organizations, (iii) changes which would discourage any requirement for submission for assurance by cooperating organizations, (iv) inclusion of language limiting a prime contractor or grantee responsibility for work performed by a subcontractor, (v) inclusion of language spelling out the instruments and documents to be provided by the cooperating organization, (vi) elimination of any requirement that would require a domestic contractor or grantee to be aware of local laws and community attitudes in foreign countries.

The Department having reviewed these comments, concludes that these often conflicting suggestions fail to provide any better alternatives than the regulations as proposed. There appears to be no reasonable alternative to requiring the prime contractor to remain responsible for safeguarding the rights and welfare of subjects, either directly under the provision of his own assurance, or through the mechanisms provided by assurances submitted by cooperating organizations. The proposed regulations permit a contractor or grantee some flexibility to meet the requirements of the policy. The proposed rules are incorporated unchanged in § 46.16.

O. Requirements for the submission of investigational new drug (IND) numbers prior to issuance of an award were criticized on several counts. One respondent felt that the regulations would make it difficult if not impossible to obtain DHEW support for studies leading to the development of a new drug. Not all compounds requiring IND's are actual drugs under development, but are employed for other purposes. Another respondent pointed out that the pertinent FDA regulations (21 CFR 310.3(a)(2)) make no reference to the IND number, but require a 30-day delay period prior to use of drugs in human subjects.

These comments having been considered, the Department agrees that references to the IND number should be replaced by reference to the FDA 30-day delay requirement. The Department does not agree that a requirement for submission of identification on IND's would cause undue delay in studies preliminary to submission of an IND exemp-

tion, since such studies are necessarily conducted in animal species. Section 46.18 has been altered accordingly.

P. With regard to retention of records, several respondents pointed out conflict between the proposed requirements for retention of records and recently published DHEW Administration of Grant regulations (45 CFR 74). Other comments reflected concern over the confidentiality of information which would be subject to DHEW inspection.

The Department, having reviewed these comments, concludes that the record retention and inspection requirements contained herein are redundant and should be deleted. A provision concerning confidentiality has been added. The appropriate changes have been made in § 46.19.

Q. Comments on the proposed sanctions for noncompliance with provisions of this part focused on two issues: (i) the absence of provisions for due process in the imposition of sanctions and, (ii) apparent intervention by DHEW in the employer-employee relationship in proposing to determine that an individual was no longer eligible to serve in the capacity of a principal investigator or in any similar capacity with respect to a DHEW grant or contract. Reference was made to clause 21 of the "General Provisions for Negotiated Cost-Reimbursement Type Contracts . . ." (HEW 316) which provides that "the Contractor agrees to assign (named personnel) . . . to the performance of work under this contract; and shall not remove or replace any of them . . ."

The Department has considered these comments and has concluded that, actions under § 46.31(a), which refers to applicable grant and procurement regulations, would be subject to due process as provided for in these regulations. Sections 46.21 (b) and (c) have been deleted, however, and replaced with a new provision which simply allows the Secretary to take into consideration past deficiencies of an institution or investigator, with regard to the protection of human subjects, in evaluating subsequent applications from that institution or involving that investigator. While it would appear from review of clause 21 of HEW 316 that it does not prevent the Department from effecting the removal of personnel from performance of work under a DHEW contract, it is agreed that the responsible organization should be a party to the notification and conference procedures necessary to the making of any such decision.

R. Several respondents suggested significant additions to the policy to provide among other matters for (i) the establishment of a National Commission to undertake a comprehensive investigation and study to develop basic ethical principles and guidelines which should govern biomedical and behavioral research, (ii) a conscience clause, prohibiting among other matters, discrimination in the employment of persons who, because of religious beliefs or moral convictions, perform, or refuse to perform a research or service activity prohibited by the en-

RULES AND REGULATIONS

18917

tity on the basis of religious beliefs or moral convictions, and (iii) providing for the regulation of unapproved uses of approved drugs.

It is concluded that these suggestions would require changes not properly within the scope of these regulations and, in the case of regulation of unapproved uses of approved drugs, are the subject of regulations proposed as 37 FR 16603 on August 15, 1972.

B. Addition to the regulations of section of "Evaluation and disposition of assurances" has made unnecessary an earlier section on "Implementation and revision of assurances." Similarly, issuance of 45 CFR 74 has made unnecessary the earlier section entitled "Withholding of funds."

Effective date. This part shall become effective on July 1, 1974; *Provided, however,* That with respect to programs administered by the Office of Education and the National Institute of Education, this part shall become effective upon adoption or implementation in regulations issued by, respectively, the Commissioner of Education and the Director of the National Institute of Education, with the approval of the Secretary of Health, Education, and Welfare.

Dated: May 22, 1974.

CARPAR W. WEINBERGER,
Secretary.

Accordingly, Subtitle A of Title 45 of the Code of Federal Regulations is amended by adding a new Part 46, as follows:

- Sec.
- 46.1 Applicability.
 - 46.2 Policy.
 - 46.3 Definitions.
 - 46.4 Submissions of assurances.
 - 46.5 Types of assurances.
 - 46.6 Minimum requirements for general assurances.
 - 46.7 Minimum requirements for special assurances.
 - 46.8 Evaluation and disposition of assurances.
 - 46.9 Obligation to obtain informed consent; prohibition of exculpatory clauses.
 - 46.10 Documentation of informed consent.
 - 46.11 Certification, general assurances.
 - 46.12 Certification, special assurances.
 - 46.13 Proposals lacking definite plans for involvement of human subjects.
 - 46.14 Proposals submitted with the intent of not involving human subjects.
 - 46.15 Evaluation and disposition of proposals.
 - 46.16 Cooperative activities.
 - 46.17 Investigational new drug 30-day delay requirement.
 - 46.18 Organization's executive responsibility.
 - 46.19 Organization's records; confidentiality.
 - 46.20 Reports.
 - 46.21 Early termination of awards; evaluation of subsequent applications.
 - 46.22 Conditions.

Authority: 5 U.S.C. 301.

§ 46.1 Applicability.

(a) The regulations in this part are applicable to all Department of Health, Education, and Welfare grants and contracts supporting research, development, and related activities in which human subjects are involved.

(b) The Secretary may, from time to time, determine in advance whether specific programs, methods, or procedures to which this part is applicable place subjects at risk, as defined in § 46.3

(b). Such determinations will be published as notices in the FEDERAL REGISTER and will be included in an appendix to this part.

§ 46.2 Policy.

(a) Safeguarding the rights and welfare of subjects at risk in activities supported under grants and contracts from DHEW is primarily the responsibility of the organization which receives or is accountable to DHEW for the funds awarded for the support of the activity. In order to provide for the adequate discharge of this organizational responsibility, it is the policy of DHEW that no activity involving human subjects to be supported by DHEW grants or contracts shall be undertaken unless a committee of the organization has reviewed and approved such activity, and the organization has submitted to DHEW a certification of such review and approval, in accordance with the requirements of this part.

(b) This review shall determine whether the subjects will be placed at risk, and, if risk is involved, whether:

(1) The risks to the subject are so outweighed by the sum of the benefit to the subject and the importance of the knowledge to be gained as to warrant a decision to allow the subject to accept these risks;

(2) The rights and welfare of any such subjects will be adequately protected;

(3) Legally effective informed consent will be obtained by adequate and appropriate methods in accordance with the provisions of this part; and

(4) The conduct of the activity will be reviewed at timely intervals.

(c) No grant or contract involving human subjects at risk shall be made to an individual unless he is affiliated with or sponsored by an organization which can and does assume responsibility for the subjects involved.

§ 46.3 Definitions.

(a) "Organization" means any public or private institution or agency (including Federal, State, and local government agencies).

(b) "Subject at risk" means any individual who may be exposed to the possibility of injury, including physical, psychological, or social injury, as a consequence of participation as a subject in any research, development, or related activity which departs from the application of those established and accepted methods necessary to meet his needs, or which increases the ordinary risks of daily life, including the recognized risks inherent in a chosen occupation or field of service.

(c) "Informed consent" means the knowing consent of an individual or his legally authorized representative, so situated as to be able to exercise free power of choice without undue inducement or any element of force, fraud, deceit, duress, or other form of constraint or coercion. The basic elements of in-

formation necessary to such consent include:

(1) A fair explanation of the procedures to be followed, and their purposes, including identification of any procedures which are experimental;

(2) A description of any attendant discomforts and risks reasonably to be expected;

(3) A description of any benefits reasonably to be expected;

(4) A disclosure of any appropriate alternative procedures that might be advantageous for the subject;

(5) An offer to answer any inquiries concerning the procedures; and

(6) An instruction that the person is free to withdraw his consent and to discontinue participation in the project or activity at any time without prejudice to the subject.

(d) "Secretary" means the Secretary of Health, Education, and Welfare or any other officer or employee of the Department of Health, Education, and Welfare to whom authority has been delegated.

(e) "DHEW" means the Department of Health, Education, and Welfare.

(f) "Approved assurance" means a document that fulfills the requirements of this part and is approved by the Secretary.

(g) "Certification" means the official organizational notification to DHEW in accordance with the requirements of this part that a project or activity involving human subjects at risk has been reviewed and approved by the organization in accordance with the "approved assurance" on file at DHEW.

(h) "Legally authorized representative" means an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to such subject's participation in the particular activity or procedure.

§ 46.4 Submission of assurances.

(a) Recipients or prospective recipients of DHEW support under a grant or contract involving subjects at risk shall provide written assurance acceptable to DHEW that they will comply with DHEW policy as set forth in this part. Each assurance shall embody a statement of compliance with DHEW requirements for initial and continuing committee review of the supported activities; a set of implementing guidelines, including identification of the committee and a description of its review procedures; or, in the case of special assurances concerned with single activities or projects, a report of initial findings of the committee and of its proposed continuing review procedures.

(b) Such assurance shall be executed by an individual authorized to act for the organization and to assume on behalf of the organization the obligations imposed by this part, and shall be filed in such form and manner as the Secretary may require.

§ 46.5 Types of assurances.

(a) *General assurances.* A general assurance describes the review and implementation procedures applicable to all DHEW-supported activities conducted by

1978

RULES AND REGULATIONS

an organization regardless of the number, location, or types of its components or field activities. General assurances will be required from organizations having a significant number of concurrent DHEW-supported projects or activities involving human subjects.

(b) *Special assurances.* A special assurance will, as a rule, describe those review and implementation procedures applicable to a single activity or project. A special assurance will not be solicited or accepted from an organization which has on file with DHEW an approved general assurance.

§ 46.6 Minimum requirements for general assurances.

General assurances shall be submitted in such form and manner as the Secretary may require. The organization must include, as part of its general assurance, implementing guidelines that specifically provide for:

(a) A statement of principles which will govern the organization in the discharge of its responsibilities for protecting the rights and welfare of subjects. This may include appropriate existing codes or declarations, or statements formulated by the organization itself. It is to be understood that no such principles supersede DHEW policy or applicable law.

(b) A committee or committee structure which will conduct initial and continuing reviews in accordance with the policy outlined in § 46.2. Such committee structure or committee shall meet the following requirements:

(1) The committee must be composed of not less than five persons with varying backgrounds to assure complete and adequate review of activities commonly conducted by the organization. The committee must be sufficiently qualified through the maturity, experience, and expertise of its members and diversity of its membership to insure respect for its advice and counsel for safeguarding the rights and welfare of human subjects. In addition to possessing the professional competence necessary to review specific activities, the committee must be able to ascertain the acceptability of proposals in terms of organizational commitments and regulations, applicable law, standards of professional conduct and practice, and community attitudes. The committee must therefore include persons whose concerns are in these areas.

(2) The committee members shall be identified to DHEW by name; earned degree, if any; position or occupation; representative capacity; and by other pertinent indications of experience such as board certification, licenses, etc. Summary to describe each member's chief anticipated contributions to committee deliberations. Any employment or other relationship between each member and the organization shall be identified, i.e., full-time employee, part-time employee, member of governing panel or board, paid consultant, unpaid consultant. Changes in committee membership shall be reported to DHEW in such form and at such times as the Secretary may require.

(3) No member of a committee shall be involved in either the initial or continuing review of an activity in which he has a conflicting interest, except to provide information requested by the committee.

(4) No committee shall consist entirely of persons who are officers, employees, or agents, of, or are otherwise associated with the organization, apart from their membership on the committee.

(5) No committee shall consist entirely of members of a single professional group.

(6) The quorum of the committee shall be defined, but may in no event be less than a majority of the total membership duly convened to carry out the committee's responsibilities under the terms of the assurance.

(7) Procedures which the organization will follow in its initial and continuing review of proposals and activities.

(8) Procedures which the committee will follow (1) to provide advice and counsel to activity directors and investigators with regard to the committee's actions, (2) to insure prompt reporting to the committee of proposed changes in an activity and of unanticipated problems involving risk to subjects or others and (3) to insure that any such problems, including adverse reactions to biologicals, drugs, radiolabeled drugs, or to medical devices, are promptly reported to the DHEW.

(9) Procedures which the organization will follow to maintain an active and effective committee and to implement its recommendations.

§ 46.7 Minimum requirements for special assurances.

Special assurances shall be submitted in such form and manner as the Secretary may require. An acceptable special assurance shall:

(a) Identify the specific grant or contract involved by its number, if known; by its full title; and by the name of the activity or project director, principal investigator, fellow, or other person immediately responsible for the conduct of the activity. The assurance shall be signed by the individual members of a committee satisfying the requirements of § 46.6(b) and be endorsed by an appropriate organizational official.

(b) Describe the makeup of the committee and the training, experience, and background of its members, as required by § 46.6(b)(2).

(c) Describe in general terms the risks to subjects that the committee recognizes as inherent in the activity, and justify its decision that these risks are so outweighed by the sum of the benefit to the subject and the importance of the knowledge to be gained as to warrant the committee's decision to permit the subject to accept these risks.

(d) Describe the informed consent procedures to be used and attach documentation as required by § 46.10.

(e) Describe procedures which the committee will follow to insure prompt reporting to the committee of proposed changes in the activity and of any un-

anticipated problems, involving risks to subjects or others and to insure that any such problems, including adverse reactions to biologicals, drugs, radiolabeled drugs, or to medical devices are promptly reported to DHEW.

(f) Indicate at what time intervals the committee will meet to provide for continuing review. Such review must occur no less than annually.

§ 46.8 Evaluation and disposition of assurances.

(a) All assurances submitted in accordance with §§ 46.6 and 46.7 shall be evaluated by the Secretary through such officers and employees of the DHEW and such experts or consultants engaged for this purpose as he determines to be appropriate. The Secretary's evaluation shall take into consideration, among other pertinent factors, the adequacy of the proposed committee in the light of the anticipated scope of the applicant organization's activities and the types of subject populations likely to be involved, the appropriateness of the proposed initial and continuing review procedures in the light of the probable risks, and the size and complexity of the organization.

(b) On the basis of his evaluation of an assurance pursuant to paragraph (a) of this section, the Secretary shall (1) approve, (2) enter into negotiations to develop a more satisfactory assurance, or (3) disapprove. With respect to approved assurances, the Secretary may determine the period during which any particular assurance or class of assurances shall remain effective or otherwise condition or restrict his approval. With respect to negotiations, the Secretary may, pending completion of negotiations for a general assurance, require an organization otherwise eligible for such an assurance, to submit special assurances.

§ 46.9 Obligation to obtain informed consent; prohibition of exculpatory clauses.

Any organization proposing to place any subject at risk is obligated to obtain and document legally effective informed consent. No such informed consent, oral or written, obtained under an assurance provided pursuant to this part shall include any exculpatory language through which the subject is made to waive, or to appear to waive, any of his legal rights, including any release of the organization or its agents from liability for negligence.

§ 46.10 Documentation of informed consent.

The actual procedure utilized in obtaining legally effective informed consent and the basis for committee determinations that the procedures are adequate and appropriate shall be fully documented. The documentation of consent will employ one of the following three forms:

(a) Provision of a written consent document embodying all of the basic elements of informed consent. This may be read to the subject or to his legally authorized representative, but in any event he or his legally authorized representa-

RULES AND REGULATIONS

18919

live must be given adequate opportunity to read it. This document is to be signed by the subject or his legally authorized representative. Sample copies of the consent form as approved by the committee are to be retained in its records.

(b) Provision of a "short form" written consent document indicating that the basic elements of informed consent have been presented orally to the subject or his legally authorized representative. Written summaries of what is to be said to the patient are to be approved by the committee. The short form is to be signed by the subject or his legally authorized representative and by an auditor witness to the oral presentation and to the subject's signature. A copy of the approved summary, annotated to show any additions, is to be signed by the persons officially obtaining the consent and by the auditor witness. Sample copies of the consent form and of the summaries as approved by the committee are to be retained in its records.

(c) Modification of either of the primary procedures outlined in paragraphs (a) and (b) of this section. Granting of permission to use modified procedures imposes additional responsibility upon the review committee and the organization to establish: (1) that the risk to any subject is minimal, (2) that use of either of the primary procedures for obtaining informed consent would surely invalidate objectives of considerable immediate importance, and (3) that any reasonable alternative means for attaining these objectives would be less advantageous to the subjects. The committee's reasons for permitting the use of modified procedures must be individually and specifically documented in the minutes and in reports of committee actions to the files of the organization. All such modifications should be regularly reconsidered as a function of continuing review and as required for annual review, with documentation of reaffirmation, revision, or discontinuation, as appropriate.

§ 46.11. Certification, general assurances.

(a) *Timely review.* Unless the Secretary otherwise provides, all proposals involving human subjects submitted by organizations having approved general assurances must be given review and, when found to involve subject at risk, approval, prior to submission to DHEW. In the event the Secretary provides for the performance of organizational review of a proposal after its submission to DHEW, processing of such proposal by DHEW will under no circumstances be completed until such organizational review and approval has been certified. Unless the organization determines that human subjects are not involved, the proposal or application should be appropriately certified in the spaces provided on forms, or one of the following certifications, as appropriate, should be typed on the lower or right hand margin of the page bearing the name of an official authorized to sign or execute ap-

plications or proposals for the organization.

Human Subjects Reviewed, Not at Risk.

(date)
Human Subjects Reviewed, At Risk, Approved.
(date)

(b) *Proposals not certified.* Proposals not properly certified, or submitted as not involving human subjects and found by the operating agency to involve human subjects, will be returned to the organization concerned.

§ 46.12. Certification, special assurances.

(a) An applicant organization not having on file with DHEW an approved general assurance must submit for each application or proposal involving human subjects a separate special assurance and certification of its review and approval.

(b) Such assurance and certification must be submitted within such time limit as the Secretary may specify. An assurance and certification prepared in accordance with this part and approved by DHEW shall be considered to have met the requirement for certification for the initial grant or contract period concerned. If the terms of the grant or contract recommend additional support periods, certification shall be provided by the organization with applications for continuation or renewal of support in the manner prescribed in § 46.11(a).

§ 46.13. Proposals lacking definite plans for involvement of human subjects.

Certain types of proposals are submitted with the knowledge that subjects are to be involved within the support period, but definite plans for this involvement would not normally be set forth in the proposal. These include such activities as (a) institutionally-granted where selection of projects is the responsibility of the institution, (b) training grants where training projects remain to be selected, and (c) research, pilot, or developmental studies, in which involvement depends upon such things as the completion of instruments, or of prior animal studies, or upon the purification of compounds. Such proposals shall be reviewed and certified in the same manner as more definitive proposals. The initial certification indicates organizational approval of the applications as submitted, and commits the organization to later review of the plans, when completed. Such later review and certification prior to the beginning of the budget period during which actual involvement of human subjects is to begin. Review and certification to the DHEW must in any event be completed prior to involvement of human subjects.

§ 46.14. Proposals submitted with the intent of not involving human subjects.

If a proposal does not anticipate involving or intend to involve human subjects, no certification should be included with the initial submission of the proposal. In those instances, however, when

later it becomes appropriate to use all or part of awarded funds for one or more activities which will involve subjects, each such activity shall be reviewed and approved in accordance with the assurance of the organization prior to the involvement of subjects. In addition, no such activity shall be undertaken until the organization has submitted to DHEW: (a) a certification that the activity has been reviewed and approved in accordance with this part, and (b) a detailed description of the proposed activity (including any protocol or similar document). Also, where support is provided by project grants or contracts, subjects shall not be involved prior to certification and organizational receipt of DHEW approval and, in the case of contracts, prior to negotiation and approval of an amended contract description of work.

§ 46.15. Evaluation and disposition of proposals.

(a) Notwithstanding any prior review, approval, and certification by the organization, all grant and contract proposals involving human subjects at risk submitted to the DHEW shall be evaluated by the Secretary for compliance with this part through such officers and employees of the Department and such experts or consultants engaged for this purpose as he determines to be appropriate. This evaluation may take into account, among other pertinent factors, the apparent risks to the subjects, the adequacy of protection against these risks, the potential benefits of the activity to the subjects and to others, and the importance of the knowledge to be gained.

(b) *Disposition.* On the basis of his evaluation of an application pursuant to paragraph (a) of this section and subject to such approval or recommendation by or consultation with appropriate councils, committees, or other bodies as may be required by law, the Secretary shall (1) approve, (2) defer for further evaluation, or (3) disapprove support of the proposed activity in whole or in part. With respect to any approved grant or contract, the Secretary may impose conditions, including restrictions on the use of certain procedures, or certain subject groups, or requiring use of specified safeguards or informed consent procedures when in his judgment such conditions are necessary for the protection of human subjects.

§ 46.16. Cooperative activities.

Cooperative activities are those which involve organizations in addition to the grantee or prime contractor (such as a contractor under a grantee or a subcontractor under a prime contractor). If, in such instances, the grantee or prime contractor obtains access to all or some of the subjects involved through one or more cooperating organizations, the basic DHEW policy applies and the grantee or prime contractor remains responsible for safeguarding the rights and welfare of the subjects.

(a) *Organization with approved general assurance.* Initial and continuing review by the organization may be car-

ried out by one or a combination of procedures:

(1) Cooperating organization with approved general assurance. When the cooperating organization has on file with DHEW an approved general assurance, the grantee or contractor may, in addition to its own review, request the cooperating organization to conduct an independent review and to report its recommendations on those aspects of the activity that concern individuals for whom the cooperating organization has responsibility under its own assurance to the grantee's or contractor's committee. The grantee or contractor may, at its discretion, concur with or further restrict the recommendations of the cooperating organization. It is the responsibility of the grantee or contractor to maintain communication with the committee of the cooperating organization. However, the cooperating organization shall promptly notify the grantee or contracting organization whenever the cooperating organization finds the conduct of the project or activity within its purview unsatisfactory.

(2) Cooperating organization with no approved general assurance. When the cooperating organization does not have an approved general assurance on file with DHEW, the DHEW may require the submission of a general or special assurance which, if approved, will permit the grantee or contractor to follow the procedure outlined in the preceding subparagraph.

(3) Interorganizational joint review. The grantee or contracting organization may wish to develop an agreement with cooperating organizations to provide for a review committee with representatives from cooperating organizations. Representatives of cooperating organizations may be appointed as ad hoc members of the grantee or contracting organization's existing review committee or, if cooperation is on a frequent or continuing basis as between a medical school and a group of affiliated hospitals, appointments for extended periods may be made. All such cooperative arrangements must be approved by DHEW as part of a general assurance, or as an amendment to the general assurance.

(b) Organizations with special assurances. While responsibility for initial and continuing review necessarily lies with the grantee or contracting organization, DHEW may also require approved assurances from those cooperating organizations having immediate responsibility for subjects.

If the cooperating organization has on file with DHEW an approved general assurance, the grantee or contractor shall request the cooperating organization to conduct its own independent review of

those aspects of the project or activity which will involve human subjects for which it has responsibility. Such a request shall be in writing and should provide for direct notification of the grantee's or contractor's committee in the event that the cooperating organization's committee finds the conduct of the activity to be unsatisfactory. If the cooperating organization does not have an approved general assurance on file with DHEW, it must submit to DHEW a general or special assurance which is determined by DHEW to comply with the provisions of this part.

§ 46.17 Investigational new drug 30-day delay requirement.

Where an organization is required to prepare or to submit a certification under §§ 46.11, 46.12, 46.13, or 46.14 and the proposal involves an investigational new drug within the meaning of The Food, Drug, and Cosmetic Act, the drug shall be identified in the certification together with a statement that the 30-day delay required by 21 CFR 130.3(a)(2) has elapsed and the Food and Drug Administration has not, prior to expiration of such 30-day interval, requested that the sponsor continue to withhold or to restrict use of the drug in human subjects; or that the Food and Drug Administration has waived the 30-day delay requirement; provided, however, that in those cases in which the 30-day delay interval has neither expired nor been waived, a statement shall be forwarded to DHEW upon such expiration or upon receipt of a waiver. No certification shall be considered acceptable until such statement has been received.

§ 46.18 Organization's executive responsibility.

Specific executive functions to be conducted by the organization include policy development and promulgation and continuing indoctrination of personnel. Appropriate administrative assistance and support shall be provided for the committee's functions. Implementation through appropriate administrative action and followup is a condition of DHEW approval of an assurance. Committee approvals, favorable actions, and recommendations are subject to review and to disapproval or further restriction by the organization officials. Committee disapproval, restrictions, or conditions cannot be rescinded or removed except by action of a committee described in the assurance approved by DHEW.

§ 46.19 Organization's records; confidentiality.

(a) Copies of all documents presented or required for initial and continuing review by the organization's review committee, such as committee minutes, rec-

ords of subject's consent, transmittals on actions, instructions, and conditions resulting from committee deliberations regarding the activity director, are to be retained by the organization, subject to the terms and conditions of grant and contract awards.

(b) Except as otherwise provided by law information in the records or possession of an organization acquired in connection with an activity covered by this part which information refers to or can be identified with a particular subject may not be disclosed except:

- (1) with the consent of the subject or his legally authorized representative or;
- (2) as may be necessary for the Secretary to carry out his responsibilities under this part.

§ 46.20 Reports.

Each organization with an approved assurance shall provide the Secretary with such reports and other information as the Secretary may from time to time prescribe.

§ 46.21 Early termination of awards; evaluation of subsequent applications.

(a) If, in the judgment of the Secretary an organization has failed materially to comply with the terms of this policy with respect to a particular DHEW grant or contract, he may require that said grant or contract be terminated or suspended in the manner prescribed in applicable grant or procurement regulations.

(b) In evaluating proposals or applications for support of activities covered by this part, the Secretary may take into account, in addition to all other eligibility requirements and program criteria, such factors as: (1) whether the offeror or applicant has been subject to a termination or suspension under paragraph (a) of this section, (2) whether the offeror or applicant or the person who would direct the scientific and technical aspects of an activity has in the judgment of the Secretary failed materially to discharge his, her, or its responsibility for the protection of the rights and welfare of subjects in his, her, or its care (whether or not DHEW funds were involved), and (3) whether, where past deficiencies have existed in discharging such responsibility, adequate steps have in the judgment of the Secretary been taken to eliminate these deficiencies.

§ 46.22 Conditions.

The Secretary may with respect to any grant or contract or any class of grants or contracts impose additional conditions prior to or at the time of any award when in his judgment such conditions are necessary for the protection of human subjects.

(FR Doc. 74-12269 Filed 5-29-74; 9:45 am)

[Item I.B.3]

EXCERPTS FROM THE REPORT OF THE TUSKEGEE SYPHILIS STUDY AD HOC ADVISORY
PANEL*Report on Charge III*

To: The Assistant Secretary for Health.
From: Tuskegee Syphilis Study Ad Hoc Advisory Panel.
Topic: Final report on charge III.

(This report was prepared by the Subcommittee on Charge III (Jay Katz, M.D., chairman, Ronald H. Brown, J.D., Seward Hiltner, Ph.D., and Fred Spenker, J.D.). The subcommittee chairman wishes to thank his research assistant Stephen H. Glickman, a third year law student at Yale University, for his valuable contributions to this report. Special thanks go also to Dr. Robert C. Backus, Mrs. Bernice M. Lee and Ms. Jackie Eagle who in many ways facilitated the work of the subcommittee.)

I. INTRODUCTION

In his third charge to the Tuskegee Syphilis Study Ad Hoc Advisory Panel, Dr. Merlin K. DuVal, the HEW Assistant Secretary for Health and Scientific Affairs, has asked us to determine whether existing policies to protect the rights of patients participating in health research conducted or supported by the Department of Health, Education, and Welfare are adequate and effective and to recommend improvements in these policies, if needed.

Our response to this charge, embodied in this report, should not be viewed simply as a reaction to a single ethically objectionable research project. For the Tuskegee Syphilis Study, despite its widespread publicity was not an isolated phenomenon. We believe that the revelations from Macon County merely brought to the surface once again the unresolved problems which have long plagued medical research activities. Indeed, we hasten to add that although we refer in this report almost exclusively to physicians and to biomedical investigations, the issues we explore also arise in the context of non-medical investigations with human beings, conducted by psychologists, sociologists, educators, lawyers and others. The scope of the DHEW Policy on Protection of Human Subjects, broadened in 1971 to encompass such research, attests to the increasing significance of non-medical investigations with human beings.

Our initial determination that the protection of human research subjects is a current and widespread problem should not be surprising, especially in light of the recent Congressional hearings and bills focusing on the regulation of experimentation. In the past decade the press has publicized and debated a number of experiments which raised ethical questions: for example, the injection of cancer cells into aged patients at the Jewish Chronic Disease Hospital in Brooklyn, the deliberate infection of mentally retarded children with hepatitis at Willowbrook, the development of heart transplantation techniques, the enormous amount of drug research conducted in American prisons, the whole-body irradiation treatment of cancer patients at the University of Cincinnati, the advent and spread of "psychosurgery," and the Tuskegee Syphilis Study itself.

With so many dramatic projects coming to the attention of the general public, more must lie beneath the surface. Evidence for this too has been forthcoming. In 1966, Dr. Henry K. Beecher, the eminent Dorr Professor of Research in Anesthesia at the Harvard Medical School, charged in the prestigious *New England Journal of Medicine* that "many of the patients (used in experiments which Dr. Beecher investigated and reported) never had the risk satisfactorily explained to them, and . . . further hundreds have not known that they were the subjects of an experiment although grave consequences have been suffered as the direct result . . ." ¹ Dr. Beecher concluded that "unethical or questionably ethical procedures are not uncommon." ² Quite recently this charge has been corroborated by the sociologist Bernard Barber and his associates, who interviewed biomedical researchers about their own research practices. ³ Despite the expected tendency of researchers to minimize ethical problems in their own

¹ Beecher, "Ethics and Clinical Research," 274 *New Eng. J. Med.* 1354 (1966).

² *Ibid.*, p. 1355.

³ Barber, Lally, Makarushka, and Sullivan, *Research on Human Subjects: Problems of Social Control in Medical Experimentation* (Russell Sage Foundation 1973) (hereinafter, Barber et al.).

work, Barber *et al.* were able to conclude that "while the large majority of our samples of biomedical researchers seems to hold and live up to high ethical standards, a significant majority may not."⁴

The problem of ethical experimentation is the product of the unresolved conflict between two strongly held values: the dignity and integrity of the individual, and the freedom of scientific inquiry. Professionals of many disciplines, and researchers especially, exercise unexamined discretion to intervene in the lives of their subjects for the sake of scientific progress. Although exposure to needless harm and neglect of the duty to obtain the subject's consent have generally been frowned upon in theory, the infliction of unnecessary harm and infringements on informed consent are frequently accepted, in practice, as the price to be paid for the advancement of knowledge. How have investigators come to claim this sweeping prerogative? If the answer to this question is that "society" has authorized professionals to choose between scientific progress and individual human dignity and welfare, should not "society" retain some control over the research enterprise? We agree with philosopher Hans Jonas that "a slower progress in the conquest of disease would not threaten society, grievous as it is to those who have to deplore that their particular disease be not yet conquered, but that society would indeed be threatened by the erosion of those moral values whose loss, possibly caused by too ruthless a pursuit of scientific progress, would make its most dazzling triumphs not worth having."⁵

We have, as will be seen, made far-reaching recommendations for change. We do not propose these changes lightly. But throughout, in accordance with our mandate, our concern has not been just to define the ethical issues, but also to examine the structures and policies thus far devised to deal with those issues. In urging greater societal involvement in the research enterprise, we believe that the goal of scientific progress can be harmonized with the need to assure the protection of human subjects.

II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A. Evaluation of Current DHEW Policies for the Protection of Human Research Subjects

1. No uniform Departmental policy for the protection of research subjects exists. Instead one policy governs "extramural" research—research supported by DHEW grants or contracts to institutions outside the Federal Government and conducted by private researchers—and another policy governs "intramural" research—research conducted by personnel of the Public Health Service. Furthermore, Food and Drug Administration (FDA) regulations promulgated to protect subjects in drug research, whether or not supported by DHEW or conducted by the PHS, incorporate variations of their own. The lack of uniformity in DHEW policies creates confusion, and denies some subjects the protection they deserve.

Moving to the next higher level, no uniform Federal policies exist for the protection of subjects in Government-sponsored research. Other agencies wholly separate from DHEW—most notably, the Department of Defense—support or conduct human research. DHEW policies do not govern such research. Here too, the Federal Government's failure to develop a uniform policy has been detrimental to the welfare of research subjects.

2. Under current DHEW policies for the protection of research subjects, regulation of research practices is largely left to the biomedical professions. Since the conduct of human experimentation raises important issues of social policy, greater participation in decisionmaking by representatives of other professions and of the general public is required.

3. The present reliance by DHEW on the institutional review committee as the primary mechanism for the protection of research subjects was an important advance in the continuing effort to guarantee ethical experimentation. Prior peer review of research protocols is a requirement which should be retained.

4. The existing review committee system suffers from basic defects which seriously undermine the accomplishment of the task assigned to the committees:

- a. The governing standards promulgated by DHEW which are intended to guide review committee decisions in specific cases are vague and overly general.

⁴ Barber, *et al.*, *supra*, footnote 3, at 52.

⁵ Jonas, "Philosophical Reflections on Experimenting with Human Subjects," 98 *Daedalus* 210, 245 (1969).

b. No provisions are made for the dissemination or publication of review committee decisions. Their low level of visibility hampers efforts to evaluate and learn from committee attempts to resolve the complex problems of human research.

c. Although the informed consent of the research subject is one of the most important requirements of research ethics, DHEW policies for obtaining consent are poorly drafted and contain critical loopholes. As a result, one crucial task of institutional review committees—the implementation of the informed consent requirement—is commonly performed inadequately. In particular, consent is far too often obtained in form alone and not in substance.

d. DHEW policies do not give sufficient attention to the protection of such special research subjects as children, prisoners and the mentally incompetent. The use of these subjects in human experimentations presents grave dangers of abuse.

e. The obligation of institutional review committees to conduct continuing review of research projects after their initial approval is undefined and as a consequence often neglected.

f. Inefficient utilization of institutional review committees contributes to their ineffectiveness. Committees are overburdened with a variety of separate functions, and could operate best if their tasks were narrowly defined to encompass mainly the implementation of research policies adequately formulated by others.

g. Effective procedures for enforcing DHEW policies, when those policies are disregarded, have not been devised.

h. No policy for the compensation of research subjects harmed as a consequence of their participation in research has been formulated, despite the fact that no matter how careful investigators may be, unavoidable injury to a few is the price society must pay for the privilege of engaging in research which ultimately benefits the many. Remitting injured subjects to the uncertainties of the law court is not a solution.

B. Policy Recommendations

1. Congress should establish a permanent body with the authority to regulate at least all Federally supported research involving human subjects, whether it is conducted in intramural or extramural settings, or sponsored by DHEW or other government agencies, such as the Department of Defense. Ideally, the authority of this body should extend to all research activities, even those not Federally supported. But such a proposal may raise major jurisdictional problems. The body could be called the National Human Investigation Board. The Board should be independent of DHEW, for we do not believe that the agency which both conducts a great deal of research itself and supports much of the research that is carried on elsewhere is in a position to carry out dispassionately the functions we have in mind. The members of the Board should be appointed from diverse professional and scientific disciplines, and should include representatives from the public at large.

2. The primary responsibility of the National Human Investigation Board should be to formulate research policies, in much greater detail and with much more clarity than is presently the case. The Board must promulgate detailed procedures to govern the implementation of its policies by institutional review committees. It must also promulgate procedures for the review of research decisions and their consequences. In particular, this Board should establish procedures for the publication of important institutional committee and Board decisions. Publication of such decisions would permit their intensive study both inside and outside the medical profession and would be a first step toward the case-by-case development of policies governing human experimentation. We regard such a development, analogous to the experience of the common law, as the best hope for ultimately providing workable standards for the regulation of the human experimentation process.

3. The National Human Investigation Board should develop appeals procedures for the adjudication of disagreements between investigators and the institutional review committees.

4. The National Human Investigation Board should also develop a "no fault" clinical research insurance plan to assure compensation for subjects harmed as a result of their participation in research. Institutions which sponsor Federally supported research activities should be required to participate in such a plan.

5. With the establishment of adequate policy formulation and review mechanisms, the structure and functions of the institutional review committees should be altered to enhance the effectiveness of prior review. In place of the amorphous institutional review committee as it now exists, we propose the creation of an Institutional Human Investigation Committee (IHIC) with two distinct subcommittees. The IHIC should be the direct link between the institution and the National Human Investigation Board, and should establish local regulations consistent with national policies. The IHIC should also assume an educational role in its institutions, informing participants in the research enterprise of their rights and obligations. The implementation of research policies should be left to the two subcommittees of the IHIC:

a. A Protocol Review Group (PRG) should be responsible for the prior review of research protocols. The PRG should be composed mainly of competent biomedical professionals.

b. A Subject Advisory Group (SAG) should be responsible for aiding subjects in their decisionmaking whenever they request its services. Subject must be made aware of the existence of the SAG. The primary concern of the SAG should be with procedures for obtaining consent, and with the quality of consents obtained. The SAG should be composed of both professionals and laymen.

III. DEVELOPMENT OF CURRENT DHEW POLICIES

A. Historical Background

Experimentation with human beings is not a modern phenomenon; it dates back to the beginning of recorded history. However, until the advent of scientific medicine, "research" was largely conducted unsystematically in the context of clinical practice which benefited, harmed, or did nothing to untold patients. Indeed, harmful consequences most often accrued to countless patients who were given treatments whose value had not been established by carefully controlled clinical investigations.⁶ Since the individuals involved in "research" were generally also considered potential recipients of the knowledge gained, few questions were raised about the propriety of these interventions by either the medical or legal profession. As far as the medical profession was concerned, the systematic use of human beings for research purposes, a trend which began in the late nineteenth century and has accelerated ever since, did not lead until relatively recently to a sustained exploration of the need to safeguard research subjects. A notable exception was Claude Bernard who in 1865 published his influential *An Introduction to the Study of Experimental Medicine*,⁷ in which he not only demonstrated the need for experimentation on human subjects but also began to formulate rules of ethical conduct.

Similarly the law has had little to say about the rights of human subjects in the research enterprise. Indeed prior to the nineteen-sixties, no specific federal or state statutes regulated research institutions or investigators in their use of human subjects for experimental purposes. Though beginning with the English case of *Slater v. Baker and Stapleton*⁸ in 1767 and the American case of *Carpenter v. Blake*⁹ in 1871, courts were from time to time confronted with the claim of experimentation in malpractice actions, the resulting opinions evinced concern about "experimentation" but did not provide any meaningful legal guidelines for investigators to follow. Perhaps the fact situations in these cases, which often raised other important issues besides experimentation, precluded judges from speaking out more clearly on the legal limits to human research. Through the first third of the twentieth century, the generally accepted legal rule seemed to be that a physician experimented "at his peril" if his patients were harmed thereby.¹⁰ Eventually, the distinction between rash human experimentation and careful, scientific and ethical experimental practice was acknowledged by the courts. In 1935, the Supreme Court of Michigan stated in a malpractice case:

"We recognize the fact that if the general practice of medicine and surgery is to progress, there must be a certain amount of experimentation carried on;

⁶ See, e.g., Modell, "Let Each New Patient Be a Complete Experience," 174 J.A.M.A. 1717 (1960).

⁷ Bernard, *An Introduction to the Study of Experimental Medicine*, H. C. Greene (Transl.) (Macmillan, 1927).

⁸ 95 Eng. Rep. 860 (1767).

⁹ 60 Barb. 488 (N.Y., 1871).

¹⁰ See Curran, "Governmental Regulation of the Use of Human Subjects in Medical Research: The Approach of Two Federal Agencies," 98 Daedalus 542, 543 (1969).

but such experiments must be done with the knowledge and consent of the patient or those responsible for him and must not vary too radically from the accepted method of procedure."¹¹

Although this dictum was a broad generalization, made in a therapeutic context, and was not directed at nontherapeutic investigations, it signalled the ascendancy of a more balanced judicial attitude toward medical research involving human beings.

This posture was sorely tested by the revelations of the horrifying atrocities perpetrated under the Nazis by German physicians and scientists in the name of clinical research.¹² The disclosures at Nuremberg disturbed the medical community, and many physicians and research scientists called for worldwide acceptance of ethical standards to assure the protection of subjects in biomedical research. However, the impact of their concern was blunted by the cruelty of the concentration camp experiments which obscured the fundamental fact that similar problems of research ethics, though not of the same magnitude, had characterized the research enterprise from its beginnings. Nonetheless, the trial of the Nazi physicians led the Military Tribunal to set forth ten basic principles, the so-called Nuremberg Code,¹³ which must be observed in human experimentation "in order to satisfy moral, ethical, and legal concepts." The following principles illustrate the nature of the Code:

1. The voluntary consent of the human subject is absolutely essential. . . .
2. The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods of study, and not random and unnecessary experiments in nature.

* * * * *

6. The degree of risk to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.

The widely felt need to supplement and modify the provisions of the Nuremberg Code led to the proliferation of other "improved" codes of research ethics. The World Medical Association's Helsinki Declaration (1964),¹⁴ the American Medical Association's Ethical Guidelines for Clinical Investigation (1966)¹⁵ and the draft code of the American Psychological Association (1972)¹⁶ are three which have received the most attention.

The promulgation of such documents helped to focus attention on the ethical problems inherent in research activities involving human subjects. However, as the number of documents increased their limitation became more evident to concerned observers. As one of us has elsewhere remarked:

"The proliferation of such codes testifies to the difficulty of promulgating a set of rules which do not immediately raise more questions than they answer. By necessity these codes have to be succinctly worded and, being devoid of commentary, their meaning is subject to a variety of interpretations. Moreover, since they generally aspire to ideal practices, they invite judicious and injudicious neglect. Consequently, as long as they remain unelaborated tablets of exhortation, codes will at best have limited usefulness in guiding the daily behavior of investigators."¹⁷

Furthermore, discrepancies between codes have helped to sow confusion. Discussing the Helsinki Declaration and the A.M.A. Guidelines, Professors Katz and Capron observed:

"The significant discrepancies between these two documents highlight the need for mechanisms which would permit their reconciliation. . . . Unlike the Helsinki Declaration, the AMA guidelines propose that '(m)inors or mentally incompetent subjects may be used as subjects only if (t)he nature of the

¹¹ Fortner v. Koch, 272 Mich., 273, 282; 241 N.W. 762, 765 (1935).

¹² See *Trials of War Criminals Before the Nuremberg Military Tribunal, Volumes I and II, The Medical Case*, Washington, D.C.: U.S. Government Printing Office (1948). For excerpts which indicate the nature of the offenses and the resulting judgments, see Katz, *Experimentation with Human Beings*, pp. 292-306 (Russell Sage Foundation, 1972) (Hereinafter Katz).

¹³ Katz, *supra* footnote 12, at 305.

¹⁴ 271 N. Eng. J. Med. 473 (1964).

¹⁵ American Medical Association, *Operations and Reports of the Judicial Council*, pp. 9-11 (Chicago, 1969).

¹⁶ American Psychological Association, *Ethical Principles in the Conduct of Research with Human Participants* (Draft Document, 1972).

¹⁷ Katz, "The Education of the Physician Investigator," 98 *Daedalus* 480, 482-3 (1969).

investigation is such that mentally competent adults would not be competent subjects.' On the other hand, the Declaration of Helsinki states, and the AMA guidelines do not, that '(a) any time during the course of clinical research the subject or his guardian should be free to withdraw permission for research to be continued.' No explanation is provided for the differences nor is any mechanism available to guide physician-investigators in adopting or rejecting part or all of either document, based on its disagreement with the other or for any additional reasons."¹⁸

In retrospect, the promulgation of so many varying codes of ethics can be viewed as a tacit recognition within the professions that self-regulation by investigators could not be relied on to control research practices. When it was also realized that the codes themselves had serious shortcomings, new and quite different proposals for ordering the research process began to emerge. Procedures were gradually developed to apply the general principles contained in codes of research ethics in the formal evaluation of individual research projects by institutional review committees.

The National Institutes of Health (NIH) first developed such procedures in order to regulate clinical research performed at its Clinical Center in Bethesda, Maryland. Since 1953, human research has not been conducted there without prior approval of a review committee responsible for the protection of subjects.¹⁹ In 1960, Surgeon General William H. Stewart extended the requirement of prior review by "a committee of (the investigator's) institutional associates" to all "extramural" research supported by United States Public Health Service (PHS) grants and awards.²⁰ This review was to assure an independent determination: (1) of the rights and welfare of the individual or individuals involved, (2) of the appropriateness of the methods used to secure informed consent, and (3) of the risks and potential medical benefits of the investigation.²¹

Prior committee review was also instituted, in 1967, for all "intramural" research programs of the Public Health Service.²² The Tuskegee Syphilis Study, conducted by PHS investigators, was an intramural activity.

In 1971, the Department of Health, Education, and Welfare formulated its policy for the protection of human subjects²³ which superseded the Public Health Service extramural program guidelines. Institutional committee review was retained as the central feature of the new DHEW policy. The DHEW regulations apply to all research supported by Departmental grants or contracts, regardless of whether the research is medical in nature. However, the new regulations do not apply to intramural PHS activities, which are still governed by separate and sometimes divergent PHS guidelines. Also in 1971, the Food and Drug Administration promulgated additional regulations,²⁴ patterned on the DHEW framework, to govern the testing of "investigational new drugs." And recently, in response to the Tuskegee Syphilis Study revelations, Senator Jacob Javits introduced a bill which would enact most of the current DHEW requirements into law.²⁵ Senator Hubert Humphrey also responding to the Tuskegee Study, introduced another bill, quite different in conception.²⁶ It would create within the executive branch an independent board to establish guidelines for human experimentation, to review research practices and to enjoin the conduct of certain investigations.

Due to the Federal Government's prominent role in funding biomedical research, the PHS-DHEW regulations have had a noticeable impact on the conduct of human research in this country. Over 700 American research institutions have established review committees in order to satisfy DHEW or PHS

¹⁸ Katz and Capron, *Social Factors Affecting the Modern Treatment of Catastrophic Diseases*. (Unpublished Manuscript, 1973) (hereinafter, Katz and Capron).

¹⁹ Sessoms, "Guiding Principles in Medical Research Involving Humans, National Institutes of Health," 32 *Hospitals, Journal of American Hospital Association* 44 (1958).

²⁰ Memorandum of Surgeon General William H. Stewart to the Heads of Institutions Conducting Research with Public Health Grants. (February 8, 1966).

²¹ *Ibid.*

²² DHEW—Public Health Service, *Protection of the Individual as a Research Subject—Intramural Programs* (May 1, 1969) (hereinafter *Interim Guidelines*).

²³ DHEW Grants Administration Manual Chapter 1-40 (1971) (hereinafter *Grants Administration Manual*). The Department publishes *The Institutional Guide to DHEW Policy on Protection of Human Subjects* (1971) (hereinafter *Institutional Guide*) to help institutions sponsoring research to implement DHEW policy.

²⁴ 36 Fed. Reg. 5037-38 (1971).

²⁵ S. 3935, 92d Cong., 2d Sess. (1972).

²⁶ S. 3951, 92d Cong., 2d Sess. (1972).

requirements.²⁷ Although these committees are required to review only Federally-funded research, they often have extended their review to all research on human subjects conducted at their institutions.²⁸

B. Description of DHEW Policy²⁹

At present DHEW policies vest primary responsibility for the protection of research subjects in institutional review committees. These committees are charged with the initial review of all project proposals and are also expected to subject research activities to "continuing review." Once a committee has approved a research protocol, its decision is reviewed again by the DHEW study section which considers the protocol for funding. When either group disapproves a protocol, that decision cannot be appealed to the Department, and the protocol cannot be Federally funded. In contrast to the DHEW requirements, PHS intramural policy does not require continuing review. Instead, the burden is on the investigator to bring "significant proposed changes in protocol and emergent problems of investigation to the attention of the review group involved."³⁰ Nor does PHS intramural policy specify distinct stages of protocol review.

DHEW requires institutional committees to review all aspects of "any activity" which might expose a subject to the possibility of harm if the activity "goes beyond the application of those established and accepted methods necessary to meet his needs."³¹ Recognizing that this jurisdictional standard leaves much to the discretion of committees and investigators the Department concedes that "(a) cceptance is a matter of professional response, and determination as to when a method passes from the experimental stage and becomes 'established and accepted' is a matter of judgment."³²

Before the committee can approve an activity under review, it must "determine that the rights and welfare of the subjects involved are adequately protected, that the risks to an individual are outweighed by the potential benefits to him or by the importance of the knowledge to be granted, and that informed consent is to be obtained by methods that are adequate and appropriate."³³ Like the jurisdictional standard, these review standards are phrased in general terms, although the "basic element" of "informed consent" are set forth in greater detail.³⁴ DHEW policy also requires each institution to provide written assurance that it will abide by DHEW policy. The assurance must include "a statement of compliance with DHEW requirements for initial and continuing committee review of the supported activities; a set of implementing guidelines, including identification of the committee, and a description of its review procedures."³⁵ As part of the "implementing guidelines," each institution is asked to adopt a "statement of principles that will assist the institution in the discharge of its responsibilities for protecting the rights and welfare of subjects."³⁶ These statements are typically derived from existing codes of ethics not much more explicit than the DHEW review standards themselves.³⁷

Unlike DHEW policy, the intramural guidelines of the PHS make specific, albeit limited, reference to "(s)udies involving children, the mentally ill or the mentally defective."³⁸ Such studies "shall be carried out only when there is no significant risk of physical or mental harm to the subject or when direct

²⁷ For a description of the spread of institutional review committees following the promulgation of the PHS guidelines, see *Barber et al., supra*, footnote 3, at 145-148.

²⁸ *Barber et al.* estimate that 85% of the institutional review committees they surveyed review "all clinical research" conducted at their institutions, regardless of funding. *Barber et al., supra*, footnote 3, at 149.

²⁹ This description is based on the *Intramural Guidelines, supra*, footnote 23, and the *Institutional Guide, supra*, footnote 23. Hereinafter, the policy of the Manual and the Guide will be referred to as "DHEW" policy, while the policy of the *Intramural Guidelines* will be referred to as "PHS intramural" policy.

³⁰ *Intramural Guidelines, supra*, footnote 22, at 5.

³¹ *Grants Administration Manual, supra*, footnote 23, § 1-40-10.

³² *Institutional Guide, supra*, footnote 23, at 3.

³³ *Grants Administration Manual, supra*, footnote 23, § 1-40-20(A). The PHS *Intramural Guidelines, supra*, footnote 22, contain essentially equivalent standards for review, at 4-5.

³⁴ See *infra*, pp. 31-32.

³⁵ *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (A).

³⁶ *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (C) (2) (a).

³⁷ *Ibid.* See also *Institutional Guide, supra*, footnote 23, at 5, footnote 2, and at 23.

³⁸ *Intramural Guidelines, supra*, footnote 22, at 10.

benefit to the subject is anticipated."³⁹ The intramural guidelines also explicitly provide that "(B) studies of individuals with limited civil freedom shall also be subject to group consideration and approval."⁴⁰ Although the references to minors, incompetents, and prisoners do not impose additional substantive restrictions on research, they may alert review committees and investigators to the special problems presented by research with such subjects.⁴¹

Since institutional review committees are entrusted with such difficult decision-making responsibilities, their composition is a matter of Departmental concern. The committee must be composed of sufficient members with varying backgrounds to assure complete and adequate review of projects and activities commonly conducted by the institution. The committee's membership, maturity, experience, and expertise should be such as to justify respect for its advice and counsel. No member of an institutional committee shall be involved in either the initial or continuing review of an activity in which he has a professional responsibility, except to provide information requested by the committee. In addition to possessing the professional competence to review specific activities, the committee should be able to determine acceptability of the proposal in terms of institutional commitments and regulations, applicable law, standards of professional conduct and practice, and community attitudes. The committee may therefore need to include persons whose primary concerns lie in these areas rather than in the conduct of research, development, and service programs of the types supported by the DHEW.⁴²

Beyond this, the Department does not specify any particular size or membership requirements, believing instead that disparity in institutional situations demands flexibility. For the same reason the Department does not provide any directions for the conduct of initial or continuing review. Instead, as already noted, institutions are required to submit for Departmental approval a description of the procedures their committees will follow to implement review.

When DHEW funding is sought, a research proposal approved by an institutional committee is reviewed again within the Department.⁴³ A study section, composed of scientists not connected with the proposal or its sponsoring institution, examines the proposal and transmits its recommendation to the particular National Advisory Council authorized to grant the requested research funds. This Departmental review is not restricted to a reconsideration of the "ethical soundness" of the proposed research. Instead, it encompasses all other factors which enter into any research funding decision, such as the scientific rigor of the proposal, the scientific significance of the proposed project, and the relationship of budgetary estimates to the proposed study. As a result, the review of ethical issues at this stage cannot be as thorough as it is intended to be at the institutional level.

The adoption of this institutional review committee approach promised to be a significant advance toward the goal of ethical human research. For the first time, codes of research ethics were to be applied in concrete situations by means of a definite procedure providing for independent scrutiny of individual research proposals. Moreover, a decentralized, pluralistic approach, emphasizing decision-making at the institutional level, seemed to offer other advantages. The exploration of problems from different points of view could ultimately lead to a fuller appreciation of the issues requiring resolution. Concern for the rights and welfare of subjects could be more easily communicated to individual investigators. The review of research protocols could be handled in depth and yet with dispatch.

Despite these hopes, the present DHEW regulatory framework can only be considered a qualified success. The continued existence of two varying sets of guidelines to govern intramural and extramural human research activities respectively serves no purpose and generates confusion. As to the content of the guidelines, although from a historical perspective institutional committee review was a major improvement over prior practices, many deficiencies, to which we now turn, have precluded successful supervision of human experimentation for the protection of human subjects.

³⁹ *Ibid.*

⁴⁰ *Ibid.*

⁴¹ PHS intramural policy does impose stricter consent requirements for experiments with such subjects. These consent requirements are discussed *infra*, at pp. 25 ff.

⁴² *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (C) (2) (6).

⁴³ *Grants Administration Manual, supra*, footnote 23, §§ 1-40-20 (B) and 1-40-50 (B). See also NIH Manual § 4107 "Grants Involving Human Subjects," § 4107 (G) (1972).

IV. CRITIQUE OF DHEW POLICY

A. Vagueness of Standards

At bottom, the difficulties which face review committees derive from the generality of the standards which are to guide their determinations in specific cases under either the intramural or extramural policies. To illustrate, if a review committee had evaluated the Tuskegee Syphilis Study under current guidelines, questions calling for searching examination would have surfaced.

(1) Is the requirement of informed consent⁴⁴ is to be taken seriously, should impoverished and uneducated Blacks from rural Alabama have been selected as subjects in the first place? Or should a concerted effort have been made to find subjects from among the most educated within the population at large, or at least to select from the given subgroup those subjects most capable of giving "informed consent"? Put more generally, what general principles should guide the selection of subjects? The philosopher Hans Jonas has given one answer to this question: "(O)ne should look for (subjects) among the most highly motivated; the most highly educated, and the least 'captive' members of the community."⁴⁵

(2) If "(t)he welfare of the individual is paramount (and) the subject must have available to him the facilities and professional attention necessary for the protection of his health and safety,"⁴⁶ what special efforts should have been made by investigators to provide medical treatment beyond the economic reach of the subjects before enlisting them in the Tuskegee Study? Or should the institutional review committee have turned down the Tuskegee Syphilis Study because no adequate treatment facilities were available in Macon County?

(3) How should "continuing review" operate? For example, at what point in time, after penicillin treatment for syphilis became available, should the subjects of the Tuskegee Syphilis Study have been apprised of this new development? Since it generally takes time before medical consensus is reached on the value of a new medication, and is reported in the medical literature, when should the subjects have been told that drug was available which at least some competent physicians considered effective treatment?

(4) How should the risks inherent in this study have been weighed against the predicted advancement of medical knowledge? The rule that "the risks to an individual . . . (must be) outweighed by the potential benefits to him or by the importance of the knowledge to be gained,"⁴⁷ is perhaps the most difficult guideline for review committees to implement. The seeming simplicity of this command belies its complexity. How are such tangibles as "risks," "benefits," and "importance of knowledge" to be measured and weighed? Can serious harm to research subjects ever be outweighed solely by additions to the sum of human knowledge?⁴⁸ If so, what kind of knowledge, in what circumstances, would outweigh what risks to subjects? The difficulties inherent in evaluating the scientific merits of a particular study are demonstrated by the ongoing differences of opinion among scientists of the PHS as to whether continuation of the Tuskegee Syphilis Study can still be defended on the ground of scientific merit. It is necessary for review committees to scrutinize carefully the research design of every proposed study if the requirement that risks be balanced against benefits is to be taken seriously, for the acquisition of knowledge depends so much on the soundness of the research protocol.⁴⁹ Does the informed willingness of the subject to accept certain risks have any bearing on the committee's balancing of risks against benefits? Finally, since the design of the Tuskegee Study could not completely exclude the possibility

⁴⁴The requirement of informed consent is analyzed in greater detail *infra*, at pp. 31 ff.

⁴⁵Jonas, "Philosophical Reflections on Experimenting with Human Subjects," 98 *Daedalus* 219, 235 (1969).

⁴⁶*Intramural Guidelines, supra*, footnote 22, at 1.
⁴⁷*Grants Administration Manual, supra*, footnote 23, § 1-40-20 (A); see also *Intramural Guidelines, supra*, footnote 22, at 2, 4-5.

⁴⁸Although PHS policy does proscribe seriously risky experimentation which cannot benefit the subject, *Intramural Guidelines, supra*, footnote 22 at 2. DHEW policy for extramural research does not categorically prohibit such research. The *Institutional Guide, supra*, footnote 23 states at 6: "If the potential benefits are insubstantial, or are outweighed by risks, the committee may be justified in permitting the subjects to accept these risks in the interests of humanity."

⁴⁹*Intramural Guidelines, supra*, footnote 22, at 1.

that non-subjects might contract syphilis from untreated subjects, how should a review committee have balanced risks to nonsubjects against benefits to society?⁵⁰

(5) Review committees are also required to "determine that the rights and welfare of the subjects involved are adequately protected."⁵¹ What rights did the Tuskegee Study subjects possess? The tremendous confusion which exists in the area of patient subjects' rights is in part the result of the traditional but largely unexamined prerogative of professionals to intervene in their patients' best interests." The doctrine of "informed consent" has had little impact on this longstanding professional practice. Since much medical research is carried out in the context of "patient care" the right to make decisions for patients has more often than not unwittingly been carried over into the research domain. The confusion about patient-subjects' rights is bolstered by the scientist's felt obligation to advance knowledge for the good of society, although society has inadequately defined the extent of this obligation.

To illustrate the confusion about subject's rights: Can the subject claim the right to be indemnified for any harm he suffers as a result of the research, regardless of the investigator's fault and in spite of consent? If so, who is responsible for informing him that an injury has occurred which is not the result of the natural progression of his illness? Do Tuskegee Study subjects have a cause of action because they did not receive suitable medical treatment? If so, who may be liable—the individual investigators, the PHS, the Milbank Memorial Fund, the Tuskegee Institute? The intramural guidelines of the PHS and *The Institutional Guide to DHEW Policy on Protection of Human Subjects* also identify confidentiality as a right which must be protected.⁵² Does confidentiality extend only to the subject involved in the study or does it also include the group of which he is a part? If the latter, what are the limits of group confidentiality? The Tuskegee Syphilis Study, in common with many other studies, singled out one particular group and revealed much that was intimate and private about all its members. Where can review committees seek guidance in devising procedures which safeguard subjects' rights in general, and their rights to confidentiality, privacy and respect, in particular?⁵³

(6) The jurisdiction of institutional review committees encompasses "any activity which goes beyond the application of those established and accepted methods necessary to meet (the subject's) needs."⁵⁴ How are "established and accepted" methods to be ascertained? Among "established" treatments should distinctions be made between those of "proven" and those of "dubious" value? What are the criteria for a "necessary" intervention? Since there is so much professional disagreement as to when a procedure becomes "therapeutic," the question must be posed: "accepted" by whom? Was the withholding of arsenic and heavy metal treatments at the beginning of the Tuskegee Study a "therapeutic" intervention since the effectiveness of such treatments was in doubt, particularly for late syphilis? When did penicillin treatment become an "established and accepted method"? What degree of certainty is required of investigators and review committees? Certainly no clear line can be drawn between experimental and routine treatment since, as has so frequently been asserted, "the therapy of disease is, and always will be, an experimental aspect of medicine."⁵⁵

The vagueness and generality of the governing standards have disadvantaged all participants in the research decision-making process. For conscientious review committees, they have meant hard work and, insofar as the committees

⁵⁰ The *Intramural Guidelines*, *supra*, footnote 22, at 1, state: The health and safety of persons other than the subject, if endangered by the research procedures, must be protected. DHEW policy neglects this problem.

⁵¹ *Grants Administration Manual*, *supra*, footnote 22, § 1-40-20 (A), see also *Intramural Guidelines*, *supra*, footnote 22, at 1, 4-5.

⁵² *Intramural Guidelines*, *supra*, footnote 22, at 0; *Institutional Guide*, *supra*, footnote 23, at 6.

⁵³ The *Institutional Guide*, *ibid.*, does make an effort to suggest procedures for safeguarding confidentiality.

⁵⁴ *Grants Administration Manual*, *supra*, footnote 23, § 1-40-10 (B); see also *Intramural Guidelines*, *supra*, footnote 22: at 2-3, 7-8.

⁵⁵ Ivy, "The History and Ethics of the Use of Human Subjects in Medical Experiments" 108 *Science* (July, 1948). Barber *et al.* have recently documented the prevalence of professional uncertainty over the definition of "research." See Barber *et al.*, *supra*, footnote 3 at 150.

are overwhelmed by the enormity of their task, superficial examination of protocols. For subjects, the inevitable result has been to deprive them in some measure of the protection which review committees were supposed to provide. For investigators, the pervasive uncertainty about what kind of human studies are now permissible has impeded their research. And for society, fears about the protection of its citizens in the research enterprise have not been stilled. Especially because review committees work in isolation from one another and no mechanisms have been provided for disseminating the knowledge gained from their individual experiences, each committee is condemned to repeat the process of finding their own answers to all the questions we have raised. This is an overwhelming, unnecessary and unproductive task for which they are not prepared and which we doubt they are willing to assume.

What is needed, is an overall official body authorized to formulate more detailed policies with respect to research on human beings. The need for such a policy making body has in point of fact already been perceived, and other bodies, official and non-official, have partially and on an *ad hoc* basis attempted to fill the gap. For example, the FDA has promulgated comprehensive rules for the conduct of drug research,⁶⁶ although on many crucial issues of subject protection it has simply copied DHEW policy.⁶⁷ Similarly, in the wake of organ transplantation, an *Ad Hoc* Committee of the Harvard Medical School redefined the criteria of "death" in order to facilitate the removal of needed organs.⁶⁸ Moreover, the Division of Research Grants of NIH,⁶⁹ which at present supervises the implementation of DHEW policy, has occasionally transmitted memoranda to review committees "concerning the interpretation and implementation of (its) policy."⁷⁰ Recent memoranda focused on potential hazards of screening programs for sickle cell trait, the definition of "human subject," and guidelines for fetal studies. These policy making activities need to be consolidated, under the auspices of a broadly representative body, about which we shall have more to say below. Such a body would not only provide guidance to review committees but would also enable them to obtain advice whenever difficult problems arise.

B. Invisibility

The creation of institutional review committees could have led to increased visibility of decisions regarding the protection of subjects. But since neither publication nor free access to their findings was specifically planned for, increased visibility has not been realized. A low level of visibility hampers efforts to evaluate and learn from attempts to resolve the complex problems of human research. Especially so long as guidelines for human research remain so indefinite, high-visibility decision-making is an essential feature of a well-functioning regulatory framework. Moreover, since committee disapprovals can block research, with no recourse to higher level review, invisibility may impede the acquisition of valuable knowledge.

The 1969 committee review of the Tuskegee Syphilis Study illustrates the problems which a low level of visibility creates. Our knowledge of that proceeding comes from an unofficial summary which constitutes the only available report on that committee's deliberations. From this summary it is impossible to determine the factors which the committee considered or the grounds on which the committee based its decision to approve a continuation of the study. This state of affairs is not atypical. Because institutional committee decisions are not published, committee decision-making operates at a primitive level, uninformed by pertinent prior decisions of other committees or by scholarly outside criticism. A mechanism for self-improvement over time is lacking. Professor Guido Calabresi has observed:

"... The best way of broadening the inputs to the committee—lies in another device: publication of the cases decided by the committees. Such cases could well be anonymous (at least at first). They could be collected and published in much the same way that decisions of courts are collected. The

⁶⁶ See 21 C.F.R. §§ 130.3, 130.37.

⁶⁷ *Ibid.*; see also 36 Fed. Reg. 5037 (1971).

⁶⁸ *Ad Hoc* Committee of the Harvard Medical School, "A Definition of Irreversible Coma," 205 J.A.M.A. 337 (1968).

⁶⁹ *Grants Administration Manual, supra*, footnote 23, § 1-40-50 (A).

⁷⁰ Memorandum of January 24, 1972, from Stephen P. Hatchett, Director, Division of Research Grants, NIH, DHEW, to Officers Responsible for Institutional Implementation of DHEW Policy on Protection of Human Subjects.

reports on any case could include, first a factual part describing, among other things, the experience of the experimenter, the antecedent tests in non-human subjects, the major risks perceived, the scientific gains perceived possible, the availability of subsequent controls to limit the risks, the origin and life expectancy of the subjects, and the nature of the consent and the manner in which it was obtained; and, second, a jurisprudential section containing the decision of the committee (whether favorable or unfavorable), together with the principal arguments made for and against the decision reached.

"Such published cases would soon become the subject of intense study both inside and outside the medical profession. Analyses in learned journals by lawyers, doctors, and historians of science would inevitably follow. These would undoubtedly re-argue the more important or pathbreaking cases. If law cases are any guide, the analyses would sometimes conclude that the cases were wrongly decided, but frequently that they were rightly decided, and perhaps more frequently that they were rightly decided but for the wrong reasons. To the extent that Law Reviews consider themselves courts of last appeal beyond the highest courts in the land, so would the learned journals in which this *jurisprudenza* would be dissected. From all this, a sense of what society at large deems proper in medical experiments might well arise. This sense would, in turn, guide the committees and make their decisions more sophisticated. The result would not only be better thought out decisions, but also a more complex system of controls, which, in effect, took into account much broader sources of information as to societal values. . . ."⁶¹

In the Recommendation section of our report we incorporate Calabresi's suggestions in a comprehensive framework for the regulation of human experimentation.

C. Subject Consent

1. *The Definition of "Informed Consent"*.—Institutional review committees are expected to ascertain "that informed consent is . . . obtained by methods that are adequate and appropriate."⁶² The DHEW Grants Administration Manual, in contrast to its treatment of other important matters, defines "informed consent" in some detail: Informed consent is the agreement obtained from a subject, or from his authorized representative, to the subject's participation in an activity.

The basic elements of informed consent are: 1. A fair explanation of the procedures to be followed, including an identification of those which are experimental; 2. A description of the attendant discomforts and risks; 3. A description of the benefits to be expected; 4. A disclosure of appropriate alternative procedures that would be advantageous for the subject; 5. An offer to answer any inquiries concerning the procedures; and 6. An instruction that the subject is free to withdraw his consent and to discontinue participation in the project or activity at any time.⁶³

The PHS Intramural Guidelines also explicate informed consent in some detail: The individual must be free to choose whether or not to be a subject in research. His participation shall be accepted only after he has received a fair explanation of the procedures to be followed, benefits, and attendant hazards and discomforts, and, suited to his comprehension, the reasons for pursuing the study and its general objectives. He must be informed of his right to withdraw from the study at any time.⁶⁴

For no apparent reason, two "basic elements" of informed consent identified in DHEW policy are ignored by the PHS Intramural policy. Nothing is said in the intramural policy statement about disclosure of alternative procedures ("basic element" number four) or response to inquiries ("basic element" number five).

Despite the commendably greater detail with which DHEW policy on obtaining informed consent is set forth, major gaps do remain. For instance, the DHEW directives permit consent to be obtained from the subject's "authorized representative" in lieu of the subject himself. But the circumstances in which third party consent may properly be substituted for the consent of subjects

⁶¹ Calabresi, "Reflections on Medical Experimentation in Humans," 98 *Daedalus* 387, 400-401 (1969).

⁶² *Grants Administration Manual*, *supra*, footnote 23, § 1-40-20 (A).

⁶³ *Grants Administration Manual*, *supra*, footnote 23, § 1-40-10 (C).

⁶⁴ *Intramural Guidelines*, *supra*, footnote 22, at 1.

are undefined. Committees are not advised as to who can validly consent in place of the subject or whether consent can be obtained from another person besides the subject only for certain investigations, such as those specifically designed to benefit the subjects themselves. Thus, committees are left to their own devices in fashioning rules about the participation in research of such subjects as the very young or the very old, the mentally incompetent or the emotionally disturbed, the imprisoned or those otherwise under duress, or, as in the Tuskegee Study, those who are ill-prepared as a consequence or cultural deprivation or inadequate education.

In contrast to the DHEW extramural guidelines, the PHS intramural research rules do address the problems of substitute consent for special subjects in more detail: Studies involving children, the mentally ill or the mentally defective should be carried out only when there is no significant risk of physical or mental harm to the subject or when direct benefit to the subject is anticipated. . . . In general, written informed consent of the parent or guardian shall be required for all medical or dental studies with such subjects, except in studies of an observational nature or in those conducted during the administration of accepted health care procedures that do not require specific informed consent in ordinary practice. Any exception shall be carefully considered and fully documented. Written informed consent of parent or guardian may be desirable in certain other studies with these groups and shall be required of conditions warrant. . . . Studies of individuals with limited civil freedom shall also be subject to group consideration and approval. Informed consent of the responsible institutional authority shall be required in all cases. Written informed consent of the individual shall also be required except for studies of an observational nature conducted during the administration of accepted health care procedures that do not require specific informed consent in ordinary practice.⁶⁵

The major difficulties with these provisions result from the exceptions to the general requirement of substitute consent. "Studies of an observational nature" and "accepted health care procedures that do not require specific informed consent in ordinary practice" are phrases too vague to be meaningful. For example, was the Tuskegee Syphilis Study "of an observational nature"? In what "other" kinds of studies may investigators dispense with the consent of parent or guardian unless unspecified "conditions warrant" it? Moreover, the PHS instructions ignore the issue of the capacity of third parties to represent the interests of special subjects adequately, and the subtle inducements which may persuade prisoners to consent.

Prisoners in particular are a group whose participation in research has long been controversial.⁶⁶ Because prisoners are a captive group, the danger is great that their consent to participate in research will be obtained by duress. Jessica Mitford has recently documented some of the abuses to which prisoner participants in experimentation have been subjected, and she comments:

"The (Institutional) Guide expresses a 'particular concern' for 'subjects in groups with limited civil freedom. These include prisoners. . . .' Having uttered this praiseworthy sentiment, HEW has apparently let the matter drop. Dr. D. T. Chalkley, chief of the Institutional Relations Branch, Division of Research Grants, and signer of the Guide, tells me that HEW does not even maintain a list of persons in which HEW-financed research programs are in progress and has 'no central source of information' on the scope of medical experiments on prisoners by drug companies. . . .

"What efforts have been made by HEW to enforce its guidelines in HEW-financed medical research behind prison walls? 'We do give some grants that involve prisoners. But there's no convenient way of recovering the information as to whether our guidelines are being followed,' said Dr. Chalkley. 'That responsibility lies with the principal investigator. . . .' Has HEW ever brought any action to enforce its regulations in any prisons anywhere? 'None, to date.'"⁶⁷

Most new drug testing is initially conducted on prisoners, and is subject to FDA regulations, but the FDA also has no list of persons in which such research is carried out.⁶⁸

⁶⁵ *Intramural Guidelines, supra*, footnote 22, at 10-11.

⁶⁶ See, e.g., Lasagna, "Special Subjects in Human Experimentation," 68 *Dacatus* 440 (1969); Katz, *supra*, note 12, pp. 1018-1052; Mitford, "Experiments Behind Bars," *The Atlantic Monthly* 64 (January, 1973).

⁶⁷ Mitford, "Experiments Behind Bars," *supra*, footnote 67, at 67-68.

⁶⁸ See Mitford, "Experiments Behind Bars," *supra*, footnote 67, at 68.

We regard the failure of the DHEW policies to include comprehensive guidelines for safeguarding prisoners, children, mental incompetents, and other special subjects in research, as a major shortcoming which must be rectified. Detailed policy must be formulated specifying the kinds of research which may be carried out with special subjects of different types, the inducements which are permissible, the circumstances in which third-party consent is necessary, the identity of those who can validly consent for the subject, additional precautions which must be taken for such subjects, and other matters.

2. *Exceptions to the Consent Requirement.*—In its *Institutional Guide to DHEW Policy on the Protection of Human Subjects*, the Department sets forth the following additional exceptions to the requirement of informed consent:

"The review committee will determine if the consent required, whether to be secured before the fact, in writing or orally, or after the fact following debriefing, or whether implicit in voluntary participation in an adequately advertised activity, is appropriate in the light of the risks to the subject, and the circumstances of the project.

"Where an activity involves therapy, diagnosis, or management and a professional/patient relationship exists, it is necessary 'to recognize that each patient's mental and emotional condition is important . . . and that in discussing the element of risk, a certain amount of discretion must be employed consistent with full disclosure of fact necessary to any informed consent'."⁶⁰

The first exception which permits obtaining consent "after the fact," is so general in scope and so extensive in the discretion it accords review committees that it almost staggers the imagination. What are "the circumstances of the project" which could ever permit such an invasion of subjects' rights to self-determination and privacy? Is this exemption limited to investigations with normal subjects employing placebos or to deception studies so frequently employed by psychologists? In one sentence the requirement of prior⁶⁰ informed consent is seriously undermined.

Furthermore, another exception provides for a departure from informed consent in situations in which "a professional/patient relationship exists." Since most medical research is carried out in such settings, it can apply to almost all medical interventions. It is particularly in clinical settings that overreaching in obtaining consent, however unwitting, is a constant danger.⁷¹ Thus the unqualified provision that "a certain amount of discretion must be employed consistent with full disclosure of fact" is particularly unsatisfactory.⁷²

PHS intramural policy also contains loopholes in its consent provisions. First, the guidelines state that an explanation so detailed as to bias his response or otherwise to invalidate findings is not necessary in those procedures that involve no risk of physical harm to the subject.⁷³

This qualification is apparently designed to minimize interference with behavioral and other studies common to the social sciences. These guidelines elsewhere state that "a major class of procedures in the social and behavioral sciences does no more than observe or elicit information about the subject's status by means of tests, inventories, questionnaires or surveys of personality or background. In such instances, the ethical considerations of voluntary

⁶⁰ *Institutional Guide, supra*, footnote 23, at 8.

⁷⁰ It is implicit that consent is normally to be obtained prior to the subject's participation in research, although DHEW policy nowhere so states.

⁷¹ See *infra*, pp. 40f.

⁷² Compare the more satisfactory provisions on informed consent adopted by the FDA, 21 CFR § 130.37, which require that consent be obtained "in all but exceptional cases." This is defined as follows:

(d) "Exceptional cases," as used in paragraph (b) of this section, which exceptions are to be strictly applied, are cases where it is not feasible to obtain the patient's consent or the consent of his representative, or where, as a matter of professional judgment exercised in the best interest of a particular patient under the investigator's care, it would be contrary to that patient's welfare to obtain his consent.

(f) "Not feasible" is limited to cases where the investigator is not capable of obtaining consent because of inability to communicate with the patient or his representative; for example, where the patient is in a coma or is otherwise incapable of giving informed consent, his representative cannot be reached, and it is imperative to administer the drug without delay.

(g) "Contrary to the best interests of such human beings" applies when the communication to obtain consent would seriously affect the patient's disease status and the physician has exercised a professional judgment that under the particular circumstances of this patient's case, the patient's best interests would suffer if consent were sought.

⁷³ *Intramural Guidelines, supra*, footnote 22, at 1-2.

participation, confidentiality, and propriety in use of the findings are the most generally relevant ones. The procedures may in many instances not require the fully informed consent of the subject or even his knowledgeable participation."⁷⁴

The lack of concern in the quoted passages for psychological—as opposed to physical—harm to subjects is striking. Despite acknowledged ethical problems, the guidelines suggest that in “many instances” the “knowledgeable participation” of the subject may be unnecessary. Here again, the regulations fail to provide meaningful guidance to review committees.

3. *The Quality of “Informed Consent”*.—Another difficulty which seriously undermines the implementation of informed consent has not been dealt with at all in the DHEW policies. It has long been recognized that consent is far too often obtained in form alone, and not in substance. As the Department itself admits in its Institutional Guide (citing Doctor Henry K. Beecher of Harvard Medical School): “The informed consent of the subject, while often a legal necessity is a goal toward which we must strive, but hardly ever achieve except in the simplest cases.”⁷⁵

For as Doctor Beecher has written elsewhere, “Lay subjects, sick or well, are not likely to understand the full implications of complicated procedures, even after careful explanation.”⁷⁶

Even with the best of intentions, investigators may fail to “get through” to their subjects for a variety of reasons. The subjects themselves may have great difficulty in understanding or little interest in knowing the nuances of what the investigator tries to explain to them. As Senator Hubert Humphrey recently lamented in response to the Tuskegee Syphilis Study:

“Who are the people who have been the subjects of medical experiment? The clear and shocking implications of the most recently revealed experiments indicate that the powerless, the poor, the least educated, and members of minority groups are the likeliest human guinea pigs.

“It is those who cannot understand what is being done to them that constitute by far the largest numbers among human experimentation subjects.”⁷⁷

Moreover, the circumstances in which consent is sought may foster or hinder an informed and voluntary decision. The subject may be under stress or distracted by other pressing concerns. For example, he may be a patient, desperately hoping for successful treatment of his condition, whose judgment is distorted by the natural tendency to grasp at any straw in reach. The likelihood of this result is magnified by the profound dependence which many patients develop on their attending physicians, who are often responsible for obtaining consent. Indeed, however wrongly, the patient may well fear that his refusal to consent to experimental treatment will anger his physician and deprive him of adequate medical care.

Lastly, the investigator himself may fail to describe his own research objectively, or unwittingly create subtle pressures on a subject to consent. To suggest this is not to deny the integrity of the researcher, but only to acknowledge the reality of investigators’ bias toward their work. Their scientific curiosity and excitement make it difficult for them to take a detached view of the research they wish to conduct with their subjects.

D. Continuing Review

Although extramural research projects supported by DHEW grants or contracts must be reviewed on a continuing basis, intramural research activities of the Public Health Service need not be reviewed again after initial committee approval. This omission for intramural programs of what the Depart-

⁷⁴ *Intramural Guidelines, supra*, footnote 22, at D.

⁷⁵ *Institutional Guide, supra*, footnote 23, at 7.

⁷⁶ Beecher, *Research and the Individual* (Little, Brown and Co. (1970).

⁷⁷ 118 Cong. Rec. 8 14041 (Sept. 5, 1972). Senator Humphrey’s assertion is corroborated by the recent study of research practices conducted by Barber *et al.* In the two institutions they analyzed, they found that studies in which the risks were relatively high in proportion to therapeutic benefits to the subjects were “almost twice as likely as more favorable studies to be done using subjects more than three-fourths of whom (were) ward and/or clinical patients,” as opposed to private and/or semi-private patients. Moreover, this proportion is not significantly altered when studies in which the risk exceeds all possible benefits, to the subjects or to medicine, generally are examined: “the ‘most favorable’ studies (where) still almost twice as likely as the more favorable to be done using three-fourths or more ward or clinical patients.” Barber *et al., supra*, footnote 3 at 55, 56.

ment itself calls "an essential part of the review process"⁷⁸ explains the long neglect of the Tuskegee Study. Begun long before committee review became a reality, the Study was not reviewed by any committee until 1969, three years after Surgeon General Stewart had inaugurated the policy of committee review. Moreover, the 1969 review was undertaken at the behest of the principal investigators themselves, and not as the result of the Public Health Service review policy. The Tuskegee Study was not reviewed again until this Panel was appointed. We have been unable to ascertain why intramural research programs are exempt from the continuing review requirement.

Although DHEW extramural policy does require "continuing review," a better definition of the nature and extent of this obligation is needed. The present indefinite regulations invite a perfunctory performance of the continuing review function. Essentially the Department expects that the committees will . . . adopt a variety of continuing review mechanisms. They may involve systematic review of projects at fixed intervals set by the committee commensurate with the project's risk. Thus, a project involving an untried procedure may initially require reconsideration as each subject completes his involvement. A highly routine project may need no more than annual review. Routine diagnostic service procedures, such as biopsy and autopsy, which contribute to research and demonstration activities generally require no more than annual review. Spot checks may be used to supplement scheduled reviews. Actual review may involve interviews with the responsible staff, or review of written reports and supporting documents and forms. . . .⁷⁹

Institutional review committees, already overburdened by the task of examining all new research projects, are thus also responsible for re-examining from time to time all ongoing research. If something has to give first, it tends to be this assignment. Pressed for time, the review committees assume that the initial review has satisfactorily resolved all existing problems and that a cursory review is sufficient.

E. Structure and Composition of Institutional Committees

Institutional review committees are charged with carrying out a number of distinct functions. They are required to formulate policies and regulations to guide the conduct of research at their institutions,⁸⁰ often under the rubric of protocol review; to communicate these policies to investigators; to administer the policies they have promulgated through the prior appraisal of research proposals, the supervision of the attempt to obtain consent and the continuing review of approved research activities; to review the consequences of their decisions; and to keep informed of DHEW policy changes and suggestions in order to reformulate institutional policies and rules when necessary.

In recognition of the variety of tasks which have been delegated to committees, DHEW policy stresses the composition of committee membership. . . . In addition to possessing the professional competence to review specific activities, the committee should be able to determine acceptability of the proposal in terms of institutional commitments and regulations, *applicable law, standards of professional conduct and practice, and community attitudes*. The committee may therefore need to include persons whose primary concerns lie in these areas rather than in the conduct of research, development, and service programs of the types supported by DHEW (emphasis supplied).⁸¹

In carrying out their functions, the institutional review committees are thus also asked: "to determine acceptability of the proposal in terms of . . . applicable law, standards of professional conduct and practice, and community attitude." By assigning these tasks to a broadened committee membership, DHEW recognizes that decision-making in the human experimentation process cannot be left solely to professionals, but requires the participation of informed and concerned non-scientists, who may be laymen, lawyers, clergymen, and appropriate others. However, the functions of these non-professional participants are not spelled out. And the assumption that they can make their most

⁷⁸ *Institutional Guide, supra*, footnote 23, at 8.

⁷⁹ *Institutional Guide, supra*, footnote 23, at 8-9.

⁸⁰ Although the parent institutions are charged by DHEW with the responsibility of formulating policies to guide institutional review committees, *Grants Administration Manual, supra*, footnote 23, § 1-40-40, to our knowledge this task is generally delegated to those committees. As we have previously described, the burden of formulating policy weighs heavily on local institutions because the DHEW policy is vague and incomplete.

⁸¹ *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (C) (2) (b).

effective contribution at the administrative stage, when individual protocols are reviewed, rather than at other stages of the process remains unexamined. The DHEW policies attempt to consolidate all phases of research regulation—formulation of detailed policies, administration of research, and review of decisions and consequences—in one committee structure. Asking each review committee to determine far-reaching policies by itself overburdens the review committee structure. The policy issues which must be resolved with the assistance of lay members are so complex that to require *each* committee to work them out by itself is at best inefficient and at worst self-defeating.

It would be more functional and efficient to leave the administration of research, like the administration of therapeutic interactions between physicians and patients, primarily in the hands of the professionals. If review committees were guided by comprehensive policies formulated by a broadly representative body, the review of individual protocols could focus on technical matters, such as degree of risk, likely benefits, research design, competence of investigators, safety precautions, and the like. This allocation of authority would help to reduce the widespread concern among physician-investigators about "meddle-some outsiders."

F. Enforcement

The DHEW guidelines on enforcement are written in permissive and general language:

"The Division of Research Grants (DRG), NIH, will follow up reports by reviewers, evaluators, consultants, and staff of the DHEW indicating concern for the welfare of subjects involved in approved and funded grants or contracts, and of subjects potentially involved in activities approved but not funded, and in disapproved proposals. On the basis of these reports and of other sources of information, the DRG, NIH, may, in collaboration with the operating agency concerned, correspond with or visit institutions to discuss correction of any apparent deficiencies in its implementation of the procedures described in its institutional assurance.

"If, in the judgment of the Secretary, an institution has failed in a material manner to comply with the terms of this policy with respect to a particular DHEW grant or contract, he may require that it be terminated in the manner provided for in applicable grant or procurement regulations. The situation shall be promptly notified of such finding and of the reason therefor.

"If, in the judgment of the Secretary, an institution fails to discharge its responsibilities for the protection of the rights and welfare of the individuals in its care, whether or not DHEW funds are involved, he may question whether the institution and the individuals concerned should remain eligible to receive future DHEW funds for activities involving human subjects. The institution and individuals concerned shall be promptly notified of this finding and of the reasons therefor."⁸²

These enforcement guidelines delegate sole responsibility for the detection of failures to comply to the Division of Research Grants. But staff members of the DRG are probably the last persons to hear of any infractions once they have occurred, and then only when, as in the Tuskegee Study, they are of major proportions. Indeed, no procedures have been established to require institutional review committees to report to DHEW any evidence on noncompliance. Moreover, DHEW has made no efforts to define categories of non-compliance⁸³ which should lead to the imposition of sanctions or to specify different kinds of sanctions which would be imposed in particular cases. Finally, institutional review committees and DHEW are not authorized to take disciplinary action, except for the Secretary's prerogative to terminate grants or make the investigator or his institution ineligible to receive future funds.

G. Compensation of Subjects

Existing DHEW policy provides no mechanism for the compensation of subjects harmed as a consequence of their participation in research, in spite of the growing recognition that no matter how careful investigators may be,

⁸² *Grants Administration Manual, supra*, footnote 23, § 1-40-50 (F).

⁸³ Because the requirement of "continuing review" has not been elaborated, committees themselves only haphazardly come across evidence of noncompliance.

harm still will befall some subjects.⁸⁴ Unavoidable injury to a few is the "cost" of engaging in research which ultimately benefits the many. But unless the injured individuals can prove carelessness, failure to obtain informed consent, or actual malice, their participation bars recovery for the harm done to them. Those subjects whose injury does result from negligence are faced with the usual difficulties and uncertainties inherent in a law suit. For his part, any investigator who is sued as a result of his research may find that his ordinary malpractice insurance does not cover medical research.⁸⁵ If it does not—and the question is as yet unsettled—the personal liability of the investigator can be substantial. In addition, the economic vulnerability of the subject and investigator adds to society's uneasiness about human experimentation, and may deter some persons from engaging in research activities.

H. Applicability of DHEW Policies

The DHEW guidelines quite appropriately were formulated for research grants and contracts to be funded by the Department. While much research in this country is supported by DHEW funds, a great deal of research is also funded or conducted by other Federal agencies, such as the Department of Defense.⁸⁶ Additionally, many research activities receive no Federal support. Is there any justification for permitting less stringent protective controls for human experimentation supported by other governmental agencies, private foundations, or other private sources than for research conducted or supported by DHEW?⁸⁷ Since a major restructuring in existing policies is necessary, we believe that serious consideration should be given to developing, through Congressional action, rules and procedures which apply to the entire human research enterprise without reference to the source of funding. A tentative step in this direction has already been taken by DHEW. Its enforcement section provides for the discontinuation of funds to any institution which has failed "to discharge its responsibilities for the protection of the rights and welfare of the individuals in its care, whether or not DHEW funds are involved."⁸⁸ If it is concluded, however, that such broad coverage is beyond the power of Congress, then Congress should at least act to bring all federally funded research within a comprehensive regulatory framework.

When this is done, the existing anomaly in the applicability of DHEW policies should be corrected. We refer to the different policies described earlier which govern intramural and extramural research. We can find no justification for differential protection of subjects on this basis. Moreover, the conduct of human research by DHEW employees and under the Department's aegis lends additional support to our call for an independent Government body to oversee all research. For to expect DHEW to scrutinize and judge its own activities as critically and strictly as it supervises outside research projects is arguably unrealistic and unnecessarily strains internal Departmental relationships.

V. RECOMMENDATIONS

A. Preface

Before turning to our specific recommendations we would like to anticipate three possible criticisms of our proposals. First, the argument may be advanced that any regulation of human research is an unwarranted infringement of the "freedom of inquiry." But freedom of inquiry is only one facet of freedom in

⁸⁴ See Ladimer, "Protection and Compensation for Injury in Human Studies," in *Experimentation With Human Subjects* (Paul A. Freund, ed.) 247. (George Braziller, 1970) (hereinafter *Ladimer*).

⁸⁵ See *Ladimer, supra*, footnote 84 at 251.

⁸⁶ For documentation of the human research conducted by the armed services, see the Legislative Reference Service's report "Medical Experimentation on Human Beings, March 1967," placed in the Congressional Record by Senator Jacob Javits, 118 Cong. Rec. S. 13780, 13793-95 (August 17, 1972). The report states: "There is very little information available on the number and types of military persons who serve as subjects in research. Intuitively appraised, however, the number of topics and of human subjects must be large." 118 Cong. Rec. S. 13793.

⁸⁷ Barber *et al.*, found that in 15% of the institutions they surveyed some clinical research was not reviewed by an institutional committee. Moreover, 35% of these institutions were medical schools. "the type of institutional setting most productive of biomedical investigations using human subjects." They concluded that "a perhaps significant volume of human research is still not subject to review by peer review committees." Barber *et al.*, *supra*, footnote 3, at 149.

⁸⁸ *Grants Administration Manual, supra*, footnote 23, § 1-40-50 (13).

general. When scientists use other human beings as subjects of experimentation and in so doing jeopardize their rights and welfare, the scientists' freedom of inquiry clashes headon with the right of every individual in our society to personal autonomy. Therefore, society must retain the right to define and limit the human costs it is willing to bear in order to benefit from advances of knowledge.

Second, whenever it is suggested that representatives of society at large participate in decision-making of significance to both science and society, concerns about the intrusion of "outsiders" in the domain of professionals are voiced. This position was forcefully expressed by Dr. Owen W. Wengensteen in a letter to Senator Walter F. Mondale prior to congressional hearings in 1968 on a proposed Commission to study the social and ethical problems raised by biomedical advances.

"Senator, I would urge you with all the strength I can muster to leave this subject to the conscionable people in the profession who are struggling valiantly to advance medicine. We are living through an era in which the innovator is often under suspicion, being second-guessed by self-appointed arbiters more versed in the art of criticism than in the subject under scrutiny. We need to take great care lest the wells of creativity and the spring of the mind of those who break with tradition are not manacled by well-intentioned but meddling intruders.

"I would urge you to leave these matters in the hand of their proponents, the persons who are actually doing the work. They know more about all this than any of us possibly could. They have wrestled with the problem day and night, almost invariably over many years. Theirs are not overnight judgments or convictions. In the academic community in which I have worked and spent my entire professional life of almost 50 years, you will find as warm, sympathetic human beings as are to be found on this earth. . . .

"It is important that we look back as well as forward. To have no concern for history is tantamount to having a physician with total amnesia. If we leave this matter alone, it will simmer down. Discussion should not be restrained, but legislative action, never."⁸⁰

We appreciate Dr. Wengensteen's fears, which have been echoed by others. But not all intrusions by "outsiders" into medical decision-making are viewed by the profession as unwarranted interferences with the practice of medicine. Authorized representatives of society have the right to circumscribe some activities of professionals and this has been accepted; for example, the discretion of physicians to commit patients against their will or to prescribe addictive drugs is limited. Thus, the pertinent questions are: under what circumstances, to what extent, and by what means should the activities of the medical professional be controlled?

We have already mentioned that the human research decision-making process can be divided into three functionally distinct stages: the *formulation* of research policies, the *administration* of research, and the *review* of research decisions and their consequences. The participation of "outsiders"—which is to say, of persons deemed capable of representing the interests of society in the proper conduct of research—is highly desirable in the formulation and review stages. Such decisions as the allocation of resources for research, the extent of hazardous experimentation, the degree of respect to be shown for the autonomy of research subjects, and the extent of the participation of children, prisoners, members of minority groups, and other captive or disadvantaged persons in research, are of momentous consequence to society as well as to science. These decisions implicate general social policies and must not be left to the sole discretion of scientists.

Nonetheless, we agree that the often expressed fear of interference by laymen with the immediate clinical research decisions which physician-investigators must make has merit. However, we believe that the two positions can be reconciled. Once satisfactory rules and procedures for the protection of human subjects have been formulated and research practices are adequately reviewed by "insiders" and "outsiders," society should feel safe in leaving the actual administration of research and therapy to physician-investigators within the

⁸⁰ *Hearings on S.J. Res. 145 before the Subcommittee on Government Research of the Senate Committee on Government Operations, 90th Cong., 2d Sess. 98-99 (1968).*

restraints imposed by peer review (through the already established institutional review committees).

Current DHEW policies fail to identify the different stages in the regulation of research. Instead, institutional review committees are charged with formulating policies, administering policies, and evaluating the consequences of their decisions. Taken together these tasks are too burdensome for such committees. Moreover, because these committees must formulate policy and evaluate decisions, the demand for outsiders to sit on them has intensified, justifying the fear of interference in professional day-to-day decision-making by persons not qualified to do so. Our recommendations seek to reverse this development by confining the role of the institutional committees largely to the implementation of policies already adequately formulated by others.

A third criticism may be leveled against our recommendation that a National Human Investigation Board be established to oversee human experimentation. Some may fear that this Board will promulgate such detailed rules and impose so many legal duties that progress in research and innovation in treatment will be seriously impaired. The danger of cumbersome bureaucracy cannot be lightly dismissed and every effort must be made to avert it.⁹⁰ At the same time we doubt that society, if properly informed, would tolerate any serious impediments to the acquisition of knowledge, for the pervasive and compelling desire to benefit from advances in medicine should counteract any tendency to stifle research.

A national Board to regulate human research is needed for many reasons. One central group should be responsible for formulating policy, instead of the many different Federal agencies and the hundreds of individual review committees which, as we have argued, cannot be expected to assume this complex task. Moreover, "outsiders" who could represent and protect individual and societal values and interests could then be included in policy formulation and review, where they are most needed, without thereby hindering physician-investigators in their professional decision-making. The national Board would provide a forum in which the competing interests of science and society could be debated openly before authoritative decisions are made.

B. National Human Investigation Board

A permanent Governmental agency, to be called the National Human Investigation Board (NHIB), should be established to oversee *at a minimum* all Federally-supported research involving human subjects. The jurisdiction of this Board should extend to all extramural and intramural research sponsored by DHEW (including human research currently governed by FDA regulations) as well as to research supported by Government agencies other than DHEW, such as the Department of Defense. Ideally, the authority of this Board should also extend to all human research activities, even if not Federally supported. However, despite its apparent merits, such a sweeping proposal may raise insurmountable jurisdictional problems. We leave it to others to determine whether Congressional authority to regulate research may encompass investigations not conducted or financed by the Federal Government.⁹¹

The primary function of the NHIB would be to formulate policies and procedures to govern research with human beings. For this reason the Board must include, in addition to eminent medical and other professional researchers, lay members who can represent the interests of society in the ethical conduct of research with human subjects. Such lay members should be selected for their ability to make disinterested judgments about research issues of societal concern. Because medical and other research professionals have been trained to pursue other goals, they should not be expected to shoulder the added burden of speaking for the concerns of society.

Senator Hubert Humphrey has called for the establishment of a National

⁹⁰ Another commonly expressed fear is that detailed regulations may adversely affect the well-being of patient-subjects because the physician-investigator's authority to intervene quickly, whenever his professional judgment dictates it, is unduly restricted. But discretionary authority must of course be delegated to physician-investigators in the exercise of purely professional judgments regarding their patient's health.

⁹¹ Senator Jacob Javits has also recently introduced a bill, in response to the Tuskegee Study, for the protection of research subjects. S. 3935, 92d Cong., 2d Sess. However, this proposed amendment to the Public Health Service Act is in essence simply a statutory enactment of current DHEW regulations. As we have argued, more than this is needed for the protection of research subjects.

Human Experimentation Standards Board which in some respects resembles the Board we propose. His bill²² provides as follows:

Sec. (2) (a) There is hereby established, as an independent agency in the executive branch, a National Human Experimentation Standards Board (hereinafter referred to as the "Board").

(b) The Board shall be composed of 5 members to be appointed by the President by and with the advice and consent of the Senate from among individuals who by virtue of their service, experience, or education are especially qualified to serve on the Board. . . .

* * * * *

(3d) Members should be chosen from persons who are representative of the fields associated and concerned with clinical investigations.

* * * * *

Sec. 5. (a) It shall be the function of the Board to—

(1) establish guidelines for the involvement of human beings in medical experiments which are funded in whole or in part with Federal funds;

(2) review all planned medical experiments that involve human beings which are funded in whole or in part with Federal funds to determine if the guidelines established under paragraph (1) are being complied with;

(3) obtain an injunction to prevent such experimentation in a case where such experiments are found not to comply with established guidelines; and

(4) prepare and submit an annual report to the President, for transmittal to the Congress recommending legislation, if required, and detailing the performance of the Board during the preceding year.

Senator Humphrey's bill assigns to his Board policy making, administrative and review powers. We believe that some of these functions should not be delegated entirely to the NHIB and that those functions which the NHIB should be given must be spelled out in greater detail. Senator Humphrey's bill also does not provide for the continuation of the institutional review committee system. We believe that institutional review committees should be maintained, although in modified form. We now turn to a discussion of the functions of the NHIB and institutional committees in the formulation, administration and review of policies for human research.

1. *Formulation of Policy.*—The National Human Investigation Board must establish guidelines for the conduct of research with human beings with respect to such matters as:

a. *Selection of Subjects.*—The Board must formulate criteria for the selection of subjects. It will have to reexamine the contemporary research practice of choosing subjects from the less educated, disadvantaged, or captive groups within society. In doing so, the Board will have to confront many questions. For example, should every effort be made, consistent with research objectives, to obtain a subject sample which represents a cross-section of the population at large? Or should subjects first be selected from among the best educated before turning to the less educated, since the former are more capable of giving "informed consent"? How should the recruitment of subjects be effectuated to implement whatever rules for their selection are adopted? Under what circumstances should non-comprehending subjects such as children or severely mentally disturbed individuals, or captive subjects such as prisoners or other institutionalized persons, be barred from participating in research?

b. *Ambit of Informed Consent.*—The Board must not only formulate the overall criteria of informed consent but must also specify the circumstances in which the consent requirement can be modified, and to what extent, in order to accomplish important research objectives. In doing so, the Board will have to find answers to such policy questions as: Under what circumstances can what benefits to individuals or society justify modifications in the informed consent requirement? Should certain groups or potential subjects be excluded from participating in research or high-risk investigations be proscribed unless informed consent can be obtained? When is third party consent permissible, and what safeguards should be introduced whenever the consent of a third

²² S. 3051, 92d Cong., 2d Sess.

party is invoked? The Board may have to promulgate separate guidelines for the conduct of investigations which are predicated on the absence of informed consent, such as placebo, double blind, deception and secret observation studies. The latter two procedures are employed by sociologists and psychologists on such an extensive and repetitive scale, and constitute such a significant exception to the general requirement of informed consent, that serious consideration should be given to restricting their use.

This may be an appropriate place to introduce a note of caution. The policies we have in mind cannot be formulated overnight or without serious study of the problems inherent in this field. An example from the literature on informed consent illustrates this point. It has traditionally been assumed that the consent requirements should be more stringent in research with "healthy" volunteers than with patients. This assumption ought to be reexamined. Perhaps, as Alexander Capron has written:

"... higher requirements for informed consent should be imposed in therapy than in investigation, particularly when an element of honest experimentation is joined with the therapy. The 'normal volunteer' solicited for an experiment is in a good position to consider the physical, psychological and monetary risks and benefits to him in consenting to participate. How much harder that is for the patient to whom an experimental technique is offered during a course of treatment. The man proposing the experiment is one to whom the patient may be deeply indebted (emotionally as well as financially) for past care and on whom he is probably dependent for his future well-being; the procedure may be offered, despite its unknown qualities, because more conventional modalities have proved ineffective."³³

Finally, more attention must be given to the nature and quality of the interactions between investigator and subject if the ensuing consent is to be truly informed and voluntary. In this connection, consideration should also be given to make an adviser available to a subject whenever he thinks that his decision to participate or not might benefit from disinterested advice.³⁴ The authority and obligations of such advisers must be carefully defined and, as we have said repeatedly, with regard to policy formulation, cannot be left to each individual research committee to work out.

c. Definition of "Research"—To clarify the jurisdiction of the Board and of the institutional review committees, distinctions must be made between "research" activities and "accepted and established procedure." We have pointed out already that the borderline between research and therapy is difficult to draw. Physician-investigators have often wittingly or unwittingly added to the obfuscation by calling some investigations "therapy" in order to escape the obligations which the research designation entails. Such practices diminish the protection afforded subjects, and also undermine the scientific validity of the results of such investigations, because they were not established in carefully controlled clinical trials.

d. Application of Risk-Benefit Criteria—We have already suggested that the risk-benefit equation is one of the most difficult guidelines to implement. To evaluate risk taking, distinctions must be made between research designed to benefit its participants and those which may benefit society at large. With respect to societal benefits, answers will have to be found to such crucial questions as: Do even minimal risks from participation require an intensive scrutiny of the benefits to be derived from the study or should "minimal" risks, however defined, be exempted from this burdensome requirement? How often can risky experiments be repeated for the sake of verification, if results have already been reported in the literature? Must certain groups, such as children and mentally defective subjects, be excluded from all risky studies that are not designed to benefit them? When the risks and benefits of therapeutic measures are unknown, as in all first clinical trials of a new drug, should the tests be randomized with a limited number of patients in order to ascertain a scientifically valid estimate of effectiveness? In research with so-called normal volunteers or other subjects who are able to give a satisfactory consent, can greater risks be taken than a weighing of risks against benefits would in general permit? Should dying patients who are

³³ Capron, "The Law of Genetic Therapy," in *The New Genetics and the Future of Man*, M. Hamilton, ed. (Eerdmans Pub. Co., 1972).

³⁴ We elaborate upon this recommendation *infra*, pp. 44 ff.

willing to participate in risky experiments be exempted from the rule that no experiments are to be conducted which might hasten death?

e. Promulgation of a Compensation Scheme—An insurance plan should be devised and implemented for the compensation of subjects harmed as a consequence of their participation in research activities. Though many schemes for compensating subjects deserve consideration, we mention one which we believe has substantial merit: "no fault" clinical research insurance paid for by each institution sponsoring research. Subjects would be compensated for any injurious consequences of their participation in research whether or not caused by the fault of the investigator. This plan would provide full protection for subjects and relieve investigators of the threat of liability. As to cost, one of the principal promoters of research insurance, Irving Ladimer, has asserted that:

"... It is unlikely that the costs will be great, probably a small fraction of customary malpractice premiums. First, there are few compensable occurrences within responsible research institutions, where most of the studies are conducted. Second, the assumption of medical care, most likely at the sponsor's premises, will reduce such costs. Third, the adoption of such a system should tend to improve prior protection, controls, and research design; this is especially true for studies approved by research review committees. Fourth, the spirit and philosophy of this form, which should be fully explained in advance in discussions with participants, should serve to diminish rather than induce any questionable claims."⁹⁵

The cost of the insurance would probably vary directly with institutional safety records and thus might provide an additional impetus to careful consideration of research proposals. Guido Calabresi has called attention to this possibility:

"... Requiring compensation of injured subjects causes the full cost of research in humans to be placed on the research center. Accordingly, approval by the center of a particular experiment will require conscious consideration not only of the possible payoff (either in market or scientific terms), but also of the risks, converted to money, that the project entails. This may not deter many experiments, but it may cause those involved in the most risky or least useful ones to consider carefully whether the experiment is worth it, whether it is best done by those who propose to do it, and whether there is an alternative, and safer, way of obtaining approximately the same results. It may well be that all these considerations are already firmly in the minds of the experimenters. If so, nothing is changed by requiring compensation. But if researchers—like auto makers, coal mine owners and the rest of mankind—tend to consider costs and benefits a bit more carefully when money is involved, a useful added control device will have been imposed."⁹⁶

If "no fault" research insurance, or any other mechanism, is adopted as a device for compensating subjects, regulations will have to be established for adjudicating disputes over such matters as causation—whether the worsened condition of the subject was caused by the research in which he participated or whether it was merely the inevitable outcome of the subject's particular illness—or the amount of compensation. Similarly, the NHIB will have to work out procedures for implementing whatever compensation scheme is adopted.

f. Promulgation of Sanctions—Senator Humphrey's bill authorized his Board "to obtain an injunction to prevent . . . experimentation in a case where . . . experiments are found not to comply with established guidelines." Though the promulgation of sanctions raises many sensitive issues, more is needed than has been provided in Senator Humphrey's bill. Other sanctions tailored to specific violations of the policies governing research are required. For example, an investigator's failure to submit a protocol for review, his departure from an approved research protocol or a review committee's failure to follow its established procedures might in some circumstances justify suspension of further Federal funding of the investigator or the sponsoring institution.

It is beyond the scope of this report to detail the offenses which should lead to the invocation of sanctions, the particular penalties which should be imposed, or the procedures which must be followed to satisfy due process requirements. We also leave open the question of who—the National Human Investiga-

⁹⁵ Ladimer, *supra*, footnote 84, at 259.

⁹⁶ Calabresi, "Reflections on Medical Experimentation in Humans," 98 *Daedalus* 387, 398 (1969).

tion Board or Congress—should promulgate the regulations which will govern the imposition of sanctions.

g. Delegation of Authority to Administer and Review the Research Process—The National Human Investigation Board must also promulgate rules and procedures for the administration and review of the human research process. We now turn to these issues under their appropriate headings.

2. *Administration of Research.*—a. Institutional Human Investigation Committees—Once adequate research policies have been formulated by a broadly representative body, "outsiders" should intervene as little as possible in the administration of those policies. For when research policies are put into effect, limitations imposed by colleagues are better tolerated by investigators than restrictions imposed by outsiders. The administration of research should therefore be performed principally by researchers' professional peers sitting on institutional review committees. Thus we seek to reverse the trend⁹⁷ toward outsider membership on institutional review committees and outsider interference with day-to-day professional decision-making. In our proposed restructuring of institutional review committees, we have sought to restrict the participation of outsiders to those areas where they have the most to contribute.

Senator Humphrey's bill does not specify the status of the institutional review committees which are not required by DHEW. The advantages of institutional committees are numerous, and we propose that they be retained, though with redefined functions. Among other things, administration at the institutional level simplifies the task of prior review of research protocols; permits closer scrutiny of research activities; encourages investigator involvement in and respect for the problems of ethical research; enables different institutions to deal with complex new problems from different vantage points, and facilitates responsiveness to difficulties in the research process as they arise. Instead of eliminating institutional committees, they should be restructured to enable them to perform their functions better than they now do.

We recommend the creation of a structured institutional body, to be called the Institutional Human Investigation Committee (IHIC), in place of the existing unspecialized institutional review committee. Each institution which is subject to the jurisdiction of the NHIB would be required to provide written assurance to the NHIB that it had appointed an IHIC. This would be similar to current practice which requires institutions to negotiate assurances with the NIH's Division of Research Grants.⁹⁸ As outlined below, each IHIC would be responsible for the conduct of research in its institution, and would be required to file with the NHIB its plans for carrying out the responsibility. Thus the NHIB would pass on the suitability of the IHIC membership, local policies, and administrative procedures, and NHIB approval would be required before Federally funded research⁹⁹ could be conducted at the institution.¹⁰⁰

IHIC members should be appointed by their institutions to serve for a period of years, so as to accumulate expertise in the problems of human experimentation. The membership should represent a cross-section of the disciplines involved in research at the institution. It ought also to include a few "outsiders," who can make a valuable contribution to the supervision of the consent process, as described below.

The main functions of each IHIC would be: to establish local policies, consistent with the uniform national guidelines promulgated by the NHIB, which are responsive to the individualized needs of the institution, to bring to the attention of the NHIB any procedural modifications deemed necessary for effective functioning; to inform local participants in the research enterprise of their

⁹⁷ Current DHEW regulations suggest, and FDA regulations require, that outsiders be members of institutional review committees. See *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (C) (2) (b); 21 CFR § 130.3; 36 Fed. Reg. 5037, 5038 (March 17, 1971).

⁹⁸ See *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (A):

"The assurance shall embody a statement of compliance with DHEW requirements for initial and continuing committee review of the supported activities; a set of implementing guidelines, including identification of the committee; and a description of its review procedures . . ."

⁹⁹ Or on research—see *supra*, p. 30.

¹⁰⁰ It should be noted that, as in present DHEW policy, different requirements might be established for institutions "having a significant number of concurrent" research projects and for institutions sponsoring only one, or a limited number, of such projects. See *Grants Administration Manual, supra*, footnote 23, § 1-40-40 (B), (C), and (D). The description of the IHIC presented in our report hereinafter is for an institution with a number of research activities.

rights and obligations; and to establish two subcommittees to carry out its administrative functions—a Protocol Review Group and a Subject Advisory Group. Although the membership of the subcommittees should be drawn largely from the IHIC, these subcommittees could also include others associated with the institution. Our recommendations regarding the two subcommittees are modeled on a similar proposal recently advanced by Jay Katz and Alexander Capron in a somewhat different context, and in what follows we quote from the draft document they have prepared.

b. Protocol Review Groups—The heart of IHIC's will be their Protocol Review Groups (PRG) which will be responsible for approving, disapproving or offering suggestions for modification in protocols for experimental and therapeutic interventions which come within the policies on risk and consent formulated earlier in the process. The PRG's task is to apply the rules and policies already set down, but this should not be a matter of "clockwork" or mere routine. Realistically, it is unlikely that even if policy formulation proceeded with much more rigor (as we urge) it will result in directives that settle all issues faced by the PRG's. This does not suggest, however, that Protocol Review Groups set policies themselves, though these rules may give them some discretion in light of local institutional conditions and so as to permit experimentation with a variety of alternative policies which are still consistent with the general directives. This sort of flexibility is vital if the PRG's are to operate effectively and secure the services of thoughtful, devoted members.

Membership in the Protocol Review Group should consist primarily of professionals with competence in biomedicine. This reflects the committee's function, which is to scrutinize protocols in light of the policy guidelines and directives, to evaluate whether the procedure should be undertaken, and to give advice to the physicians and scientists involved. In most instances these group members will be members of the university or research center's staff and faculty, but when the presence of more than one institution in a locality permits it, the crossfertilization of having some people from one center serve on another's PRG would probably be advisable. Such an arrangement would provide "outsiders" in the sense of people free of the personal ties and biases of the institution's own employees, while maintaining the biomedical expertise that should characterize "insiders."¹⁰¹

c. Subject Advisory Groups—Katz and Capron also propose "the establishment of Subject Advisory Groups (SAG) to aid patient-subjects in decision-making."¹⁰² We do not lightly suggest the creation of another subgroup within the IHIC, since we have no desire to overburden the process with excessive bureaucracy. But, as we have emphasized, present procedures for obtaining consent are concerned with form to the neglect of substance. If informed and voluntary subject consent is to become a reality in human experimentation, efforts must focus on improving the quality of the communications between investigator and subject. We therefore endorse the Katz and Capron proposal that an adviser be made available to counsel any prospective subject who thinks his decision to participate or not might benefit from disinterested advice. "Not all patient-subjects may wish to seek out representatives of the Subject Advisory Group, for some may be satisfied with the information obtained from physician-investigators. But patient-subjects should be well apprised of the availability of these representatives prior to their participation in projects which have to be submitted to the PRG because of the risk involved or because of the problems anticipated with obtaining valid consent. Patient-subjects may also wish to avail themselves of the SAG's services when they begin to wonder whether continuation of the intervention is worth the pain and suffering they have to endure. At such times the Subject Advisory Group assumes the important function of administering the procedures formulated for the termination of experimental treatments."¹⁰³

The SAG should also aid investigators in developing fair methods of obtaining consent, and in avoiding inadvertent bias or coercion when seeking consent. It ought to go without saying that . . . (c) creating an opportunity for someone in addition to physician-investigators to talk with patient-subjects does not suggest a lack of trust in the investigators' integrity, rather it recognizes the reality that investigators cannot help but plead, however unconsciously, their

¹⁰¹ Katz and Capron, *supra*, footnote 18.

¹⁰² *Ibid.*

¹⁰³ *Ibid.*

interests in the research and therefore must find it difficult fully to safeguard the interests of their subjects.¹⁰⁴

Because the work of the SAG would be restricted to issues relating to consent, laymen could make a significant contribution in this subcommittee. They, more than professionals, would appreciate the difficulties prospective subjects might have when faced with an invitation to participate in research. And potential subjects might be less overawed in interactions with their peers, than in interactions with physicians.

d. Appeals—From time to time disagreements will arise between investigators and the Protocol Review Groups. No opportunity for appeal from an adverse institutional review committee ruling exists at present, and committees can cut investigators off from Federal funding without possibility of reconsideration. This may not only hinder the acquisition of knowledge; it may also undermine the legitimacy of peer review. Barber *et al.* have written:

"We have heard researchers object to peer review as they know or understand it because they believe that research proposals having real potential for medical scientific advances, or even 'pioneering breakthroughs,' frequently either are not or will not be approved by those who sit on institutional review committees. The reasons for these rejections they are especially concerned about do not involve the ethical defectiveness of the proposals. Rather they include local institutional politics and conflicts as well as resistance to innovations just because they depart from accustomed ways of scientific thinking and proceeding . . . (T)he forestall rejections of this kind, the biomedical community may have to go beyond the establishment of local appeal procedures by institutions. Perhaps what is necessary is the establishment of a hierarchy of 'courts of appeal' throughout the nation, culminating, as a final resort, in a 'supreme court' composed of eminent peers including both 'insiders' and 'outsiders' with respect to any field. Such a system might be the best safeguard available against the object of these concerns—unjustified hindrance of medical progress by the peer review process."¹⁰⁵

Procedures should be established for appeals to the National Human Investigation Board.¹⁰⁶ After a hearing of the controversy, the NHIB should be empowered to sustain or overrule the judgment of the Protocol Review Group.

Since the NHIB has a role to play in the administration of research, it must employ expert staff to evaluate research protocols and to prepare detailed findings. This staff would take over the reviewing function currently handled by DHEW study groups. However, it is beyond the scope of this report to set forth all the specific functions which the NHIB should assume. In particular, we have refrained from deciding how many of the protocols approved by the PRG's should be reviewed again by the NHIB. Though a certain number will have to be examined in order to provide the NHIB with sufficient information to carry out its most important function—policy formulation—it may not be necessary to review all protocols a second time. This would be a time consuming task.

3. *Review of Decisions and Consequences.*—The NHIB must create mechanisms for the overall review of the human experimentation process in order to assess the continuing efficacy of its own policies and of the institutional peer group review. Thus, the Board has to keep itself informed about ongoing research practices, and a number of already existing resources would facilitate this task: scientific journals which publish research studies, legal cases in which conflicting claims about research have been brought before courts, newspaper accounts (such as the initial reports of the Tuskegee Syphilis Study), reports from Institutional Human Investigation Committees, etc.¹⁰⁷

¹⁰⁴ *Ibid.*

¹⁰⁵ Barber *et al.*, *supra*, footnote 3, at 156-157. (footnote omitted).

¹⁰⁶ IHIC's might also find it appropriate to establish an internal appeals procedure. This would be more convenient than, and would sometimes obviate the need for, appeals to the national level.

¹⁰⁷ The NHIB might consider inviting others—for example, editors of scientific journals—to submit for review studies which raise ethical questions. Editorial boards should welcome such an opportunity, particularly in the light of the recent debate about the publication of articles based on "unethical" research. Some commentators have favored non-publication, while others have felt that "(s)uch an editorial policy would maintain the low visibility of unethical experimentation and preclude not only review but also careful and constant appraisal of the conflicting values inherent in experimentation." (Katz, "Human Experimentation," 275 *New Eng. J. of Med.* 790 (1966)). Journal censorship creates difficult problems. If editorial boards could be assured that violations of "ethical" practice would be dealt with by an authorized body, they might prefer to call them to the attention of the NHIB and judge acceptability of articles on the basis of scientific merits.

The NHIB must also establish rules and procedures for the direct review by IHIC's and by NHIB staff members of ongoing previously approved research projects. The current requirement of systematic review of all projects at fixed intervals is burdensome and inefficient and encourages perfunctory review. Instead of requiring continuing review of all research projects on a routine basis, it would reduce the burden on IHIC's and maximize the effectiveness of continuing review if investigators were asked to report immediately any contemplated or necessary deviations from approved research protocols, all inconveniences and injuries suffered by any subjects which has not been anticipated in the original protocol, or any medical advances which might benefit subjects and which has not been anticipated in the original protocol. Moreover, periodic "spot checks" of selected interventions which are now discretionary should be made a requirement. It is apparent that some approved research projects are carried out improperly. For example, in a recent study involving subjects subsequent to their participation in a medical research project which had been approved by an institutional review committee, an interviewer found that—"(m)ost of these subjects learned of the existence of the study during the interviews done for my research. Second, many more subjects (the exact number awaits further analysis), while aware of the research, had significant gaps in their understanding of the project and consented on a more or less uninformed basis. These included women who had no knowledge of whether there were alternatives to participation, women who did not know of the double-blind nature of the study (it was not part of the research design to withhold this information), and women who were not aware of the fetal monitoring procedures and extra blood samples required by the research. Others were not aware beforehand that their consent to have the baby observed would be sought by a separate researcher."¹⁰⁴

Spot checks would determine the extent of noncompliance with existing procedures. Should the checks reveal widespread noncompliance, then remedial steps could be taken, such as better education of physician-investigators about their responsibilities, more careful evaluation of protocols, or routine monitoring of all research activities for a period of time.

The NHIB should also invite the IHIC's to submit their most difficult decisions for an evaluation. Significant cases, including the original PRG rulings and the subsequent NHIB opinions, should be published to give direction to the deliberation of local committees, to provide material for scholarly analysis, and to foster and sustain public awareness of the issues raised by human experimentation. Indeed, all important decisions rendered at the local or national level should be published and preserved in easily accessible form. These cases would serve as precedents for future opinions. Thus publication would be a first step toward the case-by-case development of sound policies for human experimentation. We regard such a development, analogous to the growth of the common law, as the best hope for ultimately providing workable standards for the regulation of the human experimentation process.

Finally, we emphasize again that the review of research decisions and their consequences requires the participation of persons representing a wide variety of societal interest and should not be limited to members of the biomedical professions. It is at the policy-formulation and review stages of the human experimentation process that "outsiders" have an important role to play by championing individual and societal rights and interests. Professionals have been trained to pursue other goals and should not be expected, even if they could, to shoulder the added burden of speaking for the concerns of society.

C. Education.

Our last recommendation pertains to the education of investigators, particularly when they are still students, for the responsible practice of human research in a democratic society. Recently, Senator Jacob Javits introduced a bill¹⁰⁵ in the Senate which addresses itself to this problem. The bill "would authorize special project grants for medical schools to develop and operate programs which provide increased emphasis on the ethical, social, moral, and legal implications of advances in biomedical research and technology.

¹⁰⁴ Gray, "Some Vagaries of Consent," a preliminary report (1971) on data collected for the author's doctoral thesis, reproduced in Katz, *supra*, footnote 12, at 660.

¹⁰⁵ S. 974, 93d Cong., 1st Sess.

"The bill . . . provides the opportunity for our Nation's medical schools to develop the appropriate program curriculums regarding ethical, moral, and social issues to meet the need—the protection of human subjects at risk in medical research and improved understanding of the consequences and implications for the individual and society of the advances in biomedical science—and through their own initiative and leadership construct and appropriate continuing professional institutional activity to safeguard human subjects in research."¹¹⁰

Senator Javits referred to the findings of Professor Bernard Barber *et al.*, and to document further the need for such an educational effort, we quote briefly another passage from their study:

"It is clear from our data that medical schools are presently giving very little serious attention to these matters in their curriculum. Of the 307 physicians interviewed, only 13% reported that they had had a seminar, a lecture or part of a course devoted to the issues involved in the use of human subjects in biomedical research, and only one researcher said that he had had a complete course dealing with these issues. Thirteen per cent of the respondents said that the issues of research ethics came up when as students they did practice procedures on one another, and 24% said that they became aware of the issues of balancing risk of suffering against potential benefits when doing experimental work with animals. Thirty-four per cent remembered discussions with instructors or other students of the ethical issues involved in specific research projects which they had read about or learned of in class. But 57% of the physicians interviewed reported none of these experiences, even those peripheral to work with humans, such as those involving animal experimentation."¹¹¹

It has sometimes been asserted that the human subject in experimentation is best safeguarded "by the presence of an intelligent, informed, conscientious, compassionate, responsible investigator."¹¹² Whatever merit underlies such a contention, sufficient attention has not been paid by educators in all professional schools to exploring the responsibilities of the professional toward his patients, clients, or research subjects. Without training, even a "conscientious" investigator is poorly prepared to deal knowledgeably or systematically with these problems.

Though in recent years there has been an upsurge in efforts to expose students to the issues raised by professional responsibility, considerably more thought and support must be given to this work. Professional schools must recruit faculty members who are interested in pursuing the complex problems created by human research in particular and contemporary professional practices in general. The task is not limited to educating students but must ultimately include a re-examination of the entire scope of professional decision-making.

VI. CONCLUSION

Human experimentation reflects the recurrent societal dilemma of reconciling respect for human rights and individual dignity with the felt needs of society to overrule individual autonomy for the common good. Throughout this report we have expressed our concern for the lack of attention which has been given to the protection of the rights and welfare of human subjects in research. Society can no longer afford to leave the balancing of individual rights against scientific progress to the scientific community alone. The revelations of the Tuskegee Syphilis Study once again dramatically confirmed this conclusion.

We offer our far-reaching proposals in the hope that the decision-making process for human research will become more open and more effectively regulated. We have amply documented the need for implementing this most basic recommendation. Precise rules and efficient procedures, however, are not by themselves proof against a repetition of Tuskegee. For, however well designed the system of regulation, the danger of token adherence to ethical standards and evasion in the guise of flexibility will persist. Ultimately, the spirit in which an aware society undertakes to use human beings for research ends will determine the protection which those human beings will receive. Therefore, we

¹¹⁰ 110 Cong. Rec. § 3114 (Feb. 22, 1973).

¹¹¹ Barber *et al.*, *supra*, footnote 2, at 101.

¹¹² Beecher, "Ethics and Clinical Research," 274 *New Eng. J. Med.* 1354, 1360 (1966).

have urged throughout a greater participation by society in the decisions which affect so many human lives.

Respectfully submitted,

RONALD H. BROWN,
 VERNAL CAVE, M.D.,
 JEAN L. HARRIS, M.D.,
 SEWARD HILTNER, Ph.D., D.D.,
 JAY KATZ, M.D.,
 JEANNE C. SINKFORD, D.D.S., Ph.D.,
 FRED SPEAKER,
 BARNEY H. WEEKS,
 Abstention:
 BROADUS N. BUTLER, Ph.D.

[Item I.B.4]

DRAFT SPECIAL POLICY STATEMENT ON THE PROTECTION OF HUMAN SUBJECTS
 INVOLVED IN RESEARCH, DEVELOPMENT, AND DEMONSTRATION (EXCERPTS)*

Summary

The mission of the Department of Health, Education, and Welfare includes the improvement of the health of the nation's people through research, development, and demonstration activities which at times involve human subjects. Thus, policies and procedures are required for the protection of subjects on whose participation these activities depend.

Informed consent is the keystone of the protection of human subjects involved in research, development, and demonstration activities. Certain categories of persons have limited capacity to consent to their involvement in such activities. Therefore, as a supplement to DHEW policies, special protections are proposed for *children*, *prisoners*, and the *mentally infirm* who are to be involved in research, development, and demonstration activities.

Agency "Ethical Review Boards" are to be established to provide rigorous review of the ethical issues in research, development, and demonstration activities involving human subjects, in order to make judgments regarding societal acceptability in relation to scientific value. "Protection Committees" are to be established by the applicant to provide "supplementary judgment" concerning the reasonableness and validity of the consent given by, or on behalf of, subjects. The intent of this policy is that institutions which apply for DHEW funds or submit research in fulfillment of DHEW regulations, must be in compliance with these special protections, whether or not particular research, development, or demonstration activities are Federally financed.

1. CHILDREN

If the health of children is to be improved, research activities involving their participation is often essential. Limitation of their capacity to give informed consent, however, requires that certain protections be provided to assure that scientific importance is weighed against other social values in determining acceptable risk to children. Therefore, research, development, and demonstration activities which involve risk to children who participate must: a. include a mechanism for obtaining the consent of children who are 7 years of age or older; b. include the applicant's proposal for use of a Protection Committee which is appropriate to the nature of the activity; c. be reviewed and approved, in conformity with present DHEW policy, by an Organizational Review Committee; and d. be reviewed by the appropriate agency Primary Review Committee, the Ethical Review Board, and the appropriate secondary review group.

2. SPECIAL CATEGORIES

a. *The Abortus*.—No research, development, or demonstration activity involving the non-viable abortus shall be conducted which: 1. will prolong heart beat

* Received by Constitutional Rights Subcommittee on October 19, 1973.

and respiration artificially solely for the purpose of research; 2. will terminate heart beat and respiration; 3. has not been reviewed by the agency Ethical Review Board; and 4. has not been consented to by the pregnant woman and by a Protection Committee.

(An abortus having the capacity to sustain heart beat and respiration is in fact a premature infant, and all regulations governing research on children apply.)

b. *The Fetus in Utero*.—No research involving pregnant women shall be conducted unless: 1. Primary Review Groups assure that the activity is not likely to harm the fetus; 2. the agency Ethical Review Board has reviewed the activity; 3. a Protection Committee is operating in a manner approved by the agency; and 4. the consent of both prospective legal parents has been obtained, when reasonably possible.

c. *Products of In Vitro Fertilization*.—No research involving implantation of human ova which have been fertilized *in vitro* shall be approved until the safety of the technique has been demonstrated as far as possible in sub-human primates, and the responsibilities of the donor and recipient "parents" and of research institutions and personnel have been established. Therefore, no such research may be conducted without review of the Ethical Review Board and of a Protection Committee.

3. PRISONERS

Research, development, and demonstration activities involving human subjects often require the participation of normal volunteers. Prisoners may be especially suitable subjects for such studies, although there are problems concerning the voluntariness of the consent of normal volunteers who are confined in institutions. Certain protections are required to compensate for the diminished autonomy of prisoners in giving voluntary consent. Research, development, and demonstration activities involving prisoners must: a. include the applicant's proposal for use of a Protection Committee which is appropriate to the nature of the activity; b. be reviewed and approved by an Organizational Review Committee which may already exist in compliance with present DHEW policy or which must be appointed in a manner approved by the appropriate DHEW agency; c. be reviewed by the agency Primary Review Committee; and d. be conducted in an institution which is accredited by the Secretary of Health, Education, and Welfare.

4. THE MENTALLY INFIRM

Insofar as the institutionalized mentally infirm might lack either the competency or the autonomy (or both) to give informed consent, their participation in research requires additional protection:

a. Research, development and demonstration activities involving the mentally infirm will be limited to investigations concerning (1) diagnosis, etiology or treatment of the disability from which they suffer, or (2) aspects of institutional life, *per se*.

b. All research, development and demonstration activities involving such persons must: 1. include the applicant's assurance that the study can be accomplished *only* with the participation of the mentally infirm; 2. include the applicant's proposal for use of a Protection Committee which is appropriate to the activity; and 3. be reviewed and approved by an Organizational Review Committee, in conformity with present DHEW policy.

[Item I.B.5]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND STROKE

Report on the Biomedical Research Aspects of Brain and Aggressive Violent Behavior, October 23, 1973 (Excerpts)

INTRODUCTION

The development and use of biomedical methods for the treatment of behavioral disorders during the past decade has generated discussion in the scientific community about issues of efficacy and safety and about appropriate cri-

teria for their use on humans. Psychosurgery (i.e.; the neurological treatment of behavioral disorders) more recently has generated public concern about matters such as informed consent of human subjects in either experimental or clinical care situations, the criteria for differentiating experimental from clinical procedures and the use of neurosurgical methods of treatment on institutionalized persons. The issues have become particularly sensitive with the use of psychosurgical methods for the treatment of uncontrollable violence and rage behavior.

In order to provide a background for development of a public policy position on these matters, the Department of Health, Education, and Welfare (DHEW) asked the National Institute of Neurological Diseases and Stroke (NINDS) to prepare a Report on the biomedical research aspects of brain and aggressive violent behavior and the National Institute of Mental Health (NIMH) to prepare a Report on clinical psychosurgery.

The NINDS invited forty-eight distinguished leaders in basic science and clinical research to review and evaluate the scientific literature and available unpublished data on brain and aggressive behavior, particularly uncontrollable violence and rage. (Attachment). Their deliberations were divided into four workshops: (1) neuroanatomical and neurophysiological studies; (2) biochemical, endocrine, pharmacological and genetic studies; (3) behavioral studies; and (4) clinical studies. Although social factors undoubtedly play a role in the etiology and expression of violent behavior, the workshops were limited to discussions of the biological, psychological and medical research aspects of aggressive violent behavior. Workshop participants were asked to document and evaluate only established facts and to avoid speculation.

The NINDS Report on The Biomedical Research Aspects of Brain and Aggressive Violent Behavior is divided into two parts: I. Summary and Evaluation of The Biomedical Research Aspects of Brain and Aggressive Violent Behavior; II. Recommendations on Public Policy and DHEW Procedures.

The focal point for the development of the NINDS Report was The National Advisory Neurological Diseases and Stroke Council, an officer of the Institute and a member of the Council serving as project directors. (Attachment II). Part I of the Report was prepared by a panel of workshop discussion leaders, discussants, editorial consultants and the project directors; Part II was prepared by the NINDS. The National Advisory Council has reviewed the Report and endorsed it with enthusiasm.

MURRAY GOLDSTEIN, D.O., M.P.H.,
National Institute of Neurological
Diseases and Stroke.
WARREN V. HUBER, M.D.,
National Advisory Neurological
Diseases and Stroke Council.

SEPTEMBER 24, 1973.

* * * * *

PART II. RECOMMENDATIONS ON PUBLIC POLICY AND DHEW PROCEDURES

A. SUMMARY OF RECOMMENDATIONS

It is recommended that:

1. Research on the biomedical bases of aggressive violent behavior continue to receive DHEW support.
2. The NINDS-NIMH give attention to the cooperative planning and sponsoring of a research program on the fundamental aspects of brain and aggressive behavior in experimental animals, particularly violent and rage behavior. This program should include the neurosciences and behavioral sciences, investigator-initiated fundamental research, and coordination by NIH staff.
3. The NINDS-NIMH give attention to the cooperative planning and sponsoring of a research program on the clinical aspects of brain and aggressive violent behavior. The program should include the clinical neurological and clinical behavioral sciences, be investigator initiated and university based, include special procedures for protection of human subjects and be continuously monitored by NIH staff.
4. An appropriate number of clinical research groups be supported for multi-disciplinary clinical investigations of aggressive violent behavior.

5. A human subjects advocacy committee be established in each institution proposing to conduct clinical studies on aggressive violent behavior. The appropriateness of the participation of each human subject in such studies should be reviewed by this committee.

6. The Department's position on the biomedical therapy of violent and rage behavior be that the scientific and medical literature available at this time is inconclusive in regard to the efficacy of these procedures.

B. RECOMMENDATIONS AND DISCUSSION

1. Part I of this Report clearly indicates that no conclusions can be derived about the etiology, pathophysiology, diagnosis or therapy of aggressive violent behavior from available, scientifically reliable biomedical information; this is specifically true about both the neurological and behavioral science aspects of violence.

2. The neurosurgical treatment of behavioral disorders (sometimes referred to as "psychosurgery") recently has generated discussion and concern in both the scientific community and general public. Reasons for this include the poor delineation between the clinical care and the investigative aspects of these neurosurgical procedures; also, procedures for the treatment of epilepsy, pain and brain tumor have been confused with those for the diagnosis and treatment of behavioral disorders in patients who also have a convulsive disorder, are in intractable pain or suffer a brain tumor. The evidence available at this time does not demonstrate a difference in the incidence of violent behavior in patients with epilepsy from that in the general population. The rare patient with both epilepsy and violent behavior, however, is more liable to become a subject in a clinical investigation of violence; this occurs because procedures for the diagnosis and treatment of epilepsy provide the clinical investigator with an opportunity also to study the patient's aggressive behavior.

3. With the advancement of experimental medical, surgical and behavioral methods for diagnosis and therapeutic intervention, issues of informed consent, the protection of human subjects participating in investigations and the several factors contributing as etiologies of violence have become concerns for public, legal and scientific interchange.

Recommendation 1.

It is recommended that research on the biomedical bases of aggressive violent behavior continue to receive DHEW support.

1. Irrespective of the several possible etiologies, the final common pathway for the manifestation of behavior is the nervous system. The development of adequate preventive and therapeutic measures is dependent upon meaningful investigations of the neurological mechanisms underlying aggressive behavior, including violence.

2. Fundamental studies of the neural and behavioral mechanisms of aggression and rage behaviors, particularly animal-based investigations, are progressing at a modest pace; however, increased opportunities have evolved for the understanding of these basic mechanisms. Clinical studies, particularly those including the use of human subjects, generally have been unstructured and often inconclusive. This has occurred because clinical studies usually have been conducted secondary to the needs of clinical care and have utilized case-by-case protocols; the development and evaluation of quantitative mensuration techniques essential to the interpretation of clinical results too often have had to be an integral part of the clinical situation. Despite these difficulties, technical advances have been made resulting in meaningful opportunities for the conduct of carefully structured clinical investigations.

Recommendation 2.

It is recommended that the NINDS-NIMH give attention to the cooperative planning and sponsoring of a research program on the fundamental aspects of brain and aggressive behavior in experimental animals, particularly violent and rage behavior. This program should include the neurosciences and behavioral sciences, investigator-initiated fundamental research, and coordination by NIH staff.

1. Fundamental studies on the genetic, neurochemical, enzymatic and morpho-physiologic substrates of aggressive behavior, particularly violent behavior, offer the key to a better understanding of the biological mechanisms by which

psychosocial factors evoke different behavioral responses in individuals. Stimulation and encouragement of these studies are needed, particularly investigations such as those concerned with the development of the neural network, the role of synaptic organization and reorganization, the interrelationship of the limbic system, hypothalamus and cerebral cortex with brain stem, and the histochemical delineations of relevant neural pathways. These studies require not only financial support but also NINDS-NIH planning and program development activity.

2. Paralleling and complementing these neuroscience investigations, a focused program of behavioral science research on aggression and violence also is needed. This latter program should include: exploration of perinatal and endocrine influences on behavior; ethology and killing behavior in animals; and the characteristics of the several varieties of aggressive behavior.

Recommendation 3.

It is recommended that the NINDS-NIMH give attention to the cooperative planning and sponsoring of a research program on the clinical aspects of brain and aggressive violent behavior. The program should include the clinical neurological and clinical behavioral sciences, be investigator initiated and university based, include special procedures for protection of human subjects and be continuously monitored by NIH staff.

1. Clinical studies on the pathophysiology of aggressive violent behavior, its diagnosis, prevention and therapy, must finally rely upon studies of man. With the exception of violent rage behavior occasionally reported in "killer" animals, the models of aggressive behavior utilized in animal studies (defense, attack, ritual and predatory aggression) do not coincide with rage or uncontrollable violence observed in man. Man, therefore, must be studied if man's violence is to be understood.

2. Human studies evoke concern because of both the inadequacy of a firm conceptual basis for violence from animal studies and public uneasiness about the social consequences of investigation in this area. This situation is particularly sensitive because of the nature of the population prone to such investigations—prisoners, the mentally ill, wards of the state—and the short and long-term effects on the individual of experimental therapy.

3. A DHEW policy position at either of the extremes of reactions to these concerns would be an inadequate response to a situation of importance both to the health of society and the individual and to the responsibilities of the DHEW.

Recommendation 4.

It is recommended that an appropriate number of clinical research groups be supported for multidisciplinary clinical investigation of aggressive violent behavior.

1. The establishment of multidisciplinary research groups is needed to provide for coordinated investigations of improved methods of clinical diagnosis, prevention and the treatment under carefully defined and monitored conditions. Such groups would provide for the size, composition and quality of the research team essential for such studies. They would also provide for a pool of patients from which an adequate and appropriate selection can be made to satisfy both the requirements of precise research protocols and the protections of the rights of subjects participating in the research.

Recommendation 5.

It is recommended that a human subjects advocacy committee be established in each institution proposing to conduct clinical studies on aggressive violent behavior. The appropriateness of the participation of each human subject in such studies should be reviewed by this committee.

1. For DHEW to provide federal support for clinical research on aggressive violent behavior without recognition of the potential for abuse to the individual and to society would be irresponsible: for DHEW to impose regulations which would either prevent such research or drive it "underground," would be equally irresponsible. Within the tenets of both the Helsinki Declaration and the Nuremberg Code and within the concepts presently evolving within DHEW for the protection of human subjects in research, it is possible and desirable that clinical studies of violence be developed and supported with DHEW assistance.

2. As with ALL biomedical investigations involving human subjects, four criteria must be considered in the evaluation of clinical studies of aggressive violent behavior. These are:

1. *Scientific Excellence*.—Every study involving human subjects must have a high probability of providing meaningful information. A scientifically poor or minimally acceptable study involving human subjects should be considered unacceptable.

2. *Informed Consent*.—Informed consent requires that the human subject recognizes and understands with certainty the relative risks and benefits to his or her physical and social well being of the procedures in which the subject will participate; furthermore, that the human subject agrees to these procedures freely and without overt or subtle duress. If the human subject either cannot be informed (e.g., mentally ill) or is in a situation where the ability to provide consent without duress is subject to question (e.g., a prisoner), protection of the legal and social rights of the subject must be assured.

3. *Risk-Benefit Ratio to the Human Subject*.—Nearly every biomedical clinical procedure, investigative or accepted practice, involves some degree of risk to the human subject undergoing the procedure. The potential benefit to the subject must be weighed against the potential harm. In investigative situations, these judgments often are most difficult because the body of experience about the procedure may still be too meager to establish the precise parameters of the clinical situation. Investigative procedures should be carried out on human subjects only after full and meaningful evaluation in experimental animals. To provide maximal assurance that the risk-benefit ratio to the human subject has been adequately and appropriately considered, documentation of the relevant factors considered and conclusions reached must be provided independently by the investigator, by the institution in which the investigation is to be conducted and by a board of independent reviewers appointed by the granting agency (e.g., a National Advisory Council). All must agree that the risk-benefit ratio to the human subject warrants the use of the investigative procedure before it can be utilized.

4. *Risk to the Human Subject and Benefit to Society*.—Studies of "normal" human subjects or studies of human subjects who may not benefit directly from the investigation (e.g., responses to brain stimulation in patients being studied for convulsive disorders) necessitate sensitive and often scientifically less precise decisions. If society is to understand the unusual or abnormal, it must understand the usual and normal; but at what risk to the individual human subject being studied? The decision is a "societal" decision which depends upon law and the needs and mores of society. The technical expert (e.g., the physician, the biomedical scientist, the social scientist) is an expert witness, but ought not be asked to be the decision maker. It is a firm premise of our society that "every human being of adult years and sound mind has a right to determine what shall be done with his own body."¹ The procedure of informed consent is a major protection of that right of the individual. Situations do occur, however, in which the individual cannot be informed because of mental deficiency, illness or age. Other situations occur in which the concept of consent is questionable because of imprisonment, hospitalization, institutionalization or promise of unusual reward. To ensure that the interests of the individual are adequately protected in investigative situations in which issues of either the adequacy of being informed or the appropriateness of giving consent can be questioned, a Human Subject Advocacy Committee (HUSAC) should be involved. The HUSAC should comprise members of society (e.g., theologians, jurists, community representatives) drawn from the local geographic area who are selected for their dedication to the protection of the individual rights of the human subject. The HUSAC should function at the institutional level and should have no employees of the institution as voting members. On a case-by-case basis, the HUSAC should rule on the participation of every human subject in an investigative procedure that either cannot benefit the subject or in which a question is posed about the ability of the subject to provide informed consent. All human subjects participating in investigations of violent behavior should be reviewed by the HUSAC.

¹ Justice Benjamin N. Cardozo in *Sanloendorff v. Society of New York Hospitals*, 211 N.Y. 125, 105 N.E. 92, 93 (1914).

Recommendation 6.

It is recommended that the department's position on the biomedical therapy of violent and rage behavior be that the scientific and medical literature available at this time is inconclusive in regard to the efficacy of these procedures.

1. Therapeutic interventions including surgical procedures (e.g., neurosurgical), physical methods (e.g., heat, cold, electricity, ultrasound), pharmacologic agents (chemical and biological) and psychotherapeutic regimens are ALL examples of biomedical clinical procedures being utilized at the present time for the treatment of uncontrollable rage. However, the scientific and medical literature is characterized by a lack of adequate investigations providing precise or meaningful results about either the efficacy or safety of these procedures. On the other hand, several approaches have reached the stage where carefully controlled human studies would be meaningful and need to be considered if further progress is to be made on the biomedical aspects of rage.

In conclusion, the biomedical aspects of uncontrollable violence or rage are proper and necessary concerns of biomedical investigation. A more adequate conceptual basis for such investigations needs to be developed through fundamental neurological and behavioral science research. Proper and adequate clinical studies in man need to be continued but under the most careful and monitored conditions. The participation of human subjects in biomedical research represents a privilege, a privilege which biomedical scientists and society jointly must protect by means of the continuing review and monitoring of the scientific, medical and societal facets of the proposed research.

[Item I.B.6]

PSYCHOSURGERY REPORT OF THE NATIONAL INSTITUTE OF MENTAL HEALTH,
JANUARY 21, 1974

INTRODUCTION

In preparing this report, NIMH staff have relied heavily on consultation with numerous outside experts in scientific, clinical, legal, and ethical matters. Two separate groups were convened, one group composed of scientists and clinicians, and a second comprised of legal, philosophical, and ethical experts, as well as representatives of various population groups alleged to be "at risk" as potential psychosurgery candidates. A membership list for each of these two panels appears as Attachment A.

NATURE OF THE PROBLEM

Psychosurgery is the destruction of brain tissue with the primary intent of altering behavior, thought, or mood. The current controversy about psychosurgery stems from a number of factors spanning scientific, philosophical, political, and moral issues. In order to understand the nature and source of the psychosurgery controversy, it is necessary to make explicit some of the different viewpoints that are often unstated when the psychosurgery issue is discussed.

1. A fundamental concern about psychosurgery derives from differing philosophical views of the relationship between mind (the self) and the brain. Much opposition to psychosurgery, and often the most vociferous opposition, is based on the conviction that any physical damage to the brain is tantamount to destruction of the "self." This viewpoint is most strongly illustrated by some of the rhetoric used by opponents of psychosurgery who equate it with "murder of the mind." Proponents of psychosurgery, while usually not articulating an alternative philosophy, do not equate the brain with the self and take a pragmatic approach to mental or behavioral disorders in which the primary criterion for selection of a treatment is the question of whether it works or not.

2. A closely related issue is the differing viewpoints about the causal factors in mental illness. Some psychosurgeons rationalize surgical treatment on the hypothesis that mental or behavioral disorders arise from biological dysfunction in the brain, and that appropriate treatment must be based on manipulating or changing the biological substrate of behavior. Others, however, hold the view that disturbed behavior is a result of adverse environmental influences and that the solution to mental illness or behavior disorders is to manipulate or change environmental variables. While both of these views are ex-

treme positions held only by a few, and are untenable in view of our current knowledge about the complex interrelations between environmental and biological causative factors, they illustrate another philosophical argument that, in frequently more subtle form than illustrated here, is one of the roots of the psychosurgery controversy.

3. Although virtually all psychosurgical procedures and technical innovations, including the first lobotomies, were suggested by experimental brain research with animal subjects, the scientific rationale for any psychosurgical procedure is still quite tenuous. Generalizations from animal research have often been based on incomplete understanding of the complexity of behavior, logical deductions of dubious validity, and an uncritical acceptance of similarities of brain-behavior relationships in animals and man. Although we know a great deal about how the brain influences a variety of specific and limited animal behaviors, our understanding of the complex emotional and cognitive behaviors of man is extremely limited. On the other hand, many proponents of psychosurgery would argue, quite rightly, that many medical therapies are based on a pragmatic criterion of effectiveness rather than an understanding of the physiological mechanisms underlying the disease or its treatment.

4. In contrast to most physical illnesses, many of the functional mental and behavioral disorders constitute a class of poorly defined and difficult to diagnose diseases or disorders. Thus, there is considerable concern about treating with surgical means any disorder which cannot be clearly defined and diagnosed. Such problems also come to the fore in any attempt to judge the outcome of psychosurgical treatment, with the criteria for cure or ameliorization not being clear or universally agreed upon.

5. A key issue in the psychosurgery controversy is whether or not psychosurgery is an experimental procedure. Most psychosurgeons regard it as an accepted practice of proven efficacy while critics claim it is an experimental therapy in view of an alleged unpredictability of outcome, lack of evidence about efficacy, and lack of scientific rationale.

6. Alternative therapies to psychosurgery is another division issue. Although a great deal of research is being done on drug therapies and various forms of psychotherapy or behavior therapy, there are numerous instances in which none of these alternatives seem to offer any relief, and the patient is faced with a dehumanizing fate in an institution, often with pharmacological restraints that equal or exceed any personality destruction that is claimed to be caused by psychosurgery. In these instances, psychosurgery might be seen as a reasonable last-resort therapy. On the other hand, there is no agreement or guidelines among practitioners about the duration, intensity, or degree to which other therapies should be tried before resorting to psychosurgery. Psychosurgery critics claim, often correctly, that confinement in an institution does not guarantee adequate attempts at therapeutic measures short of psychosurgery, and that psychosurgery is frequently performed before other alternatives are tried to an adequate extent.

7. Closely related to the problem of psychiatric diagnosis is the issue of the extent to which mental or behavioral disorders are socially defined. This issue most often surfaces in the context of the psychosurgical treatment of aggressive or violent behavior in which critics of psychosurgery express the fear that it will be used for nefarious purposes as a means of controlling political or social dissidents. Stated in more general terms, the critics charge that psychosurgery has been or can be used to change behavior for the convenience or comfort of persons other than the patient himself. Thus, there is claimed to be a bias toward the use of psychosurgery in blacks, women, and other minority or disadvantaged population groups. There is no reliable data available on this point.

IMMEDIATE NEEDS AND ACTIVITIES

Extensive discussion of these areas of concern with scientific, clinical, legal, and ethical experts, as well as representatives of the lay public and of some of the population groups claimed to be "at risk" for psychosurgery, has led NIMH staff to propose a number of specific activities that will be necessary in order to resolve some of the above-discussed issues, and to some interim recommendations that may be subject to modification as further information is obtained.

The following issues must be resolved before any informed and reasonable position can be taken on psychosurgery:

1. To what extent does the currently-available scientific and clinical literature provide a basis for an informed judgment about the efficacy of psychosurgery and the severity of untoward effects? Knowledgeable scientists and clinicians with whom we have consulted are of the opinion that the existing literature will not, by itself, provide a sound basis for such a judgment. Inadequacy of pre- and post-operative behavioral and psychological testing, lack of long-term followup of patients, and general inadequacies of clinical and behavioral reporting characterize much of the published literature. However, despite these deficiencies, NIMH staff and consultants feel that an updated literature survey and analysis could provide some useful data that, in combination with other sources of information, may permit us to come to a more objective evaluation about the efficacy and adverse effects of psychosurgical treatment. What is needed goes beyond a simple compilation of psychosurgical publications and must include a critical evaluation and analysis of the published data by the various relevant scientific and clinical experts. There should also be developed a system for the continuous monitoring and updating of the literature in psychosurgery.

One of the most useful outcomes of this literature survey and analysis would be the development of a uniform reporting protocol for literature in psychosurgery. By identifying deficiencies in the existing literature, recommendations could be made for the types of clinical and behavioral data that appear to be necessary to provide a scientifically valid contribution to the future psychosurgery literature.

2. Estimates of the number of psychosurgical procedures conducted in this country each year have varied from 100 to 1000. It would seem to be important to have a more realistic figure for the extent of psychosurgery practice, since we are presently dealing with a problem of unknown dimensions. A survey of the current extent of psychosurgical practice is an important and immediate need.

3. There exists an unknown but presumably large number of patients who have undergone psychosurgery in the past. No systematic attempt has been made to determine their current status. Although such a follow-up project would depend on the cooperation of the patient and the medical and psychiatric staff involved in his case, and would present problems of confidentiality in the physician-patient relationship, we feel that such an effort could provide badly needed information relevant to the efficacy issue.

4. Relying on activities 1-3, and using the resources of the NIMH staff, its outside consultants, and by contract with outside organizations, a concerted effort should be made to develop guidelines for the conduct of psychosurgery. Such guidelines should include criteria for the selection of patients, what alternate therapies should be attempted (and for how long) before performing psychosurgery, development of informed consent procedures to meet the special problems posed by treatment of the mentally ill, and (if the information obtained in 1-3 above permits) guidelines for the type of operation that seems to be most beneficial for the various categories of behavior, thought, or mood disorders.

INTERIM RECOMMENDATIONS

The activities outlined above will require considerable time, probably on the order of two or three years. Since psychosurgery practice will continue during this time period, the NIMH makes the following recommendations with the intent of providing the maximum possible protection for potential psychosurgery candidates without unduly inhibiting practice for those cases which, judged by our present standards and knowledge, appear to require psychosurgery for relief of extreme mental illness or behavioral disorders.

1. *Psychosurgery should be regarded as an experimental therapy at the present time.*—As such, it should not be considered to be a form of therapy which can be made generally available to the public because of the peculiar nature of the procedure and of the problems with which it deals. Special constraints that apply to any experimental therapeutic procedure are required and the procedure should be only undertaken in those circumstances where there is special competence and experience and in institutional environments where appropriate safeguards are documented to be available.

The designation of psychosurgery as an experimental therapy imposes a number of stringent but essential constraints on practice: comprehensive re-

search protocols must be developed whenever psychosurgery is undertaken in order to assure that the maximum scientific value and information is obtained; psychosurgery should be conducted only in hospitals with strong and intimate affiliation with, and commitment to, academic sciences; it is absolutely essential that informed consent procedures be given primary consideration; every effort must be made to insure that all reasonable alternative therapies, based on our present state of knowledge, are attempted to an adequate extent before resorting to psychosurgery.

2. *No psychosurgery should be performed on involuntarily confined persons or persons incapable of giving consent, either by reason of age or mental condition.*—The NIMH is in full and complete accord with the recent decision of the Circuit Court for the County of Wayne, State of Michigan, which concluded that involuntarily confined mental patients cannot give informed and adequate consent to psychosurgery. We would also apply this judgment to prisoners and to persons under the age of consent.

3. *A registry should be established to monitor psychosurgery practice and to provide a continually updated source of information about the extent of the practice, the type of patients selected, and the outcome of the treatment.*—We would also suggest that the registry have provisions for indicating intent to perform psychosurgical procedure, so that scientific and clinical experts in psychology, psychiatry, and neurology have an opportunity to assess the patient's status prior to operation, as well as to study the short- and long-term effects of psychosurgical treatment.

CONCLUSION

In the many discussions held between NIMH staff and consultants, the possibility of recommending a voluntary moratorium on psychosurgery practice was frequently brought up. However, we have concluded that this would not be an appropriate action, for at least three reasons: (1) it would constitute an unprecedented Federal prescription of the parameters of permissible and impermissible surgery for the medical profession; (2) the difficulty of arriving at a precise and consensually agreed-upon definition of psychosurgery, specifically in the cases of surgical treatment for epilepsy and intractable pain, would vitiate the effectiveness of any moratorium—psychosurgery could, in many cases, continue under the guise of treatment for epilepsy or other neurological disease; and (3) the interim recommendations listed above amount to at least a partial moratorium, calling for cessation of that psychosurgery practice which is most subject to criticism.

With regard to the various activities outlined above, which are designed to provide a sound basis for judging the value of and indications for psychosurgery, the NIMH is soliciting contract proposals from outside organizations possessing the special expertise necessary for approaching these problems. However, we have received no satisfactory responses to a recent "sources sought" notice in the Commerce Business Daily. This fact, combined with our discussions with consultants and potential contractors, has made it clear that some of the projects that we consider essential for reasoned judgments about psychosurgery practice will be quite difficult to accomplish. A number of serious problems present themselves, including whether or not the necessary degree of cooperation can be obtained from the professional disciplines involved in psychosurgery and difficulties in the area of the physician-patient relationship and confidentiality of clinical records. Thus it is difficult to provide at this time any timetable for completion of these tasks. We will continue our activities in trying to develop a contract that will satisfy the necessarily stringent scientific, clinical, and managerial criteria that must be applied to such an effort.

NIMH PSYCHOSURGERY PANEL—LEGAL, ETHICAL, AND LAY GROUP

PANEL MEMBERS

Hon. David L. Bazelon, Chief Judge, U.S. Court of Appeals for District of Columbia Circuit, Constitution Ave. & John Marshall Pl. NW., Washington, D.C.

Dr. Daniel Callahan, Director, Institute of Society Ethics and the Life Sciences, 628 Warburton Ave., Hastings-on-Hudson, N.Y.

- Mr. Neil L. Chayet, Chayet & Sonnenreich, 15 Court Sq., Boston, Mass.
 Mr. Charles R. Halpern, Mental Health Law Project, 1751 N St. NW., Washington, D.C.
 Ms. Wilma Scott Heide, President, National Organization for Women, 96 Irene Dr., Vernon, Conn.
 Mr. Hubert Jones, Visiting Associate Professor, Department of Urban Studies and Planning, Massachusetts Institute of Technology, Building 7, Room 338, 77 Massachusetts Ave., Cambridge, Mass.
 Ms. Maya Pines, 4724—22d St. NW., Washington, D.C.
 Dr. Warren T. Reich, Senior Research Scholar, Kennedy Center for Bioethics, Georgetown University, Washington, D.C.
 Mr. Philip Sapir, Director, The Grant Foundation, Inc., 130 E. 59th St., New York, N.Y.
 Mr. Robert C. Toth, White House Correspondent, Los Angeles Times, Washington Bureau, 1700 Pennsylvania Ave. NW., Washington, D.C.

SCIENTIFIC RESOURCES PERSONS

- Dr. Batrix A. M. Hamburg, Clinical Associate Professor, Department of Psychiatry, Stanford University School of Medicine, Stanford, Calif.
 Dr. Herbert Vaughan, Professor of Neurology, Albert Einstein College of Medicine, Bronx, N.Y.

NIMH STAFF MEMBERS

- Dr. Bertram S. Brown, Director, National Institute of Mental Health, 5600 Fishers Lane, Rockville, Md.
 Dr. Louis A. Wienckowski, Director, Division of Extramural Research Programs, National Institute of Mental Health, 5600 Fishers Lane, Rockville, Md.
 Mr. Vernon James, Chief, New Careers Training Branch, Division of Manpower and Training Programs, National Institute of Mental Health, 5600 Fishers Lane, Rockville, Md.
 Dr. Lyle W. Bivens, Chief, Neuropsychology Section, Behavioral Sciences Research Branch, National Institute of Mental Health, 5600 Fishers Lane, Rockville, Md.

NIMH PSYCHOSURGERY PANEL—SCIENTIFIC AND CLINICAL GROUP

OUTSIDE CONSULTANTS

- Herbert Vaughan, M.D., Chairman, Department of Neurology, Albert Einstein College of Medicine, Bronx, NY.
 Leon Eisenberg, M.D., Chairman, Department of Psychiatry, Massachusetts General Hospital, Boston, Mass.
 Gardner Quarton, M.D., Mental Health Research Institute, University of Michigan, 205 N. Forest St., Ann Arbor, Mich.
 Morton Reiser, M.D., Chairman, Department of Psychiatry, Yale University School of Medicine, New Haven, Conn.
 Arthur Ward, M.D., Department of Neurosurgery, University of Washington Medical School, Seattle, Wash.

NIMH STAFF

- Louis A. Wienckowski, Ph.D., Director, Division of Extramural Research Programs, Rm. 10-105, Parklawn Bldg., 5600 Fishers Lane, Rockville, Md.
 Lyle W. Bivens, Ph.D., Chief, Neuropsychology Section, Behavioral Sciences Research Branch, DERP, 5600 Fishers Lane, Rockville, Md.
 Frank Ochberg, M.D., Associate Regional Health Director for Mental Health, Region IX, Federal Office Bldg., 50 Fulton St., San Francisco, Calif.

[Item I.B.7]

CONFERENCE REPORT ON HR 7724 (P.L. 93-348)

Mr. Staggers submitted the following conference report and statement on the bill (H.R. 7724) to amend the Public Health Service Act to establish a

national program of biomedical research fellowships, traineeships, and training to assure the continued excellence of biomedical research in the United States, and for other purposes:

CONFERENCE REPORT (H. REPT. NO. 93-1149)

"The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 7724) to amend the Public Health Service Act to establish a national program of biomedical research fellowships, traineeships, and training to assure the continued excellence of biomedical research in the United States, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

"That the House recede from its disagreement to the amendment of the Senate to the text of the bill and agree to the same with an amendment as follows:

"In lieu of the matter proposed to be inserted by the Senate amendment to the text of the bill insert the following:

"Section 1. This Act may be cited as the 'National Research Act'.

"TITLE I—BIOMEDICAL AND BEHAVIORAL RESEARCH TRAINING

"SHORT TITLE

"SEC. 101. This title may be cited as the 'National Research Service Award Act of 1974'.

"FINDINGS AND DECLARATION OF PURPOSE

"SEC. 102. (a) Congress finds and declares that—

"(1) the success and continued viability of the Federal biomedical and behavioral research effort depends on the availability of excellent scientists and a network of institutions of excellence capable of producing superior research personnel;

"(2) direct support of the training of scientists for careers in biomedical and behavioral research is an appropriate and necessary role for the Federal Government; and

"(3) graduate research assistance programs should be the key elements in the training programs of the institutes of the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration.

"(b) It is the purposes of this title to increase the capability of the institutes of the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration to carry out their responsibility of maintaining a superior national program of research into the physical and mental diseases and impairments of man.

"BIOMEDICAL AND BEHAVIORAL RESEARCH TRAINING

"SEC. 103. The part II of the Public Health Service Act relating to the appointment of the Directors of the National Institutes of Health and the National Cancer Institute is redesignated as part I, section 401 of such part is redesignated as section 471, and such part is amended by adding at the end the following new sections:

" 'NATIONAL RESEARCH SERVICE AWARDS

"SEC. 472. (a) (1) The Secretary shall—

"(A) provide National Research Service Awards for—

"(i) biomedical and behavioral research at the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration in matters relating to the cause, diagnosis, prevention, and treatment of the disease (or diseases) or other health problems to which the activities of the Institutes and Administration are directed,

"(ii) training at the Institutes and Administration of individuals to undertake such research.

"(iii) biomedical and behavioral research at non-Federal public institutions and at nonprofit private institutions, and

“(iv) pre- and postdoctoral training at such public and private institutions of individuals to undertake such research; and

“(B) make grants to non-Federal public institutions and to nonprofit private institutions to enable such institutions to make to individuals selected by them National Research Service Awards for research (and training to undertake such research) in the matters described in subparagraph (A) (i).

A reference in this subsection to the National Institutes of Health or the Alcohol, Drug Abuse, and Mental Health Administration shall be considered to include the institutes, divisions, and bureaus included in the Institutes or under the Administration, as the case may be.

“(2) National Research Service Awards may not be used to support residencies.

“(3) Effective July 1, 1975, National Research Awards may be made for research or research training in only those subject areas for which, as determined under section 473, there is a need for personnel.

“(b) (1) No National Research Service Award may be made by the Secretary to any individual unless—

“(A) the individual has submitted to the Secretary an application therefor and the Secretary has approved the application;

“(B) the individual provides, in such form and manner as the Secretary shall by regulation prescribe, assurances satisfactory to the Secretary that the individual will meet the service requirement of subsection (c) (1); and

“(C) in the case of a National Research Service Award for a purpose described in subsection (a) (1) (A) (iii) or (a) (1) (A) (iv), the individual has been sponsored (in such manner as the Secretary may by regulation require) by the institution at which the research or training under the Award will be conducted.

An application for an Award shall be in such form, submitted in such manner, and contain such information, as the Secretary may by regulation prescribe.

“(2) The award of National Research Service Awards by the Secretary under subsection (a) and the making of grants for such Awards shall be subject to review and approval by the appropriate advisory councils to the entities of the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration (A) whose activities relate to the research or training under the Awards, or (B) at which such research or training will be conducted.

“(3) No grant may be made under subsection (a) (1) (B) unless an application therefor has been submitted to and approved by the Secretary. Such application shall be in such form, submitted in such manner, and contain such information, as the Secretary may by regulation prescribe. Subject to the provisions of this section other than paragraph (1) of this subsection, National Research Service Awards made under a grant under subsection (a) (1) (B) shall be made in accordance with such regulations as the Secretary shall prescribe.

“(4) The period of any National Research Service Award made to any individual under subsection (a) may not exceed three years in the aggregate unless the Secretary for good cause shown waives the application of the three-year limit to such individual.

“(5) National Research Service Awards shall provide such stipends and allowances (including travel and subsistence expenses and dependency allowances) for the recipients of the Awards as the Secretary may deem necessary. A National Research Service Award made to an individual for research or research training at a non-Federal public or nonprofit private institution shall also provide for payments to be made to the institution for the cost of support services (including the cost of faculty salaries, supplies, equipment, general research support, and related items) provided such individual by such institution. The amount of any such payments to any institution shall be determined by the Secretary and shall bear a direct relationship to the reasonable costs of the institution for establishing and maintaining the quality of its biomedical and behavioral research and training programs.

“(c) (1) (A) Each individual who receives a National Research Service Award shall, in accordance with paragraph (3), engage in—

“(i) health research or teaching,

"(ii) if authorized under subparagraph (B), serve as a member of the National Health Service Corps or serve in his specialty or

"(iii) if authorized under subparagraph (C), serve in a health related activity approved under that subparagraph, for a period computed in accordance with paragraph (2).

"(B) Any individual who received a National Research Service Award and who is a physician, dentist, nurse, or other individual trained to provide health care directly to individual patients may, upon application to the Secretary, be authorized by the Secretary to—

"(i) serve as a member of the National Health Service Corps,

"(ii) serve in his specialty in private practice in a geographic area designated by the Secretary as requiring that specialty, or

"(iii) provides services in his specialty for a health maintenance organization to which payments may be made under section 1876 of title XVIII of the Social Security Act and which serves a medically underserved population (as defined in section 1302(7) of this act),

in lieu of engaging in health research or teaching if the Secretary determines that there are no suitable health research or teaching positions available to such individual.

"(C) Where appropriate the Secretary may, upon application, authorize a recipient of a National Research Service Award, who is not trained to provide health care directly to individual patients, to engage in a health-related activity in lieu of engaging in health research or teaching if the Secretary determines that there are no suitable health research or teaching positions available to such individual.

"(2) For each year for which an individual receives a National Research Service Award he shall—

"(A) for twelve months engage in health research or teaching or, if so authorized, serve as a member of the National Health Service Corps, or

"(B) if authorized under paragraph (1)(B) or (1)(C), for twenty months serve in his specialty or engage in a health-related activity.

"(3) The requirement of paragraph (1), shall be complied with by any individual to whom it applies within such reasonable period of time, after the completion of such individual's Award, as the Secretary shall by regulation prescribe. The Secretary shall (A) by regulation prescribe (i) the type of research and teaching which an individual may engage in to comply with such requirement, and (ii) such other requirements respecting such research and teaching and alternative service authorized under paragraphs (1)(B) and (1)(C) as he deems necessary; and (B) to the extent feasible, provide that the members of the National Health Service Corps who are serving in the Corps to meet the requirement of paragraph (1) shall be assigned to patient care and to positions which utilize the clinical training and experience of the members.

"(4) (A) If any individual to whom the requirement of paragraph (1) is applicable fails, within the period prescribed by paragraph (3), to comply with such requirement, the United States shall be entitled to recover from such individual an amount determined in accordance with the formula—

$$A = \phi \frac{t - 1/2s}{t}$$

in which 'A' is the amount the United States is entitled to recover; 'φ' is the sum of the total amount paid under one or more National Research Service Awards to such individual and the interest on such amount which would be payable if at the time it was paid it was a loan bearing interest at a rate fixed by the Secretary of the Treasury after taking into consideration private consumer rates of interest prevailing at the time each Award to such individual was made; 't' is the total number of months in such individual's service obligation; and 's' is the number of months of such obligation served by him in accordance with paragraphs (1) and (2) of this subsection.

"(B) Any amount which the United States is entitled to recover under subparagraph (A) shall, within the three-year period beginning on the date the United States becomes entitled to recover such amount, be paid to the United States. Until any amount due the United States under subparagraph (A) on account of any National Research Service Award is paid, there shall

accrue to the United States interest on such amount at the same rate as that fixed by the Secretary of the Treasury under subparagraph (A) to determine the amount due the United States.

“(4)(A) Any obligation of any individual under paragraph (3) shall be canceled upon the death of such individual.

“(B) The Secretary shall by regulation provide for the waiver or suspension of any such obligation applicable to any individual whenever compliance by such individual is impossible or would involve extreme hardship to such individual and if enforcement of such obligation with respect to any individual would be against equity and good conscience.

“(d) There are authorized to be appropriated to make payments under National Research Service Awards and under grants for such Awards \$207,947,000 for the fiscal year ending June 30, 1975. Of the sums appropriated under this subsection, not less than 25 per centum shall be made available for payments under National Research Service Awards provided by the Secretary under subsection (a)(1)(A).

“STUDIES RESPECTING BIOMEDICAL AND BEHAVIORAL RESEARCH PERSONNEL

“SEC. 473. (a) The Secretary shall, in accordance with subsection (b), arrange for the conduct of a continuing study to—

“(1) establish (A) the Nation's overall need for biomedical and behavioral research personnel, (B) the subject areas in which such personnel are needed and the number of such personnel needed in each such area, and (C) the kinds and extent of training which should be provided such personnel;

“(2) assess (A) current training programs available for the training of biomedical and behavioral research personnel which are conducted under this Act at or through institutes under the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration, and (B) other current training programs available for the training of such personnel;

“(3) identify the kinds of research positions available to and held by individuals completing such programs;

“(4) determine, to the extent feasible, whether the programs referred to in clause (B) of paragraph (2) would be adequate to meet the needs established under paragraph (1) if the programs referred to in clause (A) of paragraph (2) were terminated; and

“(5) determine what modifications in the programs referred to in paragraph (2) are required to meet the needs established under paragraph (1).

“(b)(1) The Secretary shall request the National Academy of Sciences to conduct the study required by subsection (a) under an arrangement under which the actual expenses incurred by such Academy in conducting such study will be paid by the Secretary. If the National Academy of Sciences is willing to do so, the Secretary shall enter into such an arrangement with such Academy for the conduct of such study.

“(2) If the National Academy of Sciences is unwilling to conduct such study under such an arrangement, then the Secretary shall enter into a similar arrangement with other appropriate nonprofit private groups or associations under which such groups or associations will conduct such study and prepare and submit the reports thereon as provided in subsection (c).

“(c) A report on the results of such study shall be submitted by the Secretary to the Committee on Interstate and Foreign Commerce on the House of Representatives and the Committee on Labor and Public Welfare of the Senate not later than March 31 of each year.

CONFORMING AMENDMENTS

“Sec. 104. (a)(1) Section 301 of the Public Health Service Act is amended (A) by striking out paragraph (c); (B) by striking out in paragraph (d) ‘or research training’ each place it occurs, ‘and research training programs’, and ‘and research training program’; and (C) by redesignating paragraphs (d), (e), (f), (g), (h), and (i) as paragraphs (c), (d), (e), (f), (g), and (h), respectively.

“(2)(A) Section 303(a)(1) of such Act is amended to read as follows:

“(1) to provide clinical training and instruction and to establish and maintain clinical traineeships (with such stipends and allowances (includ-

ing travel and subsistence expenses and dependency allowances) for the trainees as the Secretary may deem necessary);'

"(B) Section 303(b) of such Act is amended by inserting before the first sentence the following: 'The Secretary may provide for training, instruction, and traineeships under subsection (a) (1) through grants to public and other nonprofit institutions.'

(3) Section 402(a) of such Act is amended (A) by striking out 'training and instruction' in paragraph (3) and inserting in lieu thereof 'clinical training and instruction', and (B) by striking out paragraph (4) and by redesignating paragraphs (5), (6), and (7) as paragraphs (4), (5), and (6), respectively.

"(4) Section 407(b) (7) of such Act is amended (A) by striking out 'and basic research and treatment', and (B) by striking out 'where appropriate'.

"(5) Section 408(b) (3) of such Act is amended by inserting 'clinical' before 'training' each place it occurs.

"(6) Section 412(7) of such Act is amended by striking out '(1) establish and maintain' and all that follows down through and including 'maintain traineeships' and inserting in lieu thereof ', provide clinical training and instruction and establish and maintain clinical traineeships'.

"(7) Section 413(a) (7) is amended by inserting 'clinical' before 'programs'.

"(8) Section 415(b) is amended by inserting before the period at the end of the last sentence thereof the following: '; and the term "training" does not include research training for which fellowship support may be provided under section 472'.

"(9) Section 422 of such Act is amended (A) by striking out paragraph (c) and by redesignating paragraphs (d), (e), and (f) as paragraphs (c), (d), and (e), respectively, and (B) by striking out 'training and instruction and establish and maintain traineeships' in paragraph (e) (as so redesignated) and inserting in lieu thereof 'clinical training and instruction and establish and maintain clinical traineeships'.

"(10) Section 434(c) (2) of such Act is amended by inserting '(other than research training for which National Research Service Awards may be made under section 472)' after 'training' the first time it occurs.

"(11) Sections 433(a), 444, and 453 of such Act are each amended by striking out the second sentence thereof.

"(12) The heading for part I of title IV of such Act (as so redesignated by section 103) is amended by striking out 'Administrative' and inserting in lieu thereof 'General'.

"(b) The amendments made by subsection (a) shall not apply with respect to commitments made before the date of the enactment of this Act by the Secretary of Health, Education, and Welfare for research training under the provisions of the Public Health Service Act amended or repealed by subsection (a).

"SEX DISCRIMINATION

"Sec. 105. Section 799A of the Public Health Service Act is amended by adding at the end thereof the following: 'In the case of a school of medicine which—

"(1) on the date of the enactment of this sentence is in the process of changing its status as an institution which admits only female students to that of an institution which admits students without regard to their sex, and

"(2) is carrying out such change in accordance with a plan approved by the Secretary,

the provisions of the preceding sentences of this section shall apply only with respect to a grant, contract, loan guarantee, or interest subsidy to, or for the benefit of such a school for a fiscal year beginning after June 30, 1970.'

"FINANCIAL DISTRESS GRANTS

"Sec. 106. Section 773(a) of the Public Health Service Act is amended (1) by striking out '\$10,000,000' and inserting in lieu thereof '\$15,000,000', and (2) by striking out '1972' each place it occurs in the last sentence thereof and inserting in lieu thereof '1974'.

"TITLE II—PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH

"Part A—National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research

"ESTABLISHMENT OF COMMISSION

"Sec. 201. (a) There is established a Commission to be known as the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (hereinafter in this title referred to as the 'Commission').

"(b) (1) The Commission shall be composed of eleven members appointed by the Secretary of Health, Education, and Welfare (hereinafter in this title referred to as the 'Secretary'). The Secretary shall select members of the Commission from individuals distinguished in the fields of medicine, law, ethics, theology, the biological, physical, behavioral and social sciences, philosophy, humanities, health administration, government, and public affairs; but five (and not more than five) of the members of the Commission shall be individuals who are or who have been engaged in biomedical or behavioral research involving human subjects. In appointing members of the Commission, the Secretary shall give consideration to recommendations from the National Academy of Sciences and other appropriate entities. Members of the Commission shall be appointed for the life of the Commission. The Secretary shall appoint the members of the Commission within sixty days of the date of the enactment of this Act.

"(2) (A) Except as provided in subparagraph (B), members of the Commission shall each be entitled to receive the daily equivalent of the annual rate of the basic pay in effect for grade GS-13 of the General Schedule for each day (including traveltime) during which they are engaged in the actual performance of the duties of the Commission.

"(B) Members of the Commission who are full-time officers or employees of the United States shall receive no additional pay on account of their service on the Commission.

"(C) While away from their homes or regular places of business in the performance of duties of the Commission, members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703(b) of title 5 of the United States Code.

"(c) The chairman of the Commission shall be selected by the members of the Commission from among their number.

"(d) (1) The Commission may appoint and fix the pay of such staff personnel as it deems desirable. Such personnel shall be appointed subject to the provisions of title 5, United States Code, governing appointments in the competitive service, and shall be paid in accordance with the provisions of chapter 51 and subchapter III of chapter 59 of such title relating to classification and General Schedule pay rates.

"(2) The Commission may procure temporary and intermittent services to the same extent as is authorized by section 3109(b) of title 5 of the United States Code, but at rates for individuals not to exceed the daily equivalent of the annual rate of basic pay in effect for grade GS-18 of the General Schedule.

"Sec. 202. (a) The Commission shall carry out the following:

"(1) (A) The Commission shall (i) conduct a comprehensive investigation and study to identify the basic ethical principles which should underlie the conduct of biomedical and behavioral research involving human subjects, (ii) develop guidelines which should be followed in such research to assure that it is conducted in accordance with such principles, and (iii) make recommendations to the Secretary (I) for such administrative action as may be appropriate to apply such guidelines to biomedical and behavioral research conducted or supported under programs administered by the Secretary, and (II) concerning any other matter pertaining to the protection of human subjects of biomedical and behavioral research.

"(B) In carrying out subparagraph (A), the Commission shall consider at least the following:

"(i) The boundaries between biomedical or behavioral research involving human subjects and the accepted and routine practice of medicine.

"(ii) The role of assessment of risk-benefit criteria in the determination of the appropriateness of research involving human subjects.

"(iii) Appropriate guidelines for the selection of human subjects for participation in biomedical and behavioral research.

"(iv) The nature and definition of informed consent in various research settings.

"(v) Mechanisms for evaluating and monitoring the performance of Institutional Review Boards established in accordance with section 474 of the Public Health Service Act and appropriate enforcement mechanisms for carrying out their decisions.

"(C) The Commission shall consider the appropriateness of applying the principles and guidelines identified and developed under subparagraph (A) to the delivery of health services to patients under programs conducted or supported by the Secretary.

"(2) The Commission shall identify the requirements for informed consent to participation in biomedical and behavioral research by children, prisoners, and the institutionalized mentally infirm. The Commission shall investigate and study biomedical and behavioral research conducted or supported under programs administered by the Secretary and involving children, prisoners, and the institutionalized mentally infirm to determine the nature of the consent obtained from such persons or their legal representatives before such persons were involved in such research; the adequacy of the information given them respecting the nature and purpose of the research, procedures to be used, risks and discomforts, anticipated benefits from the research, and other matters necessary for informed consent; and the competence and the freedom of the persons to make a choice for or against involvement in such research. On the basis of such investigation and study the Commission shall make such recommendations to the Secretary as it determines appropriate to assure that biomedical and behavioral research conducted or supported under programs administered by him meets the requirements respecting informed consent identified by the Commission. For purposes of this paragraph, the term 'children' means individuals who have not attained the legal age of consent to participate in research as determined under the applicable law of the jurisdiction in which the research is to be conducted; the term 'prisoner' means individuals involuntarily confined in correctional institutions or facilities (as defined in section 601 of the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. 3781); and the term 'institutionalized mentally infirm' includes individuals who are mentally ill, mentally retarded, emotionally disturbed, psychotic, or senile, or who have other impairments of a similar nature and who reside as patients in an institution.

"(3) The Commission shall conduct an investigation and study to determine the need for a mechanism to assure that human subjects in biomedical and behavioral research not subject to regulation by the Secretary are protected. If the Commission determines that such a mechanism is needed, it shall develop and recommend to the Congress such a mechanism. The Commission may contract for the design of such a mechanism to be included in such recommendations.

"(b) The Commission shall conduct an investigation and study of the nature and extent of research involving living fetuses, the purposes for which such research has been undertaken, and alternative means for achieving such purposes. The Commission shall, not later than the expiration of the 4-month period beginning on the first day of the first month that follows the date on which all the members of the Commission have taken office, recommend to the Secretary policies defining the circumstances (if any) under which such research may be conducted or supported.

"(c) The Commission shall conduct an investigation and study of the use of psychosurgery in the United States during the five-year period ending December 31, 1972. The Commission shall determine the appropriateness of its use, evaluate the need for it, and recommend to the Secretary policies defining the circumstances (if any) under which its use may be appropriate. For purposes of this paragraph, the term 'psychosurgery' means brain surgery on (1) normal brain tissue of an individual, who does not suffer from any physical disease, for the purpose of changing or controlling the behavior or emotions of such individual, or (2) diseased brain tissue of

an individual, if the sole object of the performance of such surgery is to control, change, or affect any behavioral or emotional disturbance of such individual. Such term does not include brain surgery designed to cure or ameliorate the effects of epilepsy and electric shock treatments.

"(d) The Commission shall make recommendations to the Congress respecting the functions and authority of the National Advisory Council for the Protection of Subjects of Biomedical and Behavioral Research to be established under section 217(f) of the Public Health Service Act.

"SPECIAL STUDY

"SEC. 203. The Commission shall undertake a comprehensive study of the ethical, social, and legal implications of advances in biomedical and behavioral research and technology. Such study shall include—

"(1) an analysis and evaluation of scientific and technological advances in past, present, and projected biomedical and behavioral research and services;

"(2) an analysis and evaluation of the implications of such advances, both for individuals and for society;

"(3) an analysis and evaluation of laws and moral and ethical principles governing the use of technology in medical practice;

"(4) an analysis and evaluation of public understanding of and attitudes toward such implications and laws and principles; and

"(5) an analysis and evaluation of implications for public policy of such findings as are made by the Commission with respect to advances in biomedical and behavioral research and technology and public attitudes toward such advances.

"ADMINISTRATIVE PROVISIONS

"SEC. 204. (a) The Commission may for the purpose of carrying out its duties under sections 202 and 203 hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence as the Commission deems advisable.

"(b) The Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out its duties. Upon the request of the chairman of the Commission, the head of such department or agency shall furnish such information to the Commission.

"(c) The Commission shall not disclose any information reported to or otherwise obtained by it in carrying out its duties which (1) identifies any individual who has been the subject of an activity studied and investigated by the Commission, or (2) which concerns any information which contains or relates to a trade secret or other matter referred to in section 1905 of title 18 of the United States Code.

"(d) Except as provided in subsection (b) of section 202, the Commission shall complete its duties under sections 202 and 203 not later than the expiration of the 24-month period beginning on the first day of the first month that follows the date on which all the members of the Commission have taken office. The Commission shall make periodic reports to the President, the Congress, and the Secretary respecting its activities under sections 202 and 203 and shall, not later than ninety days after the expiration of such 24-month period, make a final report to the President, the Congress, and the Secretary respecting such activities and including its recommendations for administrative action and legislation.

"(e) The Commission shall cease to exist thirty days following the submission of its final report pursuant to subsection (d).

"DUTIES OF THE SECRETARY

"SEC. 205. Within 60 days of the receipt of any recommendation made by the Commission under section 202, the Secretary shall publish it in the Federal Register and provide opportunity for interested persons to submit written data, views, and arguments with respect to such recommendation. The Secretary shall consider the Commission's recommendation and relevant matter submitted with respect to it and, within 180 days of the date of its publication in the

Federal Register, the Secretary shall (1) determine whether the administrative action proposed by such recommendation is appropriate to assure the protection of human subjects of biomedical and behavioral research conducted or supported under programs administered by him, and (2) if he determines that such action is not so appropriate, publish in the Federal Register such determination together with an adequate statement of the reasons for his determination. If the Secretary determines that administrative action recommended by the Commission should be undertaken by him, he shall undertake such action as expeditiously as is feasible.

"Part B--Miscellaneous

"NATIONAL ADVISORY COUNCIL FOR THE PROTECTION OF SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH

"SEC. 211. (a) Section 217 of the Public Health Service Act is amended by adding at the end the following new subsection:

"(f) (1) There shall be established a national Advisory Council for the Protection of Subjects of Biomedical and Behavioral Research (hereinafter in this subsection referred to as the "Council") which shall consist of the Secretary who shall be Chairman and not less than seven nor more than fifteen other members who shall be appointed by the Secretary without regard to the provisions of title 5, United States Code, governing appointments in the competitive service. The Secretary shall select members of the Council from individuals distinguished in the fields of medicine, law, ethics, theology, the biological, physical, behavioral and social sciences, philosophy, humanities, health administration, government, and public affairs; but three (and not more than three) of the members of the Council shall be individuals who are or who have been engaged in biomedical or behavioral research involving human subjects. No individual who was appointed to be a members of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (established under title II of the National Research Act) may be appointed to be a member of the Council. The appointed members of the Council shall have terms of office of four years, except that for the purpose of staggering the expiration of the terms of office of the Council members, the Secretary shall, at the time of appointment, designate a term of office of less than four years for members first appointed to the Council.

"(2) The Council shall—

"(A) advise, consult with, and make recommendations to, the Secretary concerning all matters pertaining to the protection of human subjects of biomedical and behavioral research;

"(B) review policies, regulations, and other requirements of the Secretary governing such research to determine the extent to which such policies, regulations, and requirements require and are effective in requiring observance in such research of the basic ethical principles which should underlie the conduct of such research and, to the extent such policies, regulations, or requirements do not require or are not effective in requiring observance of such principles, make recommendations to the Secretary respecting appropriate revision of such policies, regulations, or requirements; and

"(C) review periodically changes in the scope, purpose, and types of biomedical and behavioral research being conducted and the impact such changes have on the policies, regulations, and other requirements of the Secretary for the protection of human subjects of such research.

"(3) The Council may disseminate to the public such information, recommendations, and other matters relating to its functions as it deems appropriate.

"(4) Section 14 of the Federal Advisory Committee Act shall not apply with respect to the Council.

"(b) The amendment made by subsection (a) shall take effect July 1, 1976.

"INSTITUTIONAL REVIEW BOARDS; ETHICS GUIDANCE PROGRAM

"SEC. 212. (a) Part I of title IV of the Public Health Service Act, as amended by section 10E of this Act, is amended by adding at the end the following new section:

" INSTITUTIONAL REVIEW BOARDS ; ETHICS GUIDANCE PROGRAM

"SEC. 474. (a) The Secretary shall by regulation require that each entity which applies for a grant or contract under this Act for any project or program which involves the conduct of biomedical or behavioral research involving human subjects submit in or with its application for such grant or contract assurances satisfactory to the Secretary that it has established (in accordance with regulations which the Secretary shall prescribe) a board (to be known as an 'Institutional Review Board') to review biomedical and behavioral research involving human subjects conducted at or sponsored by such entity in order to protect the rights of the human subjects of such research.

"(b) The Secretary shall establish a program within the Department under which requests for clarification and guidance with respect to ethical issues raised in connection with biomedical or behavioral research involving human subjects are responded to promptly and appropriately.'

"(b) The Secretary of Health, Education, and Welfare shall within 240 days of the date of the enactment of this Act promulgate such regulations as may be required to carry out section 474(a) of the Public Health Service Act. Such regulations shall apply with respect to applications for grants and contracts under such Act submitted after promulgation of such regulations.

"LIMITATION ON RESEARCH

"SEC. 213. Until the Commission has made its recommendations to the Secretary pursuant to section 202(b), the Secretary may not conduct or support research in the United States or abroad on a living human fetus, before or after the induced abortion of such fetus, unless such research is done for the purpose of assuring survival of such fetus.

"INDIVIDUAL RIGHTS

"SEC. 214. (a) Subsection (c) of section 401 of the Health Programs Extension Act of 1973 is amended (1) by inserting '(1)' after '(c)', (2) by redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively, and (3) by adding at the end the following new paragraph:

"(2) No entity which receives after the date of enactment of this paragraph a grant or contract for biomedical or behavioral research under any program administered by the Secretary of Health, Education, and Welfare may—

"(A) discriminate in the employment, promotion, or termination of employment of any physician or other health care personnel, or

"(B) discriminate in the extension of staff or other privileges to any physician or other health care personnel,

because he performed or assisted in the performance of any lawful health service or research activity, because he refused to perform or assist in the performance of any such service or activity on the grounds that his performance or assistance in the performance of such service or activity would be contrary to his religious beliefs or moral convictions, or because of his religious beliefs or moral convictions respecting any such service or activity.'

"(b) Section 401 of such Act is amended by adding at the end the following new subsection:

"(d) No individual shall be required to perform or assist in the performance of any part of a health service program or research activity funded in whole or in part under a program administered by the Secretary of Health, Education, and Welfare if his performance or assistance in the performance of such part of such program or activity would be contrary to his religious beliefs or moral convictions.'

"SPECIAL PROJECT GRANTS AND CONTRACTS

"SEC. 215. Section 772(a) (7) of the Public Health Service Act is amended by inserting immediately before the semicolon at the end thereof the following: " or (C) providing increased emphasis on, the ethical, social, legal, and moral implications of advances in biomedical research and technology with respect to the effects of such advances on individuals and society'.

"And the Senate agree to the same.

"That the House recede from its disagreement to the amendment of the Senate to the title of the bill and agree to the same.

HARLEY O. STAGGERS,
PAUL G. ROGERS,
DAVID B. SATTERFIELD,
SAMUEL L. DEVINE,
ANCHER NELSEN,

Managers on the Part of the House.

HARRISON WILLIAMS,
GAYLORD NELSON,
EDWARD M. KENNEDY,
WALTER F. MONDALE,
HAROLD E. HUGHES,
ALAN CRANSTON,
CLAIBORNE PELI,
THOMAS F. EAGLETON,
JACOB K. JAVITS,
PETER H. DOMINICK,
RICHARD S. SCHWEIKER,
J. GLENN BEALL, Jr.,
ROBERT TAFT, Jr.

Managers on the Part of the Senate.

"JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE

"The managers on the part of the House and the Senate at the conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 7724) to amend the Public Health Service Act to establish a national program of biomedical research fellowships, traineeships, and training to assure the continued excellence of biomedical research in the United States, and for other purposes, submit the following joint statement to the House and the Senate in explanation of the effect of the action agreed upon by the managers and recommended in the accompanying conference report:

"The Senate amendment to the text of the bill struck out all of the House bill after the enacting clause and inserted a substitute text.

"The House recedes from its disagreement to the amendment of the Senate with an amendment which is a substitute for the House bill and the Senate amendment. The differences between the House bill, the Senate amendment, and the substitute agreed to in conference are noted below, except for clerical corrections, conforming changes made necessary by agreements reached by the conferees, and minor drafting and clarifying changes.

"TITLE I—BIOMEDICAL AND BEHAVIORAL RESEARCH TRAINING

Short Title.—The House bill provided for the following short title: 'National Biomedical Research Fellowship, Traineeship, and Training Act of 1973'. Under the Senate amendment the short title was 'National Research Service Award Act'. The conference substitute provides the following short title: 'National Research Act'.

Biomedical and Behavioral Research Training.—The House bill required that the Secretary of HEW establish and maintain (1) fellowships for the conduct of biomedical research and for training to conduct such research within the National Institutes of Health (NIH) and the National Institutes of Mental Health (NIMH); (2) fellowships for biomedical research and training at non-Federal public and nonprofit private institutions; (3) traineeships and training within NIH and NIMH; and (4) grants to public and nonprofit private institutions to award traineeships (commonly referred to as training grants) except for residency training. It required that fellowships, traineeships, and training grants be awarded only upon approval of an application therefor, subject to review and approval by the appropriate advisory councils to the National Institutes of Health and the National Institute of Mental Health. Traineeships awarded by nonprofit institutions under a training grant from HEW would have to be made in compliance with regulations. The period of support per fellowship, traineeship, or training grant was limited to three years, unless the Secretary waived that limitation for good cause. Fel-

lowship awards could provide for payments to be made to the institution at which the research or training was to be carried out, in order to offset the cost of providing institutional support services for the individual. The House bill required each individual receiving a fellowship or traineeship to provide one of the following kinds of public service upon completion of training; (1) Engage in health research or teaching for two years for each year of support received, or (2) if no suitable health research or teaching positions were available, serve in the National Health Service Corps for two years for each year of training received.

"The House bill required that if any individual failed to meet the service requirements within the prescribed period, the United States would be authorized to recover a certain amount from the recipient (except in case of death or extreme hardship), computed by multiplying the amount of assistance received plus interest by a fraction based on the extent to which the recipient engaged in the required activity or service.

"The Senate amendment provided for the provision of National Research Service Awards for biomedical and behavioral research and training in such research at the National Institutes of Health, the National Institute of Mental Health and at non-Federal public and nonprofit private institutions. The Awards were to be made only upon approval of an application therefor. All applicants for National Research Service Awards for research or research training at non-Federal public and private nonprofit institutions had to be sponsored by such institution. Each Award was to be subject to the review and approval by the appropriate advisory council of the institutes of the National Institutes of Health or of the National Institutes of Mental Health. The period of a single Award was three years with the provision for a waiver of that three-year limit by the Secretary for good cause. Awards could also provide for payments to the accredited institutions at which the programs for research or training were to be carried out for the cost of support services including, but not limited to, a portion of faculty salaries, supplies, equipment, staff, general research support, and overhead. Each individual receiving an Award would be required to provide one of the following kinds of service upon completion of training: (1) Health research for a period of one year for each year of support received, or (2) if no suitable health research or teaching positions were available (A) service as a member of the National Health Service Corps utilizing the specialty for which he had been trained for a period of one year for each year of training received, (B) service in his specialty in private practice in a geographic area designated by the Secretary as requiring that specialty for a period of 20 months for each twelve months of training received, or (C) service in his specialty as a member of a nonprofit prepaid group practice authorized for reimbursement under title XVIII of the Social Security Act for a period of 20 months for each year of training received. If the individual failed to meet the service requirements, a monetary payback requirement comparable to the House bill would apply.

"In addition, the Senate amendment repealed all existing biomedical and behavioral fellowship and training authority in the Public Health Service Act.

"The conference substitute combines the provisions of the House bill and the Senate amendment. It provides for National Research Service Awards, as specified in the Senate amendment, for research and research-training in NIH and the Alcohol, Drug Abuse, and Mental Health Administration (the Administration created by P.L. 93-282 has supervisory authority over NIMH, the National Institute on Alcohol Abuse and Alcoholism, and the National Institute on Drug Abuse) and non-Federal public and nonprofit private institutions. Provisions of the House bill which enabled the awarding of grants to non-Federal public and nonprofit private institutions in order for those institutions to select and support their own trainees is included, with technical and conforming changes, in the conference substitute. The conferees believed that this provision was essential if the administrators of research training programs were to be able to plan their programs on a prospective basis. The conferees used the existing training grant programs of the National Institutes of Health as the model for this provision. In addition, the conference substitute specifies that of the sums appropriated at least 25 percent shall be reserved for the direct provision of National Research Service Awards to individuals. The conference substitute adopts the Senate service requirements, adding the stip-

ulation that service for a health maintenance organization may be chosen only if the organization serves a medically underserved population designated as such under title XIII of the Public Health Service Act.

"It is the intent of the conferees that the Secretary liberally apply the provision authorizing waiver of the three-year limitation of support under the National Research Service Awards. The conferees believe that the period of training of individuals could, in some instances, exceed the three-year limitation, especially in those cases where individuals are attempting to complete both predoctoral and postdoctoral training programs.

"The conferees also believe that the provision authorizing waiver of the monetary payback requirements should be applied in such a manner so as not to discourage future applicants from seeking training under this legislation.

"The conference substitute adopts the Senate language on repeal of existing training and fellowship authority under the Public Health Service Act, with technical and conforming amendments. The conferees point out that in the conforming amendments, presents law authorizing the conduct of clinical training is retained in section 303 of the act. The conferees intend that the term 'clinical training' be broadly construed to include all types of training, except research training.

"Authorizations.—The House bill authorized two years support for both fellowships and traineeships:

"Fellowships and Traineeships awarded directly to the individual—\$54,500,000 each for fiscal years ending June 30, 1974, and June 30, 1975.

"Training grants to nonprofit institutions—\$153,438,000 each for fiscal years ending June 30, 1974, and June 30, 1975.

"The Senate amendment authorized \$207,947,000 (the total annual House authorization) for the fiscal year ending June 30, 1974.

"The conference substitute authorizes an appropriation of \$207,947,000 for the fiscal year ending June 30, 1975, subject to the requirement that not less than 25 percent of the appropriations shall be used for the direct provision by the Secretary of National Research Service Awards to individuals.

"Studies Respecting Biomedical and Behavioral Research Personnel.—Both the House bill and the Senate amendment required the Secretary to arrange for the conduct of certain studies relating to establishment of the Nation's need for biomedical research personnel and the adequacy of existing training programs conducted under the Public Health Service Act and other existing training programs in fulfilling the established need for such personnel.

"The House bill required a report of the results of such studies to be submitted to appropriate committees of Congress within one year from date of enactment. The Senate amendment required a series of ongoing studies and reports, to be submitted in an annual basis, not later than January 31 of each year. The Senate amendment provided that after completion of the first study the Secretary may grant National Research Service Awards in a given specialty only after he had certified, after evaluation of the study report, that a need for additional manpower in that specialty existed.

"The conference substitute adopts the Senate provision with technical and conforming changes and modifies the reporting requirement so that the annual report must be submitted not later than March 31 of each year.

"Sex Discrimination.—The Senate amendment amended section 799(A) of the Public Health Service Act, which requires applications for grants under title VII of such Act to provide assurances that health professions schools will not discriminate in their admissions policies on the basis of sex, to render its provisions inapplicable until June 30, 1979, in the case of schools in the process of changing their status from institutions admitting only female students to institutions admitting students without regard to sex (in accordance with an approved plan).

"The conference substitute adopts the Senate amendment.

"Financial Distress Grants.—The Senate amendment amended section 773(a) of the Public Health Service Act, which authorizes grants to assist health professions schools which are in financial distress, to increase the fiscal year 1974 authorization from \$10,000,000 to \$15,000,000.

"The conference substitute adopts the Senate provision.

"The conferees note that a supplemental appropriation has been included in PL 93-245 for an additional \$5,000,000 under section 773(a) and that release of these funds is contingent upon this approval of an increase in the authorizing legislation.

"TITLE II—PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH

"National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.—The House bill provided that the Secretary could not conduct or support research in the United States or abroad which was in violation of any ethical standard respecting research which was adopted by the National Institutes of Health, the National Institute of Mental Health, or by their respective research institutes.

"The Senate amendment established a National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. It was to have the following characteristics:

"(1) It was to be comprised of eleven members, appointed by the President from the general public and from among individuals in the fields of medicine, law, ethics, theology, biological science, physical science, social science, philosophy, humanities, health administration, government, and public affairs.

"(2) The President was to appoint, with the advice and consent of the Senate, one member to serve as chairman and one to serve as cochairman, each for a term of 4 years.

"(3) Not more than 5 members of the Commission could be people who have engaged in biomedical or behavioral research involving human subjects.

"(4) Members were to serve for staggered terms of four years each.

"(5) Nominees for Commission members were to be solicited from the National Academy of Sciences and other appropriate independent nongovernmental organizations.

"(6) Members could not serve more than two full terms.

"The duties of the Commission were—

"(1) to undertake a comprehensive investigation and study to identify the basic ethical principles which should underlie the conduct of biomedical and behavioral research involving human subjects; to develop and implement policies and regulations to assure that research is carried out in accordance with the ethical principles identified by the Commission:

"(2) to develop procedures for the certification of Institutional Review Boards;

"(3) to develop and recommend to the Congress the implementation of an appropriate range of sanctions and the conditions for their use and for the failure of Institutional Review Boards to respond to Commission rules;

"(4) to develop and recommend to the Congress a mechanism for the compensation of individuals and their families for injuries or death proximately caused by the participation of such individuals in a biomedical or behavioral research program;

"(5) to develop and recommend to the Congress a mechanism to broaden the scope of the Commission's jurisdiction; and

"(6) to consider (A) developing guidelines for the selection of subjects to participate in biomedical or behavioral research, (B) the nature and definition of informed consent in various settings, (C) the role of assessment of risk benefit criteria in the determination of the appropriateness of research involving human subjects, (D) the conditions and procedures by which appeal of an Institutional Review Board decision could be made to the Commission, (E) defining the boundary between biomedical and behavioral research involving human subjects and the accepted and routine practice of medicine, (F) evaluating and responding to requests from the biomedical and behavioral research communities and the public for clarification of particular ethical problems confronting society, (G) the need for variation in the review procedures carried out by the Institutional Review Boards, (H) evaluating and monitoring of the performance of Institutional Review Boards, (I) the question of conflict of interest in the performance of Institutional Review Board duties, and (J) conditions and procedures by which individual protocols may be referred to the Commission for decision.

"The Senate amendment provided that the policies established and implemented by the Commission would take precedence over existing Department of Health, Education, and Welfare policies wherever the two were in conflict. The Senate amendment required the Commission to conduct a study and investigation of the use of psychosurgery over the 5 year period ending December 31, 1972. It also required the Secretary to apply, to the maximum feasible extent, as appropriate, the policies and procedures developed by the

Commission to the delivery of health services in health service programs (other than programs under the Social Security Act) funded in whole or in part by the Department of Health, Education, and Welfare.

"The Senate amendment required the establishment of Institutional Review Boards at all entities which received grants or contracts to conduct research involving human subjects. The review boards were to be composed of sufficient members including religious leaders, persons schooled in ethics, and non-health care professionals with such varying backgrounds of competence as to assure a complete and adequate review. Each Institutional Review Board was to have two subcommittees: A protocol review subcommittee and a subject advisory subcommittee. The latter was to be primarily concerned with the protection of the rights of subjects of biomedical and behavioral research and was responsible for assuring that human subjects of research were as well informed about the nature of that research as reasonably possible. The National Commission was to promulgate regulations applicable to Institutional Review Boards, and certain duties were prescribed for such boards.

"The Senate amendment provided for interim provisions for the protection of subjects of biomedical and behavioral research to be effective until Institutional Review Boards were established. These interim provisions prescribed basic requirements of informed consent for each participant in a research project involving human subjects.

"The Senate amendment required the National Commission to annually set aside one percent of its budget for the evaluation of its activities and those of the Institutional Review Boards. This evaluation was to be conducted by contract with a qualified independent organization.

"The Senate amendment required the Commission to compile a complete list of decisions pertaining to programs under its jurisdiction and to annually publish and distribute reports of important decisions. The Secretary and the Commission were given authority to require inspections and certain kinds of record-keeping which would be necessary for the Commission to responsibly carry out its activities. Provision was made for confidentiality of records.

"The Senate amendment also required the Commission to conduct certain special duties which would involve a comprehensive investigation and study of the ethical, social and legal implications of advances in biomedical and behavioral research and technology. This would include, without being limited to, (1) an analysis and evaluation of scientific and technological advances in the biomedical services sciences, (2) an analysis and evaluation of the implications of such advances both for individuals and for society, (3) an analysis and evaluation of laws, codes, and principles governing the use of technology in medical practice, (4) an analysis and evaluation through the use of seminars and public hearings and other appropriate means of public understanding of and attitudes towards such implications, and (5) an analysis and evaluation of implications for public policy of such findings as are made by the Commission with respect to biomedical advances and public attitudes towards such advances.

"\$3 million was authorized to be appropriated for the fiscal years ending June 30, 1974, and June 30, 1975, for the purposes of the title.

"The conference substitute represents a significant modification of the Senate amendment. Under the conference substitute the Commission shall have a life of only two years. It is to be advisory in nature, and not have the regulatory authority proposed in the Senate amendment. However, the conference substitute requires that all Commission recommendations must be published and that the Secretary must publicly respond to each of its recommendations. Commission members are to be appointed by the Secretary of Health, Education, and Welfare within 60 days of enactment of this legislation instead of by the President, as proposed in the Senate amendment. The composition of the Commission is identical to the composition required in the Senate amendment, except that one or more of the members of the Commission must be a representative of the behavioral sciences. Members shall serve for the life of the Commission.

"The conference substitute provides for the following Commission duties:

"1. To conduct a comprehensive investigation and study to identify the basic ethical principles which should underlie the conduct of biomedical and behavioral research involving human subjects.

"2. To develop guidelines which should be followed in such research to assure that it is conducted in accordance with such principles.

"3. To make recommendations to the Secretary for administrative actions that may be appropriate to apply those guidelines to biomedical and behavioral research in order to fully protect the subjects of that research.

"4. To consider the following: (A) The boundaries between biomedical or behavioral research involving human subjects and the accepted and routine practice of medicine, (B) the role of assessment of risk-benefit criteria in the determination of the appropriateness of research involving human subjects, (C) appropriate guidelines for the selection of human subjects for participation in biomedical and behavioral research, (D) the nature and definition of informed consent in various research settings, and (E) mechanisms for evaluating and monitoring the performance of Institutional Review Boards and appropriate enforcement mechanisms for carrying out the decisions of those review boards,

"5. To consider the appropriateness of applying the principles and guidelines identified and developed by the Commission to the delivery of health services to patients under programs conducted or supported by the Secretary.

"6. To identify the requirements for informed consent for participation in biomedical and behavioral research by children, prisoners, and the institutionalized mentally infirm and make such recommendations as it deems appropriate to assure such informed consent.

"7. To conduct an investigation and study to determine the need for a mechanism to assure that human subjects in biomedical and behavioral research not subject to regulation by HEW are protected. If the Commission determines such a mechanism is needed, it shall develop recommendations for it and send them to the Congress.

"8. To conduct an investigation and study of the nature and extent of research involving living fetuses, the purposes for which such research has been undertaken, and alternative means for achieving such purposes. The Commission must report the results of this study to the Secretary within four months after the month in which the Commission is established.

"9. To conduct an investigation and study of the use of psychosurgery in the United States during the five-year period ending December 31, 1972, determine the appropriateness of its use, and recommend appropriate policies to the Secretary.

"10. To make recommendations to the Congress respecting the functions and authority of the National Advisory Council for the Protection of Subjects of Biomedical and Behavioral Research (described below).

"In addition to these duties, the Commission must undertake the special study as provided for in the Senate amendment pertaining to the ethical, social, and legal implications of advances in biomedical and behavioral research and technology.

"The Commission is to complete its duties not later than 24 months after it is established and shall, within 90 days of the completion of its duties, make a final report to the President, the Congress, and the Secretary respecting its activities and its recommendations for administrative and legislative action. The Commission shall cease to exist 30 days following submission of its final report.

"The conference substitute requires that the Secretary publish, within 60 days of its receipt, any recommendation made by the Commission. This publication must be in the Federal Register and an opportunity must be provided for interested persons to submit written data, views, and arguments with respect to the Commission recommendation. Within 180 days after the publication of the recommendation in the Federal Register, the Secretary must determine whether to favorably act upon the recommendation or whether to reject them. If the recommendation is rejected, the Secretary must publish his reasons for that determination in the Federal Register.

"The conference substitute also provides for the establishment of a permanent National Advisory Council for the Protection of Subjects of Biomedical and Behavioral Research, effective July 1, 1976. The Secretary is to serve as Chairman of the Advisory Council. The Council shall have a membership (in addition to the Secretary) of not less than seven nor more than fifteen individuals selected from the fields of medicine, law, ethics, theology, the biological, physical, behavioral and social sciences, philosophy, humanities, health administration, government, and public affairs. Three, but not more

than three, of the members of the council shall be individuals who are or who have been engaged in biomedical or behavioral research involving human subjects. Council members shall have terms of four years except for an initial staggering of the terms. No individual who was an appointed member of the National Commission may be appointed to the Council.

"The conference substitute sets forth the following duties for the Council:

"1. To advise, consult with, and make recommendations to, the Secretary concerning all matters pertaining to the protection of human subjects of biomedical and behavioral research.

"2. To review existing policies, regulations, and other requirements that govern biomedical and behavioral research in order to determine the extent to which those policies are effective and consistent with the basic ethical principles which should underlie the conduct of that research, and to make recommendations to the Secretary respecting appropriate revision of policies, regulations, or requirements which are not effective or consistent with basic ethical principles.

"3. To review periodically changes in the scope, purpose, and types of biomedical and behavioral research being conducted and the impact such changes have on the policies, regulations, and other requirements of the Secretary for the protection of human research subjects.

Unlike his responsibilities with respect to Commission recommendations, the Secretary is not obligated to publish or formally respond to Advisory Council recommendations. However, the Advisory Council is authorized to disseminate to the public such information, recommendations, and other matters relating to its functions as it deems appropriate. The conferees expect that all Council recommendations will undergo extensive public discussion.

"The conference substitute also provides that the Secretary shall by regulations, promulgated within 240 days of enactment, require entities which apply for a grant or contract under the Public Health Service Act for a program which involves the conduct of research involving human subjects to provide assurances that it has established Institutional Review Boards. It also requires the Secretary to establish a mechanism within the Department of Health, Education, and Welfare under which requests for clarification and guidance with respect to ethical issues that may be raised in connection with research involving human subjects shall be responded to promptly and appropriately.

"The conferees deleted the interim informed consent provisions of the Senate amendment only after carefully reviewing the new Department of Health, Education, and Welfare regulations for the protection of subjects of biomedical research (promulgated May 22, 1974) and concluding that the objective of the Senate interim informed consent provision was incorporated into the regulations. The conferees expect that the Secretary's incorporation of such regulations will achieve the objectives of this provision of the Senate amendment, which the conferees fully support and endorse, more expeditiously through its enactment into law.

"*Limitation on Research.*—The House bill prohibited the Secretary from conducting or supporting research in the United States or abroad on a human fetus which is outside the uterus of its mother and which has a beating heart.

"The comparable Senate provision was keyed to other provisions of the Senate amendment. The Senate provision required that until such time after certification of Institutional Review Boards were established pursuant to provisions of the Senate amendment and the permanent Commission contemplated by the Senate developed policies with regard to the conduct of research on the living fetus or infants, the Secretary could not conduct or support research or experimentation in the United States or abroad on a living fetus or infant, whether before or after induced abortion, unless such research or experimentation was done for the purpose of insuring the survival of that fetus or infant.

"The conference substitute combines the two approaches. It provides that until the temporary Commission established pursuant to the conference substitute has made recommendations to the Secretary with respect to fetal research, as required by the conference substitute, the Secretary may not conduct or support research in the United States or abroad on a living human fetus, before or after the induced abortion of such fetus, unless such research is done for the purpose of assuring the survival of such fetus.

Individual Rights.—The Senate amendment contained provisions which (1) would prohibit an individual from being required to perform services or research under projects funded by the Secretary of Health, Education, and Welfare if such performances would be contrary to the religious beliefs or moral convictions of the individual, (2) would prohibit entities from being required to make their facilities available for the performance of services or research under projects funded by the Secretary if such performance is prohibited by the entity on the basis of religious beliefs or moral convictions, and (3) would prohibit discrimination in employment, promotion, termination of employment, or extension of staff or other services with respect to physicians or other care personnel by an entity solely because such personnel performed or assisted or refused to perform or assist in the performance of a lawful health service or research activity if the performance or refusal to perform would be contrary to the religious beliefs or moral convictions of the personnel.

"The House bill contained no comparable provision.

"The conference agreement adopts, with technical and clarifying modifications, the provisions of the Senate amendment which prohibits requiring individuals from performing a part of a health services program or research activity funded by the Secretary if such performance would be contrary to the religious beliefs or moral convictions of such individuals and the provisions of the Senate amendment which prohibit discrimination in employment or extension of staff privileges to an individual because he performed or refused to perform lawful research or services contrary to his religious beliefs or moral convictions, except that the provisions are made applicable only to entities that receive grants or contracts for biomedical or behavioral research under the programs administered by the Secretary.

Special Projects Grants and Contracts.—The Senate amendment contained a provision which would amend section 772(a)(7) of the Public Health Service Act (which authorizes the awards of grants and contracts to health professions schools to carry out certain special projects) to include programs which provide increased emphasis on, the ethical, social, legal, and moral implications of advances in biomedical research and technology with respect to the effects of such advances on individuals and society as projects for which grants and contracts would be authorized.

"The conference substitute adopts the Senate provision.

Review of Grant and Contract Awards.—The Senate amendment contained a provision not in the House bill which would require the Secretary to provide for proper scientific, peer review of all grants and all research and development contracts administered by the NIH or the NIMH.

"The conference substitute does not contain the Senate provision. The conferees note that a comparable provision is contained in the conference report on S. 2803, the National Cancer Act Amendments of 1974.

HARLEY O. STAGGERS,
PAUL G. ROGERS,
DAVID E. SATTERFIELD,
SAMUEL L. DEVINE,
ANCHER NELSEN,

Managers on the Part of the House.

HARRISON WILLIAMS,
GAYLORD NELSON,
EDWARD M. KENNEDY,
WALTER F. MONDALE,
HAROLD M. HUGHES,
ALAN CRANSTON,
CLAIBORNE PELL,
THOMAS F. EAGLETON,
JACOB K. JAVITS,
PETER H. DOMINICK,
RICHARD S. SCHWEIKER,
J. GLENN BEALL, Jr.,
ROBERT TAFT, Jr.

Managers on the Part of the Senate."

C. Materials Relating to Specific HEW Projects

[Item I.C.1]

[ABSTRACTS OF PROJECT DESCRIPTIONS OF HEW-FUNDED BEHAVIOR-RELATED RESEARCH PROJECTS, RECEIVED MAY 13, 1974, AND JULY 25, 1974, IN RESPONSE TO FEBRUARY 22, 1974, INQUIRY TO SECRETARY WEINBERGER]

**NICHD PROJECTS CONCERNED WITH BEHAVIOR MODIFICATION
ACTIVE FEBRUARY 1974**

Grant No.	Investigator, institution	Title	Total period of support	Cumulative funds	Current funds
PO1 01799	Purpura, Dominick P., Yeshiva University	Support for mental retardation research center.	Sept. 1965 to Aug. 1977	\$213,483	\$44,481
	Included in the clinical research programs of this program project is a study to evaluate the use of behavior modification in a home training program for mothers of developmentally delayed children. The focus is on the development of simple levels of self-care and toilet training.				
PO1 02274	Grayston, J. Thomas, Washington, University of	Research in mental retardation and child development.	June 1966 to Aug. 1974	554,900	90,987
	This program project includes an experimental education unit involved in applied research on the use of behavior modification techniques in dealing with a variety of problems: hyperactivity, bizarre behaviors, and autism among the problems currently under investigation to determine how the techniques can best be applied to help children with these disorders.				
PO1 03144	Halt, R. Vance, Kansas, University of	The development of culturally deprived children.	Oct. 1967 to Sept. 1977	405,148	65,875
	This program project places heavy emphasis on the means of shaping behavior in schools and homes to improve the social and academic functioning of culturally deprived children. In the classroom setting, behavior modification techniques have been used to reduce disruptive behavior and tardiness. School principals and psychologists have worked together to develop in teachers the skills necessary to insure success. Similar procedures have been developed for use by parents in improving social behavior in the home, and a parent training kit is being prepared.				
PO1 03352	Heber, Rick E., Wisconsin, University of	Wisconsin Center on Mental Retardation—core support.	Mar. 1968 to Feb. 1976	267,876	55,313
	This program project includes two groups of studies involving behavior modification. In the first, applications of behavior therapy are being applied in group settings. The goal is to teach parents how to modify the behavior of their retarded children, and a comparison will be made to determine which methods of behavior therapy are the most effective. The other group of studies, in the laboratory of applied behavior analysis and modification, is concerned with the development of behavior theory and rehabilitation procedures for use with emotionally disturbed retardates. The effectiveness of various behavior therapy procedures is being evaluated.				
PO1 04512	Tarjan, George, California, University of	Mental Retardation Research Center, UCLA.	June 1969 to May 1978	328,260	71,105
	Parts of 2 studies in this program project are concerned with the modification of behavior. In 1 of these, behavioristic approaches are being used to improve classroom behavior in a special education setting. The other is investigating the use of contingent aversive stimulation to control self-destructive behavior in autistic children.				
PO1 05124	Sidman, Murray, E. K. Shriver Center for Mental Retardation, Inc.	Mental retardation behavioral and neurologic aspects.	Sept. 1970 to Aug. 1975	371,485	83,562
	The concern in several of the studies in this program project is with the methodology of effecting behavioral change in a social context. Such factors as the sequencing of teaching activities and reinforcement are under investigation in a study designed to improve the social functioning of severely retarded or autistic children. These techniques have been developed in a laboratory setting, and are now being applied to a classroom situation.				
PO1 07073	Bricker, William A., George Peabody College for Teachers.	Assessment and modification of parental teaching style.	Sept. 1972 to Aug. 1975	125,949	65,564
	The goal of this research is to examine ways of teaching parents principles of behavior modification which will enable them to work more effectively with their mentally retarded children. Parents will be taught the principles under supervision in a training laboratory. It will then be determined whether the parents are able to generalize the principles to other settings.				
PO1 07083	Giardneau, Fred, Kansas, University of	Mental retardation.	July 1965 to June 1976	I, 100,071	135,546
	Behavior modification techniques are being used in the research of several of the trainers in this training program. Some of the investigators are training parents to help children whose behavior is negative both at home and in the community. Another is using these techniques to train staff who operate group homes for predeficient boys and girls displaying retarded social skill development.				

NOTE: Funds for the relevant portions of program projects (PO1) have been estimated. Total funds are given for other projects even when only a portion of the research is relevant.

173

173

BEHAVIORAL MODIFICATION
ACTIVE GRANTS AND CONTRACTS—ADAMHA
THE NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

Project Title and Number

Alteration of Alcoholic Patients' Drinking Behavior—R18 AA00179.

Institution and Investigator

Baltimore City Hospitals, Baltimore, Maryland—George E. Bigelow, Ph.D.

Total Dollars Up to FY/74

\$199,639.

FY/74 Dollars

\$0—no FY'74 commitment but still active

Brief Description

This project is concerned with those techniques of operant psychology with therapeutic promise for controlling variables related to alcoholic drinking. In this study the parameters of a token economy system for the control of alcoholism will be determined and the conditions under which self control can be transferred to simulated and real outside environments will be explored. A major effort will be directed toward the problem of therapeutic transfer of behavioral improvements into other situations and after intervention is discontinued. The rationale for the present study stems from results of prior work with chronic alcoholic subjects at the Baltimore City Hospitals in which reinforcement contingencies were used to manage many of the problems which accompanied drinking.

Project Title and Number

Implosive Therapy in the Treatment of Alcoholic Subjects—R01 AA00245.

Institution and Investigator

Mendota State Hospital, Madison, Wisconsin—Leonard I. Stein, M.D.

Total Dollars Up to FY/74

\$228,151.

FY/74 Dollars

\$0—no FY'74 commitment.

Brief Description

This is an investigation of "Implosive Therapy" (a systematic deconditioning procedure) with alcoholic patients. The applicant proposes to: (1) delineate the characteristics of alcoholic patients that make for favorable or unfavorable response to implosive therapy, (2) explore the characteristics of therapists that make for favorable or unfavorable application of implosive therapy, (3) provide a set of dependent variables on which the effects of implosive therapy with alcoholic patients may be measured in a reasonably valid and reliable manner, (4) assess the effects of "detoxification only" in a controlled manner with follow-up procedures, and (5) investigate short and long range effects of coordination of outside agencies for alcoholic patients on discharge from an inpatient setting. The subjects are patients committed by court to a state hospital and required by law to stay until the Service Chief of the Alcoholism Treatment Center discharges them.

Project Title and Number

Avoidance Conditioning of Alcoholic Persons—R01 AA00261.

Institution and Investigator

Baylor College of Medicine, Houston, Texas—Paul E. Baer, Ph.D.

Total Dollars Up to FY/74

\$211,679.

FY/74 Dollars

\$68,002.

Brief Description

This project is concerned with evaluation of the effectiveness of avoidance training when it is coupled with aversive conditioning. The patients were on outpatient status, and the conditioning was accomplished by technicians. Avoidance behavior implies decision making; that is, it is the option of the alcoholic subject undergoing treatment to ingest alcohol and be shocked, or to discard alcohol and avoid shock. To augment the options, the inclusion of nonalcoholic beverages provides an alternative choice, drinking opportunities which are always free from the noxious consequences of shock. Twelve to 18-month followup will be used to evaluate the treatment approach.

Project Title and Number

Community-Reinforcement for Treating Alcoholic Persons—R18 AA00457.

Institution and Investigator

Anna State Hospital, Anna, Illinois—Nathan H. Azrin, Ph.D.

Total Dollars Up to FY/74

\$132,933.

FY/74 Dollars

\$68,510 (direct costs only).

Brief Description

A community-reinforcement approach to the treatment of alcoholic persons will be developed. This approach will extend laboratory-derived principles and non-alcoholism applications to the problem of alcoholism treatment. Vocational, family and social reinforcers will be arranged such that the alcoholic subject's new behavior patterns are incompatible with drinking. The comparison of the treatment modality with existing hospital procedure will use a matched-pairs design. Outcome measures to be employed are spent: (1) sober, (2) employed, (3) with family, (4) non-institutionalized.

Project Title and Number

Integrated Behavior Change Techniques for Alcoholism—R18 AA00478.

Institution and Investigator

Patton State Hospital, Patton, California—Roger E. Vogler, Ph.D.

Total Dollars Up to FY/74

\$241,171.

FY/74 Dollars

\$0—no FY'74 commitment but still active.

Brief Description

The investigation will evaluate a treatment program designed to moderate drinking behavior in chronic alcoholic individuals. The behavior change-oriented treatment program is comprised of the following components: (1) motivational feedback—videotaped confrontation of behavior in inebriated state, (2) discrimination training—subjects will be trained to discriminate blood alcohol levels (BAL), (3) aversive conditioning of overconsumption—electric shock contingent upon overconsumption, (4) avoidance conditioning—BAL-contingent shock avoidance training, (5) alcohol education and behavior counseling—lessons on alcohol and its effects, and (6) boosters—post hospitalization treatment program utilizing all of the above-mentioned techniques.

Project Title and Number

Self-Help Techniques in the Treatment of Alcoholics—R18 AA00496.

Institution and Investigator

University of Kentucky, Lexington, Kentucky—Maxie C. Maultsby, M.D.

Total Dollars Up to FY/74

\$226,235.

FY/74 Dollars

\$101,262 (direct costs only).

Brief Description

The efficacy of four treatment modalities in the treatment of alcoholism will be investigated. The treatments will include: (1) routine rational behavioral therapy including individual sessions with a professional, tape recordings, homework, and referral to a professionally led group, (2) self-help, utilizing the learning theory principles on which rational behavioral therapy is based; these patients will be given self-instructional tapes, homework, and placed in a rational self-help group with no professional therapist involved, (3) traditional insight oriented therapy, and (4) A.A. group membership. Comparisons will be made to a no-treatment control group. Self-report, demographic, and physiological predictor data will be collected to predict therapeutic outcome.

Project Title and Number

Prevention of Alcoholism in the Community—R18 AA001197.

Institution and Investigator

Pomona College, Claremont, California—Roger E. Vogler, Ph.D.

Total Dollars Up to FY/74

\$305,334.

FY/74 Dollars

\$0—no FY'74 commitment but still active.

Brief Description

The investigator will use behavior modification techniques to develop moderate drinking habits in youthful problem drinkers. Treatment includes the following: (1) motivational feedback—videotaped confrontation of behavior in inebriated state, (2) discrimination training—subjects will be trained to discriminate blood alcohol levels (BAL), (3) aversive conditioning of overconsumption—electric shock contingent upon overconsumption, (4) avoidance conditioning—BAL—contingent shock avoidance training, (5) alcohol education and behavioral counseling—lessons on alcohol and its effects. The treatment package will be compared to a control group treatment.

THE NATIONAL INSTITUTE ON DRUG ABUSE

Project Title and Number

Contingency Contracting for Treatment of Drug Abuse—R01-DA-00113.

Institution and Investigator

University of Florida, Gainesville, Florida, Dr. Henry Boudin, Principle Investigator.

Total Dollars Up to FY/74

FY/72—\$51,224; FY/73—\$81,602.

FY/74 Dollars

\$6,169.

Brief Description

The investigator will train paraprofessional volunteers to apply a technique of behavior modification, "contingency contracting" to reduce drug dependence in addicts. Reinforcing contingencies are applied and evaluated in a one-to-one relationship between client and therapist. A comparison of this technique will be made with approaches used in therapeutic communities and methadone maintenance clinics. Dependent measures used will be total days of drug-free urines, work history, illegal activity and criminal involvement and social adjustment.

Project Title and Number

Operant Self-Control Procedures, Intervention, Research in Addiction—R01-DA-00408.

Institution and Investigator

University of Chicago, Medical School, Chicago, Illinois, Dr. Israel Goldiamond, Principle Investigator.

Total Dollars Up to FY/74

\$173,302 (represents forward funding, FY/73—FY/74).

FY/74 Dollars

N/A

Brief Description

The investigators will demonstrate the efficacy of operantly-oriented, self-control procedures to maintain opiate addicts in a drug free status after withdrawal from methadone maintenance. Self-control patients will be required, over the course of weekly sessions, to record a number of their specific behaviors related to drug seeking in a series of specifically designed logs, graphs and work sheets. All behaviors are summarized on data sheets and are used as feedback to adjust the contingency-behavior relationships developed as a management plan for each patient. Treatment outcomes between self-control patients and patients receiving the standard Illinois Drug Abuse Program Treatment will be assessed by a research team consisting of a supervisor, programmer, monitor and paraprofessional trainee. The dependent variables used to assess treatment effect are: rate of illegal activity, employment history, and drug use ascertained by urine screening.

Project Title and Number

Behavioral Research Paradigm for the Study of Opiate Antagonists—HSM-42-72-208.

Institution and Investigator

McClellan Hospital, Belmont, Massachusetts.

Total Dollars Up to FY/74

FY/72—\$440,000; FY/73—\$329,939.

FY/74 Dollars

N/A

Brief Description

An experimental ward for behavioral analysis of opiate self-administration and for assessing the effects of narcotic antagonists on drug-seeking behavior will be operated. Specifically, the contractor will: (1) conduct a 60-day controlled behavior study on 5 to 10 subjects of baseline opiate self-administration and effects of narcotic antagonists upon operant performance, psychomotor activity, social behavioral interaction, mood state, personality, and intelligence profiles, and physiological effects; and (2) select detoxified male subjects with a 2 year history of continuous heroin use and follow them as out-patients on an antagonist. They will be evaluated on clinic attendance, behavior, employment, social functioning, side effects, and random urine testing.

Project Title and Number

Contingency Management and Behavior Therapy in a Methadone Maintenance Program—Contract #HSM-42-73-217.

Institution and Investigator

Baltimore City Hospital, Baltimore, Maryland—Dr. George Bigelow, Principle Investigator.

Total Dollars Up to FY/74

\$147,741.

FY/74 Dollars

None Allocated.

Brief Description

The use of behavioral management techniques with heroin addicts enrolled in a drug substitution (methadone) maintenance program will be studied. The objective of this program is to assess the use of contingency management and behavior therapy in a methadone maintenance program and compare such an approach with the "standard" treatment given in conjunction with substitution therapy. It is anticipated that this research will result in new treatment approaches for opiate abusers. Treatment outcome will be assessed by recording arrest records, employment history, social adjustment and urine screening.

Project Title and Number

Clinical Efficacy of Narcotic Antagonist—HSM-42-73-225.

Institution and Investigator

University of Pennsylvania, Philadelphia, Pennsylvania.

Total Dollars Up to FY/74

FY/73—\$175,000.

FY/74 Dollars

N/A.

Brief Description

The contractor will carry out the evaluation of naltrexone or other narcotic antagonists in conjunction with systematically programmed extinction trials (opiate challenges given on a programmed basis to addicts protected by the narcotic antagonist). More specifically, the contractor will select a population of 60 adults males, 18 years of age or older, with documented history of opiate addiction. The goals of the study are to: (1) determine the efficacy, safety and acceptability of naltrexone as a narcotic antagonist, (2) determine whether systematically programmed opiate challenges (extinction trials) have any significant differential effects on the outcome of addicts treated with the narcotic antagonist (s), and (3) provide dose range data and information relating to the duration of action of the drug(s) studied. Subjects will be administered the Brief Psychiatric Rating Scale, the Beck Depression Inventory, and the Minnesota Multiphasic Personality Inventory (MMPI).

THE NATIONAL INSTITUTE OF MENTAL HEALTH

Project Title and Number

Experimental Studies in Childhood Schizophrenia—R01MH011440.

Institution and Investigator

Lovaas, O. Ivar, University of California, Los Angeles, California.

Total Dollars Up to FY/74

\$451,152.

FY/74 Dollars

\$101,472.

Brief Description

This is a study of autistic schizophrenia children, including retardates, and treatment employing social reinforcement of verbal behavior which imitates that of adults.

Project Title and Number

The Effect of Verbal Conditioning on Social Behavior—R01MH011938.

Institution and Investigator

Krasner, Leonard, State University of New York, Stony Brook, New York.

Total Dollars Up to FY/74

\$320,680.

FY/74 Dollars

No funds but still active.

Brief Description

The object of this research is to investigate the social reinforcement process using operant conditioning. Implications of learning and role theory are being

applied to behavior therapy. Reinforcement is being applied to such topics as individual and group speaking, stuttering, and heavy smoking. Placebo response is also being studied. Among the topics being investigated are the effect of positive attitudes towards hypnosis on hypnotizability, and the effect of instructing mothers of autistic and behaviorally disturbed children in behavior modification. The effect of personality characteristics of the experimenter and subject and situational factors on reinforcement is being studied, along with the role of clinical psychologists' attitudes and characteristics on behavior modification. College students and mental patients are also among the subjects.

Project Title and Number

A Behavior Evaluation Program for Retarded Children—R01 MH 014880.

Institution and Investigator

Walter E. Fernald State School, Waverly, Maine, Beatrice H. Barrett—Principal Investigator.

Total Dollars Up to FY/74

\$39,619 (Represents funding for FY 1971-1975).

FY/74 Dollars

N/A.

Brief Description

This project is developing laboratory procedures to supplement clinical techniques for describing, predicting and modifying the behavior of severely mentally retarded persons, especially children. Subjects are mentally retarded children under 16.

Project Title

"Comparative Rehabilitation of Chronic Mental Patients."

Grant Number

2R01MH15553-06.

Grantee and Principal Investigator

Gordon L. Paul, Professor of Psychology, University of Illinois, Champaign, Ill.

Sponsoring Institution

Illinois State Dept. of Mental Health, Adolf Meyer Center, Mound Road, Decatur, Ill.

Dates of DHEW Involvement

6/1/63-7/31/74.

Amounts of Money Involved

Total (\$811,650) FY-74 (\$91,108).

Brief Description of the Project

This has been a comparative study of two promising treatment methods, milieu therapy and learning therapy. Both treatments include behavior modification techniques. The study has shown that chronic mental patients can be returned to productive healthy behavior and in some instances made to carry on independently in the community. The study was conducted at the Meyer Zone Center with chronic schizophrenic patients of the Kaukaee State Hospital. Incontinent patients were reduced 75%. Acceptability for hospital release rose from zero to 45% through learning therapy and 25% through milieu therapy. The study offers new evidence of the value of learning and milieu therapy and should provide effective devices for evaluating treatment programs for the mentally ill.

Project Title and Number

"Intervention in Low Base 'Asocial' Behaviors"—R01 MH15985—9/68-8/74.

Institution and Investigator

Patterson, Gerald R., Ph.D., Oregon Research Institute, P.O. Box 3196, Eugene, Oregon.

Total Dollars Up to FY/74

\$775,898.

FY/74 Dollars

\$217,227.

Brief Description

This is a study of "deviant" and normal families matched for socio-economic status, age, and size. Families with boys ages 6-11 years are included, with an emphasis on culturally deprived families. Intervention techniques are being used to provide reinforcement for adaptive behavior.

Project Title and Number

"Treatment of Childhood Behavior Problems"—R01 MH18516—9/71-8/76.

Institution and Investigator

Wahler, Robert G., Ph.D., Psychological Clinic, 719 135th Street, Knoxville, Tennessee.

Total Dollars Up to FY/74

\$86,536.

FY/74 Dollars

\$110,272.

Brief Description

This is an exploratory study of a new approach to child behavior modification using reinforcement therapy. The purpose is to train parents and teachers to manage the behavior of "oppositional" children, and to test for the generality of treatment effects across natural environmental settings and response classes. Oppositional behavior is defined as failure to comply with explicit and implicit adult requirements. The behaviors of pre-delinquent school-age children are being examined in multiple settings in the home, school classroom, and school playground.

Project Title and Number

"Community-Controlled Sanctions in an Urban Poverty Area"—R01 MH18-542—6/70-5/74.

Institution and Investigator

Risley, Todd R., Ph.D., University of Kansas, Lawrence, Kansas.

Total Dollars Up to FY/74

\$244,959.

FY/74 Dollars

\$0.

Brief Description

This is a proposal to study the feasibility of conducting a research project aimed at assisting the residents of a public housing project to establish and implement a formal "rules of conduct" and social sanctions, measuring community participation and social deviance. The goal is to develop procedures for increased community involvement in social control efforts.

Project Title and Number

"Group Integration and Behavioral Change"—R01 MH18813—6/70-8/74.

Institution and Investigator

Feldman, Ronald A., Ph.D., Washington University, Skinker and Lindell Boulevards, St. Louis, Missouri.

Total Dollars Up to FY/74

\$365,593.

FY/74 Dollars

\$79,038.

Brief Description

Projected efforts are to examine a community-based treatment program wherein antisocial (destructive or delinquent) children will be integrated into small

groups of pro-social children, and to ascertain effects of this program upon parents, staff, and peer groups. To be measured are the following variables: role conception, antisocial orientation, self-esteem, social readiness, belongingness and comfort, and conformity behavior.

Project Title and Number

"Behavior Modification Training for Community Agents"—R01 MH18906—6/70-8/74.

Institution and Investigator

Ray, Roberta S., Ph.D., Oregon Research Institute, P.O. Box 3196, Eugene, Oregon.

Total Dollars Up to FY/74

\$129,431.

FY/74 Dollars

\$0.

Brief Description

The objective of this project is to develop a program of training in behavior modification skills designed for the community mental health para-professional who deals with conduct-disorder, "pre-delinquent" children and their families. Trained will be community agents such as child welfare, juvenile court, mental health clinic and school counseling services; training to be in social learning theory, data collection, and behavior modification techniques for intervention in family and school settings.

Project Title and Number

"Behavior Modification Applied to a Mental Health Center."—1 R12 MH18905—04.

Institution and Investigator

Huntsville-Madison County Mental Center, Alfred J. Turner, Ph.D.

Total Dollars Up to FY/74

\$116,239.

FY/74 Dollars

\$62,250.

Description

This is a project to investigate the effectiveness of behavior modification principles when applied to the services and responsibilities of a comprehensive community mental health center. The investigators have found that the major advantages of behavior modification techniques when contrasted with traditional intervention techniques are (1) effectiveness, (2) efficiency, (3) wider applicability, (4) more precise specification of goals and objectives and (5) wider utilization by a greater number of people. This project has received widespread publicity from the press, radio, and television and as a result the community is familiar with its efforts.

Project Title and Number

"Behavioral Programs in Learning Activities for Youth"—R01 MH19706—1/71-4/74.

Institution and Investigator

Cohen, Harold L., Institute for Behavioral Research, Inc., 2429 Linden Lane, Silver Spring, Maryland.

Total Dollars Up to FY/74

\$673,686.

FY/74 Dollars

\$31,697.

Brief Description

The objectives of this program are to provide behavior-managed after-school activities for junior and senior high school youth, and to provide an in-school junior high school class, "Teenagers' Rights and Responsibilities (TARR)", in an effort to reduce antisocial behavior and prevent juvenile delinquency. The ap-

application of behavior modification would be implemented by a special behavior management course given to teachers initially entering the program. Evaluation of the program would be based on comparisons of the experimental group with matched control groups on various behavioral indices.

Project Title

"Behavioral Analysis and Modification in a Community M. H. Center".

Grant Number

3 R01MH10880-02S1.

Grantee and Principal Investigator

Robert P. Liberman, M.D.

Sponsoring Institution

Camarillo State Hospital, Box A, Camarillo, California.

Dates of DHEW Involvement

4/1/72-5/31/75.

Amounts of Money Involved

Total (\$186,046) FY-74 (\$16,318).

Brief Description of the Project

The objective of the project is to introduce behavioral analysis and modification methods into the regular operations of a comprehensive community mental health center and to evaluate and experimentally test the advantages and limitations of the behavioral approach. Findings from the project have led to a reorganization of the Oxnard Day Treatment Center. The project is now moving its efforts from partial hospitalization to outpatient and emergency services. Fifteen members of the outpatient and emergency services staff will be trained in behavioral technology. Goal attainment will be applied to every 8th patient at the Oxnard Outpatient Clinic. Follow-ups will be performed by the patient's therapist. The project will construct guides on its own goals such as tours, visitors, lectures, manuscripts sent for publication, completion of experimental and evaluation studies, and criteria for learning behavioral technology by the clinical staff.

Project Title and Number

"Achievement Place: Phase II"—R01 MH20030—5/71-4/74.

Institution and Investigator

Wolf, Montrose M., Ph.D., University of Kansas, Bureau of Child Research, Lawrence, Kansas.

Total Dollars Up to FY/74

\$443,500.

FY/74 Dollars

\$0.

Brief Description

The investigator has developed a model program, Achievement Place, which is designed to overcome the behavior deficiencies of the delinquent child in a home-like residential setting in his community. The objectives of this research are to further develop, refine, and evaluate: (1) procedures that can be used by non-professionals to modify academic and vocational behaviors; (2) procedures to produce basic social skills that are necessary for proper conduct in the community, school, and home; (3) a practical system for collecting, analyzing, and summarizing data to evaluate the overall effectiveness of the Achievement Place model; (4) procedures for educating the natural parents to deal with their child in their own home; (5) a teaching-parent education program; and (6) a model for statewide dissemination of the Achievement Place program.

Project Title and Number

Modification of Deviant Behavior—R01MH1020258.

Institution and Investigator

Barlow, David H., University of Mississippi, Jackson, Mississippi.

Total Dollars Up to FY/74

\$77,348.

FY/74 Dollars

\$87,477.

Brief Description

There are an estimated three to four million homosexuals in the United States, yet treatment for homosexuality has not been notably effective. This investigator is evaluating the usefulness of a wide variety of therapies which have shown some promise of success but have not been fully explored. These procedures include various conditioning techniques, aversion therapy, and systematic desensitization. Homosexual men between the ages of 16 and 50 participate in these experiments.

Project Title and Number

Two-environment Modification of Problem Child Behavior—R01MH020410.

Institution and Investigator

Baer, Donald M., University of Kansas, Lawrence, Kansas.

Total Dollars Up to FY/74

\$151,003.

FY/74 Dollars

\$82,078.

Brief Description

This is a project in behavioral modification research designed to study the generalizability, durability, and effectiveness of behavioral techniques developed in the classroom and home on hyperactivity, rebellious behavior, and deficient skills of non-normal preschool youth who are unacceptable for regular programs. An important question being tested is whether behavior modification techniques can be applied comprehensively enough to remediate all, or enough, of a child's behavior problems in order to label the outcome as "cure." The subjects for this project are youngsters three to four years of age who exhibit a variety of behavioral deficits, are unacceptable for, or rejectees from, other locally available programs, and whose parents plan to live in the area for the next two years.

Project Title and Number

Training Parents in Management of Antisocial Boys—R01MH020022.

Institution and Investigator

Bernal, Martha E., University of Denver, Denver, Colorado.

Total Dollars Up to FY/74

\$181,778.

FY/74 Dollars

No funds but still active.

Brief Description

The objective of the research is to evaluate the effectiveness of a parent training program using television feedback designed for treatment of young aggressive antisocial boys. The training program will be taken to parents' neighborhood via a mobile TV van to increase the likelihood of family participation and completion of treatment. The intent of the investigators is to provide a test of the parent training procedures developed over the last four years in terms of the effects upon deviant, desirable, and complaint behaviors in boys selected as seriously deviant at age six years. The boys will be followed up for two and three years to determine the degree to which they have benefitted from the training of their parents in child management procedures based upon operant learning principles of reinforcement, punishment, and extinction.

Project Title and Number

"Contingency Contracting in Treatment of Delinquents"—R01 MH21452—9/71-8/74.

Institution and Investigator

Stuart, Richard B., D.S.W., Behavior Change Systems, 3156 Dolph Drive, Ann Arbor, Michigan.

Total Dollars Up to FY/74

\$222,723.

FY/74 Dollars

\$110,808.

Brief Description

The general objective of this research is to develop a set of effective intervention procedures, based on behavioral modification principles, to improve the social functioning of pre-delinquent and delinquent adolescents in home and school settings. The intervention techniques are to be defined and validated and then taught to court, school and social agency personnel serving comparable populations. An evaluation plan is included. The investigator seeks to develop a set of materials for use in in-service training with professionals and para-professionals.

Project Title and Number

Self-Concept Changes Following Behavior Modification—R01MH021755.

Institution and Investigator

Morrow, William R., University of Wisconsin, Kenosha, Wisconsin.

Total Dollars Up to FY/74

\$21,587.

FY/74 Dollars

No funds but still active.

Brief Description

The main focus of this research project is to test whether operant techniques mediated by teachers can effectively modify nonattentive disruptive classroom behavior of elementary school pupils and bring about meaningful changes in self-concept. Following exposure to teacher mediated behavior modification techniques, experimental subjects with disruptive behavior patterns will be compared with control subjects to determine changes in behavior and self-concept. Preteacher and postteacher ratings on behavior and scores obtained by the Index of Adjustment and Value Scale provide the basic criteria for denoting change.

Project Title and Number

Behavioral Treatment of Childhood Gender Problems—R01 MH 021803.

Institution and Investigator

University of California, Los Angeles, California, Ole Ivar Lovaas—Principal Investigator.

Total Dollars Up to FY/74

N/A.

FY/74 Dollars

\$78,024.

Brief Description

Children with cross-gender (sex role) problems are being studied to improve the understanding of sexual deviation in its nascent stages. The subjects, boys five-to-eight-years of age who have exhibited various signs of a cross-gender problem (cross-dressing, playing with girls' toys, feminine mannerisms), participate in a variety of studies. The investigator is attempting to develop reliable and objective data on the behavior of these children in the home and in the clinic. Based upon this data, treatment is developed for helping children to

adopt normal gender behavior. This treatment is based on principles of "Behavior contingent management," in which subjects are given token rewards for displaying behavior appropriate to their gender. The investigator is also trying to identify the environmental conditions under which sex role problems are likely to occur. Long-term studies attempt to follow the subjects over crucial developmental years into adulthood. The long-range objective of this research is the primary prevention of adult transsexualism, transvestism, and certain forms of homosexuality.

Project Title and Number

Behavior Therapy : Professional and Paraprofessional—R01MH021813.

Institution and Investigator

O'Leary, K. Daniel, State University of New York, Stony Brook, New York.

Total Dollars Up to FY/74

\$136,351.

FY/74 Dollars

No funds but still active.

Brief Description

This is a project to develop and evaluate outpatient behavior therapy for disruptive underachieving children. In the evaluative phase of the project, the effectiveness of the therapy model will be tested by comparing a sample of children exposed to a professional psychotherapist with outcomes in children receiving therapy from a supervised paraprofessional. A group of children matched for academic deficits and disruptive behavior pattern but receiving no treatment serves as the control. Elementary school children serve as subjects.

Project Title and Number

"Rehabilitation Program for Delinquent Indian Youth"—R01 MH21853—6/72-5/75.

Institution and Investigator

Harris, Virgil W., Ph.D., Southwest Indian Youth Center, Box 2206, Tucson, Arizona.

Total Dollars Up to FY/74

\$212,838.

FY/74 Dollars

\$140,000 (Estimated total cost).

Brief Description

The study will evaluate specific behavior modification procedures and overall effects of a rehabilitation program for delinquent American Indian youths. The program emphasizes the phasing out of artificial contingencies within an institutional setting and transition to the more natural conditions of living within the community.

Project Title and Number

"PICA Research, Extension, and Practice (PREP)"—R01 MH21950—6/72-5/75.

Institution and Investigator

Fillpezak, James A., M.S., Institute for Behavioral Research, Inc., 2429 Linden Lane, Silver Spring, Maryland.

Total Dollars Up to FY/74

\$486,272.

FY/74 Dollars

\$29,598.

Brief Description

This study is an outgrowth of a promising NIMH-funded research grant currently in its final year. The project has utilized principles of behavioral psychology in developing remedial procedures for adolescents having academic, interpersonal and social deficiencies and related problems. The project will further develop and evaluate a model program for possible use in public schools to deter and remediate disruptive and delinquent adolescent behavior.

Project Title and Number

"School Intervention Program"—1 R01 MH22370-01.

Institution and Investigator

Fatherine Wright Clinic, Chicago, Ill., Graham A. Rogeness, M.D.

Total Dollars Up to FY/74

\$53,513.

FY/74 Dollars

\$53,513.

Description

The general objective of this program is to develop a counseling and behavior modification program suitable for implementation in a public, inner city elementary school. The program brings mental health services to large numbers of children with problems, employing only the available school staff and requiring a minimal amount of professional time. Its success will be measured by the extent disruptive behaviors are reduced. If anxiety and negative attitudes can be corrected, this program expects to attain increased achievement levels in the school. The second goal is to understand the process of change necessary to bring this about.

Project Title and Number

Group Work in Treatment of Adults—R01MH022742.

Institution and Investigator

Lawrence, Harry, University of Michigan, Ann Arbor, Michigan.

Total Dollars Up to FY/74

\$41,835.

FY/74 Dollars

\$11,483.

Brief Description

A study is being made of an experimental method for the group treatment of adults having problems with interpersonal relationships. The subjects are men and women who are referred by social agencies for the treatment of social difficulties. The program incorporates principles of behavior modification. This approach has the goal of changing behavior based on each member's expressed desire for certain improvements in adjustment. The major features of the group model include: (1) the identification of the behavior to be changed, (2) the development of problem focused member interaction, (3) the direct teaching by the group leader of problem-solving skills, (4) the mutual support of group members to reinforce each other's achievements, and (5) the development of desired behavior within the group which an individual can apply later on in his life. The groups meet weekly. Improvement is measured by questionnaires, talks with group leaders, performance in behavioral simulation tasks, and exercises in human problem-solving.

Project Title and Number

Modification of Family Interaction—R01MH022750.

Institution and Investigator

Martin, Barclay, University of North Carolina, Chapel Hill, North Carolina.

Total Dollars Up to FY/74

\$37,468.

FY/74 Dollars

No funds but still active.

Brief Description

Procedures are being developed to modify child psychopathology through family interaction. The interaction procedures are a combination of operant behavior modification techniques and systems for effecting conflict resolution. Parents and seven to eight year old children are taught these procedures by modeling and behavior rehearsal with feedback. A series of experiments is carried out in which: the effectiveness of the procedures is evaluated and improved; the effectiveness of self-monitoring and periodic repetition of training for increasing the persistence of changes are evaluated; the relative contribution of the intervention components are assessed; and the effect of including both father/child and mother/child relationships in intervention as opposed to mother/child relationships only are studied. In additional studies, results are to be applied to minimally and more seriously disturbed children.

Project Title and Number

Behavioral Therapy for Suicidal Patients—R01 MH 022804.

Institution and Investigator

Camarillo State Hospital, Camarillo, California, Robert P. Liberman—Principal Investigator

Total Dollars Up to FY/74

N/A.

FY/74 Dollars

\$88,949.

Brief Description

The development of a demonstrably effective behavior therapy to prevent or reduce the recurrence of self-destructive actions is the major objective of this project. The investigator also wishes to develop a standardized training program for paraprofessionals in the use of behavior modification methods, including a video tape package of treatment methods for export to treatment centers. The subjects are men and women, both Chicano and Anglo, between the ages of 18 and 50 years. These individuals, referred by the mobile emergency team of the Ventura Mental Health Department, have attempted at least two suicides each within the last 12 months. The group is randomly divided to evaluate the effectiveness of behavior plus milieu therapy versus milieu therapy only. Desensitization, assertive training, and contingency contracting forms of behavior therapy are used in the behavior therapy group.

Project Title

"Behavior Modification: Evaluating Effects on Patients."

Grant Number

5R01MH22890-02.

Grantee and Principal Investigator

Kurt Salzinger, Ph.D., Principal Research Scientist, N.Y. State Psychiatric Institute, N.Y., N.Y.

Sponsoring Institution

Research Foundation for Mental Hygiene, Inc., Albany, N.Y.

Dates of DHEW Involvement

10/1/72-12/31/75.

Amounts of Money Involved

Total (\$262,237) FY-74 (\$80,070).

Brief Description of the Project

This research is to evaluate the effectiveness of training hospital ward staff, other hospital personnel and members of patients' families. The intent is to carry out a behavior-modification program. One chronic and one geriatric ward will receive 28 two-hour training sessions for the attendants and nurses. The condition of the patient will be assessed before, during and after the behavior modification program is applied. Effectiveness will be based upon treatment of specific problem behaviors and general ward behaviors as well as the discharge and readmission rates for the experimental groups of patients. These investigators are looking at the long term persistence of changes initiated by behavior therapy.

Project Title and Number

Imipramine, Behavior Therapy and Phobia—R01 MH 023007.

Institution and Investigator

Hillside Hospital, Glen Oaks, New York, Donald F. Klein—Principal Investigator.

Total Dollars Up to FY/74

N/A.

FY/74 Dollars

\$33,100.

Brief Description

A comparative study of behavior therapy and pharmacotherapy for phobic patients is being conducted. The subjects, adult outpatients, receive six months of weekly treatment under one of six regimens providing therapy for agoraphobia (fear of open spaces) and other phobias. The focus of the behavior therapy is on relaxation, systematic desensitization, and assertive training. The pharmacotherapy group subjects are administered oral doses of imipramine, which has a specific effect on panic anxiety, some participants receive a combination of the two forms of treatment. Long, open-ended social and psychiatric history questionnaires are completed by the subjects and various rating scales are used to further define and note changes in their clinical status.

Project Title and Number

Atypical Sex Role Development in Children—R01 MH 024305.

Institution and Investigator

University of California at Los Angeles, Los Angeles, California, Richard Green—Principal Investigator.

Total Dollars Up to FY/74

N/A.

FY/74 Dollars

\$41,138.

Brief Description

The objectives of this study are: to explore early life experiences associated with the emergence of atypical sex role development and contrast these experiences with those of children whose development is typical; to document behavioral features of children with atypical sex role development and contrast this behavior with that of typical boys and girls; to explore physiological variables which may influence atypical sex role development; to explore strategies for effecting behavioral change in children experiencing social hardship because of their markedly atypical behavior; and to follow children with atypical sex role development into adolescence and adulthood in order to correlate childhood behavior with subsequent sexuality. Family interaction is also studied through interviews and observation. This project is a continuation and expansion of ongoing research with a group of 40 boys aged three to 10 years.

Project Title and Number

Comparison of Several Classroom Management Systems—R03MH024502.

Institution and Investigator

Drabman, Ronald S., Florida Technological University, Orlando, Florida.

Total Dollars Up to FY/74

\$6,373.

FY/74 Dollars

No funds but still active.

Brief Description

Three methods of administering a token system to children with classroom conduct problems are being compared. Two types of token economies administered by student captains (rotating and elected) and a conventional teacher administered token system are utilized. Following completion of task, teachers rate the captains and the captains rate the other children on their behavior. Each of three classes have the same rules, the same backup reinforcers, and the same exchange procedures, with the only difference being whether the tokens are distributed by the teachers or the captain. In addition to mean frequency of disruptive behavior per 20-second interval, teacher and student preference are ascertained for each of the systems. A standard statistical test is also utilized in the comparison of systems.

NATIONAL INSTITUTE OF EDUCATION PROJECT

Institution/Principal Investigator

Central Midwestern Regional Educational Laboratory—Dave Buckholdts.

Name of Project

Institutional Systems Program.

Project Duration

March, 1973 to November, 1974.

Project Funding

Total—\$350,000—FY 1974, \$267,000.

Description

Poverty and otherwise disadvantaged children are often burdened not only with a poor living environment but also with an inadequate instructional environment. Recent studies have identified poor reinforcement systems and deficient early systems development as two significant factors responsible for the failure of many of these children in existing educational systems.

ISP is focused on the design of improved educational systems, particularly for children who do not succeed in existing programs. The program has concentrated on the development and testing of products which serve to remediate the child or correct deficiencies in the educational environment.

The ISP program is concerned with poverty and otherwise disadvantaged children who often fail in school. One set of activities in this program is directed toward the development of reinforcement systems which are packaged in training units for teachers and others to use to build basic attentional, motivational, and performance skills in children and to reduce disruptive and other behaviors which interfere with learning. Another set of activities involves the development and testing of a curriculum for the initial learning and then mastery of critical school entry skills, particularly the conceptual skills required for language and critical thinking from preschool through the primary grades.

The products of ISP include a Language and Thinking Curriculum program which provides guidelines for teachers, manipulatives, picture cards, transparencies, take-home tasks, independent work and frequent assessment procedures aimed at increasing the verbal fluency, vocabulary size, visual and auditory discrimination skills, and other abilities of children preschool through fifth grade levels.

Another component of ISP is the Classroom and Instructional Management Training program packaged in a series of self-instructional units, each of which contains written materials, slide tape show and a set of criterion objectives. The expected outcomes of the program will be teachers who acquire the knowledge and ability to design and use effective reinforcement systems and children with increased academic and social skills.

[Item I.C.2]
THE SEED

[Item I.C.2a]

[EXCERPTS FROM GRANT REQUEST BY THE SEED TO THE DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, JUNE 20, 1972]

NOTICE OF GRANT AWARDED

Under the authority of Federal Statutes and Regulations, and Public Health Service Policy Statements applicable to:
 Research Grant Training Grant
 DA DRUG ABUSE SERVICES (P. L. 91-513)

copy

Grant No. **1 H00 MH.00619-01**
 TOTAL PROJECT PERIOD:
 From **2/1/72** Through **1/31/80**
 GRANT PERIOD:
 From **2/1/72** Through **1/31/80**

Title of Project or Area of Training
THE SEED

Practice Institution
**The Seed, Inc.
 1311 S. Andrews Avenue
 Ft. Lauderdale, Florida 33316**

Principal Investigator or Program Director
**Barker, Arthur . . .
 President
 The Seed, Inc.
 1311 S. Andrews Avenue
 Ft. Lauderdale, Florida 33316**

APPROVED BUDGET
 FOR BUDGET PERIOD **2/1/72** through **1/31/73**

Personnel.....	\$ 130,870
Consultant Services.....	
Equipment.....	3,330
Supplies.....	28,500
Travel-Domestic.....	5,000
Travel-Foreign.....	
Postage.....	
Telephone.....	
Utilities and Renovations.....	
Publication Costs.....	
Printing.....	9,500
Travel Stipends.....	
Travel Tuition and Fees.....	
Travel Travel.....	
TOTAL DIRECT COSTS	\$ 177,200

AWARD COMPUTATION

1. DIRECT COSTS.....	\$ 177,200
2. INDIRECT COSTS.....	\$ 35,060 1/
(Calculated at _____ rate)	
3. TOTAL.....	\$ 212,260
4. Less Unobligated Balance from Prior Budget Period(s).....	\$
5. AMOUNT OF THIS AWARD	\$ 212,200

SUPPORT RECO MMENDED FOR REMAINDER OF PROJECT PERIOD
 (Subject to the Availability of Funds)

Budget Period	Total Direct Costs	
02	177,200	2/1/73
03	137,511	2/1/74
04	146,667	2/1/75
05	146,667	2/1/76
06	137,822	2/1/77
07	137,822	2/1/78
08	137,822	2/1/79

Asterisks indicate limited or restricted budget categories
 Accountability for equipment: conditionally req. not wanted

Remarks: **This award is revised to include provisional indirect costs, which cannot be used until a rate is negotiated with DHEW. Supersedes Notice of Grant Awarded dated June 18, 1972.**

Common Account Number HEW 502911	FHS Account No. 506220	FHS List Number ME-12-72	FHS Transaction Number 01-041451
Payments on this grant will be made to: The Seed, Inc. 1311 Andrews Avenue Ft. Lauderdale, Fla. 33316		Recommending National Advisory Council or Committee NSA/DA <i>Lois Chatham</i> Lois Chatham, Ph.D., Chief Narcotic Addict Rehabilitation Branch National Institute of Mental Health	

B. CONTINUITY OF CARE

Program Description

The Seed can be described as a "Day Care Center" with differential time requirements for court referrals in contrast to non-court referrals. The former client typically has a first phase of intensive rapping with his peers. This initial period usually extends for one month followed by a six month follow-up program in which the client is required to attend rap sessions three nights each week plus either Saturday or Sunday for the entire day. The non-court referral's time is usually half the court referral's time, or two weeks of intensive ten o'clock a.m. to ten o'clock p.m. rapping, followed by the three month schedule of three week nights plus Saturday or Sunday for the entire day.

The first step involves the admission, or intake, in which the client is signed on the program. A Seed parent outlines the program for the parents and applicant. The Intake Counselor interviews the client, recording information about the family, including the client's history of drug use. The Senior Counselor is then introduced to the family to discuss the client's participation in the program. The parents sign the child on the program. After the client is searched, he is introduced to the group and assigned to a foster home.

As stated above, new clients entering the program are placed in a temporary foster home environment during the first phase (10 a.m. to 10 p.m.) of the program. These homes are provided by families who have their own child/children participating in the program. It has been evidenced that it is necessary to remove the client from his home environment as there might be existing problems that would prohibit normal progression during this phase of the program, and this procedure also eliminates any outside interference that might hamper the client's progress.

For the first three days, the client is placed in the first row. During this period he is not permitted to talk or relate his feelings and his experiences. He is watched closely by the group and Staff with detailed notes recorded regarding his behavior.

On the fourth day, the client moves back a few rows. He is permitted to participate in group discussions. His attitude begins to change with a softening of facial features, attention focused on discussions, and loss of hostility. It should also be noted that, during this first week (day 5) to the second week, any deep rooted emotional problems that should become evident, the services of the Psychiatrist are utilized. If the client does not participate in the program for a minimum of one week, he or she is not considered officially on the program, and therefore not included on program statistical data. Also, if the client is removed by his parents against the advice of the program, he or she is placed in a special category for separate program data evaluation. The primary reason for this separation is to test program recidivism. Those clients referred elsewhere for continued care, that cannot be provided by the program, are also separated out in the event it would be suitable for them, in the future, to continue the program.

The client's participation in the program continues. On the fourteenth day, the Staff convenes to determine the status of a non-court referral. If the decision is to return the child to his home, the parents are notified. If the decision is against this return, the parents are notified and given the reasons for the delay.

During this first phase, the client sees his parents at the regularly scheduled "open meetings", approximately four times. On the fourteenth day a drug check "follow-up" is made. This follow-up is used as back up material regarding the client's drug usage. It is the Seed's experience that the initial interview with the client does not reveal an accurate picture of usage as the client will not tell the truth of his usage. At the end of two weeks, the client tells the truth—because he wants to.

From the fifteenth day through the twenty-first day, the client lives at home, attends school or work, and attends regular rap sessions. This mandatory attendance continues for three months. This procedure as described above for the non-court referral is doubled in time duration for the court referral.

The following is a *flow chart* that illustrates the "admittance" and follow through of the client as he progresses through the program. Please note that the following is the basic two-week intensive phase and three-month follow-up.

Admittance (Intake)

Step 1. Child and Parent(s) arrive.

Step 2. First Contact—Seed Parent: At this time the program outline is discussed, and if client is to sign on to the program—

Step 3. Intake Counselor brought in—fills out form.

Step 4. Senior Counselor (Staff Assistant and/or Staff Director) introduced to the family. (If a problem exists at this time, Sister Therese, Shelly and/or Art brought in.) Decision is made to sign participant on program.

Step 5. At this point, if "client" is not suitable for program, discussion is made as to the best possible treatment available for family.

Step 6. Parent(s) sign child on program.

Step 7. Child searched—(for drugs and/or weapons, etc.).

Step 8. Client is taken to "group"—introduced to other members, identification made by members who might know him, and arrangements made for foster home.

Step 9. Senior Counselor reports back to family and informs them of any additional details regarding their child. Parents are then expected to attend "open meetings". No contact will be made with them unless absolutely necessary during the following first phase.

First Phase—Two Week Program—(10 a.m. to 10 p.m.)**CLIENT****STAFF****Day 1 to day 3**

Client is placed in first row of group. During this time he does not talk and is watched by the group and staff.

Staff leaders in the group are watching client for his reactions in the first three days.

Day 4 to day 7

Client is moved back a few rows. He is given permission to participate in group discussions. Changes seen at this time are: facial features soften, attentive, and no hostility.

Client is receiving "feedback" from all layers of staff and also the group—acceptance is now being given to the client—so he feels.

Day 8 to day 14

Client continues to participate, wants to be involved in the group and looks well physically.

Staff has continued to observe; if there are any questions or problems that exist that cannot be handled by the group, the client will be talked to on a one-to-one basis.

Day 14

Decision is made by staff and group as to whether or not client is ready to go home. If "yes," parents notified. (If "no," parents are notified and given the reason that client will be extended.)

Senior Staff contacts the family to inform them whether or not client will be going home—*progress report*.

During the first phase, the client sees his parents four times only during the "open meetings." If client does not participate in the program for a minimum of one week, he is *not* considered "officially" on the program. On the fourteenth day, a drug check follow-up is made.

Day 15 to day 21

Client is living at home, attending school or job, and attends daily rap sessions.

During this one week period, client is watched very closely, not only by the Staff, but by his family and school and/or job and his own "peer" group.

Day 22 (official start of 3 month phase)

Client's mandatory attendance consists of three nights weekly and one full day on the weekend.

Client's participation in the program is carefully watched by the Staff, his attendance, his attitude and physical appearance. Also, the Staff is in contact with the family to check his attitude at home and his school attendance and grades. Progress reports are written on his status on a regular basis.

The last day of the client's program is decided by the Staff and when this decision is made, the client is officially "terminated" and brought before his peers to congratulate him.

Periodic follow-up is made on the client every three months for the first year and once a year thereafter to find out how he is doing. This will be explained in more detail with documentation at a later date.

The Seed has recently been approached by a group representing business-industrial fields, whereby they would provide a two-phase program; (1) incentive, i.e.—training, and (2) supportive, i.e.—employment.

As the clients progress through the program and are ready to participate in other areas of endeavor, i.e. furthering their education or employment, this group stands ready to assist these young people towards their ultimate goals. As this is in the formative stages, agreements are pending.

Also, as part of The Seed's responsibility to insure quality care to its clients, contact has been made, and is continuing to be made, with many of the State and County agencies to understand their programs and available services. These agencies include the following: Family Service Agency, Inc., Catholic Service Bureau, Inc., Bureau of Unemployment Compensation, The Broward County Welfare Department, Florida Unemployment Service, American Red Cross, Easter Seal Clinic, Bureau for Crippled Children, Division of Vocational Rehabilitation, and Adult Education.

With reference to the Division of Vocational Rehabilitation and Adult Education, many clients participate with these two agencies. Once the client is on the second phase of the program and eligible for vocational training and schooling, these agencies provide an invaluable resource for these young people.

OPTIMIST CLUB OF DOWNTOWN FORT LAUDERDALE, INC.,
P.O. Box 1018, January 18, 1971.

Mr. ART BARKER,
The Seed,
Ft. Lauderdale, Fla.

DEAR MR. BARKER: As you probably know, the Downtown Optimist Club is a group of concerned men, drawn from a cross-section of the community, who recognize their civic responsibilities and band together voluntarily in thought and action for the good of the community.

Optimist Clubs do whatever needs doing in the community. I am happy to report to you that we have chosen "The Seed" as our number one external project for 1970-1971. This decision was reached after a thorough investigation into what you are doing, and the tremendous results you are achieving. We found most interesting the testimony of Municipal Court Judge James B. Balsinger when he told our membership that "about 90% of the kids (probationers) I have sent to the Seed have stayed straight, some since July."

In addition to financial support we have already given you, a committee is diligently working at the present time, on arranging fund raising projects, the proceeds of which will go to the Seed.

It goes without saying, Mr. Barker, and because so many of our members have personally witnessed what the Seed is doing to win the battle against Drug Abuse, we intend to give you as much assistance as we possibly can.

Highest regards,

T. ED BENTON,
First Vice President.

NOVA UNIVERSITY,
INSTITUTE OF HUMAN DEVELOPMENT,
Fort Lauderdale, Fla., January 5, 1971.

Mr. ART BARKER,
Executive Director, The Seed,
Fort Lauderdale, Fla.

DEAR ART: I am happy to have the opportunity to write a letter in support of the activities of The Seed with young people who are experimenting with, using, and abusing dangerous drug substances.

I have referred a number of my patients to The Seed with dramatic results, not only in terms of getting off the use of the drugs but also in terms of positive

attitude changes. The attitude changes have made possible family and school adjustments which were completely rejected prior to the experience at The Seed.

Although The Seed program has been in operation for only a short while, the success rate for my referrals to date has been one hundred percent.

While more documentation of the program would be helpful to potential users and keeping in mind that more time will be needed for a thorough evaluation, the preliminary results appear to me sufficiently positive to justify continuation and expansion of the program.

Please feel free to call upon me at any time if I can be of help to you or The Seed.

Sincerely yours,

ROBERT J. JONES, *Psychologist.*

[Item I.C.2.b]

EXCERPTS FROM "THE STUDY OF THE ADVISABILITY OF THE 'SEED' IN DADE COUNTY"
BY THE COMPREHENSIVE HEALTH PLANNING COUNCIL OF SOUTH FLORIDA

* * * * *

IV. DESCRIPTION OF THE SEED

The final report of the special panel of the State Drug Abuse Program describes the Seed program as follows:

"The Seed is a non-residential drug abuse treatment program focusing on the rehabilitation of young (average age 16) poly drug abusers. Approximately 20 of some 90 drug abuse programs in Florida are oriented toward the youthful drug abusing population. Each program relies on peer group pressure, many involve parents, none use foster homes to the extent that the Seed does, and each has its own unique approach and contribution to make. The Seed has several sources of funding; \$177,000 from the NIMH, \$35,000 from the LEAA, and the balance from units of local government and private donations. Many of the young people in the program have been referred by the Broward County schools (875 in 1971-72), and by courts in both Broward and Dade County.

"Applicants accepted by the Seed are placed on a 12-hour day regimen, from 10 a.m. to 10 p.m., for an initial period of 14 days for voluntary admissions and 30 days for court placements. The daily routine consists of morning, afternoon and evening rap sessions with approximately 500 to 600 participants conducted by a staff member using a microphone. Discussions center around such topics as relation with parents, friendship, loneliness, etc. While in this intensive initial phase of the program, members live in foster homes provided by families having a child in the later phase of the program or who has completed it. Parents are further involved in the treatment process by attending evening meetings twice a week. Many parents volunteer their professional services and skills, prepare meals twice a day, and furnish transportation to and from the program. Upon successful completion of the first phase, the member (or "Seedling") is required to attend evening rap sessions three nights a week and one full day on the weekend. He may have returned to school or a job and perhaps to his own home. The decision is made by the staff and is based upon the individual's circumstances."

Additional information was obtained from observations, from the Director and from other printed materials. The Seed has staff members located in several referral points, primarily the courts, who assist in the determination of the appropriateness of a person for the Seed program.

There are a number of persons, including professionals in the medical field who contribute time and can be called on from within the community as requested by the staff. The Committee was informed that although the initial phase was referred to as a two-week program, it is seldom that brief and can extend for a month or more in many instances, dependent upon the progress of the "Seedling." The second phase of the treatment program can also last for several months. The Committee was also informed that progress reports are submitted to the parents at various intervals and always at the end of the initial phase. Parents who appeared before this Committee and wrote letters, strongly suggested that to them the Seed is the answer to their parental prob-

lems as they relate to their children's drug and behavioral difficulties. The Seed is licensed by the State of Florida as a non-residential treatment program at its present location in Broward County. Since participants are placed in selected foster homes from two to six weeks, there is room for questioning its "non-residential" nature.

Parents state that the establishment of honest communication and the change of attitude of the participants are incredible and genuine. Many Seedlings corroborate this and say that it is the only place where they have experienced total honesty in conversation and relationships. Conversely, others who have gone through the program suggest the honesty being displayed is either "brainwashing" on a mass basis or an attempt to speak the "party line" in order to complete the program and to leave the repressive atmosphere, and that it is therefore not genuine, effective, or permanent.

Target Population.—The Seed claims to be able to help almost all drug abusers regardless of age and the degree of drug involvement. However, as will be noted later, the actual population served is almost entirely that of the adolescent, and where there is drug usage it is almost exclusive of prolonged narcotic addiction. Although the Director and several supporters and advisory persons to the Seed have stated that referrals are made from the Seed to community agencies and Mental Health programs when appropriate, this Committee found only limited evidence of this. However, other agencies indicate they do have under care a certain number of persons who have completed the Seed program and have since then returned to drug use.

The socio-economic status of the population being served was identified by the Assistant Director of the Seed as families with an average income of \$10,000.

The Committee heard from several persons who work with drug abusing adolescents. Almost unanimously they suggested that the adolescent who is most appropriate for referral to the Seed and its methodology is the young neophyte in drug usage (the experimenter) and youths with attitude and family relationship problems.

Cost.—The per unit cost of helping any person at the Seed is difficult to determine from available materials. It has been publicly stated to the County Commission by a Seed representative that it costs an average of \$100 to "cure" a Seed resident. The Director of the Seed told this Committee that the average cost per Seedling was \$200. Since the average intake per month is stated to be within the vicinity of 100 new persons (1,200 per year), a \$100 per person cost would require a budget of \$120,000; doubled if the unit cost is \$200. A minimum income of \$212,000 in Federal contracts or fees for service is identifiable, not counting grants from local governmental bodies and municipalities. In addition, the program makes a request for contributions from each parent (the suggested amount is \$100), and there is a weekly "passing the hat" in the open meeting audience.

The State study indicated a presumed budget in the vicinity of \$300,000 per year. These figures do not include the large amount of donated "in-kind" activities and services that are provided by foster homes, the transportation, and donated professional services. The Program Director identified the staff salary range, exclusive of himself and his assistant, as between \$15 and \$75 per week.

Peer Pressure and Confrontation Technique.—The techniques of peer group pressure, and the group confrontation which helps to promote it, are the most identifiable aspects of the Seed program and therefore will be further described and discussed. The continuous "rap" sessions at the Seed concern personal responsibility and relationship difficulties. These discussions involve "kids working on kids", under the guidance of a staff person. The tactic appears designed to eliminate a person's psychological defense and excuses. This process breaks down a person's dependence on his psychological defenses and creates a dependency upon the support of the group. The group responds to the person's admission and confession of failures and personal disabilities with supportive statements of love and respect in spite of the admitted disabilities. The peer group then becomes both the conscience and the support mechanism for changed behavior. At the Seed, this technique is used throughout the daily "closed sessions." A strong influence is instilled for the person to be aware of the group's wishes, with group support for his recognition of failures and desire for change. Twice per week at the Seed, parents are included in massive meetings in which the youths, in numbers of 400 or more are seated in one half of the auditorium opposite their parents in the other half. Parents who attend have the opportu-

nity to communicate with their child briefly by microphone in mutual confession of communication problems and interpersonal relationship deficiencies.

The peer pressure concept utilized by the Seed is very similar to the methods used by Alcoholics Anonymous. The heavy confessional aspect and the moral-inventory concept also have their parallel in Alcoholics Anonymous. The participant's defenses are penetrated until he develops a dependency on the group. Favorable response is then rewarded by the group and unfavorable responses are unacceptable. The Committee would classify the Seed as an attitudinal modification program.

The long-term value of these group confessions and individual expressions of problems in a large group environment is questioned by many professionals and other persons. Conversely, an individual needs and wants to belong, and in this setting confession is the method of participation. Thus, the group aims at social acceptability and brings to the Seedling at least the temporary satisfaction of belonging to a group.

Peer pressure is a powerful force in behavioral change. It is not unique to the Seed program. It has been used in other types of programs and is being used by numerous drug rehabilitation programs in this and other communities, although not to the extent used at the Seed. Peer pressure is the primary method currently being used by the Division of Youth Services in handling delinquents in the State system where it is known as "guided group interaction" or "positive peer group pressure." Ordinarily peer pressure is accomplished in smaller groups ranging from 10 to 15 persons. The Seed is unique in applying this technique to 300 to 500 persons at once. There are a number of concerns about this technique that had been expressed both in relation to its use by the Seed in massive non-selective groups. These concerns can be summarized as follows:

Is such public confession destructive?

If the peer group is effective for behavioral modification while within and around the peer group, does it have a lasting effect when the person is returned to society and away from the peer group?

Since drug abuse is often symptomatic of other disturbances within the adolescent's life, does peer group pressure constitute an abdication of one's own responsibility for decision making to an outside group?

Consequently, does this hinder the maturation process by not providing any skills for coping with life's problems in the real world?

A consultant suggested to this Committee that the group consciously and overtly or by inference become the decision-maker for individual behavior and thus does not provide for the development of the coping skills that an adolescent needs to handle the personal problems including drug usage pressures. On the other hand, even if coping skills are not learned through this method, if the technique keeps a person drug free for a period of time, the youth might be afforded the opportunity to develop socially and psychologically within a more acceptable atmosphere. It is obvious that the adolescents who are involved in drug abuse have received something from this abuse, be it chemical reaction or acceptance by a drug using reference group. If a program provides something constructive that will replace whatever was considered a value from drug usage, it must be given some credence. Conceivably, even if the Seed does not deal with the deeper problems, it may still produce a moratorium on the problem manifestation long enough that other methods (or growing up itself) can contribute to the solution of the deeper problems.

A primary cause of drug abuse among the youth is the pressure for experimentation and usage from the peer group (an adolescent's associates), and the adolescent's desire to belong and be acceptable to a group. The premise of the Seed is, therefore, that since peer pressure caused the drug abuse, then that same peer pressure in reverse form should be utilized for correction purposes. A sizeable percentage (17% according to the State analysis of client records) of the adolescents at the Seed are not there because of any drug usage but for attitudinal problems. These can be described as relationship difficulties, behavioral and school adaptation problems and a life style that is objectional to parents and others in the social environment. In this group and others among the non-addicted drug abusers, some of the apparent positive results of the Seed's methodology can be compared to the results in "marathon" group and counter group therapies wherein people experience a temporary emotional high and subsequently feel that their life has changed and their problems have been solved by a new insight. It has also been suggested that the lengthened inten-

sity of the confrontation sessions produces a group response similar to that found in revivalistic religious meetings under the guidance of very inspirational and charismatic leaders.

The Staff.—During most of the period of operation, the staff of the Seed has consisted of the Director, Mr. Art Barker, and non-professional assistants. The latter are former drug abusers who have graduated from the program and have been selected by him for participation in the group sessions with the "Seedlings." Until recently, there had been no staff member with any professional experience. Under growing criticism, the Seed had added a staff member with experience and training in counselling. The junior staff members are actively engaged as leaders in the sub-groups as well as in the large group sessions. The Director, Mr. Barker, has had limited professional training or experience in the field of drug abuse or youth counselling. He is a recovered alcoholic who has worked as a volunteer in various institutions as a representative of Alcoholics Anonymous. He has experience as an entertainer and an obvious talent for conducting himself in front of audiences and for moving groups of people with his own enthusiasm. An attempt was made by the Committee to determine whether Mr. Barker was a necessary and essential part of the continuance of the Seed or any extension of the Seed into other locations. Opinions provided were at both extremes. Numerous persons suggested that his dynamic and charismatic personality and leadership was the key to every value that comes from the Seed program. The Committee also learned that because of the size of the program, his actual activity and relationship with an individual Seedling is minimal and that most parents barely know him. The exposure of Mr. Barker to the actual clientele is limited to conducting occasional revival type group meetings and a rallying point for the evangelistic spirit in the entire program. However, in addition to his activities within the community, he provides leadership and training to the staff members who work closely with the youths.

In conduct of the Seed program and in the promotion of it, Mr. Barker has frequently voiced his success claims in public speeches and the news media, and his lack of confidence of other drug programs, and in the school and law enforcement systems in controlling the drug problem. These pronouncements voiced in extreme terms have created a very strained relationship with other drug programs and social institutions and individuals in Broward County and other communities. These strained relationships also have created a climate of non-cooperation in referrals and mutual training between his and other programs. The Committee expressed a concern that such pronouncements and exaggeration detract from Mr. Barker's desirability as a role model for adolescents.

Even his supporters admit that Mr. Barker is a most difficult person to deal with because of this exaggerated claims about his own program, his negative attitude toward other programs, his secrecy about his own methodology and his defensiveness toward those who are interested in either cooperating with him or who question his methods and results. The Committee itself had personal experience with the extreme and rapid changeability of the founder while attempting to arrange a site-visit and access to materials about the Seed, and also during the site-visit. On several occasions, Mr. Barker unnecessarily displayed a strong antagonism, suspiciousness and uncooperativeness that detracted from the effectiveness of the visit. Yet during the visit, he personally extended himself in a most cordial manner, commenting on his desire for a favorable report from this Committee. It was the opinion of this Committee that although the Seed and its Director have had real oppositions and have had to overcome major stumbling blocks, particularly in its early stages, that the present defensiveness and combative posture of the Director has exceeded reasonableness and has become the major source of controversy and the greatest present weakness of the Seed. This Committee must conclude that he is an abrasive personality, that he has demonstrated a total lack of cooperation with other social agencies and drug abuse rehabilitation programs and has not participated in efforts to coordinate referral, staff training and efforts with others to mutually work at the community problem of drug abuse. The Committee was also impressed with his dedication to helping a large number of troubled youths in a way that seems effective to him, to many youths and to their parents, and was impressed with his ability to organize an agency and program to be the vehicle for that objective.

[Appendix "C"]

MIAMI, FLA.,
April 2, 1973.

Mr. ALEX MILLER,
Youth Co-ordinator, Florida State Drug Abuse Program, Miami, Fla.

DEAR MR. MILLER: As a Clinical Psychologist currently employed by The Children's Psychiatric Center and previously employed by the Dade County Department of Youth Services, Division of Psychological Services, I have had the opportunity to speak with and evaluate many children who have been in treatment in DATE Centers, as well as in non-licensed drug treatment programs. The purpose of this letter is to share my concern with you regarding the manner in which SEED, Inc., a non-licensed drug treatment program in Dade County, is conducting its program.

My current position involves working on a consultative basis to Youth Counselors and the staff of the State of Florida Division of Youth Services, as well as direct evaluation and interviewing of children in their custody. Almost on a daily basis I learn of incidents in which children have been mistreated, threatened, and have suffered ill consequences pursuant to their involvement in the SEED Program. In my discussions with children at Youth Hall, I have been told of numerous practices by the staff of the SEED which I feel are psychologically destructive to the children in their care. Children have reported to me that when they wanted to leave the SEED program they were threatened with commitments to State School. Further, in some instances, they were locked in rooms by themselves and denied food for days. They also reported that they were made to sit in chairs without speaking while listening to others berate them for hours.

I recently had the opportunity to interview a child who would be diagnosed as an emotionally unstable personality with paranoid overtones. The use of the above noted practices with this kind of child could easily result in a precipitation of major mental disturbance. Fortunately this child was able to run from the SEED before very much damage had been done to her psychologically. She did, however, manifest some confusion and paranoid ideation which she felt was a result of the manner in which she was treated by SEED personnel. I have also interviewed children who made suicide attempts following their running from the SEED. Overwhelming feelings of worthlessness, hopelessness, and despair were in evidence. Occurrences such as these lead me to question the manner in which children are selected for treatment in the SEED program.

It is my understanding that SEED personnel frequently refuse to cooperate with both Youth Counselors and other professionals, such as psychiatrists and psychologists.

Many of the children with whom I have spoken have told me that personnel at the SEED make statements to the effect that no psychiatrist or psychologist can help a person with a drug problem; the only manner in which a person can be helped is to go through the SEED program. Disparaging remarks are frequently made about other drug rehabilitation programs as well as the professional and legal community. Such remarks make it difficult for these people to do their work without apprehensions and resistances on the part of the drug involved youth.

Both the use of potentially destructive interventions and lack of cooperation make the SEED a danger to our community. Although SEED type programs may be beneficial to many of our drug involved youths, I feel that the program, as it is presently operating, may be doing a great deal of harm. It is my sincere feeling that the SEED not be allowed to operate in Dade County unless appropriate changes are made in the program.

Please do not hesitate to contact me should you want any further information regarding my observations on this matter.

Sincerely,

JEFFREY J. ELENEWSKI, Ph.D.,
Clinical Psychologist.

[Appendix "G"]

TELEPHONED STATEMENT OF HELENE KLOTH, GUIDANCE COUNSELOR--NORTH
MIAMI BEACH SENIOR HIGH SCHOOL

"I know many returned Seedlings, there are many here at the High School. When they return, they are "straight", namely, quiet, well-dressed, short hair and not under the influence of drugs compared to their previous appearance of

stoned most of the time. However, they seem to be living in a robot-like atmosphere, they won't speak to anyone outside of their own group. They sit in a class together and the classes become divided of Seedlings opposing non-Seedlings. They alienate many of the other students who do not understand why this anti-social behavior, the classes and the student body are as though divided into two camps. When there are group discussions about social problems or human relations, the Seedlings will not participate in these discussions. Whenever a class or part of the student body is scheduled for a field trip or an outing of some type, the Seed students refuse to participate until they have received permission from the Seed. In this manner, they use their Seed status in an unhealthy manner. One student attempted to rule the class using the Seed as his authority for his efforts at dictating within the class. I have noticed that it is almost necessary that the Seedlings be rehabilitated into social situations upon their return from the Seed. However, at the School, we do not know how to accomplish this because we do not know anything about what we should be doing in relation to the Seedlings. Therefore, sometime ago, I attempted to visit the Seed in order to speak with them about how we could work with them and what we should do. I asked for help. I was treated rudely, two people who went with me, were denied permission to enter and were closely watched in a separate room. In addition to rude treatment, I was told that the Seed was not interested in helping us. The Seed counsellor with whom I spoke, said, "We are not interested in educators or any of the people out there because they don't know anything. The world out there stinks, we will not come to school people."

Seedlings seem to have an informing system on each other and on others that is similar to Nazi Germany. They run in to use the telephone daily, to report against each other to the Seed and it seems that an accused Seedling has no chance to defend himself because if enough persons accuse him of something he is presumed guilty. The Seedlings also make numerous false accusations about drug behavior concerning non-Seedlings. The School is quite upset about this division of social groups and the teachers are very concerned and the non-Seedlings are all uptight.

I used to think it was the saving program, a year ago, I used to take kids there. Now, I know that a number of the children are back on drugs and I am not sure whether the method in which they do return home and the difficulties they have in school, is an improvement over their previous condition of being on drugs. I think there is something valuable available at the program but we could surely help make it work if we could work with them, both about the youngster before he goes to the Seed and to be able to get some help from the program after the student returns."

Received by:

PAUL T. SCHARACKER,
Senior Health Planner.

COMPREHENSIVE HEALTH PLANNING COUNCIL
OF SOUTH FLORIDA,
Miami, Fla., April 20, 1973.

Mr. FRANK NELSON,
Director, State Drug Abuse Program,
Tallahassee, Fla.

DEAR MR. NELSON: At a special meeting, the Health Planning Council Board of Directors voted to recommend to the State Drug Abuse Program that a conditional DATE Center license be issued to the "Seed, Inc." for Dade County with the proviso that the "Seed" moves toward the resolution of the following concerns:

1. A questionable client screening process which results in acceptance into the program of persons that could better be served in other local programs or those who are in danger of being harmed by participation in the Seed program, plus a lack of willingness to refer persons to other programs.
2. A seriously limited use of necessary professional services needed to best render quality comprehensive services to the large number of children and their families involved in the program.
3. A lack of willingness to allow persons involved in the program or the parents of these individuals to voluntarily remove themselves from the program.
4. A small number of persons (5) on the policy Board, plus the questionable procedure of the President also being the Program Director and the President's wife being a member of the policy Board as well as employed by the corporation.

5. Continual communication to the public of success rate claims that are not validated by facts, while other community agencies are seeing numerous Seed failures in their agencies.

6. Communication to the public of misleading information relative to the actual costs of the program to the client and their parents.

7. Continuous lack of willingness on the part of the Seed program to work cooperatively with other local drug agencies, other youth service agencies, the school system, and the HPC and it's Drug Abuse Task. Force, and the local representatives of the State Drug Abuse Program.

8. Concerns expressed throughout the community relative to the lasting affect the "Seed" program is having on its "graduates", and in some instances, deleterious affects on its participants.

9. The need in Dade County for all drug programs to jointly participate for the community good, and the record of the Seed in avoiding such mutual participation and openly stating defiance toward the cooperating process.

10. The Seed should develop a policy-making Board of Directors for the Seed program in Dade County composed of Dade County citizens and without employed members of the Seed organization.

11. That substantial progress toward the resolution of the above concerns should be made within six months and before the Seed be considered for licensure in 1974.

12. Also, that the Board strongly objects to pressures on HPC decisions, coming from this or any other agency, directed at the Board and officials of the State, and particularly objects to the pressures that resulted in the silencing of the local staff of the State Drug Abuse Program.

I would also like to take this opportunity to express our appreciation for the decision of the Department of Health and Rehabilitative Services to await licensing decision until the local review process had determined its recommendations.

Sincerely,

WINSTON W. WYNNE, *President.*

[Item I.C.2.c]

THE SEED, INC,

Fort Lauderdale, Fla., February 19, 1974.

To: Dept. of H.E.W., Bethesda, Md., Governor's Council on Criminal Justice, Tallahassee, Fla.

GENTLEMEN: With the conclusion of this past year, The Seed was motivated to re-evaluate the need for Federal grant continuation based on The Seed's community and parental involvement. The various Federal grants under consideration were (1) National Institute on Drug Abuse—Broward County—\$224,000.; (2) Law Enforcement Assistance Act (LEAA)—Broward County—\$50,000.; (3) LEAA—Dade County—\$35,000.; and (4) LEAA—Pinellas County—\$60,000. for the sum total of \$369,000., resulting in the matching requirement of funds totalling \$104,335.00.

To further clarify this picture, The Seed must match the total Federal grants with \$104,335. of its own funds. The Seed maintains that its \$104,335. can be used more economically and effectively without government bureaucracy.

This re-assessment, after considerable and careful deliberation, resulted in the unanimous decision on the part of the Board of Directors, Administrative and Program Staff of The Seed to "reject" all government grants.

This important decision is based on three vital principles: (1) The Seed's philosophy is to secure community support to operate an optimum program. During the past three and one-half years of operation. The Seed has built up a cadre of parental and community support. This philosophy has enabled, and shall continue to enable. The Seed to utilize the sound, successful procedures which have helped approximately 5,000 young people. This outreach has resulted in The Seed's becoming the most successful, the largest, and the most economical program of its kind in the world; (2) The local competition for the Federal grants creates a hostile atmosphere among drug rehabilitation programs. This competition brings disharmony and discredit to rehabilitation efforts. It also fosters a super agency that focuses its efforts on grantmanship rather than quality care for young people, which should be the *base*, the *primary*, and the *only real concern*; (3) We disagree with the "Ivory tower" approach to the funding of drug rehabilitation programs. Federal, State, and local agencies who

have little or no experience with *successful* rehabilitation make "life and death" decisions. *Their* ability to evaluate is based on textbook knowledge and observations of programs which have failed.

The Seed's rejection of the Federal grants and the subsequent elimination of the excessive demands, harassment and bureaucracy created by these numerous agencies provide the necessary autonomy for The Seed to continue its innovative and dynamic leadership in fulfilling its only purpose—saving kids!!

ART BARKER, *President.*

[Item I.C.2.d]

[From the St. Petersburg Times, September 16, 1973]

TWO VIEWS OF THE SEED PROGRAM

The Times interviewed two Seed graduates, two staff members (who are also graduates), seven people who had been in the Seed but had not graduated, seven parents and Seed director Art Barker. The names of all except Barker and St. Petersburg Seed director Susie Connors have been changed or omitted. Some of the family circumstances have been changed slightly to disguise identity. Seed staff and graduates would consent to be interviewed only in a group. The non-graduates were interviewed both alone and in the presence of their parents.

FOR

(By Margaret Leonard)

Drugs are available in the County's schools, at St. Petersburg's Williams Park, at parties, on street corners, in churchyards. Practically everywhere.

Almost any teenager will tell you that most of the students in his school have tried marijuana and would have no trouble buying other drugs.

The availability of exotic and dreaded drugs is common knowledge among parents of teenagers. The parents grew up when alcohol and sex were feared as the biggest threats to a normal, healthy adolescence.

Now their children are exposed to something far more mysterious and frightening.

With that fear in their minds, parents see their children enter adolescence, a time of rebellion, impulsiveness and uneven appreciation of adult reality.

The parent who catches his child shooting up heroin or anything else or who believes that his child may be on hard drugs is usually willing to do anything to save the child's life. Some look on it as a moral salvation. Many, with the images of heroin addicts etched in their minds, see it as physical salvation.

The Seed promises to save the child's life.

Some parents are not sure at first that the Seed is the answer but within a few days or a week or two, most are convinced.

One father said he was indignant when first told, by a Seed parent, that his 17-year-old daughter had a drinking problem. Also, he disapproved of "the language" used in the Seed program.

But his daughter was arrested, on a charge of breaking and entering. That night, her father says, she was so stoned she wandered to a strange house and beat on the door, calling "It's Carol, let me in." The occupant called the police.

While she was out on bond awaiting trial, Carol went back to drugs. She took a series of jobs but kept none of them more than a few days. Her grades worsened and she dropped out of school.

She would stay away from home for as long as three days at a time without telling her parents where she was. Sometimes she would call home but refuse to say where she was. When her parents took her car away from her, she took up hitchhiking.

Holding a picture of Carol taken a few months before she went into the Seed, her father says, "That girl is not my daughter, to put it bluntly—now she's getting to be."

Her charge was reduced to trespassing and she was sentenced to two years' probation but by that time Carol's parents had lost hope of being able to help her. They had withdrawn her bond and returned her to the county jail in Clearwater, where she stayed 18 days, without drugs, they hoped.

On probation, she continued to stay away from home, drift in and out of jobs and, presumably, take drugs.

Her mother told her, "Either make up your mind to seek help or you are going to have to get out."

"We had talked to Carol until we were blue in the face," her mother says. "We couldn't reach her."

Carol agreed to go in the Seed but the staff insisted that completion of the program be made a term of her probation. The judge was persuaded to amend the probation and Carol entered the Seed.

In most cases, the first thing that happens after a youngster enters the Seed is that he admits he did a lot more than he ever admitted before. Some who were showing a "bad attitude" or smoking pot admit within a few days that they took all kinds of drugs their parents have never heard of.

Carol admitted, after she went in the Seed, that she had taken pot, speed, downers, mushrooms, hashish, hashish oil, Demarol and possibly others that her parents don't remember. She told the staff where a bottle of amphetamines was hidden in her bedroom. She admitted to shoplifting.

Others never admit to any more than marijuana or beer but the Seed staff remains skeptical. Almost every parent interviewed by The Times had been told his child would be dead, usually within a year, if he did not get help from the Seed.

Faced with that prospect, most parents are eager to give the Seed a chance.

Asked what would have happened to Carol if she hadn't gone into the Seed, her mother said she would "eventually have overdosed" and her father said she probably would be dead.

He is convinced that teenagers who smoke marijuana inevitably go on to other drugs.

"This is where they're all going—eight out of 10 kids in St. Petersburg," he said. "We're reaching a new low and our kids are taking us there."

Carol's parents say she is "beginning to come back to life" after three weeks in the Seed.

"The change is so drastic," her father said.

She was wearing grubby clothes when she went in and now the staff has called her parents to say she wants new clothes.

She gave them "mean looks" in the beginning and said she'd like to lock them up and throw the key away. At the beginning of the third week, she told her parents in the open meeting that she was "very happy and working hard."

"Carol has a long ways to go," her father said, "but she is 200 per cent better than she was. I'm the most grateful parent that ever lived that the Seed is here."

"We have hope now," his wife says.

They believe that no other program could have helped Carol. She had refused to try counseling.

At Seed open meetings, many children who have been resentful in their adolescent rebellion stand up and say they love their parents.

Eventually, most confess to having been selfish, irresponsible and mean to their parents. They say they were miserable before and now are learning to be happy.

They say their friends weren't true friends and were only using them. They say their parents tried to give them love and they turned it away.

At some point, the boys appear at open meetings with short hair.

Parents who have been trying to handle unpleasant, unreasonable and uncommunicative boys and girls see perfectly controlled children standing before them confessing they were wrong in past disputes.

Parents who have been afraid that their children will never get through school and never amount to anything hear their children express ambitions to do well in school and work hard.

Parents who have not known where their children are and what they are doing now know where their children are and have some idea of what they are doing.

Parents who have been afraid their children will overdose and be killed can now be assured that they are not taking drugs at all.

A mother who is sick and tired of picking up dirty clothes and cleaning up messy bathrooms hears her daughter promise, before hundreds of people, that she will wring out the washcloth and hang it up and will make up her bed when she is allowed to come home.

And when the children are allowed to come home, they do make up their beds and take out the garbage. If they don't, they don't "graduate from the program." If they talk disrespectfully to their parents, they may not graduate.

Parents who were frightened and bewildered before are delighted with their children after the Seed.

The transformation of their children does not come entirely without effort from the parents.

Grateful parents say "\$1,000 wouldn't be too much." They are asked to give only \$250, if they can afford it, and most do. The Seed says many give more. A bucket is passed at the end of the open meetings on Monday and Friday nights and parents put in paper money.

They make sandwiches and give fruit. They volunteer to work in "intake," the program's reception center for new admissions. Most parents will do whatever seems to be needed to bring about changes in their children.

Both parents are expected to come to both open meetings every week and stay for the full meeting, usually about three hours.

When their children become "oldcomers," or veterans of Seed training, most parents take in new "seedlings" who are not allowed to go home at night. They give them a place to sleep, breakfast and sometimes food at night.

Many Seed parents become missionaries for the program. They make speeches at civic clubs, write letters and recruit.

"Seedlings" are recruited primarily through their parents. Graduates of the program, when they go back to school or jobs, are told to avoid old friends and stay with other "seedlings."

Art Barker, founder of the Seed program, explains that "seedlings" are encouraged to invite druggies to come with their parents to their home to talk with the "seedling" and his parents. They are not encouraged to talk to druggies outside the presence of the parents of both.

"Seedlings" tell their stories in the presence of Seed staff at civic clubs, in open meetings or occasionally in interviews.

One story is told over and over at civic clubs throughout St. Petersburg by a 19-year-old staff member who chose the name Mary for an interview.

She says she was "what most considered an alcoholic" at age 12 "because I wanted to be cool and I wanted everybody to look up to me."

By age 13, she says she was smoking marijuana, had left home and had a circle of friends in their 20s.

"I wanted to really impress them," she says. "More than anything I wanted to really have friends. I didn't have anything going for me but as long as I did drugs I could find people who did drugs."

At about age 16, although she had promised herself she would never use chemical drugs, "all of a sudden I found myself tripping or crashing every day in school."

At one time she lived with her boyfriend and "overdosed every time I got a chance."

She also recalls living in Haight-Ashbury for awhile, getting into radical politics, capturing an ROTC building at the University of Kentucky, being in a psychiatric hospital, living on a farm in West Virginia, selling about \$1,000 a week of cocaine and being "strung out" on a racetrack job in Florida where she heard about the Seed.

"I talked to a staff member and something about her eyes was so beautiful to me, clear and sparkling," Mary says. "She told me she had done drugs too, been in my shoes. I noticed a certain kind of peace in her eyes that I had always been looking for."

Describing the program, Mary says, "for the first time in my life I heard real honesty."

"I wanted to learn about me. I wanted to be the kind of person who could be honest with other people. I started being truthful about myself. . . . All of a sudden I saw people really cared about me for the kind of person I could be. . . . I started believing all the corny things like love of God and love of my country and love of my fellow man. I really wanted to help other people go through the same thing I had gone through."

A 13-year-old girl tells a similar but shorter story, using the name Sally:

She started smoking pot "just to be accepted and to be cool."

"I thought I had really good friends but I'd use them and they'd use me," she says. "My parents knew something was going on because I never paid attention to them and never went any place with them and if I did I had to duck my head down in my seat because I was afraid my friends would see me and start laughing."

"When I first started doing drugs I thought I was cool and happy and everything and I thought everybody really liked me."

Her mother read her diary and learned that she was smoking marijuana and drinking and persuaded her to go to the Seed. She says she had been afraid to use chemicals or pills but knows now she would have if she hadn't gone in the Seed.

About the fourth day in the Seed, Sally started "giving up things, opening up and being honest."

"I started to participate and let go of all those things (thinking about friends, smoking pot, the 'security of being outside,' her boyfriend)."

She was on the Seed program about six and a half months and "graduated" about two months before the interview.

"I know I'm not completely myself yet," she said. "I can tell because I still play games with people and myself and I'm not perfect."

Now, "I have a better attitude. I think life is love and caring for each other and helping each other. I don't mind telling people how I feel and what's inside me. I'm being more myself, more honest with myself and with others.

If she hadn't gone into the Seed, she believes she would be dead or in jail.

The arguments most parents give Seed critics is that "it works."

Barker, creator and director of the program, says it is "the closest damned thing in the world" to perfect. He claims a 90 per cent success rate.

"If the Seed program doesn't work," he tells civic clubs, "in five years 50 per cent of the young in this country are not going to be giving a damn."

Critics who believe "seedlings" are "brainwashed zombies" are hard put for an answer when asked if that isn't better than being addicted to heroin, dead or in jail.

Those who question the percentage of real drug addicts who enter the Seed are told that today's pot smoker is tomorrow's hard drug user.

Barker said the Seed doesn't attempt to treat the older "hardcore heroin addict."

Susie Connors, who runs the St. Petersburg Seed, said that in "rare cases," children are admitted who have only an "attitude problem."

"If a brother or sister is on the program and we feel the family would benefit, we'll always make an exception," she said. "Usually those kids—all the time, those kids have at least drunk before and are heading that way."

She says it is true that everybody does pretty much the same thing and for pretty much the same reason. Seed graduates tell of feeling surprise and relief when they heard others describe their own feelings and confess to their own misbehavior.

An older staff member recalls a key point in his cure when a 13-year-old girl in a rap session "stood up and related something and it was exactly the way I felt."

The program, as explained by Susie Connors, is "based on love and respect and consideration for each other."

"We never ask anybody to do anything they can't do," she says. "We never ask anyone to be the kind of person they're not. We never dwell on the negative qualities of people. We emphasize the positive qualities.

The practice of "coming down on" youngsters in the program, recalled bitterly by disillusioned former "seedlings," is described as therapeutic by Susie and loyal graduates.

"It's used in the Seed," she said. "For instance, a kid stands up and is not being honest. There's always going to be another kid who says, 'Hey you're not being honest and this is how I know.' Everyone seems to think it's some kind of brutal torture.

"They're always reinforced no matter what a kid stands up and tells another kid . . . it always ends with the kid saying I love you and I want you to be honest.

"In extreme cases where it's necessary, sometimes it takes an hour, sometimes less than that or more than that or it may never happen to a kid."

She said the staff "never" threatens children with jail who are not actually facing jail sentences if they don't make it in the Seed.

Asked why children who go into the program are not allowed to have money or identification during the first part of the program, she replied that "for one thing, they don't need money or identification.

"It only takes a dime for a phone call to an old druggie friend to tell them to come get them to go get stoned."

Asked why a "seedling" in the first part of the program, whether under or over 18, is not allowed to call a lawyer, she asked, "Why would he need a lawyer?"

She said parents agree to the terms before their children are accepted in the program: No phone calls, no letters and the parents do not know the names of the foster parents or the location of the foster homes.

The program, she said, teaches "spirituality," not religion. "We say the Lord's Prayer every night. Everyone comes to understand God on his own terms. We never shove religion down their throats."

The Bible is not brought into the Seed but neither is any other book.

"They have no reason to read books or anything like that," she said. "The most important thing is the knowledge they get about themselves. They're free to read the Bible when they go home.

"Seedlings" in the first part of the program, which lasts from two weeks to two or three months, go only to the Seed and home.

"If parents prefer to have their kids go to church on Sunday, we let them know and it's the parents' choice whether they still want to put them on the program or not," Susie explained.

Parents who have spent months with the terror and grief of drug problems see their children free of drugs and with the attitude, demeanor and appearance considered "straight" and just thank God for the Seed.

AGAINST

Pat, 18, spent about two months in the Broward County Seed before the Pinellas County Seed opened.

He says he has never used any drugs but his parents were persuaded last year that he did. They believe him now.

"People involved with the Seed literally convinced us he was on drugs," Pat's father says now. "We had no proof at all. The only thing we had was pure growing-up actions. He was kind of stinky. We thought every kid in Pinellas County was on drugs."

Pat's parents said they were told that a "druggie" can be recognized by his tastes and habits—if he has posters on his bedroom wall or keeps his room dark, if he has a hi-fi set or burns incense, if he has any black lights or owns a van, he's a druggie.

At least one Seed parent says in public meetings that a child is on drugs if he acts obnoxious, refuses to go anywhere with his family and won't help around the house.

Pat said he agreed to go into the Seed after he was assured by a Seed parent he could "work out his problems" there.

Bobby, 14, who admits only that he has tried marijuana once, also went into the Seed voluntarily.

His father, who believes Bobby has no drug problem, said the Seed staff told the family that Bobby's older brother, who was already in the program, could not come home until Bobby entered the Seed.

John, 16, admits he has a drug habit and has been in trouble with the police many times. He went in as a condition of probation.

He ran away recently, sought out a reporter for *The Times*, visited his mother briefly and went back to the program.

His mother said she doesn't know whether the Seed is doing him any good or not but she leaves him in there and keeps going to the open meetings because she doesn't want him in jail.

She doesn't like the program but said she doesn't want to say anything that might get him in trouble with the Seed staff.

Carolyn, 14, says she has tried a great variety of drugs but had given up all but marijuana before she went in the Seed. She entered voluntarily.

Pat's father and stepmother said that when they took him to the Seed in Fort Lauderdale, they were told he was "on everything from pot to heroin." They quoted an intake worker who said he could tell by the way Pat looked him in the eye, the way he shook hands and the way he denied using drugs.

"They told us how weak we were," Pat's stepmother recalls. "They kept saying, 'We know he's on drugs' and we were scared to death."

Pat by that time was frantically changing his mind about "working out his problems" at the Seed but it was too late.

He began two and a half months of resistance to what he calls "brainwashing" by the Seed.

The first step is isolation from any influence other than the Seed. The Seed-confined child is not allowed to attend school in the initial stages.

"I wasn't alone one minute of the time," Pat says.

He says seedlings accompanied him to the bathroom, sat on each side of him in the car going to the foster home at night and slept in the same room with him at night.

He said he was allowed to communicate with no one outside the Seed. He talked to his parents only over a microphone in open meetings.

"If it's something that's all right, that you used to have fun with, you're not allowed to bring it up at all," he says.

Pat's stepmother still gets mad when she tells about a picture of Pat's little brother that she asked the staff to give him.

"They said, 'no, it brings back memories of his past,'" she recalled.

Pat said he was not allowed to read newspapers or newsmagazines, but in one foster home he was permitted to read books selected by his "oldcomer."

He said he was not allowed to seek a lawyer or help from any outside institution.

He said he was not allowed to go to church.

"The staff says you don't need religion to get off drugs," Pat says. "They don't say there's no such thing (as God). They just don't bring it up."

The Seed uses seven of the 12 traditional steps of Alcoholics Anonymous but Pat recalls that the words "a higher power" are always substituted where AA sometimes uses the word "God."

Carolyn, who spent 12 hours a day in the Seed for 15 days, said she was told the Seed is the higher power.

"God can't really help you," she said staffers told her.

"The only time you pray to God is when you're in trouble and he never seems to answer you so the Seed is our God. The only way you can get help is to talk about things and you can't sit down and talk in a two-way conversation with God."

Carolyn, who was allowed to go home at night after about 20 nights in foster homes, said she was forced to change her hairstyle and throw away her clothes because they represented her "old image."

In a daily "moral inventory" kept by all "seedlings," Carolyn listed as a "bad point" that she had winked at her mother in an open meeting. She explained that her mother was considered a bad influence because she had not wanted her to go into the Seed.

Isolation from family, friends, school, culture, church, government and the past create a vacuum to be filled by the Seed.

The 12-hour Seed day consists almost entirely of what are called "raps."

"You sit in a room from 10 a.m. to 10 p.m. and talk about the same thing over and over and over," Carolyn said. "If you don't listen, a staff member will tell you to sit up and pay attention."

She said staff members tell the new people why they behaved as they did.

"They try to tell you you only do it because your friends do it," she said. "They told us we hated ourselves before we went in the Seed and our friends were not friends at all and didn't try to help us."

"They told us we thought of ourselves as failures. They told us we wanted to be neat, to be cool."

"If you talk about a nice past, they keep a watch on you. They think your whole past was ugly, that you never did nothing right, you never accomplished nothing but since you have the Seed you can accomplish anything. They say you screwed up your family really bad."

"If you say you blame your parents for any of your problems, they come down on you and say that's not true," Pat said. "They say your problems are brought on by yourself. Your problems are your own fault."

The technique of "coming down on" people is used to teach "seedlings" to "be honest with themselves."

Pat said it is used most intensively during night meetings, when more are present, including those who work or go to school in the daytime.

He said the "most sickening" occasion he remembered was an attack on a 12- or 13-year-old girl.

"I could tell she was straight," he said. "There wasn't anything wrong with her at all. I really felt sorry for her. They came down on her about an hour. One girl started using her age and telling her she wasn't old enough to know

what to do, not even old enough to . . . (commit an act of masturbation). The girl started crying and they came down on her a few more minutes.

"The staff didn't have anything to say about that. (One staff member) laughed her head off."

Carolyn recalled other raps in St. Petersburg where girls were teased with obscene language.

When the group comes down on a boy, Carolyn said, girls will tell him, "I wouldn't even look at you twice when I was on the street . . . you really think you're hot."

Bobby said he was encouraged to relate sexual experiences with girls and give their names.

He said he was encouraged to talk about sex and use obscene language, but was threatened with starting over if he looked at girls in the program or talked to them.

All the disillusioned "Seedlings" interviewed said the pressure to confess to misbehavior made them say they had done things they had not done, in order to move along more quickly in the program.

"I was fighting it a really long time," Carolyn said, "Then all of a sudden I just kind of gave up."

Even before she gave up and began to believe what she was told in the Seed, Carolyn pretended to believe it. She said she caught on that the only way to get out was to do what was expected of her.

"I was so afraid to say anything wrong," she said. "I was just waiting to hear what I was supposed to say. That's what everybody does. You get the idea that if you don't say what the others are saying, you're not going home. Nobody wants to start over. I picked up words from everybody else and made them my own."

She was allowed to go home after about 22 days and after 45 days, she was promoted to "the three-month program," an indication that her acting was successful.

Pat, who was never promoted from the first stage of the program, said he once told a staffer to "go to hell" and was forced to stand for five or six hours while the group went on with the rap.

During the raps, he said, "guards" stood at the doors—"big guys at every door."

"If anybody gets out of his seat, they verbally tell him to get back and if he doesn't, they physically make him get back."

Pat is scornful of the "open meetings" where parent visitors come to see the program.

"Seedlings" who tell their stories in the open meetings "are told what to say and what not to say," according to Pat.

For example, he said, "Seedlings" are told to confess in open meetings "what you did to your parents."

Carolyn said any "Seedling" who criticized the program or asked to go home in the open meeting would be forced to start over. She said those who break the rules are "come down on" the next day.

New visitors at the open meetings are surprised to see pairs of adolescent boys walking around with their arms around each other.

Pat, Carolyn and Bobby said the practice is compulsory. Girls are required to hold hands and boys must put their arms around each other when they leave their seats, they said.

Pat's first foster home was in a "really nice" family.

"If I had stayed in that home and not been taken away," he said, "I probably would have finished the program."

However, he was moved to a new home with an "oldcomer" who was "on such an ego trip he thought he could tell everything about you by looking at the way your nose twitched."

In that house, he said he was locked in a room with a chain on the outside of the door as soon as he got home and "never saw" the father except once at breakfast.

He ran away from that house and found a free telephone to call his parents, who drove to Ft. Lauderdale and took him back to the Seed.

When they got back to the Seed, Pat's father recalls, he was again persuaded that his son was on drugs and in great danger if he left the program.

"They told me to hit him and make him stay—either that or he'd be out on the street and dead. I was convinced he should stay. I never would have touched him if I didn't feel like it was that or death. I'll never forgive myself for that."

Pat said his father began by screaming at him to go back in the group and finally shoved and hit him. The father and son hit each other and Pat remembers blood coming from his father's lip. He says the Seed staff was standing around smiling and his mother was crying.

He said his father finally just gave up and a staff member sent for "eight guys to carry me in in front of a thousand people."

At that point he decided to go in voluntarily.

When Pat went in the group, his father said he went to the men's room and vomited and cried.

Bobby got out of the Seed because a staff member asked his father to beat him in front of the group, his mother said.

A staff member "wanted my husband to take a belt before the whole group and whip his son," she recalled. "I said no way. That same day I was already thinking Bobby shouldn't be there."

She said she called a lawyer to find out what authority the Seed had to keep her son. When he told her she had the right to take Bobby out, she took him out.

Bobby said the seed staff told him he would have to go to jail if he ran away. "That's why I didn't split."

Pat, Carolyn and Bobby all said they were "brainwashed" to some extent in the program.

Pat, although threatened with the state school, managed to run away again and hitchhike back to Pinellas County, armed with faith that he could persuade his parents not to take him back to the Seed.

His parents said the Seed called to tell them Pat had run away and to advise them to lock him out of his house and have him arrested for vagrancy.

They balked at the advice. They took him back into his home, talked to him, listened to him and became convinced that he had never been a "druggie."

Asked how people can be "brainwashed" to believe things they once ridiculed, Pat described it as "sort of like torture."

"They keep on and on and on until you finally start believing it," he said. "They just drill it into your mind. If somebody tells you something and the other kids tell you enough, you start believing it."

He thinks fear is an important tool.

"They tell everybody if they don't make it in the Seed it means death," he said. They're brainwashed to think pot is really bad, that it will kill them.

"They think even the tiniest things are really horrible. They stay on each person until he admits everything horrible."

By the time a "Seedling" graduates, Pat said, he usually believes everything he has been told.

"Some are so scared that if they do leave the Seed they are going to go back on drugs, even if they know the Seed is a bunch of crap, they are still scared of what will happen."

[Item I.C.3]

CENTER FOR THE STUDY OF CRIME AND DELINQUENCY—ABSTRACTS OF CSCD-
FUNDED PROJECTS, DECEMBER 19, 1973

Index

APPENDIX A-1, RESEARCH PROJECTS WITH PRISON POPULATIONS

R01 MH14734—Palmer.
P01 MH17585—Borgaonkar.
R01 MH17955—Berkowitz.
R01 MH18075—Daly.
R01 MH18468—Megargee.
R01 MH20696—Toch.
R01 MH21035—Monroe.
R01 MH21853—Harris.
R01 MH22350—Erickson.
R03 MH23170—Bruning.
R01 MH23975—Witkin.

APPENDIX A-2, RESEARCH PROJECTS WITH MENTAL HOSPITAL POPULATIONS

R01 MH20867—Steadman.
R01 MH21303—Schwitzgebel.
R01 MH23742—Thornberry.

APPENDIX A-3, RESEARCH PROJECTS WITH SCHOOL POPULATIONS

R01 MH15985—Patterson.
 R01 MH18516—Wahler.
 R01 MH19706—Cohen.
 R01 MH20030—Wolf.
 R01 MH21950—Filipczak.

APPENDIX B, INSTITUTIONAL ASSURANCES (BY GRANT NUMBER)

MH 14734—Breed.
 MH 15985—Hoffman.
 MH 17505—Lazen.
 MH 17955 and MH 18075—Young.
 MH 18408—Marshall.
 MH 18516—Boling.
 MH 19706 and MH 21950—Cohen.
 MH 20030—Argersinger.
 MH 20367—Barclay.
 MH 20696—Salkever.
 MH 21035—Kuhn.
 MH 21303—Whitlock.
 MH 21853—Schurz.
 MH 22350—Kassander.
 MH 23170—Milar.
 MH 23742—Scurlock.
 MH 23975—Solomon.

[Appendix A-1]

RESEARCH PROJECTS WITH PRISON POPULATIONS (ABSTRACTS)

R01 MH14734—"An Evaluation of Differential Treatment for Delinquents," Palmer, Theodore B., Ph.D., California Youth Authority, 3810 Fifth Avenue, Sacramento, California.

The major objective of the research is to determine the extent to which it would be possible to maximize the overall proportion of commitments to the Youth Authority which could be made eligible for a specified program of differential treatment, particularly those who could be handled through community-based programs.

Building on knowledge gained from previously supported NIMH research, this project would attempt systematically to determine whether it is feasible to: broaden the range and refine the type of settings and treatment strategies for specified delinquent sub-types; expand the range and variety of offenders to whom differential treatment may usefully be applied; continue to isolate factors essential to the success of differential treatment; and continue refinement and expansion of the Differential Treatment Model.

All subjects would be first commitments to the Youth Authority from the Juvenile and Criminal Courts, or approximately 125 males per year. The age range would be 12 through 21 years. A number of behavioral, psychological, and other indices would be used to compare process and outcome changes for the different treatment groups.

P01 MH17505—"Genetics of the XYY Phenomena in Man," Borgaonkar, Digambar S., Ph.D., Johns Hopkins University Hospital, 601 North Broadway, Baltimore, Maryland.

The purpose of this study is to obtain frequency figures for the XYY males in the population by karyotyping 14,000 male children during a three year period.

Subjects in this study would include all the approximately 6,000 male juvenile delinquents, ranging in age from 8 to 18, housed in ten Maryland State institutions. Approval to screen these boys has been obtained from the Director of the Juvenile Services with a concurrence of the Department of Health Services. In addition, informed consent is obtained from parents and juveniles. A residential treatment center (The Edgemoade of Maryland) for emotionally and mentally disturbed children would provide about 500 male subjects under age 18.

An equal number (7,500) of presumably normal males of ages 2-18 years, of the same ethnic origin and socio-economic background, would also be selected for chromosome study. This normal comparison group would be drawn from the Comprehensive Child Care Program of the Johns Hopkins Hospital, which cares

for all children in a large area of East Baltimore up to their 18th birthday. As necessary, subjects would also be drawn from public and private schools and the outpatient clinics of the Johns Hopkins Hospital.

The specific aims of the project are: (1) to determine the frequency of XYY males in the aforementioned populations, and (2) to conduct extensive physical anthropometric, endocrine, psychologic, neuro-psychiatric, and sociological investigations of the XYY subjects in order to characterize the phenotype; to explore the feasibility of prophylactic and therapeutic measures for the XYY males; and (3) to study the fathers of XYY males, chromosomally and epidemiologically, for insight into the "cause" of the chromosomal abnormality.

R01 MH17955—"Research on Repeated Exposure to Film Violence," Berkowitz, Leonard, Ph.D., Professor and Chairman, Department of Psychology, University of Wisconsin, Madison, Wisconsin.

This research program plans to investigate the consequences of repeated exposure to film aggression, and to compare the reactions of incarcerated delinquents and normal adolescents to such exposure. A field experiment in which the content of TV programs watched by a group of incarcerated delinquents over an extended period will be under experimental control. A variety of measures of aggression would be secured before, during, and after the period of exposure. Measures of aggression would include: peer judgments; counselor and teacher ratings; behavioral tallies and observational measures in regular cottage situations; aggression in experimentally established competition; and punch intensity (Buss "aggression machine"). In addition, a series of rating scales would be used by clinical psychologists, such as: 7-point scale of personality prognosis; a scale assessing adequacy of family background; ratings of the delinquents' institutional adjustment; peer relations; and job responsibility.

The second study would involve a series of laboratory experiments in which groups of normal adolescents and delinquents would be exposed to repeated presentations of specific kinds of aggressive displays. These studies will permit a more detailed analysis of the effects of certain variables that may alter the effects of repeated exposure, such as the frequency of exposure, the similarity of the repeated aggressive displays, the time intervals between presentations, the time interval between exposure and test, and the degree of generalization of satiation from one class of repeated aggressive stimuli to a class of non-repeated aggressive stimuli.

R01 MH18075—"A Comprehensive Study of 47XYY Male Offenders," Duly, Richard F., M.D., Department of Neurology, University of Wisconsin Medical School, Madison, Wisconsin.

This study is designed to aid in the continuation of the applicant's efforts to add to knowledge regarding the spectrum of morphological and functional anomalies occurring in 47,XYY males. Using "blind" procedures the applicant would compare 47,XYY delinquents and offenders with matched controls. In addition to physical, neurological, anthropometric, and endocrinological assessments, very detailed neuropsychologic testing and personality and emotional studies would also be undertaken.

The testing will be conducted on samples drawn from the approximately 1000 new juvenile offenders and about 1050 new adult offenders admitted yearly to various correctional institutions in the state, and from the 200 males admitted annually for observation or commitment to Central State Hospital, the only maximum security hospital in Wisconsin. The population to be studied will include new offenders and repeat offenders not studied previously. During the first year it will also include prisoners already committed to correctional institutions at the time the study begins.

The proposed research would hope to answer the following questions: (1) Are previously noted anomalies in 47,XYY males (e.g., neurological abnormalities, body asymmetries, homosexuality) more frequent in such males than in controls matched for several factors including height? (2) Are there significant differences between 47,XYY males and matched controls in regard to type of crime, age at first arrest, family background, and other social and psychological variables? (3) Within a particular state (Wisconsin), are there differences in the frequency of XYY males in the population of institutionalized juvenile offenders,

adult offenders hospitalized for mental illness and/or mental retardation, and other prisoners? (4) Do tallness or any other traits develop sufficiently early to be of value in the early recognition of XYY males? And, (5) how does the frequency of the 47,XYY condition in adult and juvenile offenders vary with height?

R01 MH18468—"A Program of Research on Antisocial Behavior and Violence," Megargee, Edwin I., Ph.D., Florida State University, Tallahassee, Florida.

This is a program of multidimensional research on the personality factors involved in antisocial and aggressive behavior, and to apply the results to the problems of prediction and treatment. Using a common data pool on the personality functioning and background characteristics of prison inmates in a cohort sample, three investigators would examine respectively the patterns of behavior and attitude change during incarceration, the psychodynamics of aggression through psycho-physiological research, and the role of anxiety and self-concept in psychopathy.

Subjects include incoming inmates at the Federal Correctional Institution (FCI) in Tallahassee, Florida. The researchers use information collected by Institution staff at intake, including psychometric tests, standardized interviews with the subject and his relatives, and various laboratory procedures. The psychometric procedures include the MMPI, the sentence completion, the Spielberger State-Trait Anxiety Questionnaire, the Tennessee Self-Concept Inventory, the Holtzman Ink-Blot Techniques, standard biographical check sheet, and possibly the Jesness Inventory and the Quay Questionnaire. At 90-day intervals the biographical data is up-dated, including information about the inmate's participation in individual or group therapy, progress in academic programs, disciplinary infractions, and so forth. Interviews are conducted with volunteers prior to leaving the Institution. Psycho-physiological testing is conducted on a selected sample of inmates. Written informed consent is obtained from inmates for this testing.

R01 MH20696—"Self-Destruction Among Prison Inmates," Toch, Hans, Ph.D., School of Criminal Justice, State University at New York, 1400 Washington Avenue, Albany, New York.

This study is examining self-destructive acts (suicidal, interrupted suicide, self mutilation, exposure to victimization and social self injury) in both short and long term imprisonment. The aim is to describe occasions for self destructive acts in a prison population and to categorize motives for these acts.

First, baseline data will be obtained through the New York State Department of Corrections from incident reports from individual institutions covering every self destructive act for a six month period. During this time, preliminary motivational categories will be established, an interview schedule will be constructed and interviewers will be trained. Then a sample of at least ten institutions will be drawn for intensive follow-up of self destructive acts by interviews with inmates and staff during a three month period. This sample will be stratified in terms of model period of incarceration, degree of security and types of offenders handled with half the sample projected among short and half among long term imprisonments.

Interviews by ex-inmates and prison guards will offer perspective and insight through peer cooperation as they will be involved both in data collection (interviews) and group discussion about the collected data. Data will include the sequence of events, the steps in personal interactions, the signals of impending self destruction preceding the self destructive act as reconstructed from available documentation. Interviews with the survivor of the self destructive act where possible and interviews with staff and inmates who can provide first hand observational data.

R01 MH21035—"Clinical Prediction and Treatment of Episodic Violence," Monroe, Russell R., M.D., School of Medicine, University of Maryland, 680 West Redwood Street, Baltimore, Maryland.

This study is designed to identify three subgroups of aggressive, recidivist prisoners. On the basis of his previous studies, the investigator suggests that some 10-15% of recurrently violent individuals may be defined as having epilep-

told impulsivity, a condition amenable to treatment. Using neurophysiologic (activated EEG), psychometric, and clinical psychiatric techniques, the principal investigator proposes to attempt the classification of recidivist inmates at a special correctional institution for violent offenders (Patuxent Institution) into three groups. These groups are described as (1) "aggressive lifestyle," (2) "epileptoid" impulsivity, and (3) "hysteroid (motivated)" impulsivity. It is suggested that the effectiveness of prediction and control of violent behavior can be enhanced if these groups can be differentiated. The major objectives of the proposed research may be summarized as follows: (a) To refine techniques now available at the neurophysiologic (EEG activation), psychometric, and clinical psychiatric levels for predicting impulsive violent behavior; (b) to evaluate new techniques at these three levels to differentiate epileptoid and hysteroid (motivated impulsivity); (c) to test the value of identifying and treating epileptoid impulsive behavior; and (d) to provide clinical baselines for future studies critical in establishing the social utility of the clinical procedures.

One specific hypothesis to be tested is that chloralose activation of the EEG will correlate positively with epileptoid impulsivity. Data will be collected in such manner as to determine the reliability of the psychiatric, psychometric and EEG measures of epileptoid and hysteroid impulsivity, and to allow later quantitative computer analysis of both psychologic and electroencephalographic data. Finally, the clinical usefulness of the anticonvulsant primidone (Mysoline) will be tested in a double-blind study, and the results compared with those of a previous study in which diphenylhydantoin was used with a similar group of offenders in the same institution.

From an inmate population of about 400, it is estimated that over a three year period from 70 to 100 subjects can be found who will meet the criteria of having no mental retardation and no overt neurological disorder, and who would be willing to cooperate in the study. All subjects would be volunteers and written informed consent would be obtained in every instance.

R01 MH21853—"Rehabilitation Program for Delinquent Indian Youth," Harris, Virgil W., Ph.D., Southwest Indian Youth Center, Indian Development District of Arizona, Box 2266, Tucson, Arizona.

This three-year study would evaluate specific behavior modification procedures and overall effects of a rehabilitation program for delinquent American Indian youths. The program emphasizes the phasing out of artificial contingencies within an institutional setting and transition to the more natural conditions of living within the community.

The proposed study would evaluate specific procedures and overall effects of the programs sponsored by the Southwest Indian Youth Center (SWIYC) in Arizona. The Center is a residential institution which attempts to apply behavior modification principles in developing the vocational, academic and social skills of delinquent youths. The Center also operates a number of community-based halfway houses (each accommodating 2 house parents and about 8 youths) in Tucson. Youths admitted to the SWIYC are between 13 and 21 years of age, and typically have limited and inappropriate repertoires of social, academic, and work behavior. In general, they have failed to adjust to traditional school settings, have high truancy rates, and often possess lengthy court records involving offenses from drunkenness to glue sniffing, rape, and grand larceny. Priority is given to chronic offenders who have already spent a significant period of time incarcerated.

The majority of the youths come from reservation communities. Referrals from tribal courts constitute about 75 percent of the resident population. Approximately 10 percent of the youths were convicted in Federal courts; another 10 percent are referred by the Arizona State court system; and about 5 percent are from urban areas not under the jurisdiction of the Bureau of Indian Affairs (BIA). Depending on jurisdictional authority or the source of referral, expenses for the youths are paid by the BIA, the Federal Bureau of Prisons, the Arizona Department of Corrections, or the State Department of Vocational Rehabilitation.

The major features of the program are vocational and academic training, varying levels of supervision, a contingency management point system (as well as a daily work evaluation system and monetary reward for vocational and

academic performance), and the use of a halfway house as an intervening environment between the institutional setting (Center facility) and community placement. The "trainee" advances from entry at Level IV (where he receives close and constant supervision) through Levels III and II (where he gradually assumes greater responsibility for himself, his training, and his leisure activities), to Level I (permanent placement). Advancement is contingent upon his performance in various social, academic and vocational areas, and relates to procedures designed to phase out his dependence on artificial behavior management contingencies.

R01 MH22350—"Measures of Delinquency and Community Tolerance," Erickson, Maynard L., Ph.D., Department of Sociology, University of Arizona, Tucson, Arizona.

This is a three-year study to examine the relationships over time between official and unofficial measures of juvenile delinquency. Legal reaction rates (the ratio of official to unofficial measures) will be related to measures of community tolerance and tolerance of "legal reactors" (police, probation officers, etc.). Tolerance toward deviance (types of delinquency and other forms of deviance) is measured by determining both the relative "evaluations" of the propriety of acts and the relative "intensity" of attachment to evaluative stances taken by respondents (either legal reactors, deviants, or the general public). The relative "seriousness" of a variety of offenses will also be assessed. The analyses of inter-relationships between tolerance and various measures of delinquency (official and unofficial) will be made over a three-year period in selected Arizona communities.

Within each of these locales, three sub-samples will be required: a sample of adolescents to yield measures of unofficial delinquency and other information, a sample of adults to yield measures of general community tolerance levels and other information, and a sample of law enforcement and related personnel to yield measures of their tolerance levels and other related information. Within each of these sub-samples there are three groupings: official non-delinquents, community offenders (recorded offenders remaining in the community), and incarcerated offenders. The number of adolescents in the total sample is estimated to be between 500 and 700, and the number of adults included will be approximately 1200.

R03 MH23170—"Attitudes Toward Criminal Behavior," Bruning, James L., Ph.D., Department of Psychology, Ohio University, Athens, Ohio.

This is an investigation of the differences between public offenders and the general law-abiding citizenry with respect to their subjective estimates of seriousness, probability of arrest, and expected severity of penalty for a number of specified illegal acts. Further analyses will be made of the differences in response between subjects scoring high and low on the Pd (psychopathic deviate) scale of the Minnesota Multiphasic Personality Inventory (MMPI).

Subjects will be 100 inmates at the Ohio State Reformatory (felon group) and 100 students at a technical college (non-felon group), who closely approximate the felon group in terms of age (18-25), education and socioeconomic background.

R01 MH23975—"The XYY Syndrome," Witkin, Herman A., Ph.D., Division of Psychological Studies, Educational Testing Service, Princeton, New Jersey.

This study is designed to shed further light on the incidence of males with an extra Y chromosome and on the relation, if any, between the presence of an extra Y and the tendency toward aggressive behavior.

The proposed research provides for comprehensive and in-depth psychological studies of XYY cases. It is emphasized that to make progress toward understanding the nature of the relationship between an extra Y and aggressiveness, it is necessary to study more varied populations of XYYs than those examined to this point. The design of the study includes three groups of XYYs selected in an effort to provide variation along the dimension of identified involvement in aggression; matched control groups of XY cases are allowed for each sample to be studied. The three groups to be studied will be drawn from a population of criminals, policemen, and from the general population.

The study of the criminal group will be selected from among the 1500 offenders admitted each year to the prison ward of the Psychiatric Service of Kings County Hospital for psychiatric examination. Candidates for the New York City police force (numbering about 28,000) will be the police group to be involved in this study. Karyotyping on a large, non-institutionalized, unbiased sample will be drawn from army recruits in Denmark.

[Appendix A-2]

RESEARCH PROJECTS WITH MENTAL HOSPITAL POPULATIONS (ABSTRACTS)

R01 MH20367—"Dangerousness, Due Process & the Criminally Insane," Steadman, Henry J., Ph.D., Mental Health Research Unit, New York Department of Mental Hygiene, 44 Holland Avenue, Albany, New York.

This is a study of estimations of dangerousness in the criminally insane, the role such estimations play in the due process of institutional commitments, and the relationship of dangerousness to demands for social control. Major emphasis would be placed on efforts to operationalize the concept of dangerousness and to develop a causal model for the role of dangerousness in the post-labeling careers of the criminally insane.

The proposal is occasioned by changes that occurred in the New York State Criminal Procedure Law (CPL) on September 1, 1971, relative to confinement procedures for the criminally insane. The new code will result in the transfer of responsibility for commitment of individuals to special security institutions from the Commissioner of Mental Hygiene to the courts. In effect, an increased burden will be placed on the courts to make estimations of patients' dangerousness, and on the Department of Mental Hygiene to treat patients in civil hospitals.

The study would build upon the applicant's previous work on the relationship between in-hospital behaviors and patients outcomes. In this research a group of 987 patients, who were transferred from two New York State hospitals for the criminally insane to civil hospitals following the *Baastrom v. Herold* Supreme Court decision in 1966, were found to be *less dangerous* (i.e., less assaultive) than expected. Only 2 percent (23) were returned to the special security institutions between 1966 and 1970, while only 19 percent of the males and 25.5 percent of the females were reported to have shown any assaultive behavior in civil hospitals.

The scope of the study would encompass six distinct, yet interrelated, objectives: (1) to determine the effects of being labeled dangerous on the hospital and post-hospital careers of different types of criminally insane patients; (2) to develop an operational definition and technique for measuring dangerousness; (3) to establish a causal model for the post-labeling careers of the criminally insane; (4) to examine the actual changes in the administration of due process to the criminally insane as a result of changes in the CPL; (5) to study the organizational and procedural adaptations of the civil state hospitals to the change in the law; and (6) to lay the groundwork for an ongoing evaluation of the effectiveness of the new focus of treatment.

The study would be divided into three separate phases. Interview data would be gathered during Phase I from legal and psychiatric professionals on criminal commitments of mental patients, patients following hospitalization, and an initial follow-up of released patients. During Phase II, a second cohort would be added, while continuing an intensive follow-up of the first-year patients as they are released or remain in either the mental health or correctional system. In Phase III, efforts would be made to test the causal model predicting patient outcomes, refine an index and predictive instrument for dangerousness, conduct a content analysis of the interviews with patients, mental health professionals and judicial officials, and estimate the relative efficiency of different hospital treatment programs.

R01 MH21303—"Assessment of Adequacy of Treatment," Schwitzgebel, Ralph K., Ed.D., J.D., Laboratory of Community Psychiatry, 58 Fenwood Road, Boston, Massachusetts.

The primary purpose of this research is the development of empirically-based criteria by which the adequacy of treatment provided for offenders can be

accurately and reliably determined by mental health and legal personnel. This would be accomplished through three major types of activities: (1) an extensive survey of legal decisions and commentaries, and mental health literature related to the concept of the "right to treatment"; (2) an analysis of the psychiatric, sociological, and behavioral criteria currently being used to determine treatment adequacy; and (3) a preliminary evaluation of the legal and social policy implications of a widespread recognition of a "right to treatment."

One subject population would consist of 80 mental health personnel associated with mental hospitals providing treatment for offenders, and located in Massachusetts. The entire range of treatment personnel would be sampled, with 10 subjects selected on a random stratified basis from eight different hospitals. A second subject population would consist of approximately 20 involuntarily committed offenders, who would be selected on a random stratified basis to provide variation of background characteristics, offense and hospitalization histories, and diagnostic classifications. A third group of subjects would be comprised of 40 patients whose daily activities would be observed on a time-sampling basis. Patients would be interviewed and asked to complete rating scales only with their consent and with the express approval of appropriate hospital personnel. The proposed interviews, moreover, would not require any detailed discussion of sensitive, personal matters, but would be oriented toward obtaining the patient's general view of his past and present therapeutic situation.

R01 MH23742—"Release of Dangerous Mental Patients: The Dixon Case," Thornberry, Terence P., Ph.D., University of Pennsylvania, Room 203, 3718 Locust Street, Philadelphia, Pennsylvania.

This request is a follow-up of the post-release behaviors of a group of about 400 prisoners who were previously judged mentally ill and dangerous. The release of these patients (known as the Dixon Class) from Farview State Hospital was prompted by legal action begun in 1969. The investigators propose to locate and interview the released patients, to survey reports of relevant state agencies, and to review the Farview records of patient characteristics and behaviors while incarcerated at Farview. For purposes of controlled comparison, a group of about 100 patients released from Farview at expiration of sentence subsequent to the Dixon case, will be similarly studied.

The proposed research intends to answer five specific questions: (1) What are the personal and social costs and benefits of this Court-ordered release of mentally ill dangerous offenders? (2) Is the prediction of dangerousness and inability to adapt to a less secure situation of these patients confirmed or denied? (3) Is dangerousness in the behavior of the patient within the maximum security mental institution significantly associated with post-release dangerousness? (4) Is any one type (or a constellation of types) of behavior evidenced by the patients while they are in the hospital associated with post-release dangerousness? (5) Can types of behavior (as in 4 above) be found which are associated with post-release adaptability to a less restricted social setting?

[Appendix A-3]

RESEARCH PROJECTS WITH SCHOOL POPULATIONS (ABSTRACTS)

R01 MH15985—"Intervention in Low Base 'Asocial' Behaviors," Patterson, Gerald R., Ph.D., Oregon Research Institute, P.O. Box 3196, Eugene, Oregon.

The study is designed to develop a practical technology to deal with the out-of-control, asocial behavior of pre-adolescent boys. The proposed study builds upon the principal investigator's previous study of interaction patterns in the homes of pre-delinquent boys. In this early study, basic social learning concepts have been successfully applied toward the development of intervention strategies in dealing with socially aggressive behaviors such as fighting, defiance, cruelty, and assaultive tendencies. The range of behaviors would now be extended to include asocial, low base-rate behaviors, such as stealing, setting fires and running away from home. The proposed study would (a) provide a formulation to account for those interactions which maintain the occurrence of these behaviors, (b) develop intervention techniques in the home and schoolroom to prevent the occurrence of these behaviors, and (c) train families and other social agents

who interact with the child in these settings to detect early signs of these behaviors and to apply appropriate intervention techniques.

The design of the proposed study is similar to that which has been used successfully in the previous research. The criterion for admission to the project will be that the family have a problem boy between six and twelve years old who displays any two of the following behaviors: stealing, fire-setting, truancy. Families will be referred to the project by local agencies, such as the juvenile court, school, clinics, and the welfare department. No cases will be accepted in which either the parents or child manifest obvious schizophrenic or psychotic behaviors, or in which the child shows severe neurological damage. Prior to intervention, baseline data will be obtained for each family accepted into the program on the basis of 10 days observation in the home and 5 days in the school. Additional observation will be carried out during intervention and for 12 months following termination.

An initial sample of 6 families will be accepted during the study's first year, while intervention procedures are being developed and standardized. A "block study" of 12 consecutive referrals will be undertaken the following year using standard procedures; a "replication block" of 12 families will follow in the third year. For each family in each block, a standard design of baseline, intervention and follow-up procedures will be used in both home and school. Each "problem" family will be matched with a "normal" family for family size, age of parents, number of parents present in the home, and occupational level of parent(s). The total number of families for three years will be 60.

R01 MH18516—"Treatment of Childhood Behavior Problems," Wahler, Robert G., Ph.D., Psychological Clinic, University of Tennessee, 719 13th Street, Knoxville, Tennessee.

The three-year study would continue research which has received NIMH support for the past two years to examine the generality of behavior modification techniques in the home and classroom for problem children. There are five major aspects of the proposed research: (1) further evaluation and implementation of the clinical assessment device developed in the earlier study, (2) demonstration of some practical applications of within-setting generality, (3) further study of across-setting generality, (4) assessment of teacher and parental attitudes toward the child's behaviors, and (5) collection of normative data on non-problem children.

Subjects will be obtained from the waiting list of the Psychological Clinic of the University of Tennessee and from Riverbend, a state-supported treatment facility which uses behavior modification techniques. These subjects are almost exclusively males, range from 6 to 12 years of age, and present problem behaviors of a rule-breaking nature (e.g., school truancy, fighting, refusal to do schoolwork, property destruction, stealing) in the home, school, or community.

Approximately 70 subjects will be involved in the research each year, plus an additional 20 subjects who will be evaluated during the first year. For the "accountability study" about 40 children (the entire population of Riverbend) will be assessed by means of the observational scoring system. For the across-settings study, 6 subjects, presumably from the psychological clinic, will be studied each year. These 6 plus approximately 15 children from Riverbend will be used in the within-setting study and the parent-teacher attitude study. For the normative study, 40 non-problem children will be selected from elementary school districts reporting highest incidences of problem behaviors from their pupils. Parental permission to observe will be requested for all children within one randomly selected "problem school," and the subjects will be observed on a bi-weekly basis in their homes and classrooms. Finally, a "contrast group" of about 10 problem children not receiving behavior modification treatment will also be observed.

R01 MH10706—"Behavioral Programs in Learning Activities for Youth," Cohen, Harold L., Institute for Behavioral Research, Inc., 2429 Linden Lane, Silver Spring, Maryland.

The major objective of the Behavioral Programs in Learning Activities for Youth (BPLAY) is to design, implement, and experimentally test two programs for the prevention of adolescent delinquency and antisocial behavior. The pro-

posed project would explore the application of behavior modification approaches in two areas: (1) an after-school program for junior and senior high school students to develop skills and resources which are personally relevant to them, and (2) an in-school course at the junior high school level, Teenagers' Rights and Responsibilities (TARR), designed to teach social and legal problem-solving skills so that the youths will learn to deal more effectively with merchants, community agencies, and schools. Students would earn points for their participation in the program, and for fulfilling specified performance criteria in the after-school teacher-managed programs. These points will be negotiable for socially acceptable goods and services presently in demand by the adolescent population.

The project would provide an opportunity to test the usefulness of behavior modification approaches in new areas without labeling or stigmatizing youth as "problems." These modification procedures would attempt to shape new patterns of leisure time usage and provide rewards for learning new skills. The approaches rest upon the assumption that behavior is functionally related to its consequences, and that it can therefore be established, altered and maintained by programming appropriate consequences contingent upon specific behavioral requirements. The applicant cites several earlier studies to support his basic assumptions.

A behavior management course would be given to teachers initially entering the program. This course would include basic principles, vocabulary and procedures of behavior modification. Teachers would be trained to observe and record very specific types of behavior and learn to analyze various situations to determine those contingencies which maintain and control the target behaviors.

R01 MH20030—"Achievement Place: Phase II," Wolf, Montrose M., Ph.D., Bureau of Child Research, University of Kansas, Lawrence, Kansas.

This study is designed to further evaluate, refine, and disseminate research based on three previous years of experience with the Achievement Place model. Achievement Place is a community-controlled, community-based family-style residential half-way home for six to eight boys between 11 and 16 years of age. Reinforcement procedures, designed to provide a maximum amount of motivation and feedback, have been applied on a variety of social, self-care, academic and pre-vocational behaviors. As the boys develop skills and self-control, the structured elements of the program are reduced and replaced by a more natural set of feedback conditions in the natural social environment. In addition, the parents are trained in child management procedures so that they can be more successful in guiding their child toward a productive life. Preliminary findings indicate that the Achievement Place boys are progressing better than a small sample of comparable youths placed on probation or sent to the State training school.

The objectives of the proposed research are to continue to develop, refine, and evaluate (1) procedures that can be used by non-professionals to modify academic and vocational behaviors; (2) procedures to produce basic social skills that are necessary for proper conduct in the community, school, and home; (3) a practical system for collecting, analyzing, and summarizing data to evaluate the overall effectiveness of the Achievement Place model; (4) procedures for educating the natural parents to deal with their child in their own home; (5) a teaching-parent education program; and (6) a model for Statewide dissemination of the Achievement Place program.

An experimental analysis will be used to build accuracy in reading. Further, designs will be used to develop and evaluate pre-vocational behaviors that are necessary to job securement, i.e., arriving at the job on time, and vocational training in skills, i.e., learning the tools common to the trade. Also, training methods, such as verbal instruction, modeling by adults, and use of video-tape players to record interactions will be investigated to improve the complex repertoire of behaviors necessary in various social interactions.

Data from police contacts (formal and informal), juvenile court contacts (formal and informal), school attendance, grades on report cards, achievement test scores, school disciplinary problems, classroom behavior, and social and self-help behavior at home will be evaluated to assess the effectiveness of the treatment program. Parents will learn: some basic principles of behavior; to

observe and objectively define behavior; to record behavior and use this record to evaluate the effectiveness of their supervision of the child; to employ a point system and design a suitable home structure for their son. Specific measures of academic, social, and self-help behaviors will provide constant feedback to parents and research staff concerning the progress of the youth.

R01 MH21950—"PICA Research, Extension, and Practice (PREP)," Filipczak, James A., M.S., Institute for Behavioral Research, Inc., 2429 Linden Lane, Silver Spring, Maryland.

Building on research previously supported by NIMH, the overall objective of this project—"PICA Research, Extension, and Practice (PREP)"—is to develop a model program that can be adapted and maintained in public schools for the prevention of disruptive and delinquent adolescent behavior. Five major objectives relating to the development and potential utilization of this model are indicated: (1) To revise and extend the classroom-based interpersonal skills training component, and attempt to make this component effective by using school personnel as teachers; (2) to conduct a contingency-oriented, individualized self-instructional academic component, to train teaching personnel to operate this system, and to supervise previously trained teachers in conducting replications of this component; (3) to refine and conduct behavior modification programs, and to train teachers in their use; (4) to conduct training programs in behavior modification procedures for the parents of the target youths; and (5) to disseminate information and train other professionals and public school personnel, with the intent of assuring the eventual utilization of proven practices in a number of public schools.

The sample will consist of approximately 70 subjects selected from a pool of seventh and eighth grade students identified by school staff and on the basis of school records as being "high problem behavior" students on whom PREP might focus. Students will be sought who are also one or two years behind grade level in English or mathematics or both. Procedures have been developed to assure that confidentiality of records is maintained and that the informed consent of students and their parents is obtained before participation in the program. Final selection occurs when a sufficient number of students and their parents have agreed to participate in either the experimental program or the control group. These consenting students are matched in pairs according to criterion scores and are assigned to either experimental or control condition by appropriate random selection methods.

Matched students will be assigned randomly to one of five groups, with approximately 16-18 students in each. One group will consist of students who participate in both the Skills Center and the Interpersonal Skills Class, and whose parents are involved in the Parent Training program. Three other experimental groups will consist of students whose participation (or their parents') is limited to one of the three aforementioned components. The fifth group will be the control condition. Comparisons will be made among the groups on data from a range of sources, including information on academic achievements and performance, and social behaviors. Various experimental analyses of program components will be conducted by longitudinal assessments of each group and comparative evaluations among the various groups. A number of small-scale analyses of the various modification procedures in each component will also be carried out.

[Item I.C.4]

STATEMENT OF DR. WILLIAM H. SWEET, CHIEF OF THE MASSACHUSETTS GENERAL HOSPITAL, AND PROFESSOR OF SURGERY, HARVARD MEDICAL SCHOOL, BEFORE SENATE LABOR-HEW APPROPRIATIONS HEARINGS, MAY 23, 1972

SPECIAL UNITS FOR STUDY OF VIOLENT BEHAVIOR

Senator MAGNUSON. Dr. Sweet from Boston, your full statement will be printed in the record and you may proceed.

(The statement follows:)

"Mr. Chairman, Gentlemen: I am William H. Sweet, M.D., Harvard; D.Sc., Oxford University, Chief of the Neurosurgical Service of the Massachusetts Gen-

eral Hospital, Professor of Surgery at Harvard Medical School, Diplomate of the American Specialty Boards of Neurological Surgery and of Psychiatry and Neurology. I have recently served for three years as a Vice President of the American Academy of Arts and Sciences and for one year as President of the Society of Neurological Surgeons. Currently, I am a Vice President of the American Neurological Association, one of the Editors of the neurosurgical journal *Neurochirurgia*, and of the series of annual volumes entitled *Progress in Neurological Surgery*. I have co-authored two books and over 200 scientific papers on the brain, including chapters on various aspects of the field in 50 books.

The House and Senate Appropriations Committees for the 2nd Session of the 91st Congress agreed that a study of the causes of violent behavior leading to the critical injury or death of others should be funded by an appropriation of \$500,000 for the first year operations of such a study under the aegis 'Health Services and Mental Health Administration.' (Conference Report No. 91-1720 Amendment No. 13, page 7, paragraph 2). Such a study has been in progress under an appropriate contract. This research has sought (1) to identify those with physical brain disease who are likely to be dangerously assaultive and (2) to develop medical and psychiatric means to help people to refrain from undertaking senseless violence. In appropriate cases we have applied specific surgical diagnosis and therapy where there is unequivocal evidence of focal brain disease.

"Indeed the emphasis of this work is on objectively demonstrable brain and/or neuroendocrine disease. In order further to emphasize the cardinal place of organic pathology of the brain in this research and because of such investigation is more logically developed by the National Institutes of Health's Institute of Neurological Diseases and Stroke, we request that the latter Institute receive an additional appropriation of \$1,000,000 for this work in this year's budget. The relevant officers both of the National Institute of Mental Health and of the National Institute of Neurological Diseases and Stroke are agreed upon the wisdom of this shift in responsibility. The money would be allocated to several of the interested centers qualified for the research in accordance with established peer review procedures of the Institutes.

"This testimony is being presented in behalf of the Neuropsychiatric Institutes of the University of California at Los Angeles—under the direction of Professor Louis Jolyon West, of the Brain Research Institute of the same University or the direction of Professor John French, of the Neurological Unit of the University of Texas at Houston directed by Professor William Fields and of the Neurological and Neurosurgical Services of Harvard University at the Massachusetts General Hospital and Boston City Hospitals respectively under the direction of Professors Raymond Adams, William Sweet, Norman Geschwind and Vernon Mark.

"Evidence to justify a major appropriation for this research is as follows:

"Brain disease demonstrable by electroencephalographic (electrical brain wave) abnormality was shown as early as 1944 by Hill to be associated with violent temper, overt aggressiveness or a recurrent tendency to suicide in 65% of 400 psychopathic patients. Similar subsequent observations culminated in a 1969 report by D. Williams on 333 persons in prison for crimes of personal violence. He found abnormal electroencephalograms (EEGs) in 65% of the 206 who were 'habitually aggressive,' but in only 24% of the 127 others who had committed a 'solitary major violent crime.' When those with the obvious evidence of brain disease shown by mental retardation, epilepsy, or a history of major head injury were removed from the count, the EEG was abnormal in 57% of the habitual aggressives and 12% of the second group—the same as the population at large. These findings indicate that nearly 2/3 of prisoners convicted of crimes of personal violence are habitual aggressors and that such individuals tend to have intrinsic brain disease.

"In work done under the present contract 37 cases with a major problem of violent behavior have been intensively studied, initially as out-patients; 30 were hospitalized in the special unit financed by the contract. The percentages of organic manifestations were: Epilepsy—73%; Head Injury—approximately 100%; Dermatoglyphic (finger, palm, foot and toe print) abnormality—80%.

"In an effort to develop quantitative measures of the relevant multifactorial medical aspects of the violence in these patients, a comprehensive test battery has been designed. This includes 17 separate components in the psychiatric and psychological spheres, 4 in the genetic area (chromosomal and dermatoglyphic) and assays of 5 different hormones.

"These tests were developed in the light of our pilot surveys of inmates of three different types of penitentiaries—a state prison for sexual offenders, a federal male prison and a multistate prison for females. Of the 1,500 total inmates 300, guilty of crimes of personal violence, were studied by various methods.

"Some of the striking findings have been :

	Percentages		
	Females	Federal males	Sexual offenders
Epilepsy and seizures.....	13.6	9
Head injury.....	76.0	81
Mental illness requiring previous hospitalization.....	45.0	12
Chromosomal abnormality.....		10	10

"The abnormalities in the chromosomes were in those governing sexual constitution and occurred at 50 times the rate in the population at large. These sexual genetic changes affect specific foci of the body influencing behavior through alterations in brain development and glandular function.

"Under the same NIMH contract in-patients have been studied and treated at the Boston City Hospital. A portion of the Neurological-Neurosurgical ward area, special operating rooms, and electroencephalographic and electrophysiological monitoring areas are specially designed and converted so that six patient beds would be available for patients with focal brain disease and episodic behavior disturbance, including violence. During a period from the last week in August of 1971 through the end of April, 1972, thirty-five patients were studied in this unit. This included twenty-four patients with temporal lobe epilepsy and five patients with anti-social personality disorders who were suspected of having focal brain disease, as well as six other patients with either generalized epilepsy or some other structural of brain associated with behavior disturbance. This unit was staffed by a psychiatrist, neurologist, neurosurgeon, seven nurses and nine aides.

"All of these patients except for four, who were uncooperative, had a complete medical, psychiatric, psychological, electroencephalographic, neurological and, when appropriate, pneumoencephalographic study of the brain. Two patients, after prolonged trials of psychotherapy, psychotropic drugs, ataractics, anti-convulsant medication and other forms of medical management, did not have either their seizures or episodic behavior disturbance controlled and they had the implantation of amygdala electrodes, that is electrodes were placed into the antero-medial portion of the temporal lobe of their brains for recording, stimulation, and eventual lesion-making.

"Even though the unit has been in operation for a relatively short period of time, some important conclusions have come out of the study :

"DIAGNOSTIC CONCLUSIONS

"A: Patients with unsuspected intracranial lesions may fall under the rubric of 'Psychiatrically Disturbed Patient' or 'Undesirable Personality,' without having adequate diagnostic tests.

"Example No. 1: A 68 year old lady with unusual but episodic outbursts of unpleasant behavior which perplexed and frightened her family, was seen for three years by various physicians including psychiatrists who could not help her or change the course of her illness. No neurological examination was ever done until she finally had a grand mal seizure. In retrospect, some of her abnormal behavior was related to temporal lobe seizures. This patient turned out to have a very large tumor of the emotional brain that would have been completely curable if it had been diagnosed at an early stage of its development.

"Example No. 2: A 35 year old woman killed two of her children during a psychotic reaction to hormonal therapy. She turned out to have an unsuspected tumor involving the pituitary.

"Example No. 3: A 22 year old man, referred for diagnostic study by the courts, had a character disorder. He had committed multiple personal assaults, shootings and beatings on New England citizens. He was a member of underworld organizations. He turned out to have shrinkage (atrophy) of a portion of his emotional brain (the inner aspect of his temporal lobe) on the left side.

This man's impulse control was so poor that he was not even tolerated in criminal circles; he was expelled from one criminal gang after the other because of the unpredictable way he would shoot or maim fellow members of his own gang for no apparent reason.

"B. The surface brain wave recordings may not pick up abnormalities in violent patients, even when they are present.

"Thirty patients have had complete electroencephalographic studies. Although epileptogenic foci were demonstrated by surface recordings, chemical activation continued to prove of value only in those patients in whom natural sleep tended to activate the brain wave. In one patient with a high index of suspicion who was said to have convulsive episodes outside the Hospital, several clinically atypical seizures were observed. Repeated brain waves obtained under conditions of telemetering and using activation failed to reveal any focus. In view of our own demonstration an epileptogenic focus and that it is possible, in patients with atypical clinical seizures, that examinations limited to the surface may preclude the making of a correct diagnosis of epilepsy.

"Prolonged depth recordings in two patients with inlying electrodes indicated that the seizure foci in the brain may be extremely discrete; thus abnormal or actual seizure activity could be noted in one deep area of the brain whereas an electrode five millimeters away could record almost normal activity. It is no wonder then that recordings from the surface of the brain or surface of the scalp may not show abnormal brain activity even when it is present.

"C. Reliable psychological tests to detect brain disease in violent patients need to be developed.

"Psychological evaluation of the patients included Wechsler Adult Intelligence Scale and Memory Quotient Test, seizure record, aggression record, mood scale, mania-depression scale, violence questionnaire, sex questionnaire, discharge potential scale, and emotions profile index as well as the following cognitive tests: attention concentration tasks, immediate memory span, serial learning, interference sets, paired associates with letter pairs and with symbol pairs. An attempt is being made to evaluate patients with limbic brain disease and compare them to patients in general hospital population who have volunteered to have this psychological battery performed on them. As yet, our numbers are not large enough to obtain a statistically significant sample but, of course, we are looking for differences in the psychological and psychometric tests which will allow us to differentiate patients with disease or alterations of their emotional brains as compared to individuals with abnormal behavior who do not have such a brain problem or medical difficulty. Observations are made continuously and the relation of seizures to behavior disorders is being correlated.

"THERAPEUTIC CONCLUSIONS

"A. Medical and Psychiatric Therapy: One of the encouraging facts to come out of this study is that most of the violent patients with focal brain disease referred to us for study, can be treated by conservative non-surgical means. If there are enough attendants and medical and nursing staff educated in both neurology and psychiatry, the majority of episodically violent patients can be controlled without confinement and without danger of injuring themselves or other patients or the staff. This is true of patients who had to be kept in strict confinement at other institutions and who were sent to us for immediate surgical therapy because other physicians had despaired of conservative measures and even refused to accept them for further hospitalization for any purpose. The fact that only two patients required surgical intervention is an indication of the efficacy of judicious neurological and psychiatric treatment, combining anti-convulsant, ataractic, and psychotropic drugs with reeducation and rehabilitation techniques. This kind of unit and the prolonged observation of the patients give the clinician a better yardstick to measure the occasional failures of medical and psychiatric management and to select those patients for surgery in whom this form of therapy is most appropriate.

"B. Surgical Therapy: In those patients with episodic behavior disturbance, i.e., violence and temporal lobe epilepsy, who required surgical treatment, long term followups have indicated that successful control of symptoms and social rehabilitation is possible.

"The progress made in this field by work in this and other countries was described at an International Congress in Copenhagen in August 1970. It has been so encouraging that a 3 day symposium on the 'Neural Bases of Violent Behavior,' attended by 200 specialists in the field, was held in March this year

in Houston, Texas. Another International Congress in Cambridge, England in August 1972 will deal in major part with this subject. Prominent centers in Canada, Great Britain, Germany, Finland and Japan will be reporting their studies.

"Although disorders characterized by violent behavior have been recognized by suitable combinations of genetic, neurologic, hormonal and psychological tests these need to be validated and improved upon by further multidisciplinary research. Diagnosis of the illness early in its development is likely to lead not only to more effective treatment—psychiatric, chemical, specific hormonal or surgical—but as well to the prevention of subsequent violence. Certain of the abnormalities which may predispose to violence, such as those in the EEG, brain scans and hormones, have already been shown to be present early in life. Thus there is evidence that critical evaluation of such data will be effective in the early identification of this type of disorder.

"To re-emphasize: 1. When the disease is organic as well as social, it may be amenable to medical diagnosis, prevention and treatment.

"2. When organic, it is repetitive and produces a disproportionate share of acts of criminal violence. Therefore, early identification of relatively few cases should have a significant effect on the reduction of violence and recidivism.

"There is no duplication of support of work of this type on clinical patients by any other governmental or private philanthropic source of which we are aware."

Dr. SWEET. This has to do with special units for the study of violent behavior, methods of determining which individuals may be becoming dangerous to society. Means of identifying them and treating them.

I am Dr. Sweet of Harvard, chief of the neurological service. You were kind enough to hear me a year ago, and your committee, through your good offices, appropriated \$500,000 for the first year operations of a study on the causes of violent behavior leading to critical injury or death.

This was carried out and is now in progress under a contract with the Health Services and Mental Health Administration. This research has sought to identify those with physical brain disease likely to commit dangerous assaults and trying to develop medical and psychiatric means to help people to avoid this undertaking of senseless violence.

The emphasis on this work has been on objectively demonstrable brain disease, and in order to emphasize the cardinal place of organic pathology of the brain in this area, and because such investigation is neurologically developed by the National Institute of Neurological Diseases and Stroke, we request that the latter Institute receive an additional appropriation of \$1 million for this work in this year's budget.

While the relevant officers in both the National Institute of Mental Health and the National Institute of Neurological Diseases and Stroke and Dr. Marston and Dr. Sherman, the senior officers of the National Institutes of Health, all agree with the wisdom of this shift in responsibility, it is the Neurological Diseases and Stroke Institute which is concerned with identifiable brain disease, as contrasted with the work of a psychiatrist, and their tremendous efforts we've just been hearing about in such fields as drug addiction and so forth, make it seem appropriate to use the machinery of the Institute of Neurological Diseases and Stroke for an evaluation of this kind of work.

The money would be allocated to several of the instant centers qualified for this research in accordance with the established peer review procedures of the Institutes. I am speaking today on behalf of the chief of the Neuropsychiatric Institute of the University of California at Los Angeles, and his staff—Professor West.

The Brain Research Institute there at U.C.L.A.—Dr. John French, of the Neurological Service at the University of Texas in Houston, and of the services of Harvard at the Boston City Hospital and the Massachusetts General Hospital. I have detailed in the pages of this testimony the reasons why we request support for research of this sort.

It scarcely needs emphasis that we have a real problem in terms of violent behavior. The unit that your committee has funded has developed sufficiently interesting data and enough encouragement so that several other centers in the country are eager to submit requests to take up this work now.

Senator MAONVSON. Well, we deal in figures. What is your figure?

Dr. SWEET. \$1 million.

Senator MAGNUSON, As against the \$500,000 we put in?

Dr. SWEET. That was for a single unit. There are envisaged several different units in the country in view of one, the urgency of the problem, and two, the interest in this. I may say that in other countries as well, there are a few distinguished research units moving in this area.

I cite those in this testimony here, and I would like to conclude with a couple of paragraphs on the last page of this report.

Senator MONTROYA. Would you answer this question before you conclude, Doctor? How do you get these cases into these units, and what kind of study do you make upon these cases?

Dr. SWEET. The number of applicants for entry into these units is vastly in excess of those for which we have places.

Senator MONTROYA. Are these applications from individuals who have committed acts of violence?

Dr. SWEET. Interestingly enough, they come not only from the people themselves who have committed serious crimes or feel that they are about to do so, they come also from their families, their clergymen, their friends.

In the unit which is set up in the hospital in which I work, we have a vastly greater number of individuals who seek help than we have places to supply beds and opportunities to study them.

Senator MONTROYA. Are you going to confine your study to cases which have indicated acts of violence or who have committed acts of violence or are you going to cover the broad spectrum and take cases at random?

Dr. SWEET. We think it's important to study those who present themselves and say they have a problem. To give you a specific example, in the week after Robert Kennedy was killed, two men presented themselves at our unit saying that they really hadn't realized what a terrible thing it was to kill a man and that they had a terrible problem.

Each of them was planning a murder, and one of them brought in, in a newspaper, the dissembled parts of a gun with which he planned to commit the murder. Well, here are two individuals who have not actually committed a crime, but who present themselves asking for help, so that in addition to those who are constantly at odds with the law for minor crimes, assaults, constantly in and out of jail because they strike an individual, spend a few days in jail and are released again, there are these other individuals who recognize they have a problem in advance, of committing the assault.

Senator MAGNUSON. Well, now, when a judge, and they often do, commits a man for psychiatric treatment, would that be something—would that be a person you could take?

Dr. SWEET. It might well be.

Senator MAGNUSON. Now, the State would pay for that?

Dr. SWEET. The State has paid, or a third party coverage of some sort—not just the State but insurance.

Senator MAGNUSON. They would not pay for the research you're talking about, but they would pay for the actual services which were rendered to this person?

Dr. SWEET. Right. So that this has kept the cost of the operation of the unit at a level that would enable us to treat a significant number of people and use the Federal funds for the investigative part of the research—to try to improve our methods.

Senator MAGNUSON. All right, thank you very much.

II. DEPARTMENT OF JUSTICE: BUREAU OF PRISONS

A. Correspondence

[Item II.A.1]

DECEMBER 21, 1972.

MR. NORMAN A. CARLSON,
Director, Bureau of Prisons, Department of Justice, Washington, D.C.

DEAR MR. CARLSON: It has come to my attention that the Bureau of Prisons is constructing a \$12.5 million facility at Butner, North Carolina. The center is apparently designed for "behavior modification" and is intended as a model for the entire federal prison system. The precise purpose and scope of this unit at Butner is most unclear. To my knowledge, there has been no mention in the Bureau's statements to Congress of exactly what type of programs are planned for the Butner facility. It appears also that a Project START is to be implemented at the Springfield, Missouri, Medical Center. The dimensions of this project as revealed in the Bureau's October 25, 1972, memorandum are also unclear.

The Subcommittee on Constitutional Rights has long been interested in psychological testing and its effects on constitutionally guaranteed civil liberties and individual privacy. In conjunction with this interest, the Subcommittee has been surveying the entire spectrum of psychological testing and treatment.

For these reasons, I would like to obtain information concerning the activities to be carried out and the type of programs to be utilized at Butner and at Springfield. I would appreciate your response to the following questions so that the Subcommittee may better understand the purposes of these projects.

1. Congress has appropriated approximately \$20 million for development and construction of the Butner facility. Please specify all types of "treatment" and "research" to be conducted at the Butner unit. Please send copies of all pertinent studies and plans, including plans created at NIH and plans for programs in behavior modification. Please send copies of all programs and plans of study proposed under Project START.

2. The Butner, North Carolina construction was introduced as part of the Bureau of Prisons' plan for future construction. Please specify how this unit fits into the long term goals of the Bureau and aids in its programs, and include copies of the Bureau's long term construction plan. Are there any plans for other institutions such as the one under construction at Butner or for other projects such as START? Will results at Butner and Springfield be made available for state use?

3. As it appears that there will be research from outside the facility conducted at Butner and Springfield, would you please send your plan for the type of review process and screening to be employed at Butner and Springfield for acceptance of study proposals. Please specify the type of continuing review there will be for projects in progress.

4. The inmates at Butner and at Springfield will come from other units around the country. Please send copies of the criteria for determining which prisoners will be transferred or directly incarcerated at Butner and in Project START. May a prisoner refuse to be admitted? Inmates at Butner and in Project START will be segregated from the other prison units and will require records inclusive of their time at Butner and Springfield. Please specify what records will exist for each inmate and send copies of all proposals for keeping computerized records. Please send as well all proposals for keeping psychological data in gross figures or by individual case studies. Will records from the two programs be integrated with other prison records for each prisoner? What type of access will exist in relation to records from the Butner and Springfield facilities? Who will have authorization for access? Will the inmate be able to challenge the accuracy of the information on his record by subsequent psychological tests? Please supply copies of the Bureau's proposals in this area.

5. The Butner facility and Project START will involve treatment as well as incarceration. Please specify what forms of experimentation will be allowed and

what controls and review will exist for experiments. Please send copies of proposals for employment of psychosurgery or psychotropic drugs and control of their use. Will inmates be allowed to refuse treatment or request transfer after admittance to Butner or Springfield?

6. The programs at Butner and Springfield seem treatment oriented. Please send copies of the Bureau's concept of incarceration under Project START and at Butner—will it terminate with successful treatment or at the end of the prescribed sentence period? Will a prisoner receive good time benefits for admittance and treatment at Butner or Springfield?

7. How does Project START relate to Attorney General Kleindienst's press release of December 4, 1972, which discusses the Bureau of Prisons' 10-year program? Please send copies of the Bureau's plans for therapy programs in its 10-year plan.

Your cooperation in this matter would be greatly appreciated and will aid in the Subcommittee's efforts to preserve individual liberties.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item II.A.2]

U.S. DEPARTMENT OF JUSTICE,
BUREAU OF PRISONS,
Washington, D.C., February 8, 1973.

Hon. SAM J. ERVIN, Jr.,
Chairman,
Subcommittee on Constitutional Rights,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: Please excuse the delay in responding to your letter of December 21, 1972, requesting information concerning programs at the new Bureau of Prisons facility at Butner, North Carolina and at the Medical Center for Federal Prisoners in Springfield, Missouri.

Your first question concerns the programs to be established at the Butner facility. This institution will serve two prime functions. The first is to provide psychiatric services; the second purpose is to develop more effective correctional treatment programs.

The psychiatric or mental health program at Butner will be housed in three units separated physically from the remainder of the institution. Federal offenders who are acutely disturbed, diagnosed suicidal and beyond the management capabilities of regular institutions, will be transferred to Butner for psychiatric services. This will alleviate some of the overwhelming demands for psychiatric services which presently exist at the Medical Center for Federal Prisoners—the single institution designed to handle this type of offender. The type of programs conducted in the mental health units will be comparable to those found in the best mental health facilities in communities. The proximity to three universities in the North Carolina area will bring to the Butner facility a wide variety of consultants whose expertise will help in the development of effective methods for helping these inmates to better cope with their emotional problems.

The Butner facility's second major program area—which will be housed in four units of fifty men each—is the correctional treatment program section. The intent here is to develop more effective methods for the retraining and rehabilitation of convicted federal offenders. Programs will be devised which enable individuals to better cope with the demands of free society. Those program elements which appear to be successful in achieving this objective will be made known to other federal, state, and local correctional institutions. This will help them upgrade the level of their programs and, in part, contribute to the Bureau of Prisons' effort of serving as a model for the nation's correctional systems.

In the last portion of your first question you inquire about project START. Enclosed you will find a copy of the Operations Memorandum which initiated this program. Its intent is to provide additional treatment resources for individuals who appear to be too difficult to manage in regular institutions but who are not diagnosed as psychotic when they are interviewed by competent mental health staff. In order to avoid the poor situation in which these people are transferred back and forth between institutions, a new program was devised to

specifically meet their needs. This is housed in the Medical Center at Springfield, Missouri; it has been established as a totally separated area. That is, the participants in the START program have no contact with the psychiatric patients. They have their own living quarters, work area, and recreation area.

Your second question asks for information in regard to the following: Concerning the manner in which the Butner, North Carolina institution fits into the long term goals of the Bureau, whether there are plans for other institutions such as Butner, or other projects such as START, and whether the results from these programs will be made available to the states.

The Butner institution was designed as a one-of-a-kind facility. The concept for Butner was explained during the course of Congressional hearings on the appropriations. In addition to the ten year construction plan, please find enclosed a briefing paper on this facility. There are no plans for other institutions similar to Butner. However, you will note in the five year plan that there are institutions designated to serve as regional psychiatric hospitals; these have a more narrow mission than Butner.

The START program is not envisioned as being expanded to additional institutions since it also serves a narrowly defined "borderline" population. There are plans to develop special long-term control programs for violent and/or dangerous inmates in penitentiary settings. The purpose of those programs will be to provide a treatment alternative for inmates who require very close control. A Policy Statement detailing the standards for this program is currently being prepared.

Program evaluation results from the Butner and START programs will be made available for use by other federal, state, or local institutions. One of the unique purposes which Butner is to serve will be to provide information for all correction systems in an effort to make correctional treatment programs throughout the country more effective.

Your third question concerns the review process and screening for research proposals for projects to be conducted at Butner and Springfield. Attached you will find a copy of the Bureau of Prisons Policy Statement on research. As you will note, the final approval for all research projects rests in the hands of the Director of the Bureau of Prisons. Periodically, reports are required and audits of the institution programs will be conducted in these facilities as they are throughout the federal correctional system. We are very much concerned with the rights of individuals who are participants in research projects. Accordingly, we have incorporated into our policy statement the standards which emerged from the Nuremberg trials and the statement of the Surgeon General regarding investigations involving human subjects.

Your fourth question deals with concerns involving the use of records and the manner in which inmates will be transferred into the Butner and Springfield facilities. The appended Operations Memorandum on the START program lists the criteria for selection. Inmates are not permitted to refuse transfer. This is similar to the instance in which inmates are not permitted to refuse being transferred to facilities when they require more secure control. Procedural safeguards have been built in so that people are not transferred for "punishment" reasons. At the Butner facility, inmates who are transferred to the psychiatric section will not be permitted to refuse transfer. An effort will be made in the correctional treatment units to select inmates who are willing to participate in the program development effort. However, it may be necessary to transfer individuals for whom it is felt the new program would most appropriately meet their treatment needs.

In regards to record security, the same type of security which exists throughout the federal system concerning access to information in inmates' records will be in operation at Butner and Springfield. Psychological data collected in these facilities are used in two major ways. They are used initially to help staff members, in collaboration with the individual inmate, to design appropriate treatment programs. When used in the second way—to evaluate program success—these data are used only in the aggregate and do not identify specific inmates. Any reports emerging from these studies will not identify inmates and will report only group data. In regard to the possibility of inmates challenging data contained in their records, it is possible for inmates to request and receive repeat psychological examinations.

Question five poses a number of concerns similar to those raised in question three in regard to controls over experimentation. The nature of the "experi-

ments" will be in the area of program development. That is, methods will be tried to, for example, help timid, inferior-feeling, inmates gain a better self image through skill development, educational attainment, etc. Psycho-surgery will not be used. Psychotropic medication will be used only in the mental health facility during the initial, acutely disturbed phase of a psychotic patient's treatment. The goal here will be to have the patient off medication and fully participating in a variety of treatment modalities which will be made available for him. Acutely disturbed inmates will not be permitted to refuse treatment. Inmates who are in the correctional treatment units can refuse treatment and this then becomes part of the program evaluation process. That is, if a program is implemented in which many inmates refuse to participate, then, this suggests that such a program is not effective. Accordingly, a different program will be devised—subject to the review procedures as outlined in the Bureau of Prisons policy statement.

Question six is concerned with the Bureau of Prisons' philosophy in regard to incarceration and also raises questions concerning length of confinement. The Bureau's concept of incarceration is incorporated in its stated mission: Correction of the Offender. In attempting to achieve this goal, individuals committed to the custody of the Bureau of Prisons must be treated humanely, must be given maximum individual attention; treatment programs must be developed with the inmate's involvement and based upon the individual's needs. Both Butner and START are designed to implement this philosophy.

Neither in Butner nor START are any inmates kept beyond the length of their prescribed sentence. Both in the Butner psychiatric program and in START inmates are returned to their initial institution following the end of a successful treatment course. Inmates who participate in the program development section of Butner are there for a prescribed amount of time—twelve to eighteen months—and then returned to their originating institution. Inmates participating in these program development efforts will be selected so that their expected release time will be beyond the project date of completion. However, should an inmate become eligible for a parole, he will be released and not detained solely for research purposes.

Goodtime benefits are set by law and not affected by the programs operating at Butner or START. Actually, inmates in START are afforded an opportunity to earn "industrial goodtime" which many of them would not have been eligible for had they not been selected for this program.

Question seven relates to the manner in which project START relates to a press release made by Attorney General Kleindienst on December 4, 1972. Attorney General Kleindienst made a speech, rather than a press release, on December 4, 1972 to judges of the courts in Washington, D.C. In that speech he pledged his support for the Bureau's ten year program (a copy of which is enclosed).

The Bureau's plans for therapy programs in the next ten years are general rather than specific. The reason for this is the rapid rate of change which is occurring not only in corrections but in all of the behavioral and social sciences. While we cannot identify specific programs for the entire upcoming ten year period, we do know that the best approaches incorporate the following concepts: Differential treatment of inmates in which programs specific to meet the needs of individual inmates will be made available on a "prescription" like basis; "normalizing" institutions so that the detrimental effects of incarceration are minimized and inmates learn to cope with problems in situations which as close as possible approximate free world conditions; involvement of the inmate in the decision making process so that he has a commitment to participate in programs designed to help him make a more successful free world adjustment; greater community involvement which will help enrich the program alternatives available to inmates; and a lessening of restraints on individual freedom whether in institutional or community based programs.

We realize this reply is quite lengthy. However, our intent was to provide you with comprehensive information concerning the questions that you have raised. If there still remains a need for further clarification, please do not hesitate to contact this office.

Sincerely,

NORMAN A. CARLSON, *Director.*

[Item II.A.3]

FEBRUARY 23, 1973.

Mr. NORMAN A. CARLSON,
 Director, U.S. Bureau of Prisons,
 Department of Justice, Washington, D.C.

DEAR MR. CARLSON: Thank you for your reply of February 8, 1973, to our letter inquiring into the programs at Butner, North Carolina, and Springfield, Missouri, concerning behavior modification programs. The information was most helpful and answered many questions that were still open in my mind.

There are several questions which I hope you would be kind enough to respond to in this area. The information desired concerns various points not answered in your letter and some additional points which I would appreciate your clarifying.

In relation to the Butner facility, I would like to inquire as to what specific forms of assurances are provided to control punitive transfers. As you mentioned in your letter, such controls exist and I would appreciate a copy of them. You note that all projects will conform to established medical standards in relation to human experimentation. I would like to know to what degree programs created at the National Institutes of Health or National Institute of Mental Health will be employed. I would also like to know the degree to which the peer review type process employed at NIH will be utilized at Butner. I note that the Director of the Bureau of Prisons will have final approval authority over all projects conducted at Butner in the Correctional Program Development Unit. How will this final authority relate to recommendations made by NIH, universities or peer review committees?

In relation to Project START, would you please send information concerning the actual programs involved in the treatment of inmates at Springfield. Furthermore, I would like to know if Project START is to be terminated at the end of its operations memorandum date of October 31, 1973, or if it will be continued beyond that date.

I would also like to know if the Bureau has any plans, either at Butner and Springfield or elsewhere, for programs involving treatment of homosexuals. Does the Bureau have plans for the treatment of sexual offenders or homosexuals in behavior modification programs? I would appreciate a copy of any such programs.

I thank you for your cooperation in clarifying these matters which are of concern to all citizens of the United States. The protection of individual privacy and the provision of informed consent for every individual participating in experimental programs are basic guarantees of individual rights, which I am sure you will agree must be preserved.

Again, my appreciation for your first response and I hope this inquiry will not inconvenience you.

With kindest wishes,
 Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item II.A.4]

U.S. DEPARTMENT OF JUSTICE,
 BUREAU OF PRISONS,
 Washington, D.C., March 23, 1973.

Hon. SAM J. ERVIN, Jr.,
 U.S. Senate,
 Washington, D.C.

DEAR SENATOR ERVIN: We have your recent letter in which you request additional information concerning the programs at Butner, North Carolina and Springfield Missouri. Your first question relating to the Butner facility inquires about procedures to control punitive transfers. Transfers to the Butner facility will be for two basic purposes: to participate in the Mental Health Program; and to participate in the Correctional Treatment Program Section. Before an inmate will be transferred for psychiatric purposes, he will have been evaluated by a professional mental health person at the sending institution. The basis for his transfer will be acute psychiatric disturbance and/or chronic suicidal at-

tempts. Upon receipt at Butner, the patient will be examined by the Butner staff relative to these areas of concern. Concurrence by the Butner staff will be necessary before the patient is admitted into the psychiatric facility. In regard to the Correctional Treatment Section, an effort will be made to select inmates who are willing to participate in the program development effort. However, it may be necessary to transfer individuals for whom it is felt that the new program would most appropriately meet their treatment needs. Therefore, it will be the treatment needs of the individual which are the determinants of whether or not he is selected for placement in a program. Transfer will then, not be for punitive reasons but for positive treatment benefit.

The controls mentioned which currently exist were stated in reference to the START program. These are contained in the operations memorandum which was sent to your office. They refer to the review procedures which takes place at the institution by the inmate's treatment team, a further review by the Warden, and a final review by a member of the Central Office staff before an inmate is selected for placement into the START program.

In regard to your question concerning the degree to which programs created at the National Institutes of Health or the National Institute of Mental Health will be employed at Butner, I can give you the following information. It is intended that there will be a collaboration between governmental agencies in regard to the research findings of programs conducted within each jurisdiction. Programs conducted under NIMH grants may provide leads for program development at the Butner facility. However, the conducting of these projects will be entirely within the domain of the Department of Justice. The review procedure for projects of this nature, as spelled out in the research protocol sent to your office with the previous letter, details the review procedures prior to the implementation of any research project within the Bureau of Prisons. Recommendations made by NIH, universities or peer review committees in regard to the implementation of research programs will be included among the material reviewed by the Bureau of Prisons Research Advisory group. This group consists of the Assistant Directors who make a final recommendation to the Director of the Bureau of Prisons. All projects require approval by the Director before they can be implemented.

In regard to project START, you will find enclosed a description of the program. Prior to the October 31st, 1973 date, an assessment will be made of project START in regard to its continuation or termination. At that time, if it is decided to continue START, a formal policy statement will be written outlining the procedures and guidelines to be followed.

We have developed no plans to implement programs which are directed specifically at the treatment of homosexuals.

We would certainly agree with you and are equally concerned that programs which we developed do not contravene individual privacy or basic human rights. We trust that you will find the above material responsive to your request for additional information. If there are areas which require further clarification, please do not hesitate to contact this office.

Sincerely,

NORMAN A. CARLSON, *Director.*

[Item II.A.5]

MAY 15, 1973.

Mr. NORMAN CARLSON,
*Director, U.S. Bureau of Prisons,
Department of Justice, Washington, D.C.*

DEAR MR. CARLSON: Thank you for your information concerning Project START and questions relating to the Correctional Research Unit at Butner, North Carolina.

I would like to inquire further about programs planned for the Butner Unit. In your recent letter you stated that the Bureau of Prisons would be responsible for the creation of research and treatment programs with the assistance of universities in the vicinity of Butner and with some cooperation from NIMH.

I would appreciate information as to what programs have been developed at this time for use at Butner. Specifically, I would appreciate information as to what groups are targeted for transfer to Butner, transfer procedures to Butner, and copies of the initial programs to be conducted at the Unit.

Thank you for your continuing cooperation in this matter and the readiness of your office to provide information on this topic which affects many Americans. With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item II.A.6]

U.S. DEPARTMENT OF JUSTICE,
BUREAU OF PRISONS,
Washington, May 29, 1973.

HON. SAM J. ERVIN, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ERVIN: In your recent letter you inquire about some of the procedures which will be operative at the Federal Center for Correctional Research in Butner, North Carolina. Specifically, you inquire about the nature of the research programs which will be conducted, the types of inmates who will participate and the transfer procedures which will be employed.

At the present time we are in the process of developing the specifics of the Butner program. Two models are currently under consideration: in the first, the correctional research units at Butner would be utilized to house small groups of inmates for whom specific treatment programs would be developed to better aid them to deal with their problems and make a successful community adjustment. Under the second model, the research units at Butner would function in many respects like programs in regular institutions. However, a strenuous effort would be made to utilize the best thinking concerning rehabilitative programs in correctional institutions and to fully implement such programs at Butner. In this latter instance, the selection criteria for Butner would be for inmates who will be potential releasees to the general area near the institution.

In both instances, an effort would be made to obtain volunteers to participate in these programs. Should there not be enough volunteers, then inmates would be transferred to Butner in the same way that they would be transferred to institutions with more or less security depending upon a particular inmate's treatment needs.

It is difficult to be more specific about the precise treatment approaches since, as stated above, a final resolution as to the model which would be employed at Butner has not been decided upon. However, such procedures as psychosurgery, the use of massive dosages of drugs, and other similar approaches will *not* be permitted at the Butner facility. Extreme treatment techniques, such as these, are counter to the policies and procedures of the Bureau of Prisons and are not acceptable in any of our facilities.

While this letter has not been fully responsive to your request for information, I trust that it has helped to answer some questions concerning the Butner facility. Should you have any additional questions, please feel free to contact this office at any time.

Sincerely,

RAY GERARD,
(Form Norman A. Carlson, Director).

[Item II.A.7]

JANUARY 7, 1974.

Mr. NORMAN CARLSON,
Director, Bureau of Prisons,
Washington, D.C.

DEAR MR. CARLSON: Earlier this year I directed a series of inquiries to your office concerning biomedical and behavioral research on human subjects conducted within the Federal Prison System. Your responses were most helpful.

While my previous inquiries dealt primarily with behavioral research, recent information I have received has stimulated my concern over biomedical research projects conducted in the prisons, particularly those that involve the use of testing of drugs. As you know, experimentation on human subjects has been a source of continuing concern to me, especially when such experimentation is conducted within a prison environment. In light of this concern, I would appreciate your response to the following questions.

I. EXPERIMENTATION IN GENERAL.

A. How extensive is the use of prisoners in biomedical or behavioral research projects? Please supply me with a list of all such projects, including names, brief descriptions, location, and persons responsible for the individual projects. What measures are taken to safeguard the rights of participants, and in particular, to insure that a prisoner is fully informed about the experiment he participates in? To what extent does the Bureau of Prisons use, or plan to make use of, the recently proposed HEW guidelines concerning human experimentation as reported in 38 Federal Register 194, 27881? Does the Bureau have any formal regulations of its own concerning human experimentation outside of its policy statement on research? If not, does the Bureau plan to issue such regulations in the future?

B. What methods are used to secure volunteers for experiments conducted in the prisons? Under what circumstances may a prisoner withdraw from an experiment once it has begun? What measures are provided to insure that a prisoner will not be penalized for his withdrawal from an experiment? Are prisoners ever coerced in any way to participate in research projects?

C. Has the Bureau developed a position toward *Kaimowitz v. Michigan Department of Mental Health*, 42 USLW 2063, a Michigan case that effectively has ruled that truly informed consent could not be obtained in a coercive environment? If so, would you please describe that position. What effect will the Michigan decision have on Federal Bureau of Prisons projects conducted within the State of Michigan and elsewhere in the country?

II. DRUGS AND DRUG TESTING IN THE PRISONS

A. Are experimental drugs or experimental dosages of approved drugs ever tested in the federal prisons? Are federal prisoners ever used in drug-related projects conducted outside of the prison system? Is drug testing in the prisons subject to the supervision and regulations of the Food and Drug Administration?

B. To what extent is drug-testing by private companies conducted within the prison system? Please include copies of research proposals specified by the Bureau of Prisons Policy Statement on Research for all research projects that are presently being conducted or are planned.

C. Recent reports have indicated that some drugs have been administered to prisoners without their consent. Have any of these drugs not yet been approved by the FDA? Are anectine, thiorazine, or prolixin ever used in the prison system for any reason? Are emetics ever used? Are any drugs or treatments designed to produce radical changes or permanent effects used in the prisons? If so, would you please include descriptions of all such practices, or practices that could be interpreted as being radical, that are conducted within the Federal Prison System. If drugs are ever administered to prisoners without their specific consent please describe those situations in which such a practice takes place.

III. CLINICAL RESEARCH CENTERS

A. I understand that in 1972, the National Institute of Mental Health transferred its Clinical Research Center (CRC) at Fort Worth, Texas, to the Bureau of Prisons, and that it plans a similar transfer for its CRC at Lexington, Kentucky. In recent testimony given before oversight hearings into drug abuse conducted by the House Subcommittee on Health and the Environment, Dr. Robert DuPont, director of the Special Action Office for Drug Abuse, indicated that prisoners would be used in the testing of pharmacological methods of drug abuse prevention conducted at the Lexington facility, replacing the civilly committed addicts that formerly had been used. Would you please describe in detail the Bureau of Prisons present and planned use of the Fort Worth and Lexington facilities. Are the subjects used in the experiments conducted at these facilities volunteers? What methods are used to secure these volunteers? If some of the subjects are not volunteers, what methods are used to select prisoners for the programs? Please provide any pertinent information concerning the practices, drugs, and methods that have been and will be tested or used at Lexington and Fort Worth.

B. Is NIMH presently involved with the two facilities? If so, in what capacity?

C. Under HEW guidelines there should have been established local committees at Lexington and Fort Worth to review all projects undertaken at the NIMH

facilities. Please describe the membership, activities, and politics of those two committees, and if possible, include copies of the assurances required by the guidelines. Does the Bureau plan to maintain the committees, and if so, in what capacity? If the committees are not to be maintained in the form in which they existed under NIMH, what measures will be taken to provide for continuing review of research projects conducted at the facilities?

D. Are any future transfers of NIMH Clinical Research Centers to the Bureau of Prisons planned?

IV. WITH RESPECT TO THE BUREAU OF PRISONS POLICY STATEMENT ON RESEARCH, I WOULD APPRECIATE YOUR RESPONSE TO THE FOLLOWING

A. How is the Bureau's policy enforced?

B. Under Section 3-C, would you please describe those situations that could be considered "highly justifiable circumstances" where the guidelines of the National Advisory Health Council could be waived. With respect to these guidelines as quoted in this section, what would constitute an appropriate method of obtaining informed consent, and who determines whether or not the method is appropriate?

C. Under Section 4-b, what specific measures other than the consent form and the enclosed memorandum are used to insure that no individual is subject to arbitrary risks against his will, and that truly informed consent is derived in every research project? What is the nature of the "release" mentioned in this section?

D. Under 4-c, what types of incentive programs other than extra good time and monetary rewards are used? Do sufficient numbers of prisoners feel that the "opportunity to participate in a wholesome activity, such as research holding the promise of advancing knowledge and capability, is sufficient incentive" for participation?

E. Under Section 4-d, what steps are taken to safeguard the confidentiality of a subject's records, both in the publication of project results and in the availability of information to other persons and agencies? Must an individual's consent be obtained prior to the use of his records in an identifiable capacity?

F. Under Section 4-f, are there any further policy statements or directives pertaining to the duties of the Chief of Research? To whom are "[m]ajor changes in project design" reported when they are proposed? Does the warden of a given prison have the power to suspend the activities of a research project conducted at his institution? Is there a minimum number of project reports that the chief of research must require for a given project? Does the chief of research ever conduct direct, on-site evaluations of research projects? Are there any system-wide standards or rules pertaining to research?

G. As regards the consent form (Appendix 1), what guidelines are used to determine that "[t]he nature and purpose of the operation, the risks involved, and the possibility of complications" are fully explained to the subject? Exactly what is meant by the term, "operation"? Is appendix 1 the consent form that is used in all experiments? For how long are copies of the form kept on file? Where are these files maintained? Is experimental surgery ever performed within the prison system?

V. ARE ANY STUDIES OR EXPERIMENTS THAT ARE CONCERNED IN ANY CAPACITY WITH TELEMETRY OR ELECTROPHYSIOLOGY AS THEY RELATE TO THE IDENTIFICATION AND CONTROL OF CERTAIN TYPES OF BEHAVIOR PRESENTLY BEING CONDUCTED WITHIN, OR ASSOCIATED WITH, THE BUREAU OF PRISONS?

VI. DOES THE BUREAU OF PRISONS EVER GRANT FUNDS TO RESEARCH ORGANIZATIONS THAT CONDUCT EXPERIMENTATION ON HUMAN BEINGS OUTSIDE THE PRISON SYSTEM?

Please allow me to emphasize that I feel that research involving human subjects is essential to the future of medicine and thus to the human race. I feel equally strongly, however, that concern for the rights of the individual must assume the highest priority in any consideration of such experimentation.

Though I realize that these questions are wide-ranging and require a significant amount of information, I look forward to your prompt reply.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item II.A.8]

U.S. DEPARTMENT OF JUSTICE,
BUREAU OF PRISONS,
Washington, February 19, 1974.

HON. SAM J. ERVIN, JR.,
U.S. Senate, Committee on the Judiciary,
Subcommittee on Constitutional Rights, Washington, D.C.

DEAR SENATOR ERVIN: We regret that there has been some delay in responding to your letter of January 7. We shall attempt to answer your questions following the outline in which they are presented.

IA. It is against the Bureau of Prisons policy to permit offenders to become involved in medical experimentation projects or drug testing studies which are conducted under the auspices of private agencies or companies, although we frequently receive such requests. There have been instances where a study conducted by a federal agency was clearly in the national interest, and the Bureau of Prisons authorized the participation of volunteer offenders. However, we are now placing limitations on even these kinds of projects. A recent survey of the status of these studies which have been approved in former years shows the nature of Bureau of Prisons participation.

1. At the United States Penitentiary, Atlanta, Georgia, a Malaria Project conducted under the direction of the United States Public Health Service and National Institutes of Health was begun near the end of World War II. Federal offenders participated as subjects in efforts to develop a malaria vaccine. This study has now been phased out.

2. At the Federal Reformatory, Petersburg, Virginia, offenders participated in the development of the Rubella (German Measles) Vaccine by National Institutes of Health researchers; Dr. John L. Sever is project director. At present only two offenders are still being followed.

3. Offenders from Federal Correctional Institution, Lompoc, California and Federal Prison Camp, Safford, Arizona have participated in studies conducted in collaboration with National Aeronautics and Space Administration staff at the United States Public Health Service Hospital in San Francisco to determine the effects of weightlessness—simulated by extended bed rest. Less than six offenders are presently participating. Dr. Kenneth H. Hyatt and Dr. Schneider are project directors.

4. The largest research program using federal offenders is at the National Institute of Mental Health Addict Research Center in Lexington. About 40 long term ex-addicts from penitentiaries are permitted to volunteer for transfer to Lexington where they serve as subjects for a variety of studies testing the effects of addictive drugs and antagonists for addiction. A series of review committees, both within National Institute of Mental Health and at Bureau of Prisons monitors these studies. Dr. William Martin, Chief, is responsible for all projects.

We are in the process of revising our Policy Statement on Research which will explicitly incorporate the Health, Education and Welfare guidelines concerning human experimentation as reported in 38 Federal Register 221, 31738.

IB. For the United States Public Health Service studies mentioned above offenders have been selected in different ways, depending on the nature of the study. For the Measles Vaccine study at Petersburg, only a few offenders were eligible, depending on blood type and Rh factor. Offenders for transfer from penitentiaries to the Addict Research Center in Lexington generally volunteer after they have heard of the research program from a former offender who returns to the penitentiary from Lexington. There is usually a waiting list of volunteers who want to transfer to Lexington. For each study, there is a paragraph in the consent statement which specifies that the offender may withdraw from the study at any time without penalty. Offenders are never coerced in any way to participate in research projects.

IC. As to the legal situation cited in *Kaimowitz versus Michigan*, the Bureau's position relative to psychosurgery and involuntary consent will be covered by incorporating the Health, Education and Welfare guidelines mentioned in IA above. We can state unequivocally that the Bureau of Prisons has never permitted such psychosurgical experimental procedures, nor are there any plans to permit such studies.

IIA. The only experimental drugs tested are those used at the Addict Research Center, Lexington, Kentucky.

IIB. There is no drug testing by private companies.

IIC. Food and Drug Administration approved drugs may be administered by our physicians in treating patients without their consent if patients are unconscious or mentally incompetent or psychotic and doing damage to themselves or others. Anectine is not used in Federal prisons. Thorazine and prolixin are used when prescribed by a physician for treatment of specific illnesses in accordance with generally accepted medical practice. (See *American Medical Association Drug Evaluations*, Second Edition, and Food and Drug Administration Regulations). Emetics would be used only when prescribed by a physician to induce vomiting after ingestion of certain poisons. No radical drugs or treatments are used in the medical care of Federal offenders other than such widely accepted procedures as radical cancer surgery.

IIIA. Since the transfer of the Clinical Research Center at Fort Worth to the Bureau of Prisons in November 1971 there has been no testing of pharmacological methods of drug abuse prevention. The program at the Federal Correctional Institution, Fort Worth, Texas, emphasizes the Bureau's most innovative attempts to normalize the prison environment by providing a variety of programs keyed to interaction with the community. These include programs in which volunteers from the community are in the prison, and offenders are studying and working in the community. A report on these programs prepared by a research sociologist, Sister Esther Heffernan, is appended for further information. At the Lexington Clinical Research Center, recently acquired from National Institute of Mental Health, essentially the same programs will be developed as those at Fort Worth.

IIIB. and C. The distinction between the two former National Institute of Mental Health facilities is that the Addict Research Center at Lexington will continue to operate as a separate facility under the direction of National Institute of Mental Health. Dr. William Martin, mentioned in paragraph IA above, continues as Chief of the Research Center. Dr. Martin should be able to provide you with details of the National Institute of Mental Health addict research studies.

IIID. There are no plans for further transfers of National Institute of Mental Health Clinical Research Centers to the Bureau of Prisons.

IIVA. Enforcement of the Policy Statement on Research follows procedures which are common practice for enforcement of any policy statement. In meetings with wardens, they are reminded that all research proposals, require review in the Central Office. Certainly any warden who might receive a local request for any kind of medical or drug research would be aware that there are Bureau policy implications, so he would either refuse the request or refer it for Central Office review. Periodic site visits to all institutions by audit teams review correctional programs, fiscal management, custody, and medical services. Too, planning for evaluation of innovative correctional programs occurs with Central Office staff visiting institutions. Examples of where such planning has occurred are Kennedy Youth Center, Fort Worth, Oxford, Butner and Pleasanton.

IIVB. There are no circumstances where the *guidelines* could be waived; the exception refers to the rare circumstance where the research may be conducted by other than United States Public Health Service auspices or direction.

IIVC. The informed consent and "release" form are provided for each specific study and the language may vary slightly, depending on the content of the study. The "release" refers to release of confidential information, such as medical or psychiatric data from the prisoner files. You may want to examine such forms from specific studies at Lexington, and Dr. Martin should be able to provide you with samples.

IIVD. There are no other incentives than those referred to in your question.

IIVE. The consent for release of confidential data wherein the offender could be identified is rigidly adhered to.

IIVF. There are no further specific policy statements or directives pertaining to the duties of the Chief of Research. Major changes in project design are proposed to both the Warden and Chief of Research. The proposed changes are then presented to the Assistant Directors, who are members of the Research Advisory Council. A Warden has the power to suspend a research project at his institution. The final report of a project may be the minimum number of reports. The Chief of Research frequently conducts evaluation of research projects at the site. The standards are generally described in the Policy Statement on Research.

IIVG. As mentioned in C above, the consent form varies with each study; Appendix 1 is a sample. The consent form for each study provides details of medi-

cal procedures, risks, etc. There is no experimental surgery performed in the prison system.

V. and VI. No such studies or experiments are conducted within the Bureau of Prisons; nor does the Bureau of Prisons provide funds for such studies outside the Prison System.

We share your concern for the rights of individuals who may become subjects in research projects, and hope that this information will be useful to you. If there are areas which require further clarification, please inform us and we will attempt to provide the information.

Sincerely,

NORMAN A. CARLSON, *Director.*

[Item II.A.9]

JANUARY 7, 1974.

Dr. MARTIN GRODER,
*Director, Federal Center for Correctional Research,
Old U.S. Highway 73, Butner, N.C.*

DEAR DR. GRODER: As chairman of the Senate Subcommittee on Constitutional Rights and as a Senator from North Carolina, proposals concerning the Center for Correctional Research at Butner are of particular concern to me. Whenever research is conducted involving the use of human subjects, the greatest care must be taken to preserve the fundamental rights guaranteed by the Constitution to those individuals. When such research is conducted in a coercive environment, even greater care must be utilized.

Earlier this year, I directed a series of inquiries to Norman Carlson concerning plans for the Butner facility. Since that time, I have received a number of complaints and questions relating to the types of programs to be tested at Butner. In his letter to me of May 29 of last year, Mr. Carlson said that "[i]t is difficult to be more specific about the precise treatment approaches since . . . a final resolution as to the model which would be employed at Butner has not been decided upon." As the facility nears completion, I have received information that has indicated that the programs to be tested are better defined than they were at the time of my earlier inquiries. In light of my concern, and by way of providing information, I would appreciate your response to the following questions. Though many are similar to those I asked of Mr. Carlson, I would like you to respond as director of the Center for Correctional Research.

1. Will any direct, permanent techniques or methods that involve long-term changes in an individual's personality or behavior be tested at Butner? Specifically will psychosurgery or aversion therapy in any form be tested? Will experimental drugs (or experimental dosages of approved drugs) be tested or used? Will shock treatments be administered to inmates? Will any emetics or drugs such as anectine, prolixin or thiorazine ever be used in any capacity at Butner? Will any drugs or treatments designed to produce radical physiological and/or behavioral responses ever be used? Will any of the aforementioned treatments ever be administered to a prisoner or mental patient involuntarily or without the express consent of the patient or his legal representative? Please describe all situations in which these treatments will be utilized or administered. If there are no specific plans for such practices, is it possible that these treatments could ever be used as the program is presently conceptualized? If not, what measures have been taken to insure that these treatments will never be part of the program at Butner?

2. What methods will be used to secure subjects for the experimental programs tested at the institution? In the event that sufficient numbers of volunteers are not available, how will additional subjects be selected?

3. Section 4 of the Bureau of Prisons' Policy Statement on Research states that:

"It is a firm principle that no one should be subject to arbitrary risks against his will and informed consent is required of all participants in research projects. This requires obtaining a consent and release statement from each participant which statement must include the stipulation that the subject may freely withdraw from participation at any time without penalty of any kind."

What steps have been taken at Butner to insure that true informed consent will be obtained in every case? Could a prisoner or mental patient ever be forced to participate in an experiment against his will? What is the nature of the "release" specified in the policy statement and how is that release conceptualized

for Butner? What guarantees are provided to insure that a prisoner may withdraw from participation at any time? Please include copies of all forms and documents pertaining to the derivation of informed consent at Butner.

4. Has a program master plan more recent than summer, 1973 been drafted? Please include copies of all policy statements or reports concerning the Butner facility. Would you please describe, in as much detail as possible, all programs planned or under consideration that are not fully outlined in enclosed statements or reports. Please include a detailed description of the structure and organization of the institution and list as many names as possible of medical personnel to be associated with the facility.

5. Because of participation in the Butner program, will a prisoner be denied any rights or privileges he normally would be accorded? Will he be granted any privileges he normally would not be accorded? What effect will participation in the Butner program have upon an individual's chances for parole? Is it conceivable that a prisoner could be denied parole because of his importance to a given research project? As regards post-release or aftercare supervision, what sort of control will be maintained over a prisoner once he has been released from Butner? Specifically, will a prisoner be subject to more restrictions concerning his release, either prior to or after that release, than would a similar prisoner in a normal institution? What measures will be taken to insure that a prisoner is aware of any and all changes in his status that might result from his participation in a program?

6. Will experiments or studies concerning telemetry or electrophysiology as they relate to the identification and control of certain types of behavior be conducted at Butner?

7. What guidelines, regulations, rules, and the like will govern the conduct both of prisoners and the researchers? If such guidelines or regulations have been drafted, would you please enclose a copy.

8. Has the Butner Project received funding from other departments or agencies, specifically the Department of Health, Education, and Welfare, or the Law Enforcement Assistance Administration of the Justice Department? If so, please elaborate.

Please allow me to emphasize the general fact-seeking nature of this inquiry. My interest is based on concern for the rights of the subjects of the experimental programs at Butner, and not on preconceived notions with respect to any of the issues that have been raised respecting Butner. Though I realize these questions require a significant amount of information, I look forward to your prompt reply.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item II.A.10]

U.S. DEPARTMENT OF JUSTICE,
BUREAU OF PRISONS,
FEDERAL CENTER FOR CORRECTIONAL RESEARCH,
Butner, N.C., January 24, 1974.

HON. SAM J. ERVIN, JR.,
*Chairman, Subcommittee on Constitutional Rights,
U.S. Senate, Washington, D.C.*

DEAR SENATOR ERVIN: I have been pleased at your continuing and even-handed interest in the Federal Center for Correctional Research. Before I proceed to answer your specific inquiries, I will reiterate some broad principles upon which the program plans for the Federal Center for Correctional Research, Butner, North Carolina are being made. First, it is basically two institutions. One is a mental health center with three units that will provide acute psychiatric treatment for incarcerated prisoners in our federal institutions for OMB Regions I-IV, Federal Bureau of Prisons Regions designated Northeast and Southeast. This will be a treatment center and will not be primarily involved with research and the primary responsibility of the staff will be the use of modern, up-to-date mental health treatment methods. The second section will be a research section per se and consists of four units. The prime concepts that we will be working with in these units are: Correctional programs which appear to be helpful to inmates and successful in reducing recidivism and elevating the

general social status of the participants replicated in a way that enables us to be sure that they were, in fact, successful and what about them contributed to their success. Secondly, by having four such programs, we hope to be able to see what differential success might occur and what elements of one program may be more effective under some circumstances or with some people. Thirdly, we are now also looking at the possibility that we may be able to elaborate a theory and practice of corrections that will be more effective and understandable than the historical theory and practice.

I will now proceed to the answering of the specific questions you have asked in the order you have asked them.

1. No permanent, irreversible methods have been contemplated, are being contemplated or will be contemplated. Specifically, psychosurgery will not be done nor does the facility have any capability of, at this time or any future time, doing psychosurgery as there is no surgical suite nor is there any staffing for such purposes. Aversion therapy will not be used and since there has been a long-standing policy with the Bureau of Prisons not to use aversive or physically punishing methods of any kind, I presume that this position will remain stable through time and change of administration. We currently have no plans to use experimental drugs or psychotropic drugs of any kind in the research units. In fact, all the programs currently contemplated, preliminarily agreed on and being searched into further, are drug-free programs. No program involves the application of any physical force, galvanic action, electric shock or other such physical intervention. Again, no psychotropic drugs will be used in these drug-free programs. I might note that there has been some confusion in some of my press statements when I have talked about the fact that, of course, in the mental health units some of the long-proven and tested treatments for acute psychosis involve the use of Thorazine or other phenothiazines and likewise, with depression, includes the use of anti-depressant drugs, etc. Again, no drugs will be used in the research units and the inmates will be there on the basis of informed consent and their continuing voluntary participation. In the mental health units, of course, with inmates that are deemed sufficiently disturbed to warrant enforced treatment, this will be provided to prevent injury to themselves, to others or further deterioration of personality. Repeating, as the program plans for the research units are all drug free, not only in their proposed use but in their common practice, it is not conceivable that they would involve psychotropic drugs in any way whatsoever. The main safeguard on the later introduction after my administration of drug treatment programs or other such programs as might be of concern, of course, would be the continued monitoring of these programs by the executives of the Bureau of Prisons, by the United States Justice Department, by your own committee and of such other governmental or non-governmental bodies as may from time to time look into the practices at that time.

2. The methods used to secure subjects will consist of creating a randomized pool of subjects who meet the following criteria:

(1) That their original place of residence shall be on the east coast, preferably within one day's drive of the institution, so as to facilitate involvement with community resources and family.

(2) That they have an adult sentence and not be over the age of 50.

(3) That the sentence be such as they would, under usual circumstances, be eligible for parole within 18 months to 3 years from time of transfer to Butner.

(4) That they not be on the special offenders list.

(5) That they be male.

(6) That they have no history of major psychiatric illness.

(7) That they not be in that small category of criminal activity such as IRS offenders in which the recidivism rate is already so low as to not warrant such an expenditure of resources.

Out of this pool now being created, the number of which has not yet been determined but is being worked up by our newly acquired researcher, a randomized sample then will be offered the opportunity, after having been informed of the nature of the programs, to come to Butner.

3. The method of insuring informed consent is to provide a complete description of the program plan and that consent for transfer be signed for by the inmate. We have not yet gotten to the point in our planning to work up the specific release. None of the inmates will be subjected to experimentation without their consent. The exact procedure by which the inmate might withdraw from the research program is not yet specified but there will be such a procedure that

will be reasonably clear and sensible administratively. No documents of any kind currently exist for this and this is all in the verbal planning stage.

4. The Summer 1973 Program Master Plan still is our working document. Enclosed with this there is a Preliminary Program Plan for the Human Resource Development Unit and within the next two months there will be a Preliminary Program Plan for an Asklepieion-type unit and a psychodrama-type unit which have already been presented verbally to the Bureau of Prisons executive staff. The proposed staffing for the institution that we are currently using is just about to be staffed by the executive staff and will be available within the next 60 days. As currently planned, there will be no medical personnel per se in the research units as none of the programs are specifically medical nor designed to treat psychiatric illness. As in previous plans, in the mental health units, of course, there will be a psychiatrist in each unit and a Ph.D. level clinical psychologist along with 19 psychiatric nurses who will rotate in a psychiatric nursing service for all three units, 2 occupational therapists, 2 recreational therapists, an educator, 4 social workers and a complement of correctional counselors and correctional officers. In addition to this, we will be running a small infirmary with a dentist, dental assistant, 4 physician's assistants, including a hospital administrator, a clinical nurse, medical records librarian, a safety officer and a staff of physician's consultants. I, myself, though I am a psychiatrist by training, will be the Warden of the institution and will not directly participate in any of the specific programs. To date, no specifically medical personnel, other than myself, have been identified.

5. Again, I am answering your question in two parts. In the mental health section, of course, for acutely psychotic and/or dangerously depressed suicidal individuals, restrictions on movement around the institution and on program options will, of course, be in effect as in any mental health situation until such time as the individual is capable of handling these opportunities without danger to himself or others. In the research program the exact nature of privileges and opportunities will vary somewhat depending on the specific program but, in general, will be in line with other F. C. I. type federal institutions. The major privilege that each individual will have at Butner that they would not have at other institutions is the opportunity to participate in intensive, well-staffed, well thought out program plans which, though available at some of our institutions at this time, hopefully will be available more generally and this is a privilege, indeed, especially if it works in preventing recidivism.

I have discussed the Butner program with the United States Parole Board on occasion. Preliminarily, they feel that they would like to proceed with the inmates at Butner on the same basis as the inmates at any other institution. I agree with this stipulation as my own evaluation of change in inmates involved with intensive treatment programs is such that the changes ought to be obvious to the members of the Parole Board, not just the program staff. I can, therefore, only guess as to what effect it may have on these inmates and their relationships with the U.S. Parole Board. It is definitely planned that no prisoner will be held beyond a granting of parole by the U.S. Parole Board whether or not the program staff agrees with the Parole Board decision. Participation in any aftercare supplementation projects that may be possible to set up for the inmates in the research program will be on a voluntary basis and will need to be approved by the United States Probation Office in the area in which the individual resides post release. This is seen as an important supplementation of the usual supervision available and to help insure success in a way that has been demonstrated in other projects that are community based. It is in no way designed to restrict or further harass or in any way discomfort inmates. If an inmate were to choose not to participate in such a program, then we would follow his progress on parole through correspondence with the United States Probation Officer and would not attempt to effect his success in any way as obviously this would skew the research and be inequitable. All the program types preliminarily selected to date are basically training models with a great deal of participation of inmates in their own program and can be presumed by their prior history when used in other situations to provide inmates a high level of accurate and rapidly available information as to the status of the programs, their own particular status and will provide multiple opportunities for input by inmates with their own source of information and opinions.

6. No experiments using telemetry or electrophysiology as they relate to the identification and control of behavior are contemplated at Butner. There has

been some interest expressed in a process that is now being used in civilian life known as biofeedback where an individual in a context similar to meditation but assisted by electronic monitoring devices can learn to control various aspects of their own physiology. Were such a program to be used, it would be, of course, again voluntary and in no way, at least as I understand it having never used these, does it represent control by an experimenter or outside source but is an autonomous learning device seemingly used to enhance self-esteem, reduce anxiety and teach the kinds of bodily control that are available through more tedious non-electronic means; yoga, meditation, etc.

7. The general guidelines, regulations, rules, etc. that will govern both the actions of the staff and the inmates will be the currently available policy statements of the Bureau of Prisons. Any additional guidelines or regulations would be a part of the program models and these will become available as these program models become elaborated. None have been written to date but we do not contemplate, in any case, their running against Bureau policy in any general or detailed sense.

8. The Butner project is being totally funded by the Bureau of Prisons and no other funding is contemplated to date. However, because of the tremendous interest of the local academic community at Duke University, The University of North Carolina at Chapel Hill, North Carolina State University and East Carolina University, it is conceivable that subsequent to becoming operational some of these contacts might become interested in training of graduate students at our facility in a variety of specialties and, perhaps, supplemental research on the programs that we are working with that might entail grants from agencies other than our own. These however, would be monitored and supervised by the grantee whose project would have to be approved by our own research evaluation board and the executive staff of the Bureau of Prisons. In no case would these projects contradict the principles described above relative to the various questions you have asked.

In summary, Senator Ervin, I hope I have, within the information currently available, made clear that, in general, the inmates in these programs will be at least as well off and with their rights as well protected as any inmate in the federal system. The major reason for calling it research is that instead of the usual procedure of starting programs that are untested in a way that makes it very difficult or impossible to know whether the program has, in fact, enhanced the success of the inmate's post-release, these programs are being carefully set up with randomized availability of the programs to those inmates that meet the criteria so as, when the project is completed, we can tell whether, in fact, it was worth the bother, expense, etc. of mounting such intensive programs or whether, in fact, just our regular institutional programs would have availed the inmates just as much good as this more sophisticated type of program. My hope is, of course, or I would not have involved myself in this project, that we will, in fact, by delivering services along the lines of the Program Master Plan and in these four different modes, increase the actual performance of inmates on release and make them the more productive and honest-type citizens that we would hope that a correctional system can look forward to being able to do with more and more of its clients as time goes along. I regret the false propagandistic horror stories that have been perpetrated against this institution and the Bureau of Prisons by a small number of self-interested, politically motivated people who wish to see the prison system of this country destroyed and/or prevented from moving from its traditional methods which have been relatively ineffective to more sensible, humane, rational and effective methods which could, in fact, deliver to the citizens of this country a service worth the resources that are being employed.

Thank you for your continued interest and I hope that the above will satisfy some of your needs although recognizing that there is still a great deal undetermined which we will be providing to you and your committee as the materials become available.

Sincerely yours,

MARTIN G. GRODER, M.D.,
Program Development Coordinator.

[Item H.A.11]

APRIL 19, 1974.

Dr. MARTIN GRODER,
 Director, Federal Center for Correctional Research,
 Butner, N.C.

DEAR DR. GRODER: Please allow me to thank you for your continued cooperation with the Senate Subcommittee on Constitutional Rights in its investigation of programs to be tested at the Federal Center for Correctional Research. I understand that you had a most informative meeting with the staff of the Subcommittee on January 25 of this year.

On several occasions, both in response to my inquiry of January 7, 1974, and in your recent conversation with the staff of the Subcommittee, you indicated that detailed ethical guidelines had not been developed for the Butner facility, and that a local institutional review committee had not been established. I cannot overstress my conviction that no inmates should be transferred to Butner until strong guidelines have been developed and a workable, effective review structure has been established.

In light of the continuing interest of the Subcommittee, I would appreciate your providing us with a detailed status report regarding the facility, with particular emphasis on present attention being given to the development of ethical guidelines and the establishment of a local institutional review committee. Please forward any project descriptions or program master plans that may have been developed since our last communication, as well as a detailed description of methods being developed for securing volunteers for the program. In view of the recent case of *Kaimowitz v. Michigan Department of Mental Health*, and other indications that informed consent cannot be obtained in a coercive environment, I am very interested in your approach to the problem.

Please allow me to emphasize my view that great strides are badly needed in the area of prison reform. I feel, however, that it is necessary that the many important and legitimate questions that have been raised concerning Butner be thoroughly considered and answered.

Thank you for your cooperation, and I look forward to your response.

With kindest wishes,
 Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item H.A.12]

U.S. DEPARTMENT OF JUSTICE,
 BUREAU OF PRISONS,
 FEDERAL CENTER FOR CORRECTIONAL RESEARCH,
 Butner, N.C., April 30, 1974.

Hon. SAM J. ERVIN, Jr.,
 Chairman, Subcommittee on Constitutional Rights,
 U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: I appreciate your and your staff's continued interest in the Federal Center for Correctional Research. As your letter of April 24 was essentially a request for an update, let me so proceed.

No further effort on the ethical guidelines has been made since my last discussion with your staff for two reasons:

1. I am awaiting the selection of the programs and program managers before proceeding in this very delicate area so as to know what it is exactly that the guidelines will refer to.

2. Because of construction delays, caused by the general contractor, it appears that the institution will not be ready for some time yet and, therefore, we have not been able to go ahead and designate the programs nor hire the program managers.

I await both events with a great deal of eagerness as you can imagine as I have been in this planning phase for quite some time.

We are preparing to update the Program Master Plan as of the summer of this year, 1974, and, at that time, it will replace the 1973 version and, of course, you and your committee will be provided the update as soon as it is available.

The program plans are still in varying drafting stages and they will be prepared and ready at approximately the same time as the Master Plan and will be distributed along with it.

No firm procedure has been set on how to approach those inmates who will be designated as potential volunteers for the programs at the Federal Center for Correctional Research. However, I would tend to expect, as I have indicated in the past, some form of written communication to be either read by the inmate or read to him if literacy is a problem, with the opportunity for direct, face-to-face discussion, question and answer, etc. Then, subsequent to that, the decision and signing of the consent form before transfer for those who agree.

In reference to your discussion of *Kainowitz v. Michigan Department of Mental Health*, I have not had the opportunity to read that case carefully, but as I have seen it written about in various places in the criminal justice and mental health literature, it appears that it was decided largely on the issues of permanent physical harm and that of being a highly experimental method that had not yet been demonstrated to be effective in any case. As you know, the programs that we are contemplating evaluating at Butner will (1) have been used extensively in a variety of settings inside and outside of corrections and, (2) would not have the capability of producing any permanent harm physically or even psychologically, for that matter. Of course, under current law and regulations, any inmate under the wardship of the Attorney General could be transferred at his will or that of his designated agents. Thus, our procedure is a good deal more voluntary than the current and traditional methods of classification and assignment. Since the programs we are evaluating are currently available and used rehabilitation efforts, we are, in fact, in a much more voluntary situation than the usual situation in which an inmate might be classified for such a program. Even in the typical case of these program types where it is voluntary, men often sign up for the program without as complete a description and set of guidelines as we will make available. Nonetheless, the philosophical issues involved in the concept of voluntarism are very complex and occasionally turgid, but as far as I can determine, we are certainly within the usual meanings of the word "voluntarism" since there will be no detriment to those who decline and the advantage comes through participation and not external payment. However, as you and your committee have spent a good deal of time considering these issues closely, I would appreciate further communication on your part as to what you may feel would represent an adequate procedure in this area and would be happy to closely study it and see if it, in fact, would be feasible in our situation.

I, then, look forward to any advice that you may have and, in any case, remain

Sincerely yours,

MARTIN G. GRODER, M.D.,
Program Development Coordinator.

B. Related Materials

[Item II.B.1]

BUREAU OF PRISONS—POLICY STATEMENT ON RESEARCH, OCTOBER 31, 1967

1. PURPOSE

To state that it is the policy of the Bureau of Prisons to *encourage* and *promote* research activities, i.e., projects undertaken by individuals or organizations either in or out of Federal, state, or local governments where the Bureau of Prisons assumes either a host or sponsorship role.

2. POLICY

The Bureau of Prisons will actively cooperate in all research activities which meet the following four conditions:

(a) The "researcher," either as an individual or organization has a bona fide professional standing in the pertinent field;

(b) The benefits are clear in terms of the mission and collateral objectives of the Bureau of Prisons and the potential for benefit or advancement of knowledge warrants involvement and/or investment of funds, facilities, and services;

(c) The activity does not adversely affect Bureau of Prisons programs or operations;

241

(d) In the case of medical projects (where the direct application to corrections is submerged in the significance of the project as a benefit to mankind and where the project would be difficult if not impossible to conduct in other than a controlled setting such as is offered in an institution).

It will be the policy of the Bureau of Prisons to assign priorities. Research which is innovative and contributes to the development of the correctional profession is especially desirable. Projects that are of lesser concern to medicine and corrections, or which are primarily for the individual's benefit, will be assigned a lower priority. These latter projects will, however, be considered if they require minimal use of institution resources.

3. CRITERIA

a. *Correctional Programs.*—Research in correctional programs (which, by implication, may include many facets of the social sciences) is especially desirable, particularly where such research has promise for advancing knowledge and capability for treatment of offenders. Emphasis, however, should be given those projects having a primary corrections component.

b. *Operational Programs.*—While few research programs relating solely to operations have been conducted in the past, the rapid gains in science and technology make it likely that such projects may be done more frequently in the future. Because of this and because such projects may result in immediate and material benefits, the definition of research may be expanded to include experimentation and demonstration, even that conducted by commercial firms at no cost or obligation and with the understanding that government participation does not imply any endorsement.

c. *Medical and Psychiatric Programs.*—Except in unusual and highly justifiable circumstances, research in these areas will be conducted by the U.S. Public Health Service with the joint approval of the Inter-Bureau Committee on Health Services Research and the Bureau of Prisons within the policy framework established by the National Advisory Health Council as follows:

"Be it resolved that the National Advisory Health Council believes that Public Health Service support of clinical research and investigation involving human beings should be provided only if the judgment of the investigator is subject to prior review by his institutional associates to assure an independent determination of the protection of the rights and welfare of the individual or individuals involved, of the appropriateness of the methods used to secure informed consent, and of the risks and potential medical benefits of the investigation." (See Appendix 1 for consent form to be used in medical projects.)

In addition, the Bureau of Prisons will be guided by the ethical standards suggested by the statement of permissible medical experiments on volunteers prepared by the War Crimes Trial Prosecutors at Nuremberg. (Appendix 2)

4. GENERAL CONDITIONS

a. *Research Assumption of Responsibility.*—As a condition of Bureau of Prisons cooperation and participation, researchers will assume responsibility for the protection of the rights and lives of individuals involved and for the continued treatment of complaints or problems that may arise at any time, even after project termination.

b. *Informed Consent of Participants.*—It is a firm principle that no one should be subject to arbitrary risks against his will and informed consent is required of all participants in research projects. This requires obtaining a consent and release statement from each participant which statement must include the stipulation that the subject may freely withdraw from participation at any time without penalty of any kind. (See Appendix 1 and 4.)

c. *Inmate Incentives.*—The opportunity to participate in a wholesome activity, such as research holding the promise of advancing knowledge and capability, is considered to be sufficient incentive for inmate participation. On this basis, offering inmate incentives of a material nature seems inappropriate and doing so should be discouraged. However, in the light of past practice, and particularly in the case of medical research projects involving some degree of personal risk or discomfort, incentives such as extra good time and monetary awards may be approved. In line with the foregoing, the nature of the incentive involved and the justification therefor must be documented at the time the proposed project is submitted to the Central Office for approval.

d. *Publication Rights.*—Unless otherwise mutually agreed to, the researcher may publish at his own expense the results of project activity without prior Bureau of Prisons review, provided that such publication (written, visual, or sound) contains an appropriate acknowledgment of Bureau of Prisons participation, and provided further that such participation does not imply approval or endorsement of such publication. Also, unless otherwise mutually agreed to, the researcher shall furnish ten (10) copies of any such publication to the Bureau of Prisons and, in the case of original books, manuals, films, or other copyrightable material produced by non-federal government researchers, such material may be copyrighted but the Bureau of Prisons reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, translate, or otherwise use, and to authorize others to publish and use such materials.

e. *Assurance of Compliance with Civil Rights Act of 1964.*—It will be necessary in the case of non-federal government researchers for the institution to obtain a written assurance of compliance with the Civil Rights Act of 1964 and the appropriate regulations of the Department of Justice (28 CFR Part 42). The form of assurance required is attached as Appendix 3.

f. *Project Controls.*—The Chief of Research of the Bureau of Prisons will stipulate at the time a project is approved how many reports of progress must be submitted by the researcher and the intervals which they must be submitted. The fixing of the intervals will be determined by the nature of the project. The Project Director is responsible for submission of a progress report to the Warden every six months after the beginning date of the project and more frequently to the Bureau if appropriate. Major changes in project design shall also be reported when proposed. The Warden shall transmit a copy to the Bureau. All research personnel are required to observe the rules of the institution in which they work. The Bureau also retains the prerogative to suspend or terminate any project at any time if there is reason to believe that continuation of the project will be detrimental to the inmate population or the functioning of the institution staff and/or program.

5. RESEARCH PROPOSAL FORMAT AND CONTENT

a. *General.*—Each proposed project shall be fully described as indicated in the following. The description should be in sufficient detail to permit full understanding of what is to be done and how, and to permit complete consideration for undertaking. Four (4) copies of the proposal are required for submission to the Central Office, including any attachments or exhibits and, in the case of projects where approaches are made in the field, four copies of the institutional report and recommendation are also required.

b. *Project Summaries.*—In recognition of the fact that development of a complete proposal frequently requires considerable investment of time, the proposal may be submitted to the Warden for submission to the Central Office in preliminary form for preliminary reaction. This may be a brief summary but in sufficient detail as to permit full consideration and evaluation at the Central Office by the Chief of Research. Approval of a preliminary project summary, however, does not signify final approval of the project. Final approval will be considered only after the complete proposal has been completed and evaluated.

c. *Proposal Format and Content.*—The proposal should be organized as follows:

- (1) Name. List full name and address of researcher, vita, including relevant research experience and capabilities and list of publications, if any.
- (2) Title of Project.
- (3) Name and title of person who will supervise the project.
- (4) Project summary. Include a brief (200-500 words) summary of what will be done, how, intended purpose, and the anticipated results.
- (5) Projected duration. Show proposed beginning and ending dates.
- (6) Statement of the general problem and specific purpose of the proposed project. Describe the nature of the problem and the need to be met and what it is that the project is expected to achieve.
- (7) Methodology. Describe what is to be done, how, and by whom.
- (8) Resources. Describe the resources the researcher will put into the project under the headings of (i) personnel, (ii) supplies and materials, (iii) equipment, and (iv) "other". Describe also the investment required of the host institution and Bureau of Prisons under the same headings and, in addition, describe space and personnel requirements of the host institution. Also, show project effects, if any, on institutional programs and operations.

(9) **Results.** Describe anticipated results, paying attention to (i) significance, (ii) immediate or potential benefits, and (iii) innovations or new knowledge likely to result.

(10) **Inmates.** List inmate involvement by number, type, time and extent of required participation. Show inmate incentives to be offered, if any, and justify where proposed. Indicate risks involved, if any, as a result of project participation; state how participants will be notified of such risks; state whether written consent will be obtained, and; state clearly how liability will be assumed and what actions or continued "after-care" will be available in the event risks do materialize.

(11) **Project continuation.** Indicate whether project will, in fact, be terminated after project duration expires or whether a second phase or continuation of some type will be required. If yes to either, indicate whether Bureau of Prisons cooperation and participation will again be required.

(12) **Project endorsement.** Indicate by either attaching letters or other appropriate documentation whether proposed project has been endorsed by others, and, in the case of medical projects, attach written evidence of prior independent determination as required by the policy of the National Advisory Health Council (see paragraph 3).

(13) **Institution review.** Each institution will establish a Warden's Advisory Committee on Research. This standing committee, which will be representative of the personnel and departments, will initially review all projects proposed for their institution to estimate what effect the project would have on institutional programs, what resources of inmate and staff would be required, and any other appropriate considerations. The Committee will report their findings to the Warden, along with their recommendations.

(14) **Summarizing understanding.** Where an arrangement is recommended with another Government agency or non-Government organization or individual that involves the use of resources such as manpower, space, facilities, supplies or equipment, a formal memorandum of understanding, inter-agency agreement, or contract should be effected. Therefore, all necessary elements to be included in such an agreement, or a draft agreement, should be submitted for consideration.

The Warden, after reviewing the committee's report, will then forward the proposal to the Research Branch of the Bureau, along with his personal comments and a statement whether or not he favors the project being conducted at his institution.

6. CENTRAL OFFICE PROCESSING AND APPROVAL

a. **Processing.**—Research proposals made at the institutional level shall be reviewed and coordinated locally prior to submission to the Central Office. Local review and coordination shall give consideration to the requirements of this policy memorandum. Under the direction of the Warden, proposed projects shall also be reviewed by the local Research Committee, giving consideration to such local policies and conditions as may be pertinent as well as the requirements for space, personnel time and other institution requirements. Submissions to the Central Office level should be addressed to and shall be coordinated and reviewed under the direction of the Chief of Research.

b. **Submission.**—Four copies of the research proposal and four copies of the institutional review shall be submitted to the Central Office. The institutional submission shall clearly recommend for or against the project, including the reasons for such recommendation.

c. **Function.**—The Chief of Research shall determine whether proposals submitted warrant review by representatives of other offices and divisions within the central office and schedule such meetings as may be necessary for this purpose. These meetings should be scheduled in advance with Assistant Directors or their designees and copies of proposals distributed a minimum of one week prior to the meeting.

d. **Approval.**—All projects are subject to the approval of the Director of the Bureau of Prisons which approval authority is not delegated.

e. **Notification.**—The head of the institution involved and principal investigator shall be notified in writing of approval or disapproval of the proposal within five weeks of its submission to the Central Office.

Standard Form 524
Rev. June 1961
Brought to the Budget
Chapter Act (Rev.)

CLINICAL RECORD

**AUTHORIZATION FOR ADMINISTRATION OF ANESTHESIA
AND FOR PERFORMANCE OF OPERATIONS AND OTHER PROCEDURES**

NAME OF MEDICAL FACILITY _____

DATE _____

1. I hereby consent to the performance upon myself or
(name of patient) _____

of _____
(State nature of operation or procedure as: "an operation to remove appendix.")

and of such additional operations or procedures as are considered necessary or desirable in the judgment of the medical staff of the above-named medical facility.

2. The nature and purpose of the operation, the risks involved, and the possibility of complications have been explained to me. I acknowledge that no guarantee or assurance has been made as to the results that may be obtained.

3. I further consent to the administration of such anesthesia as may be considered necessary or desirable in the judgment of the medical staff of the above-named medical facility, with the exception of

(State "None," or name anesthetic)

4. I also consent to the disposal by authorities of the above-named medical facility of any tissues or parts which it may be necessary to remove.

5. For the purpose of advancing medical knowledge, I consent to the admittance of medical students and other observers, in accordance with ordinary practices of this medical facility, to the use of closed-circuit television, the taking of photographs (including motion pictures), and the preparation of drawings and similar illustrative graphic material, and I also consent to the use of such photographs and other materials for scientific purposes.

(Cross out paragraphs above which are not appropriate.)

Signature of patient _____

When patient is incompetent to affix signature:

Signature of person
authorized to consent for patient _____

Address _____

Authority to consent _____

WITNESS: Signature _____

Address _____

City and State _____

PATIENT'S IDENTIFICATION (For typed or written entries give: Name—last, first, middle, grade; date; hospital or medical facility)

REGISTER NO.

WARD NO.

AUTHORIZATION FOR ANESTHESIA, OPERATIONS, ETC.
Standard Form 524
1-2-61

"PERMISSIBLE MEDICAL EXPERIMENTS ON VOLUNTEERS"

PREPARED BY THE WAR CRIMES TRIAL PROSECUTION AT NUREMBERG

(1) The voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject there should be made known to him the nature, duration, and purpose of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonably to be expected; and the effects upon his health or person which may possibly come from his participation in the experiment.

The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs, or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another with impunity.

(2) The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random and unnecessary in nature.

(3) The experiment should be so designed and based on the results of animal experimentation and a knowledge of the natural history of the disease or other problem under study that the anticipated results will justify the performance of the experiment.

(4) The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury.

(5) No experiment should be conducted where there is an a priori reason to believe that death or disabling injury may occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects.

(6) The degree of risk to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.

(7) Proper preparations should be made and adequate facilities provided to protect the experimental subject against even remote possibilities of injury, disability, or death.

(8) The experiment should be conducted only by scientifically qualified persons. The highest degree of skill and care should be required through all stages of the experiment of those who conduct or engage in the experiment.

(9) During the course of the experiment the human subject should be at liberty to bring the experiment to an end if he has reached the physical or mental state where continuation of the experiment seems to him impossible.

(10) During the course of the experiment the scientist in charge must be prepared to terminate the experiment at any stage, if he has probable cause to believe, in the exercise of the good faith, superior skill, and careful judgment required of him, that a continuation of the experiment is likely to result in injury, disability, or death to the experimental subject.

ASSURANCE OF COMPLIANCE WITH TITLE VI OF CIVIL RIGHTS ACT OF 1964

The undersigned hereby agrees that it will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all requirements imposed by or pursuant to Regulations of the Department of Justice (28 CFR Part 42) issued pursuant to that title, to the end that no person shall on grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity which the undersigned conducts in conjunction with the Bureau of Prisons; and gives further assurance that it will promptly take any measures necessary to effectuate this commitment as more fully set forth in the foregoing Department Regulations. This assurance shall obligate the undersigned for the period of the project; and the United States shall have the right to seek judicial enforcement of this assurance.

Date:----- Name of Researcher: -----

376

August 30, 1967.

To: See list below.¹

From: Surg. on General.

Subject: PHS policy for intramural programs and for contracts when investigations involving human subjects are included.

I. INTRODUCTION

Advances in health depend on the creation of new knowledge. The Public Health Service conducts and supports research in medicine, in the health sciences and in the sciences related to health to obtain 'his knowledge. Some of this research can be done in the test tube and laboratory animals, but man himself is the ultimate necessary subject of study in the clinical phases of medical research, in most social and behavioral research and in epidemiologic and other public health research. The use of human beings as subjects in research poses problems for the investigator and his institution. The principles which follow reflect the present position of the Public Health Service and apply to intramural programs and to contracts (a statement of policy applicable to extramural programs was issued in PHS Policy and Procedure Order No. 129, revised July 1, 1966, supplemented December 12, 1966, and January 24, 1967).

Each Bureau Director shall file with the Surgeon General a description of the policy and procedure that his Bureau will follow in adhering to these principles. The Bureau Director shall report to the Surgeon General all subsequent changes in this policy and procedure.

II. INTRAMURAL PROGRAMS

A. THE SUBJECT

The welfare of the individual is paramount.

1. *Health and Safety*.—a. The subject must have available to him the facilities and professional attention necessary for the protection of his health and safety; b. The health and safety of persons other than the subject, if endangered by the research procedures, must be protected; and c. Concern for the subject's comfort is essential.

2. *Rights*.—a. Respect for the subject's privacy, dignity and legal rights is essential; and b. The individual must be free to make his own choice whether to be a subject in research. His participation shall be accepted only after he has received an explanation, suited to his comprehension, of the reasons for the study and its general objectives, procedures, benefits, hazards and discomforts. An explanation so detailed as to bias his response or otherwise to invalidate findings may not be necessary in those behavioral, social, epidemiologic and demographic procedures that involve no risk of harm to the subject. He must, however, be informed of his right to withdraw from the study at any time.

[Item II.B.2]

PROJECT START

[Item II.B.2.a]

BUREAU OF PRISONS—OPERATIONS MEMORANDUM

Subject: Procedure for processing participants into project START (special treatment and rehabilitative training), October 25, 1972.

1. *Purpose*.—a. To provide the criteria for selection of inmates for participation in Project START; b. To transmit procedures for processing inmates from home institution to Project START.

¹ Addresses:

Director, Office of Comprehensive Health Planning and Development, OSG.
 Director, Bureau of Disease Prevention and Environmental Control.
 Director, Bureau of Health Manpower.
 Director, Bureau of Health Services.
 Director, National Institute of Mental Health.
 Director, National Institutes of Health.
 Director, National Library of Medicine.
 Assistant General Counsel (Public Health Division).

2. *Background.*—In an attempt to develop behavioral and attitudinal changes in offenders who have not adjusted satisfactorily to institutional settings, the Bureau has recently initiated a Special Treatment and Rehabilitative Training (START) Program at Springfield. The Program is designed to provide care, custody, and correction of the long term adult offender in a setting separated from his home institution.

3. *Selection Criteria.*—The START Program will be for 30-35 inmates and those who complete the program will not be eligible for return to START. When an institution is screening an inmate for participation in the program, it is necessary that the inmate meet the following selection criteria:

(a) Will have shown repeated inability to adjust to regular institutional programs—not just minor offenses.

(b) Will be transferred from the sending institution's segregation unit.

(c) Generally, will have a minimum of two years remaining on his sentence.

(d) Will not be overtly psychotic (overtly psychotic inmates are appropriate referrals to the regular medical center psychiatric program).

(e) Will have had experience in an adult penitentiary.

(f) Will not be a continuous escape risk, a id in terms of personality characteristics, shall be aggressive, manipulative, resistive to authority, etc.

4. *Referral procedures.*—Institutions wishing to refer inmates to START will request transfer authorization from the Office of the Coordinator of Mental Health Services. This request, submitted by the Warden, should contain a thorough narrative justification supporting such a transfer and documenting how an inmate fulfills selection criteria.

All transfers, in and out of this program, will go through the Office of the Coordinator of Mental Health Services.

5. This operations memorandum is cancelled effective October 31, 1973.

NOBMAN A. CARLSON, *Director.*

[Item II.B.2.b]

MEDICAL CENTER FOR FEDERAL PRISONERS
START PROGRAM

INTRODUCTION

The START Program at the Medical Center for Federal Prisoners is designed to assist you in changing your current way of living within the Federal prison system. To be eligible for the program you must have spent considerable time in segregation for one reason or another. This is a miserable existence and the Federal Government is the first to recognize this situation. We, in the Federal Government, have not sent you to prison but we have been given the responsibility of your custody by the Federal courts. We have also been given the responsibility to establish a program in which you can still live by your principles and beliefs, but learn to express them in a manner more acceptable to society than you have in the past.

The enclosed information will serve to introduce you to the START Program. It will attempt to explain the benefits you can expect to gain, and the personal cooperation and effort required of you to earn a favorable recommendation for transfer back to a regular institution. First of all you must understand that you have been designated for placement on this unit by the Bureau of Prisons due to adjustment problems at previous institutions. Likewise Bureau approval must be obtained before you can be transferred to another institution.

The START Program is designed to employ rigid controls and at the same time provide you the opportunity for participation in work, recreation, and areas of self-improvement. All of your needs will be provided within the unit including meals, work, play, sick call, education, visits, etc. The unit is self contained which simply means you will not be permitted to visit other areas of the Medical Center.

Immediate change in one's behavior is an unrealistic objective. For this reason the START Program consists of three levels of privileges, responsibilities, and opportunities. Every new inmate starts at Level I and progresses to Level III. Promotions from one level to another are earned or awarded on

the basis of your conduct, cooperation, acceptance of responsibility for your own behavior, and achievement towards Treatment Team established goals.

You are initially assigned to Level I until the Treatment Team recommends promotion to Level II. Level I has a minimum of privileges and responsibilities with requirements for promotion to Level II also being minimal. In Level II your privileges and responsibilities are increased and you will be required to participate in more activities such as work and self-improvement.

Satisfactory performance in Level II must be maintained for at least six months before you can be promoted to Level III. Here again, your privileges and responsibilities will be increased and more will be expected of you. There is no minimum or maximum time limit for this level. The Treatment Team will evaluate your accomplishments with you and will make recommendation for transfer to another institution when deemed appropriate. Although you can earn more benefits and privileges in the START Program than you could have in a locked segregation unit, you can never benefit as well or receive as much in this unit as in a regular institution population.

Some of the benefits available in the START Program are, as follows:

1. You will have the opportunity for educational achievement.
2. You will have an opportunity to earn Industrial Good Time and pay.
3. You can work toward restoration of forfeited Statutory Good Time.
4. You will have the opportunity to seek personal counseling and understanding.

The operational philosophy of the START Program simply says that you are a man and you will be treated as a man. However, if you behave as a child, you will be treated as a child.

The following specific paragraphs will help to explain many of your questions. If there is an area you still do not understand after reading the entire brochure, the Treatment Team will assist you.

ADMISSION

Upon admission you will be placed on Level I for orientation and admission procedures. During this period you will be given time to understand the program and learn what is expected of you. With a minimal amount of cooperation and satisfactory conduct, you can be promoted to Level II. Also during this initial period, the Treatment Team will establish program goals and will explain what will be required of you to attain these goals.

MEALS

In Level I, depending upon your conduct, you will be released from your cell to serve yourself from the food cart and then return to your cell to eat. The Officer will collect and account for your eating utensils when you have had sufficient time to finish your meal.

In Level II, you will be released from your cell to serve yourself from the food cart. In most cases you will be required to eat with the group at the unit's dining area. However, at the Treatment Team's option other arrangements for eating may be designated.

In Level III, you will be released from your cell to serve yourself from the food cart and eat with the group at the unit's dining area. You are not required to eat; but if you do, you must eat at the tables in the dining area.

BATHING, CLOTHING EXCHANGE, AND SHAVING

Level I will bathe twice weekly and an exchange of clothing will be provided at shower time. You will be issued a razor to shave during your shower period which must be returned after use. Extra clothing will not be permitted in your cell.

Level II will bathe three times weekly and clothing exchange will be provided at shower time. You will be issued a razor daily for use in shaving as it is policy to be clean shaven at all times. You must return the razor to the Officer immediately after use. You will be permitted to keep one extra suit of clothing in your cell.

Level III will be permitted to bathe daily during your off duty hours, and exchange clothing when available. Three suits are standard issue and special

arrangements will not be made to provide extra clothing. You will be issued a razor to keep in your cell and will be required to be clean shaven at all times.

YARD AND RECREATION

In Level I you will be provided a one hour period in the yard for exercise and fresh air twice weekly, weather permitting. Recreation within the unit will be available during inclement weather.

Level II will be allowed a one hour yard period three times weekly, weather permitting. Recreation within the unit will be available during inclement weather.

Level III will be permitted daily yard privileges during evenings, weekends, and on holidays within the unit, or on the yard when daylight and weather will permit. Recreation in the 10 Building yard or the unit's yard is at the discretion of the Treatment Team.

PERSONAL PROPERTY

While in Level I you will not have access to your personal property beyond that provided for in the Bureau Policy Statement. With satisfactory cooperation on your part, you will be in Level I only a minimum amount of time, so do not request special consideration.

In Level II and III the Treatment Team will approve for you to have some of your personal property. You most likely will not be allowed to have all of your property, as you will not be allowed to accumulate items to the extent the Officers can not routinely and efficiently check your cell.

MAIL AND CORRESPONDENCE

Men at all levels will have regular correspondence privileges in accordance with the Medical Center Policy Statement governing "Inmate Correspondence Procedures." You will be allowed to subscribe to a limited number of publications at the upper levels.

COMMISSARY

Depending upon your level, you will be permitted to spend a limited amount of money for approved commissary items. You will submit an order list to the Unit Officer who will check it for approved items and forward it to the sales unit. The commissary supervisor will deliver the filled order to you in the unit. Level I will not have commissary spending privilege.

VISITING

Visiting will be in the designated unit's visiting area. All visits will be in accordance with the Medical Center Policy Statement governing "Inmate Visiting Privileges." However, the number of visits and length will be dependent upon the number of Officers available, space, and current condition you are in at the time. Because of these limitations, you are requested to contact all potential visitors and request that they write to the Warden designating the date and time of a visit so arrangements can be made.

Attorney visits will be granted as the need arises and will not be charged against your regular visiting.

SICK CALL

A member of the medical staff will visit the unit daily. You should make your medical problems known to him and he will make the proper disposition. If you are seriously ill, you will be transferred to a locked ward in the medical hospital area and returned to the "STAR" unit when you have made satisfactory recovery.

RELIGION

If you need assistance in the area of religion, you may request help by submitting a request to one of the staff chaplains who visit the unit several times weekly.

EDUCATION

You will have the opportunity to further yourself and your education through use of individual study courses. The Education Department Staff will evaluate

your educational needs and make recommendations to the Treatment Team. The Team will then present educational goals which you are urged to complete.

WORK ASSIGNMENTS

Your work assignments will consist of orderly work within the unit, or an industrial assignment making "sweep brushes," or both. The Treatment Team will discuss and designate your work classification.

When assigned to industry, you will earn extra good time and pay at a standard rate proportionate to the hours you work.

CASE MANAGER

A Case Manager is assigned and will be available on request. He is a member of Treatment Team and will periodically come to the unit for notarization of correspondence and legal material. If you have a problem outside the unit or Medical Center, he will assist you in its resolution.

CORRECTIONAL COUNSELOR

Correctional Counselor will be available daily to discuss any area of concern you may have. He is a member of the Treatment Team and can be called upon to speak for you if you are not present. He is trained in various counseling methods and can be helpful when you need someone to talk with on a personal and private level.

You will gain as much from the START Program as you put into it. If segregation is the way you choose to do your time, you have a right to this choice. However, each staff member is here to help you change those aspects of your life which resulted in your continual placement in a segregation unit. Everyone finds himself in situations in which he would prefer not be in, but this is life. He is a MAN who can make the best of a situation and profit from the experience. This is true not only for inside a prison but also in the community. If you feel you can make it in the community, you must first demonstrate that you can adjust in a general population. The man who says that he can make it in the community but can not make it in the general population is only fooling himself and copping out from life. You are now given the opportunity to start over again. Are you man enough to accept this challenge?

Federal Center for Federal Prisoners

START PROGRAM

INDUSTRY PERFORMANCE EVALUATION

Name _____ Date _____

WORK SKILLS

A. Ability to:

1. learn quickly
2. follow directions
3. retain instructions
4. work without close supervision
5. sustain work effort
6. stay at work assignment
7. exhibit versatility
8. handle complex tasks
9. assume responsibility
10. organize work efficiently
11. recognize errors
12. seeks assistance if runs into difficulty
13. work under pressure
14. return to work promptly after break
15. become involved with work
16. derive satisfaction from being productive
17. do a job he doesn't like
18. work without complaining
19. conform to rules and regulations

Very

Good Good Fair Poor Indeterminate

Very Good	Good	Fair	Poor	Indeterminate

B. Level of:

1. finger dexterity
2. eye, hand coordination
3. physical strength

C. Attendance has been:

INTERPERSONAL RELATIONSHIPS:

A. Relationship to Supervisors:

1. need for encouragement
2. need for emotional support
3. need for strict limit setting
4. ability to handle criticism
5. ability to learn from correction

Slight Moderate Excessive

Slight	Moderate	Excessive

B. Relationship to Co-workers:

1. ability to get along with others
2. ability to tolerate annoying co-workers
3. irritate is generally liked by others
4. innate functions as: Leader _____
Passive Individual _____

Above Average Average Poor

Above Average	Average	Poor

Very Good Good Fair Poor Indeterminate

Very Good	Good	Fair	Poor	Indeterminate

Active Participant _____
Passive Individual _____ Social Isolate _____

Comments _____

Evaluator _____ Date _____

(Start: 10-72)

352

OCTOBER 13, 1972.

Memorandum to: James Pearsley, Correctional Supervisor.
 From: A. R. Ellard, Supervisor of Education.
 Subject: Availability of Staff and Programs to the Participants in the
 S.T.A.R.T. Project.

This is to inform you that the Education Department will furnish personnel on Tuesday, Wednesday and Friday mornings from 9:00 A.M. to 11:30 A.M. when and if they are needed for that period of time to assist any members of this project that might wish to participate in the education program. The Education Department will set up a mini-Learning Center on the premises that will contain the following programs:

G.E.D. Preparation, Complete Program, Lesson 1-124.
 Programmed College English.
 Vocabulary Growth.
 Spelling 1500.
 How to Research & Write a Report.
 Area & Volume of Common Figures.
 Using Tables of Squares & Square Roots.
 Numerical Prefix & Power of Ten.
 Positive & Negative Numbers.
 Ration & Proportion.
 Right Angle Trigonometry.
 Whole Numbers.
 Fractions.
 Reading & Preparing Simple Graphs.
 Decimals & Per Cent.
 Using Fractions.
 How to Read a Rule.
 Understanding the Metric System.
 First Year Algebra.
 Second Year Algebra.
 Sets & Symbols.
 The Arithmetic of Computers.
 The Bill of Rights.
 World History Study Lessons.
 Study Lessons in Civics.
 Study Lessons in General Science.
 General Science: Work & Machines.
 General Science: Biology & Chemistry.
 Understanding Maps.
 Maps: How We Read Them.
 Fundamentals of Electricity.
 Using the V.O.M.
 Guide to the V.O.M.
 The V.O.M. Practice Book.
 Systematic Trouble Shooting for A/C & Refrigeration System.
 Blueprint Reading & Sketching.
 Alphabetic Filing.
 Stenospeed.
 Reading Engineering Drawings.
 Safety Training Observation Program.
 Arc Welding Symbols.
 Choosing Your Career.
 Applying For a Job.
 Good Job Habits.
 Body Structure & Functions.
 Your Heart & Circulation.
 Therapy With Oxygen & Other Gases.
 Prevention of Communicable Disease.
 Body Structure & Function.
 Personal Health.
 Safety.
 First Aid.
 Nutrition.
 Artificial Respiration.

In addition to the above listed programs, the attached list contains all of the programs available to the inmates at the Medical Center. These programs are also available to the members of the S.T.A.R.T. project providing there is a need or a desire for them.

If we can be of any further help or assistance in this project, do not hesitate to let us know.

OCTOBER 17, 1972.

Memorandum to: All Concerned.

From: J. E. Pearsley, Acting Unit Manager, START Program.

Subject: START Program revisions.

Effective immediately, the following program policy is revised.

(1) *Visiting* privileges are changed to conform with local regulations regarding visits for regular population inmates. However, due to limited staff and facilities, it will be necessary to establish specific controls as to times and numbers.

(2) *Level II* will be graduated into six steps within the level. The Treatment Team will review the individual's progress and make recommendation for promotion to the next step. Satisfactory progress for one month will normally result in promotion to the next step.

Situations which indicate demotion is in order will be handled by the officer at the time the incident occurs. He will also prepare a memo for the Treatment Team indicating the circumstances. The team will review the incident and make recommendations for continuance in Level demoted to, or, reinstatement to an appropriate Level or Step. Each case will be evaluated on an individual basis.

This revision will provide flexibility for the team to extend consideration to the individual who has maintained himself in Level II for an extended time and not necessarily demote him all the way down the ladder for a relatively minor offense.

(3) Inmates of this program who have newspaper or magazine subscriptions in effect will be permitted to have them at the time they are forwarded from the mail room. They should be informed that they must be discarded after reading and they will not be permitted to accumulate in the cell.

NOVEMBER 15, 1972.

Memorandum to: All concerned.

From: J. E. Pearsley, Unit Manager, START Program.

Subject: Program changes.

Commissary spending has been extended to allow purchases of stock food items, and several miscellaneous items. (See adjusted commissary list).

Spending limitations have been extended as follows:

Level II, Steps 1 and 2—\$ 5.00 per month.
 Level II, Steps 3 and 4—\$10.00 per month.
 Level II, Steps 5 and 6—\$15.00 per month.
 Level III, —\$25.00 per month.

NOVEMBER 15, 1972.

Memorandum to: All Concerned.

From: J. E. Pearsley, Unit Manager, START Program.

Subject: Loan of radios to START Program inmates.

Government owned transistor radios are being loaned to the inmates of the START Program who can maintain their conduct well enough to remain on Level II or higher. This is a privilege extended to them and may be withdrawn by any staff member. The radio is to be played in the cell only. There are no earphones and the volume must be controlled so as to not disturb others in the unit. The day shift OIC will be responsible for issuing and accounting of the radios.

247

BEHAVIORAL CHECK SHEET

Each Behavioral Category will have one of the following marks placed in the appropriate square:

- ✓—Acceptable Performance.
- O—Unacceptable Performance.
- N—No Opportunity To Perform Designated Response.
- R—Refused To Perform Designated Response.

Description of Behavioral Categories

GENERAL BEHAVIOR

1. Breakfast: Retrieve food from food cart and eat in designated area.
2. Dinner: Retrieve food from food cart and eat in designated area.
3. Supper: Retrieve food from food cart and eat in designated area.
4. Industrial Task: Reports to industry and stays for assigned period.
5. Shower: Take a shower in the shower stall.
6. Shave: Accepts a razor and blade; shave according to Medical Center Policy H-7300.26D.
7. Clothing Exchange: Accepts clean clothes at designated exchange times.
8. Yard: Exercises in either recreation yard, when available.
9. Unit Recreation: Leaves cell and exercises out in the unit.
10. Commissary Ordered: Orders commissary according to appropriate level and step in the program.

DAILY RESPONSES

1. Personal Appearance: according to Medical Center Policy Statement.
2. Room Appearance: according to Medical Center Policy Statement H-7300.14A Paragraph 4.
3. Performs Designated Unit Work Assignments: Performs acceptably in work task(s) on the unit as assigned by Staff.
4. Participated in Educational Programs: inmate, who is enrolled in educational program, worked on program during the day.
5. Responsible or Non-Disruptive Behavior:
 - a. No fighting.
 - b. Works without close supervision.
 - c. Uses reasonable care in use and handling of Federal property.
 - d. Refrains from agitating others.
6. Cooperative or Non-Argumentative Behavior:
 - a. Accepts and performs assignments or duties without needing persuasion.
 - b. Reasonable cooperation with Staff and other inmates.
 - c. Follows instructions.
 - d. Not demanding.
7. Communicates With Others In A Positive Manner:
 - a. Does not use abusive language.
 - b. Not irritable or angry.
 - c. Communicates freely with others.
8. Overall Participation For The Day: This designation should be marked at 4:00 PM daily. This encompasses all categories of behaviors and those which are not listed. A judgmental response is made and labeled: Good (G), Average (A), and Poor (P)

VISITS

A check (✓) mark is to be placed in the designated square whenever the inmate has a visit from one of the following:

1. Chaplain or his representative.
2. Medical Department or rounds made by the Doctor.
3. Legal Department in regards to a Public Defender or Federal Attorney.
4. Education Department representative.
5. Family or relative.

START PROGRAM

Date _____		GENERAL BEHAVIOR																					DAILY RESPONSES										VISITS				COMMENTS:
Leave _____		Breakfast	Dinner	Supper	Industrial task	Shower	Shave	Clothing exchange	Unit recreation	Yard	Commissary ordered	Personal appearance	Room appearance	Unit work assignment	Participation in edc. program	Responsible behavior	Cooperative behavior	Communicates in positive manner	Total participation for the day	Chaplin	Medical	Legal	Education department	Family or relative													

- ✓ - Acceptable performance
- - Unacceptable performance
- N - No opportunity
- R - Refused

Name _____ Number _____

START PROGRAM

Level I

LENGTH OF STAY ON LEVEL I

New admission—One week

Demotion from higher level—One week, unless otherwise specified by Team. All exceptions will be specified in writing with a specific period of time designated.

BEHAVIORAL REQUIREMENTS FOR MOVEMENT FROM LEVEL I TO LEVEL II

1. Cooperate with all rules, regulations, policies, and procedures of the program and Medical Center.
2. Maintain neat and clean personal appearance.
3. Maintain neat and clean room appearance.
4. Shower and shave according to established schedule.
5. Perform designated work assignments as indicated by staff, i.e., orderly tasks.
6. Refrain from use of verbally abusive language toward staff and other inmates.
7. Refrain from threatening behavior toward staff and other inmates.
8. No fighting.
9. Appropriate care and maintenance of Federal property.
10. Eating scheduled meals and appropriate use of food and eating utensils. Only variation accepted pertain to prescribed diets and religious beliefs.

ITEMS & PRIVILEGES ON LEVEL I

Bed, comb, locker, soap, mattress, towel, pillow, set of linen, blankets (2), toilet tissue, tooth brush, cup (1), tooth powder.

Institutional tobacco pouch (1) : per day.

Cigarette rolling papers (2) : per day.

Book of matches (2) : per day.

Religious Material: Bible of recognized religious belief.

Legal material.

Shower: twice weekly as scheduled accompanied by clothing exchange.

Shave: Twice weekly as scheduled.

Recreation: one hour of exercise twice weekly outside cell.

Unlimited correspondence in the form of letters.

Visits: Medical Center policy in Program's visiting area.

No commissary ordering.

No academic material whether from institution or outside.

No books, except Bible and law books.

Lights out at 8:00 P.M.

All personal effects and property are stored, except that stated above.

All other items and exceptions will be presented to the Team for final decision and disposition according to START Program Rules.

U.S. DEPARTMENT OF JUSTICE,
BUREAU OF PRISONS,
Springfield, Mo.

A Government owned radio is being loaned to you as a reward for your continued good conduct and cooperation. This is a privilege extended to you which may be withdrawn by any staff member. You may play the radio in your room only. Earphones will not be furnished and the volume must be controlled so as not disturb others in the unit. You will be expected to furnish your own batteries.

I hereby acknowledge receipt of Government owned radio # _____ and agree to properly care for it. I agree to surrender it to any staff member

upon request and further agree to pay the cost of replacement in the event it becomes damaged or unserviceable through any form of misuse.

Signature

Reg. Number

Date

Issued by

Noted defects at time of issue:

Date issued.

Date Returned.

START PROGRAM—RECORDS AND DATA COLLECTION

The implementation of the daily marking of relevant Behavioral Categories is suggested to replace the many and varied methods of record keeping presently in operation. Basically, only three records need to be kept, namely: Unit Log Book, Nursing Notes, and the Behavioral Check Sheet. The Unit Log Book should include all policy and procedure changes, transmission of relevant information to all Staff Members, instructions and guidelines to be followed, and other areas of general communication. The Nursing Notes should pertain to elaborating on the occurrence of incidents, special remarks about an inmate's behavior, special program formulation, and unusual reports of both acceptable and unacceptable behavior. The remaining needed information is included on the Behavioral Check Sheet. A record is kept on the daily performance or participation of each inmate in regards to general behavioral categories, specific individual responses, and visits.

[Item II.B.2.c]

START PROGRAM—REVISION, MAY 1973

ALBERT F. SCHECKENBACH, PH. D.

The inception of the START Program was an initial step in the direction of providing a form of training and treatment for that segment of the prison population which is considered severe management problems and incorrigibles. The Program's objective continues to be to change those aspects of a man's behavior which are maladapted to living in a prison environment, as well as society. These behaviors include aggressive, assaultive acts; disruptive to re-habilitative or treatment programs; excessive use of verbally abusive language; inciting riotous conditions; agitation of others including staff; manipulative responses for self gain only, and general disregard for order, rules, procedures, requests and/or suggestions. However, this does not mean that these individuals do not demonstrate some adaptive behaviors. It simply indicates that their maladaptive behaviors far exceed their appropriate responses. The task which has been presented to the START staff is to develop a program to establish and/or increase what the institution and society deems as adaptive, appropriate behavior. Two basic questions the program is striving to answer are:

- (1) How to more effectively change behavior in a control unit environment and,
- (2) How to better generate high levels of adaptive performance.

As with every new program changes and modifications in the program's format are dictated by pragmatic experience and increased information. The START Program is no different and after eight months of operation several areas of program modification are quite evident. However, the initial program format can not be excessively criticized as circumstances outside the program hampered adequate development and evaluation. Nevertheless, certain areas are weak and others need development. Expanded staff training in behavior modification principles and techniques is required. The system of behavioral feedback is ineffective for reasons similar to those heavily documented in the field of mental health. Operational definition of criteria behaviors proved lacking in clarity and usage. A man's advancement upward in the level system with accompanying qualifying limits was not specified in sufficient detail to promote behavioral motivation. Other segments of the program have been re-

vised, but still seem ineffectual to provide the type of program desired by the staff and the Bureau of Prisons. The following is an explanation and summary of corrective measures to remediate the Program's deficiencies and to provide more clearly outlined criteria in respect to what is available and expected of each individual as he progresses through the Program.

TRADITIONAL TREATMENT AND CONTINGENCY MANAGEMENT

Each man has demonstrated a long history of opposition to authority figures and lack of impulsive controls. In addition, each has experienced environmental consequences which have primarily been negative in nature. In order to cope with this type of environmental stress and consequences each man has developed an elaborate system of compensation by learning to manipulate his environment, but in ways unacceptable to normal standards of behavior adaptable in prison as well as in society. He has also learned to make life "miserable" for those who are forced to care and deal with him in every day custodial situations. He seeks immediate gratification of his wants, desires, and needs without regard for others around him. His repertoire of responses are manipulative in nature and often self-destructive. In general, his responses are more in keeping with the "convict code", rather than developing an adaptive repertoire of behaviors.

Effective means of dealing with these individuals has been fruitless because the problem has been attacked from the position of attempting to rationalize behavior and verbally setting up situations which are thought to be beneficial; however, this has done nothing more than "fed" his continuing system of rationalization and intellectualizing his behavior and thus reinforcing an over compensating defense mechanism. It is the usual course of events that he will promise or say one thing and react or respond in an entirely different manner. Talk and verbal therapy with this group is foolish and highly ineffective. In some respects talk therapy is nothing more than "playing in the man's own ball park" and not really inducing or influencing behavioral change for more than a short period of time. Thus, any form of treatment, therapy, training, or corrections must deal directly with his overt or observable behaviors and not his verbal responses.

Traditional modes of therapy and corrections with this population have not been effective because it is not as important what a man says as much as how he responds to the situations and events occurring around him. Traditional approaches have stressed the adaptability of the man's thought processes and have emphasized his overt behavior in only a disciplinary paradigm. A divergent point of view has received serious attention during the last several decades by placing almost total emphasis on a man's overt actions. Several basic assumptions have been demonstrated to be credible in other areas of human behavior and should thus be applicable in a penal environment.

1. Deviant behavior is learned and can be altered. The development and maintenance of maladaptive behavior is no different from the development and maintenance of any other behavior.

2. Desirable behavior change can occur within an institution. This change occurs primarily in terms of interactions with other individuals, especially with correctional workers in realistic, action situations within the institutional environment.

3. Offenders are not mentally ill or psychotic. Their actions are not a result of a dysfunction of the psyche, but rather from a failure to learn adaptive responses, i.e., internalize the values, norms, and controls of the majority of American society.

With these assumptions accepted as feasible, a programmatic format is needed employing behavioral analysis leading to intervention and behavioral change. The behavioral analysis to be applicable to intervention must be specified in the basic parameters of behavior, namely, frequency, latency, rate, intensity, variety, conditions, directions, and quality. By this type of behavioral evaluation, effective tools to generate and maintain adaptive, desirable behavior can be provided for many population groups. In addition, it can facilitate the efficiency with which those who have responsibilities for guiding, directing and teaching others to achieve the objective of providing something other than the norms and ways of the "convict subculture". To return the individual to general population with the same maladaptive behaviors and the added reinforcer of

withstanding attempts to help him is to sentence him to the same environmental conditions which contributed greatly to his institutionalization and membership in the subculture. However, the use of behaviorally contingent techniques which observe, analyze, and modify behavior have been demonstrated to be effective in arranging environmental conditions where a man can understand the contingencies of the "real" world and develop a repertoire of responses which are both adaptive and acceptable. Behavioral feedback systems have been effective in changing behavior when the feedback is consistent and contingent upon a response. The use of social approval, praise, and attention for acceptable responses is the traditional method, but it is difficult to administer without elaborate training, experience, and self control. However, a system of reinforcement or feedback using material or tangible items provides the opportunity for the individual to totally distrust those around him and still function appropriately. Material reinforcements offer the individual the opportunity to continue his facade of being a "tough guy" without sacrificing his image. At the same time expectations or contingencies are operationally defined which remove the individual from those opportunities to verbalize opposition and rationalization which naturally lead to coming into verbal conflict with those in authority. One of the most effective means of controlling behavior is contingency management in the form of a token economy or point system.

CONTINGENCIES AND CONSEQUENCES

The use of tokens, points, or material reinforcers enables the individual to initially continue his previous verbal rationalizations of a "corrupt" system but at the same time respond appropriately within the same system. He is then in the role of the man on the street who constantly complains about everything around him, but responds to situations and events in ways deemed appropriate or adaptive by society. In addition, the individual is forced to make decisions and choices which he has demonstrated from his past behavior that he is unable to do in the areas of living with the consequences of his actions. He has the opportunity to refuse to participate with a choice to get involved. If he selects the former it is of his own "free-will" without coercion or pressure; but he will also realize that he is determining his own future and not having it determined by someone else.

The selections and consequences which the individual come into contact with in a token economy program are specifically designed to be positive. These opportunities are arranged to maximize his exposure to the positive aspects of consequences. Since he has a history of negative consequences it is important to provide as many opportunities for positive responses in order to change his negative behavioral repertoire of self defeat and pessimism for a more optimistic outlook. At the same time the use of a token reinforcement paradigm arranges behavioral conditions where the individual interacts with his environment for his personal gain without violation of the "convict code." His behavioral history comes primarily from experiences and imitation of others around him. To change his history a concerted effort over a long period of time is needed to realize the effects of positive consequences and recognize that they are just as enduring as negative ones. Since behavior is strengthened and more durable on a variable schedule of consequences than on a fixed schedule he must have time to feel the effects of contingencies and consequences which are often contradictory but weighted in the positive direction. For these reasons the present arrangement of Levels and Steps will remain unchanged but simplified to just Levels.

An individual with an extended behavioral history of negative aggression cannot be expected to reverse direction as a function of a program unless the program is devised in such a fashion as to develop responses in that direction. The initial Levels System of training attempted to provide feedback to the individual by gradually increasing the level of acceptable behaviors in exchange for increasing levels of privileges. Behaviors condoned at the lower levels were unacceptable at the higher levels if these behaviors had not shown improvement and adaptability. In this way the individual's behavior upon admission was accepted at face value, but had to increase proportionately in the acceptable direction to progress to higher levels. Pragmatically, there were two areas of deficiency. First, the behaviors at the various levels could not be operationally defined to provide the necessary limits needed to distinguish the

levels. This became quite evident in attempting to establish a differentiation in behavioral refinement to the extent that the individual understood that those behaviors which were once tolerated were not acceptable at a higher level. Second, the system of verbal feedback lacked consistency where it was needed the most, namely at the lower levels. Positive behaviors were often missed for either lack of responsiveness or ambiguity about limits. The lack of consistency and absence of sufficient contingency management rendered the feedback system inadequate and ineffective in establishing behavioral control and change. The proposed correction of the situation is implementation of a behavior modification token reinforcement system of feedback at the lower levels of the program with a gradual removal of tokens to the type of contingencies normally found in a prison environment.

PROGRAM RENOVATIONS AND RATIONAL

The proposed changes or renovations in the START Program are basically designed to shape the desired behavior in a successive number of phases. The Program presently has no established limits which clearly outline the successive phases of behavioral control or change which a man must pass to reach the criteria of adaptive behavior. Even though the phases of behavioral change are individualistic, overall levels of responsiveness can be developed to basically assist a man in formulating those responses which are deemed adaptive.

Shaping of behavior is accomplished by differentially reinforcing successive approximations of a desired behavior in a step by step program. Each consecutive step approximates the desired or terminal behavior. Just as it is impossible for someone with a baseball swing to successfully adapt to golf the first time, the same can be said of other behaviors. There are a number of fundamental responses in golf which must be shaped or developed in order to achieve an accurate shot. However, each response in approximating the ultimate swing and resulting distance. For those men in the START Program their maladaptive behaviors must be shifted in the opposite direction. To expect complete adaptive behavior at the beginning is unrealistic and negates their need for such a program. Their behaviors must be shaped from maladaptive to adaptive, but over a course of time with each response developed approximating terminal adaptive behavior.

The proposed change in the program can be best viewed as a series of steps or phases with each approximating the ultimate behavior of adaptive responding in a penal environment under the direction of correctional workers. The basic adaptive responses are three, namely personal care and hygiene, work performance, and social interaction. It is readily recognized that these are identical to the basic behaviors shaped in the developmental growth of every individual. Without exception these three behaviors are the foundation for adaptive, acceptable performance in prison as well as society.

To develop these behaviors a number of programmatic changes must be arranged. At the same time the basic needed ingredient in the initial phase of the program is behavioral control. Each man has a history of being a management problem which means emphasis on security and custody. This is the traditional reaction to these individuals and it is essential. However, it creates an atmosphere of animosity, suspicion, and mistrust which does not lend itself to developing a therapeutic or counseling relationship. The constant flow of demands and manipulations forces the correctional staff to attempt to defensively rationalize every move which results in the Program operating in the opposite direction from shaping desired behavior.

Accepting responsibility for the consequences of one's actions is the first phase of adaptive training. Each individual has demonstrated a behavioral history of shifting or projecting his responsibility to others, including staff. By arranging verbal confrontation the man has the opportunity to shift his responsibility and thus defeat the purpose of the Program. However, the use of token reinforcement system prevents this shifting and projecting. The points or tokens are contingent upon his behavior. They are exchangeable for various items or activities desired by the man. Since he is controlling whether he earns points or not, he is accepting responsibility for his actions. In other words, acceptable behavior affords opportunities to receive desired items, whereas unacceptable behavior or no behavior renders the individual at a static position. He also loses the opportunity to engage in his usual manipulative behavior be-

cause there is no one to manipulate but himself and no one is negating or stopping him from earning but he himself. In this way the consequences for his actions are his responsibility. These consequences can not be shifted or projected as the staff is only an intermediary in the process. The staff controls the contingencies but the man controls his consequences.

Presenting desired consequences contingent upon behavior is identical to behavioral control. When an individual is responding to acquire something desired, he cannot at the same time respond in a negative manner as long as the contingent behavior is defined in an adaptive direction. Since adaptive and maladaptive types of behavior are incompatible and opposite, behavioral control is manifested as long as the contingency is met. Thus by the use of a token system of reinforcement two areas of programmatic deficiency are remediated, namely, accepting responsibility for personal behavior and behavioral control.

The initial phase of the program affords behavioral control and places the individual in a position of accepting responsibility for his own behavior. The ultimate test for acceptance of responsibility is demonstrated by the individual purchasing the privilege of progressing to the next higher level. This purchase indicates that he has performed at an adaptive level for a considerable period of time and refrained from maladaptive behaviors. In this way the individual is almost completely determining his responsiveness to his environment. This is the usual manner of responding for the individual in question. However, the main difference is that little determination or specification was previously defined as to the adaptability or maladaptability of his behavior. With addition of points contingent upon appropriate behavior, progress is contingent upon adaptive behavior. In this way the individual is still dictating and manipulating his environment but it has been shifted from one of inappropriateness to adaptive responding.

Since a token reinforcement system for adaptive responding is insufficient to reach the desired terminal behavior and can not be maintained in the "real" world, the consequences of responding for the individual must be altered to those naturally occurring in his environment around him. Initially the man dictates his behavior and the staff reinforces those aspects which are adaptive. This is satisfactory but it is only the initial phase. The individual must progress to compromising his maladaptive responses to those dictated as adaptive by society. In other words, the man must be totally removed from the token system of reinforcement and have it replaced with natural consequences while maintaining the same level of performance and participation. The second phase of the program gradually removes token reinforcement and substitutes contingent social controls which are the naturally occurring consequences in a correctional environment.

In phase two the individual continues to respond to a token reinforcement system but the points are in some respect valueless to him in that the opportunity to exchange them for desired items and activities is discontinued. The major behavioral requirement is that he continues to respond as he had in the initial phase and in turn receives corresponding privileges. In this way two very important measurements of evaluation of his behavior are in effect. First, the level of earning without the opportunity to spend provides the opportunity to equate the level of performance with that of the initial phase. Second, it examines the behavior under more natural consequences than previously. As in the initial phase the individual will have pre-arranged a minimal level of performance to be afforded the opportunity to be completely removed from the token reinforcement system. This gradual shifting away from token reinforcement to the more natural occurring consequences in the environment will wean the individual from the addictive effects of responding under a token system. At the same time additional behavioral requirements will be programmed in the form of the individual completing self-improvement programs which have been determined as appropriate for him by a joint contractual agreement of the staff and individual in question. The behavioral contract will emphasize those aspects of an individual's behavior observed from his point of admission to that date. The fading of a token reinforcement system and shifting to natural occurring events is the preparation for the final and preparatory stage of progress for the individual.

After a contractual period of time the individual has the opportunity to progress to the final phase in the program. This phase is very similar to that

which is occurring under normal conditions in a regular penal environment. He will be afforded many of the privileges and opportunities which are available in "population" but with some limitations. At the same time the individual will be required to meet with his treatment team and determine what responses he needs to further improve and outline a course of events which he must complete prior to the Team recommending transfer to a regular prison population. This final phase is very similar to any man in prison approaching his Team and jointly establishing goals and aims for his self improvement while in confinement. These goals will be somewhat pre-determined from the classes of behavior he has demonstrated in the two earlier phases of the program. No startling new developments will occur at this stage but it will primarily be a continuation of earlier performance with refinement emphasized.

The overall program format is designed to operate in various stages to change a man's maladaptive responses to appropriate behavior. Phase one is primarily designed to develop behavioral control and force the individual into a position to accept responsibility for his own behavior. Phase two incorporates methods to shift an individual from a very structured pattern of responding to that more normally occurring in the natural environment. Phase three is the final step in approximating conditions as similar as possible to those existing in a regular penal institution. By designing a program with these three phases of behavioral development under consideration it can be readily observed that each phase emphasizes aspects of adaptive behaviors with behavioral controls decreasing proportionally as one advances through the various levels in the program.

DEMOTIONS AND DISCIPLINE

One of the basic renovations in the new proposal which has not been mentioned involves the policy of not demoting an individual under normal conditions. At this point there are three events or circumstances which would force the staff into a position of requesting demotion after considering circumstances and other qualifying variables. The three events are as follows: overt physical attack toward staff, use of a weapon in an overt physical act, and destruction of federal property. These three will be dealt with by demotion and the possibility of forfeiture of statutory good time and even criminal prosecution. Other infractions as to rules, regulations, and procedures will be met with immediate action. In the initial phase of the program in which token reinforcement is used the consequences for violations will amount to confinement in one's room for a predetermined period of time, no loss of points, no availability of earning points, and no availability for spending points. In the second and third phase violation of rules, regulations, and procedures will be administered by confinement and/or the assignment of an additional task as to the frequency of the violation over a period of time. The program will not be without its negative consequences, but these will be held to a minimum in respect to those violations which are currently everyday occurrences in the START Program.

NATURALLY OCCURRING CONTINGENCIES

Many references have been made to "naturally occurring contingencies in the environment." These contingencies are everyday social interactive events between the correctional worker and the inmate. However, these events in the START Program occur at such a low frequency that their consequence has little effect if any. At the same time the allegiance to the "convict code" and opposition to all authority figures negates any attempted counseling, help, or normal social interaction. The token reinforcement system in the initial phase of the program arranges conditions conducive to fostering a helper-helpee relationship. Each time the correctional worker dispenses a token or points, he is relating to the individual in a positive manner without infringing upon the individual's beliefs, subculture norms, or attitudes. At the same time it is impossible to continue presenting points and the usual accompanying socially reinforcing comments without breaching the barrier of the correctional worker versus the inmate. Since the correctional worker becomes a reinforcing agent, this reinforcing situation naturally generalizes to other aspects of the forced contact between the two as a result of continual, close proximity to each other. When the officer acquires the role of a reinforcing agent, he then has the opportunity to utilize his personal and learned counseling skills. Since this

is the normal means of corrections in dealing with problem behaviors, the use of token reinforcement and the eventual shift to socially reinforcing actions achieves one of the major goals of the program. At the same time it arranges conditions exactly or very similar to those conditions and contingencies existing in a regular prison environment. Instead of the individual strictly adhering to the "convict code," he is influenced by those around him who were formerly "plgs." Conversely, without establishing the correctional worker as a reinforcing agent, little actual progress will be made in arranging programmatic conditions analogous to a regular prison setting and in establishing adaptive social interaction or naturally occurring contingencies.

TEAM CONCEPT APPLICATION

The team approach is perhaps much more broadly conceptualized in the START Program than it may be in other units or institutions. All members of the Team are considered part of the treatment staff. However, the treatment staff is more inclusive and defined as any correctional worker who comes in direct contact with a START member on a daily basis, or otherwise basis, and is, therefore, in a position to influence and/or modify the individual's behavior.

In phase one the Team arranges the conditions, contingencies, and selection of reinforcers. The individual determines his participation, performance, and the consequences. In this way the Team is only the intermediary in the process. However, the Team begins to take a more active role in phase two on Level IV. The reinforcing effectiveness of the points is gradually shifted to the naturally occurring consequences of social interaction. These natural consequences have been occurring in phase one, but the overriding factor is usually the points. The team now has experienced the particular positive manner of responding in presenting points and can continue without the use of points to "break the ice." The joint action of the Team and individual in contractual meetings sets the stage for a combined effort on both parties to refine or improve contractual behaviors. Finally, in the last phase or Level V, the environmental conditions are similar to a regular correctional setting without the animosity and suspicion of both parties. The Team determines with the cooperation of the individual areas of progress, refinement, and continued self improvement.

The Team is shaping the behavior of each individual and must be attuned to the individual's needs. At the same time the stoic relationships of the individual and correctional worker is changed to a joint effort towards improvement. In this way the individual's behavior is changed and the correctional worker's reactions to the individual concurrently improves. However, this is only valid if consistency in application is the mainstay of the program. For this reason the Team concept is heavily emphasized and stressed.

DIFFERENTIATION OF LEVELS

Within the proposed reorganization of the START Program, a realignment of the levels is also necessary for simplicity. The following is the proposed alteration:

PRESENT

- Level I.
- Level II: Step 1, Step 2, Step 3, Step 4, Step 5, and Step 6.
- Level III.

PROPOSED

- Level I.
- Level II.
- Level III.
- Level IV.
- Level V.

The use of a five level system within the same living area presents problems, but these are minimal with addition of a physical annex for Level I. Basically, each individual will be performing similar tasks and behaviors with only differentiation of whether points are available or not. The following is a delineation of the new levels as to program, criteria for advancement, areas of concentration and programmatic conditions. (See Appendix)

Level I--Level I remains unchanged from the current program description. Basically, this Level provides the individual with those basic items designated

as minimal by Bureau Policy statement. The duration is one week with the program emphasizing admission and orientation procedures with the opportunity for the individual to observe the program prior to participation. Privileges for Level I and criteria for advancement to Level II are unchanged. The areas of major emphasis are personal hygiene and responsibility for own behavior.

Level II.—After a minimum of one week on Level I and minimal adherence to criteria, the individual advances to Level II. He is immediately placed on the point system.

Points will be delivered according to pre-arranged criteria in multiples of 10. Each individual will have a card with the total number of possible points being 500. Additional cards are available when one's card is completely filled or the card is lost. Whenever the individual earns points, his card will be stamped the appropriate number of times according to the pay scale. Exchanging of points will be in the form of punching a hole through the number.

Points will be earned for the following areas: personal hygiene, work performance, responsibility for own behavior, and self-improvement courses. Points can be spent on various general items as listed, and personal items from the individual's personal property not ordinarily permitted in a control unit setting. Each man will have the opportunity to purchase items or activities and rent other items. The areas of major emphasis are personal hygiene, work performance, and responsibility for one's behavior. Self-improvement courses will be available, but staff will not emphasize their importance.

Level II is a crucial level in that each individual is capable of maintaining adaptive behavior but not for any appreciable period of time. The transitory nature of their behavior should be brought under sufficient control by motivating them to earn and spend points. Presently, this seems to be the time period which has been the most difficult to cross without serious management problems.

A dual criteria for progression will be in effect. The individual must have earned a set number of total points before requesting the Team to approve promotion. His requesting promotion is in the form of paying the Team a predetermined number of points. In this way the individual is dictating how fast he progress through the initial phase of the program, but the Team has arranged the earning of points to equal approximately two months performance before the minimum total number can be reached. Thereby, the staff still retains some measure of control over the contingencies for promotion. Nevertheless, the individual determines how rapidly he progresses to the next Level by the rapidity of earning points.

Violations of rules and procedures result in a specified minimum period of confinement to one's room. Any extension of this period is dependent upon the man's responses while in his room and upon being permitted to return to the program. While in this position the individual will not have the opportunity to earn or spend points, but also will not lose points.

Level III.—Following the earning of a minimum number of total points and paying the base price for advancement, the individual will be promoted to Level III. This Level is operationally the same as Level II with the addition of emphasis of being removed from the personal hygiene behaviors and shifted to increased involvement in self-improvement courses. Personal hygiene behaviors are deemphasized but expected to be maintained at the same degree as in Level II.

The role of the correctional worker as a punishing stimulus should begin to generalize more as a reinforcing agent. This will come about as a function of dispensing points. At the same time the program will begin to arrange more complete prescription plans for each individual.

The duration is approximately two months and the conditions for promotion is identical to Level II with the exception that the points total and cost is increased. Violation of rules and procedures is handled in the same manner as Level II.

Level IV.—Meeting Level III criteria results in progressing to phase two or Level IV and the phasing out of the point system. As in phase one the individual will earn points, but the opportunity to exchange them will be nonexistent. This will start the process of removing the addictive effect of functioning on a point system and provide a measure of evaluation of continued performance and participation. The individual will receive those items and activities

formerly purchased but without spending points. A minimum total number of points for advancement will still exist and be the only transactional use of points. After earning the minimum total number of points, the man will be removed from the point system altogether. He will not have the availability of earning or spending, but continue to receive his reinforcers. However, the individual will meet with the Team and a joint contract will be drawn up specifying those aspects of the individual's behavior which need reinforcement as determined by his behavior in Level I through his present status. It will also specify the conditions and criteria for promotion to Level V. The contract will be written and signed by the Team and the individual. Following completion of the contractual agreement the individual will advance to the final Level.

This is the first Level where major emphasis is placed upon correctional and psychological counseling. Regularly scheduled meetings with the individual on a one to one basis will attempt to provide the individual a framework of communication which he can use upon returning to open population. The contractual agreement stresses individualized programs and thus the greater need for counseling to prevent misconceptions and provide further guidance similar to that found in population.

The areas of importance continues to be work performance, responsibility for own behavior, and self-improvement courses. Where appropriate the completion of a self-improvement course will be one of the conditions of the contract.

Violations of rules and procedures will be acted upon on a frequency and severity basis before necessitating more than disciplinary action of a confinement nature. Since the duration for both segments of Level IV is approximately one month the frequency will be adjusted accordingly.

Level V.—The final Level remains unchanged as to what is currently offered to the individual. However, additional behavioral requirements will be established on a contractual basis in terms of self-improvement responses. The contract established in Level IV will be rewritten to further refine behaviors. Realistic plans for relocation in a regular population will begin with traditional counseling used to discuss various aspects of the individual's past, present, and future behavior. After approximately three months of acceptable behavior and fulfillment of the contractual agreements, it will be recommended to the Bureau that the individual be transferred to a regular population at an institution other than Springfield.

During the final phase conditions and contingencies will be similar to those found in any general population. With acceptable behavior at this phase, the individual is behaviorally prepared for open population. There may be a transition problem since each has spent considerable time in a control unit prior to the START Program. These problems will be individualistic and handled as such.

Violations of rules and procedures extends the Level V duration dependent upon the individual's general behavior and frequency of occurrence of the particular behavior. Since the majority of Level V conditions are almost identical to open population, disciplinary matter will operationally be handled in a similar manner as in population.

START PROGRAM REVISION

Program Phases	<u>CONDITION</u>				<u>AREAS OF CONCENTRATION</u>			
	Old Level System,	New Level System	Approx. Time Duration	Points Available	Personal Hygiene	Work Behavior	Responsible Behavior	Self-Improvement
	Level I	Level I	1 week	No Points	X		X	
Phase 1	Level II Step 1 Step 2	Level II	2 months	Points	X	X	X	
	Step 3 Step 4	Level III	2 months	Points		X	X	X
Phase 2	Step 5 Step 6	Level IV	2 months	Points (earning only) No points		X	X	X
Phase 3	Level III	Level V	3 months	No points	X	X	X	X

Characteristic of Conditions




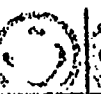


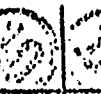
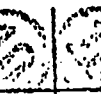





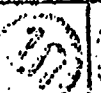

1. Phase emphasis
 - Phase 1
 - Behavioral control
 - Responsibility for own behavior
 - Phase 2
 - Shifting contingencies
 - Phase 3
 - Correctional management
 - Self-improvement

3. Minimum number of points to progress
 - Level II
 - Level III
 - Level IV (first portion of Level IV)
4. Requirement in the last portion of Level IV and Level V dependent upon prior behavior in Level I through first portion of Level IV.
 - Team designation
 - Individual behavioral contract

2. No demotions except serious disciplinary matters.

287

EXCHANGE MEDIUM

									
									
		NAME <u>John Doe</u>							
		DATE <u>May 10, 1973</u>							

500 points per card

Color code

- Level II white
- Level III green
- Level IV red

268

REINFORCERS ACQUIRED THROUGH POINTS

REINFORCERS

Commissary ordering (10 pts. = \$.10).
 Ordering subscription to hometown newspaper.
 Tobacco and paper.
 Matches.
 Rent own radio for week.
 Rent institution radio for week.
 Notarizing by casemanager outside of regular day and time.
 Pencil.
 Paper (5 sheets).
 Collect telephone call home.
 Rent own musical instrument for week.
 Acquisition of paint by numbers set in room.
 Outside recreation equipment for the entire recreation period.
 Keeping library books in room for week.
 Ordering subscription to magazine or periodical.
 Coffee or juice per cup.
 Photograph of self.
 Shower and shave more than twice a week (cost per day).
 Written contract with Team.
 Day off from industry with pay.
 Cereal.
 Ball point pen.
 Calendar.
 Mirrors.
 Models (planes, cars, ships, etc.).
 Leather work.
 Rent other personal property.

RESPONSES WHICH EARN POINTS

BEHAVIOR

Room appearance.
 Personal appearance.
 Shower on assigned day.
 Shave on assigned day.
 Orderly assignment.
 Industry per ½ day.
 Special assignment.
 Haircut.
 Physical exercise.
 Overall behavior for the (4:00 P.M.) (Notes in file).
 1. Refrained from use of abusive language both in and out of room.
 2. Not irritable or angry in a negative manner.
 3. Refrained from agitating others both in and out of room.
 4. Not demanding.
 5. Accepted and performed assignments, duties, and tasks without needing persuasion.

POINT EARNING ON A CONTRACTUAL BASIS

Performance on educational course.
 Performance on preparation for GED.
 Paper written on specific topic.
 Acquiring typing skills.
 Performance on self-improvement course.
 Performance on written contract with Team.

(Item J.C.B.2.d)

START—REVISED PROGRAM DESCRIPTION, NOVEMBER, 1973

Introduction

Of the 23,000 plus offenders currently confined in the Federal Prison System, 98% will eventually be released to the community. The vast majority of these individuals will have participated in programs designed to better equip them

to make a successful free world adjustment. However, there is a small group of offenders who will have had another type of prison experience.

People who cannot bring their behavior into minimal conformity with society's demands—who break its laws—are the group which the community segregates by placing them in prison. Among those offenders who are incarcerated, there is an aggressive sub-group which continually violates institutional rules and regulations. These inmates must be separated from the prison population and periodically placed in the segregation unit. There is still a further sub-set—perhaps 1% of the Federal offender population—who assault staff, aggress against other inmates, and continually act-out in an uncontrolled way while in the segregation unit.

For this latter group there appears to be only two alternatives: either continue to let them vegetate while they remain in virtual continuous segregation status, or try an alternative approach. Regardless of which choice is made—and regardless of the success or lack of success of that approach—when their sentence expires, these offenders will also be released to the community. Individuals who may have caused fights, stabbings, assaults, and even murder, have been released into the free world at the end of their sentence. In an effort to decrease the frequency of this type occurrence, a different treatment alternative was developed on a demonstration basis.

Project START (Special Treatment and Rehabilitative Training) is a developing program. It has evolved from a realistic and immediate need to promote change in the behavior of a sub-group of the Federal prison population which has chronically demonstrated hostile, anti-social behavior while in regular penal institutions. START incorporates suggestions, ideas, and hypotheses based on past institutional work experience of a professional task force selected to develop a program which would realize the desired goal: motivating highly aggressive, continuously disruptive offenders to gain more effective control over their destructive behavior.

The first 20 inmates admitted into the START program had: an average of 5 institutional transfers (range 2-13) because of disciplinary problems; had received an average of 21 disciplinary reports (range 4-66), of which an average of 12 were for major incidents (range 3-24) including: arson, assault, possession of a weapon, violence, etc.; had spent an average of 49% of their institutional time in segregation status (range 21-92%) where they continued to be destructive of property, assaultive towards other inmates, and verbally and physically abusive towards staff, including throwing food, urine, and feces at them. The offenses for which these men were incarcerated were: Forgery (1), Kidnapping (1), Heroin Possession (1), Threatening the Life of the President (1), Murder (2), Assault (3), Assault and Robbery (4), Bank Robbery (7). While incarcerated, eleven of these men received additional sentences for offenses committed while in prison: Possession of a Weapon (1), Assault (4), Murder (6).

The definition of the special correctional needs of these offenders and the search for effective ways to meet them has been a continuing concern. Efforts to resolve these concerns have been in the direction of developing approaches for START which avoid "de-humanizing" the program participants. Despite their frequently uncontrolled behavior, these men will eventually be released to the community: the intent is to help bring about positive changes in their behavior without further alienating these individuals.

The foundation and structure of Project START can be found in established correctional treatment programs developed at the State Reformatory, Yardville, and the Federal Youth Center in Morgantown, West Virginia, effective procedures of which have been incorporated into this program. A great deal of pre-established material from other programs has been utilized in the formulation of Project START at the Medical Center for Federal Prisoners in Springfield, Missouri.

Rationale

There exists among the Federal Prison population, a small group of individuals who characteristically cut out in a belligerent fashion. They have a history of out-of-control behavior in the community. This behavior persists while they are in prison; even while in the institution's segregation unit. They utilize their aggressive acting-out tendencies to manipulate situations in order

to gain their own ends. Frequently, this results in verbal attacks and physical assaults on both staff and other offenders. Because of its life-threatening potential, this behavior is highly disruptive of efforts to implement rehabilitative programs for those who wish to participate. Not only must a disproportionate amount of staff time be devoted to coping with the disturbances created by these individuals, but their threats and assaults on others further serves to undermine rehabilitative efforts. Typically, the usual remedial techniques (such as loss of privileges, segregation, etc.) have no ameliorative effect on these offenders.

On occasion, these highly manipulative individuals may resort to almost bizarre extremes to achieve their goals (e.g., self-mutilation, swallowing razor blades, etc.). Consequently, they frequently receive diagnoses of severe mental illness, and are transferred to a psychiatric setting. While it is recognized that these offenders suffer from emotional pathology, their personality disorganization is not of psychotic proportions. They are not helped by a milieu and medication program designed for the psychotic patient. Therefore, they are transferred back to a correctional setting where they initiate the process all over again. Generally, this type of offender has a history of having been transferred between regular and hospital settings (or of many transfers between regular institutional programs) without any real benefit accruing to the individual involved. START was initiated to intervene in this "treatment-by-transfer" cycle; it is an effort to develop a positive program to help these most-difficult-to-manage-offenders.

Bureau of Prisons preliminary studies indicate that for any releasee the prognosis for a successful return to society is directly related to his level of adjustment while incarcerated.

Goals and Objectives

The primary goal of Project START is the care, control, and correction of the long term, disruptive adult offender. The major objective is to help these individuals gain better control over their behavior so that they can be returned to regular institutions where they can then participate in programs designed to help them make a successful community adjustment. START, then, can be viewed as a type of "pre-rehabilitation;" a necessary first step for that small subset of inmates who consistently undermine training programs that the majority of offenders find useful in contributing to post-release success.

Pertinent sub-goals of Project START are those which will enable the individual to participate in programs in regular institutions. There are three such sub-goals:

1. Maintain an appropriate level of personal hygiene.
2. Develop an ability to engage positively in inter-personal relationships.
3. Learn productive work habits.

The Participants

The type of individual eligible for selection in the START program represented less than 1% of the total Federal Prison System's population. Nevertheless, he does much to disrupt normal operation of any institution. He consumes a disproportionate share of staff time by destructive behavior and does not respond to disciplinary or other external controls. Most counseling efforts fail. He is assaultive and maliciously schemes to demonstrate his physical prowess, usually by pressuring the weaker, more passive inmates. Feelings of genuine guilt are non-existent as he readily rationalizes his own maladaptive behavior, displacing responsibility for his actions onto others. Usually, he is verbally facile and quite clever in being able to mask his deceitful intent. Thus, he is manipulative, egotistical in the extreme and verbally and physically assaultive. He threatens the successful rehabilitation of other offenders, continually indoctrinating those less sophisticated than he with the idea that "crime does pay."

The START participants are heterogeneous relative to age, type of offense, race, area of residency, etc. The major common element is that they all have repeatedly demonstrated their inability to live in regular penal facilities.

Selection Criteria

Referrals for placement in the START program are initiated at the offender's current institution. A summary of the individual's prior history and level of institutional adjustment is prepared upon which is based a recommendation for consideration. This is reviewed by the Warden at the institution and then forwarded to the Central Office for a further review and final decision. Placement in, and removal from the START program is controlled at the Central Office level.

Selection criteria for placing an offender in the START program are:

1. Will have shown repeated inability to adjust to regular institutional programs—not just minor offenses.
2. While he may have an escape history, will have repeatedly displayed other maladaptive behavior.
3. In terms of personality characteristics, will be aggressive, manipulative, resistive to authority, etc.
4. Will have had experience in an adult penitentiary.
5. Will be transferred from the sending institution's segregation unit.
6. Generally, will have a minimum of two years remaining on sentence.
7. Will not be overtly psychotic (such individuals are appropriate referrals to the Medical Center's psychiatric program).
8. Will not have participated in START program in past.

The narrative justification in support of the transfer into the START program is reviewed in terms of the degree to which the offender fulfills the selection criteria. In making this judgment, additional material is reviewed (such as that contained in the offender's Central Office folder) in order to gain as clear a picture as possible of the individual being considered.

Physical Characteristics of Unit

The START Program is located physically and operates functionally, as a semi-autonomous section of the Springfield Medical Center. It is situated at the end of a maximum security building within the general psychiatric hospital. The living quarters consist of a double tier of cells along the east and west walls. There are 40 individual rooms; however, in order for the unit to function at maximum efficiency, no more than 30-35 will be used at any one time.

The cell block housing the START unit is in the extreme west end of the building. It is reached by passing through two locked corridor grills, one of which is electrically operated. A third grill can be locked if it is deemed necessary. The corridor area in front of the unit contains two adequately sized rooms (on the south side) which can be used for recreation day room activities. Immediately south of the unit entrance is a large room which houses the START industrial operation: a brush factory. This affords START participants not only the opportunity to learn and display good work habits, but also each individual can earn industrial pay and industrial "good time" (time off his sentence) which is in addition to statutory good time.

Outdoor recreation activities occur in a yard area immediately east of the unit or in a larger area to the north. This latter area is separated by a wall from the area used by the psychiatric patients. Although the Medical Center's psychiatric units are immediately east (off the same corridor) of the START unit, the psychiatric patients are restricted to their wards and there is no interaction between the two types of individuals.

Staff

The staff in the START unit has been increased from the number that would ordinarily service this ward. It consists of professionally trained personnel familiar with the personality characteristics of this type offender. Personnel are selected who cannot be manipulated easily and who have a clear understanding of established rules and regulations. They cannot hesitate in direct confrontations. If disciplinary action is warranted, they act fairly and decisively. Modes of expected behavior are "modeled" in interactions between staff and participants. Expected behavior is clearly defined so that there is little chance for misunderstanding.

Since the offenders assigned to Project START are highly aggressive, with histories of assaults on both staff and other inmates, a larger than usual number of staff are needed. Duty times have been arranged so that there are at least three permanent staff on the unit any time that START participants are out of their rooms. The presence of these personnel forestall overt, hostile actions.

Personnel assigned full-time to the unit include a Unit Manager (a Correctional Treatment Specialist), and Assistant Unit Manager (a Ph.D. Psychologist), one Correctional Officer on each shift around the clock, one additional Correctional Officer on both the day and evening shifts, one Correctional Counselor, and one Industrial Specialist.

A number of additional specialists spend part of their on-duty time working with the START program. These include: the chaplain, a caseworker, a general practice physician, a physician's assistant, an occupational therapist, and an educational specialist. All medical and related services are provided on the unit except in emergency situations when the participant may be moved to locked quarters in the hospital until the emergency situation has abated and he can be returned to the START unit.

Progression (level) System

A treatment procedure that has proven effective in other institutions (e.g., the Morgantown Youth Center and the Yardville Reception Center) has been a progression system. This consists of a number of levels which differ as to the responsibilities required and the privileges allowed. Residents begin at the lowest level and progress through successive levels as their behavior improves. If the individual fails to meet his responsibilities at any of the levels, he remains there until he can demonstrate the appropriate behavior; flagrant violations of the rules can result in demotion. When a participant reaches the highest level he has demonstrated a consistent ability to maintain the type of behavior which will permit him to return to a regular institution. At that time a conference is held with the participant and a decision reached as to which facility he shall be transferred. (Individuals who do not "graduate" are returned to the institution from which they were initially referred to START).

The current system has eight levels. The responsibilities and privileges associated with each level increase as the participant displays his ability to "handle" this type of responsibility. At the lowest level, the offender is allowed only basic personal articles, little time out of his cell, and limited exercise (in accord with the standards established in Bureau Policy on inmate discipline; see attached). These conditions differ very little from the lockup conditions from which the START participants have been transferred. At the lowest level, the participant will be expected to keep his room neat, maintain his personal hygiene, and show at least a minimal level of cooperation. To earn the opportunity to move to Level II, the resident must meet certain criteria. (See Table 1).

TABLE 1—MOVEMENT CRITERIA

Levels and Time Scale

Orientation, 1 week.

Level I, Good Days—20.

Level II, Good Days—25.

Level III, Good Days—30.

Level IV, Good Days—30+7 consecutive in last 10 days.

Level V, Good Days—30+10 consecutive in last 15 days.

Level VI, Good Days—30+14 consecutive in last 20 days.

Level VII, Good Days—30+20 consecutive in last 25 days.

Level VIII, Transfer.

When the resident reaches Level II, he is expected to remain cooperative, maintain his room, and continue his personal care. His performance in these areas will be continually observed. While at this level, he will have increased privileges, but there are also increased responsibilities. The Level II individual is expected to pursue the educational and treatment goals that he and the START Treatment Team have together established. He is also expected to work helping to maintain the sanitation of the START unit; he is given a limited

opportunity to work (and earn industrial pay and industrial "good time") in the industry program.

When the man reaches Level III, his amount of time outside his cell has greatly increased and he is given the opportunity to spend more time in industry. In addition to the sub-goals of Level II, he is expected to work towards the completion of his treatment goals. In similar fashion, the individual moves through the eight levels.

Other rewards which accrue to those who move up through the levels include: the return of forfeited good time (25% returned at Level V; 50% returned at Level VII; the remainder returned when the individual is transferred back to a regular institution); increased time in industry (Levels I-VI, ½ day; Levels VII and VIII, full day; increase in industrial "pay" in accord with the regular institution's industrial pay scale; further, the participant receives industrial good time, which means additional time off his sentence; individuals at Levels I through V will be on the point system; Levels VI through VIII, the inmates will be on a contract system (see attached description).

The criteria for movement are shown in Table 1. It centers around the concept of a "Good Day." This involves a daily measure of behavior in twelve areas of responsible behavior which incorporate the three sub-goals of the START program; personal care and hygiene, adequacy of interactions with others, level of work behavior. Each of the twelve areas (see Table 2) are observed and daily, one of three marks is placed on a check sheet: a symbol for acceptable performance, a symbol for unacceptable performance, and a symbol which indicates those areas in which the individual had no opportunity to perform on a specific day. Following the principle of the progressive level system, the criterion for a "good day" is also on a graduated scale (see Table 3).

Treatment Approach

The START program was developed to help an individual change those aspects of his behavior which are maladaptive. The task presented to the START staff was to find a means which would result in the decreased occurrence of these destructive behaviors. To accomplish this goal, certain basic principles of behavior modification were adapted. The underlying theme of the START program is to reward constructive behavior. If appropriate behavior is rewarded, the likelihood of it happening again is increased; conversely, if unacceptable behavior is not rewarded (i.e., not attended to) the likelihood of it re-occurring is reduced.

TABLE 2—"GOOD DAY" CRITERIA

1. Willingness to participate; e.g.
 - a. Accepted work assignment.
 - b. Vacated room when opportunity available.
 - c. Served self from food cart.
 - d. Agreed to medical exam and laboratory test upon admission and/or request.
2. Neat and clean room appearance.
3. Neat and clean personal appearance.
4. Shower and shave according to guidelines on designated days.
5. Engaged in exercise or recreation activities; e.g.
 - a. Vacated room.
 - b. Went to yard or day room.
6. Accepted a "no" or other reasonable response when making requests. Made requests in a non-abusive manner.
7. Communicated with others in a reasonable tone of voice without belittling, agitating, or using abusive language.
8. Accepted or performed assignments, duties, or tasks without needing persuasion.
9. Followed directions and instructions in a willing manner without bickering.
10. Followed rules, regulations, and policies of unit.
11. Used care in handling federal property.
12. Settled differences without fighting, wrestling, striking, or other overt, physically aggressive acts towards another person.

Non-earning of a "Good Day" necessitates a note in resident's file.

5/24

TABLE 3--GUIDELINE FOR EARNING A "GOOD DAY"

Level I, 9 out of the 12 acceptable areas.

Level II, 10 out of the 12 acceptable areas.

Level III, 11 out of the 12 acceptable areas.

Levels IV thru VIII, 12 out of the 12 acceptable areas.

Within the START Program two types of positive reinforcements or rewards will be used. The *first* is a medium of exchange; namely, points. Upon completion of an adaptive or constructive task or behavior, the individual will be rewarded by the presentation of a specified number of points. These points, in turn, may be exchanged for a variety of additional privileges; ordering commissary, cigarettes, making collect phone calls, buying personal items, special privileges, etc. The *second* type of reward is social reinforcement. Generally, social reinforcement is the method of communication which is commonly used every day; e.g., smiles, statements with a positive meaning (i.e., "good"), and the general accepting mood of the reinforcing person. Communication is considered a reinforcer because it provides the individual feedback as to whether he is performing correctly or incorrectly. Since research has demonstrated that rewards are more effective behavior motivators, both the point system and the social rewards system will stress positive reinforcement. (A more detailed description of the START point system is appended).

Being awarded or exchanging points naturally leads the START participant into interactions with the staff members. Through such a mechanism as this, the staff begins to appear more positive to the inmate than the usual negative role in which offenders cast them. This opens the way for social contact, thus, active counselling (which had been ineffective in the past) can now be more meaningful.

A second theme underlying the START program is that participants have a freedom of choice. Inmates will not be forced to work, keep themselves or their living areas clean, or engage in any behavior against their will except insofar as this freedom does not interfere with the rights and well being of others. This does not mean that behavior will not be prompted. It is unrealistic to expect all individuals to perform appropriately the first time they are presented with a situation. It is desirable for a staff member to ask a participant in a positive manner to act in accordance with the unit routine; however, it is not appropriate to threaten or coerce the individual.

As has always been the case, disruptive behavior will not be condoned. If an offender engages in such behavior, he will be placed in his room. When this happens, the individual will not have the opportunity to earn or spend points, nor can he earn a Good Day. In essence, when the Unit staff locks a participant in his room, they are indicating that the person cannot control himself. His removal continues until he shows by a change in his behavior, that he can now control himself. At that time, he can leave his room and resume participation in the program; he no longer needs someone else to control his inappropriate behavior for him.

A third central theme around which the START unit was developed is individualizing treatment. While the program does have a structure within which its participants must function, effort has been made to permit an individualization of the treatment approach. The START Treatment Team will, with the individual, develop a treatment program to fit his needs (e.g., academic or social education, recreation, counseling, etc.) Further, in addition to the point system, individually designed contracts will be used in which the inmate and the Treatment Team agree that if a particular participant accomplishes a task specifically designed to meet his needs, he will receive a specified number of points. At a later stage (from Level VI onward) the points will be eliminated and contracts will be written directly in terms of desired items.

The START Team will make every effort to deal with each of the inmates as an individual. A continuing stress will be placed on treating each with dignity and humaneness. The staff will be expected to model the type of behavior being required from the participants. Each man in the program will be treated like a man; since it appears to be a truism that people generally behave as they anticipate others expect them to behave.

Discipline

Despite efforts to prevent such occurrences, disciplinary problems will occur. In line with the behavior modification principle that the participant should be fully aware of the contingencies in a given situation, an effort has been made to spell out disciplinary procedures.

Of those offenses listed in the Bureau of Prisons' Policy Statement on Inmate Discipline, the START program is particularly concerned about those noted in Table 4. Based on current experience and prior history, these kinds of activities can lead individuals into a continuation of previous adjustment problems in an institutional setting. Consequently, the START program will be particularly interested in trying to help participants eliminate this type of behavior.

For the most part, violations of START program regulations will result in the participant being confined in his room for a specified period of time set by the Unit Team. Following the completion of this restriction period, the individual presents a request to return to normal program participation. If the Unit Team agrees, he returns to the program. If the Unit Team does not agree (because the offender has continued to be disruptive) he will be told why he must continue in time out status and when he will next be reviewed. (As a "rule of thumb," he must be reviewed no later than the time designated for the original offense; i.e., if the rule violation resulted in 3 days restriction, then a review must occur before three more days).

During this control period, the individual will: not lose points previously earned; will not be able to earn points; will not be able to spend points previously earned. He will not be able to earn a Good Day either on the day the violation occurred, or while he is in "time out" status. During the restriction period, the standards for segregation unit practices will be followed as detailed in Bureau of Prisons' policies. In all matters related to the handling of disciplinary problems, the Unit Team will make the final decisions within the guidelines established by Bureau of Prisons' policies. Appeals for a review of the Team decision can be made by a participant in accordance with institutional and Bureau policies.

TABLE 4—VIOLATIONS OF START PROGRAM PROCEDURE

1. Gambling.
2. Excessive use of abusive language after first warning.
3. Agitation of others without stopping after first warning.
4. Excessive arguing with another participant or staff member after first warning.
5. Disobeying a staff member after first warning.
6. Fight between two or more individuals.
 - a. Instigator or agitator.
 - b. Victim.
 - c. Start of fight not observed by staff (same for all).
7. Stealing of any type, including coercion, strong-arming, or extortion.
8. Physically threatening another inmate or staff member.
9. *Deliberate destruction of federal property.
10. *Use of weapon in an incident.
11. *Overt physical action towards another participant resulting in victim requiring medication or removal from unit.
12. *Overt physical action resulting in injury of staff member.

Conclusion

The START program is not viewed as a panacea. Rather, it is a treatment alternative when repeated efforts with other types of approaches have not had any beneficial results. Individuals who demonstrate after a significant trial period in the program—not longer than one year—that START is not helping them, will be returned to the sending institution.

*Depending upon the severity of the incident, any one or several of the following may be imposed by the Unit Team: restriction of two weeks or more; reduction in level including return to Level 1; recommend forfeiture of good time; refer for criminal prosecution.

The following is the first paragraph of the handbook given to new participants in the START program:

"The START Program at the Medical Center for Federal Prisoners is designed to assist you in changing your current way of behaving within the Federal Prison System. To be considered for the program you must have spent considerable time in segregation for one reason or another. This is a miserable type of existence; the START Program is designed to help you learn to live more successfully in a regular institutional program, and to help better prepare you for release from custody. We, in the Federal Government, have not sent you to prison; by Law, we have been given the responsibility of your custody after you have been sentenced by the Federal Courts. We have also been given the responsibility to establish a program in which you can still live by your principles and beliefs, but learn to express them in a less destructive manner than has been the case in the past."

START PROGRAM--POINT SYSTEM

The point system is designed to provide the START participant with immediate feedback as to the appropriateness of his behavior. The system involves: (1) the awarding of points for appropriate behavior; and (2) the creation of an exchange rate for desired items. The earning scale and exchange rate will be published and made known to all START participants.

Earning Points

START inmates at Levels I through V will receive immediate tangible feedback (points) following their performing in an adaptive manner. Points can be earned for classes of behavior including personal hygiene, work tasks, adaptive social interaction, and engaging in self-improvement tasks. Each class of behavior is sub-divided into specific behaviors for which points will be awarded at a pre-determined rate.

A further group of behaviors (which are individually specified for a particular inmate) will be rewarded on a contractual basis. That is, the participant and the staff member will negotiate a special contract which will require that the individual behave in a certain way in order to earn a specified number of points (e.g., asking an "isolated" participant to engage in a table game with a different START inmate for five days in order to earn 500 points).

Spending Points

The points which a participant earns can be exchanged for a variety of items: personal comfort items, recreational, edible, communication, etc. The initial list was drawn from other programs, discussions with inmates and staff members, and observation as to what kinds of things offenders request. The list is not all inclusive (it can be expanded at any time) since some of the strongest reinforcers will be those suggested by the inmates themselves. The point-exchange rate will be set by the START Unit staff.

Items will be available in the Unit "store" which will be open several times each day. Rented items will be available several times each week on a scheduled basis.

Details of the point system are contained in the following tables:

Rules and Procedures Governing Point Cards

1. Each card will show the individual's name and date of issue.
2. Each card holds a maximum of 500 points.
3. A card completely punched will be returned to the staff.
4. Cards should be kept on the person and not left lying around.
5. A card which is destroyed or lost cannot be replaced unless staff can validate that the card was accidentally destroyed or lost.

Guidelines for Distributing Points

1. Individual is given points contingent upon the completion of the designated response.

2. Individual presents his card to the staff at the appointed area.
3. Staff stamps the card the number of times as designated on the Point Earning Sheet or according to the terms of an individual behavioral contract.
4. Individual keeps the card(s) in his possession.
5. Individual is given a new card:
 - a. Complete filling of an existing card.
 - b. In the event of a lost or destroyed card.

Guidelines for Spending Points

1. Individual presents card to staff requesting the purchase of an item, privilege, or rental.
2. All items, privileges, and rentals will be exchanged at a pre-determined rate or cost.
3. Two specific days will be the only rental periods unless otherwise specified.
4. The unit store will be open several times daily.
5. Other items will be purchased at pre-arranged periods.
6. Points are spent once a hole is punched through the number.
7. Point card must be returned to staff after it is completely punched.

POINT EARNING SHEET

Behaviors

(See list of Behavior Requirements)

- (1) Shower on assigned day.
- (2) Shave on assigned day.
- (3) Haircut.
- (4) Personal appearance.
- (5) Room appearance.
- (6) Orderly assignment.
- (7) Industry per ½ day.
- (8) Special assignment.
- (9) Physical exercise.
- (10) Good Day.

Point earning on a contractual basis

- Performance on educational course.
- Performance on preparation for GED.
- Paper written on specific topic.
- Performance on self-improvement course.
- Performance on written contract with Team.
- Acquiring typing skills.

BEHAVIORAL REQUIREMENTS

Shower, shave, and haircut

1. Accept appropriate toilet articles.
2. Move to area designed for hygiene use.
3. Perform hygiene activity in accordance with Medical Center Policy.
4. Return toilet articles to appropriate person or place.

Personal appearance

In regard to expected behavior in this area, START participants will be expected to conform their behavior to Bureau and Medical Center policy as to generally acceptable standards. For example: shoes tied, if applicable; pants zippered or buttoned; shirt buttoned, if applicable; shirt tail inside pants; hair combed so that it is not unmanageable or unkempt (see Policy Statement 7300.04--Mustaches, Sideburns, and Hair for Male Inmates); and other areas of general appearance neat.

Room appearance

1. Bed made in accordance with Medical Center Policy.
2. Floor swept and mopped, when cleaning materials available.
3. Walls clean and used according to Policy.
4. Toilet and sink clean with items neatly placed.
5. Metal Cabinet.
 - a. Items on top neatly arranged.

- b. Items on shelves arranged in a reasonable order.
6. Items on window sill neatly arranged.
7. Other areas clean and items placed neatly.

Orderly assignment

1. Accept designated area (s) to be cleaned without hickering.
2. Acquire necessary cleaning materials.
3. Clean designated area.
4. Return and neatly arrange cleaning materials.

Industry

1. Move to the industrial room.
2. Accept industry assignment (s) without controversy.
3. Perform industry assignment.
4. Clean industry area according to direction of industrial foreman.
5. Return to unit living area.

Special assignment

1. Accept special assignment without becoming abusive.
2. Perform special assignment.

Individuals may earn points through performing a work task to which they are not normally assigned. The individual and staff member must agree on a set rate or earning before the task is performed. The rate is not to exceed 50 points per hour for work unless designated by the Unit Manager.

POINT EXCHANGE RATE

Store Items

- Fresh fruit.
- Tobacco and paper.
- Packs of matches.
- Pencil.
- Paper (5 regular sheets).
- Coffee or juice.
- Cereal.
- Ballpoint pen.
- Calendar.
- Learning Center newspaper or periodical.
- Games and arts and crafts items.
- Puzzles and cardboard (rent).

Rental Items

- Institutional radio per week.
- Own radio per week.
- Recreational equipment per day.
- Private chair in own room per week.
- Own musical instrument per week.
- Other personal property per week.

Other exchange Items

- Commissary items.
- Ordering hometown newspaper.
- Notarizing by case manager outside regular time.
- Collect telephone calls home (limit 2 per month).
- Ordering periodical subscription.
- Photograph of self.
- Shower and/or shave above weekly rate.
- Ordering personal books.

[Item 11.B.3]

FEDERAL CENTER FOR CORRECTIONAL RESEARCH, FEDERAL BUREAU OF PRISONS,
BUTNER, N.C.

[Item 11.B.3.a]

PROGRAM DESCRIPTION, AUGUST 22, 1972

The Federal Center for Correctional Research will be a unique facility in the Federal correctional system, specializing in long-term research on the treatment and management of various types of offenders. The Center will study and treat

selected subgroups of offenders in an attempt to devise effective treatment programs which can be adopted by other correctional facilities.

The "correctional program research" units, housing about 190 persons, will attempt to develop programs for offenders, such as minority groups, and subgroups like alcoholic felons, overly passive follower types, and various other groups. These inmates will be at Butner for a period of intensive study and treatment in an effort to determine what kind of correctional program is effective with each type of offender. A system for monitoring results during the treatment period will be devised and the evaluations of these studies will be published.

A "mental health research" program will care for a population of about 35 young men, 35 women, and 60 adult men who are in the acute phase of mental disturbance. The objective of the research program will be to develop and implement intensive treatment approaches for mentally disturbed patients who constitute a management problem. The treatment effort will attempt to stabilize these special cases so they can be returned as quickly as possible to the sending institution to resume their correctional treatment.

Various treatment approaches will be used in the semi-autonomous housing units including group therapy, individual counseling, specialized education, vocational programs, social services and leisure-time activities. However, shared activities will be provided in a central area—small chapel, canteen, dining hall, indoor and outdoor recreation, auditorium and clinic. This "Community Green" will resemble a town center where residents and visitors can associate in an atmosphere as normalized as possible.

The location of the Center makes possible a close working relationship with the medical schools and universities in the Raleigh-Durham-Chapel Hill "Research Triangle" area. Staff members of these organizations, as well as representatives of the National Institute of Mental Health, the Department of Health, Education, and Welfare, and the National and North Carolina Advisory Panels to the Bureau of Prisons have assisted the Bureau planning staff in developing the programs and architectural design for the facility.

Instead of a traditional institution, the facility will have a more psychologically pleasing character, designed to be adaptable to changing research procedures. Rather than guard towers, underground electronic detection systems together with a mobile vehicular patrol will be used for more effective perimeter security. Special windows of a special plastic and glass laminate with a built in alarm will furnish better and more economical security as well as providing a better therapeutic environment.

The architectural firm is Middleton, Wilkerson, McMillan of Charlotte, North Carolina, who will also provide construction management services for the project.

Capacity

Mental Health Research—38 Youth—Male; 64 Adult—Male; 38 Female.

Correctional Research—200.

Maintenance Cadre—40.

Infirmary—8.

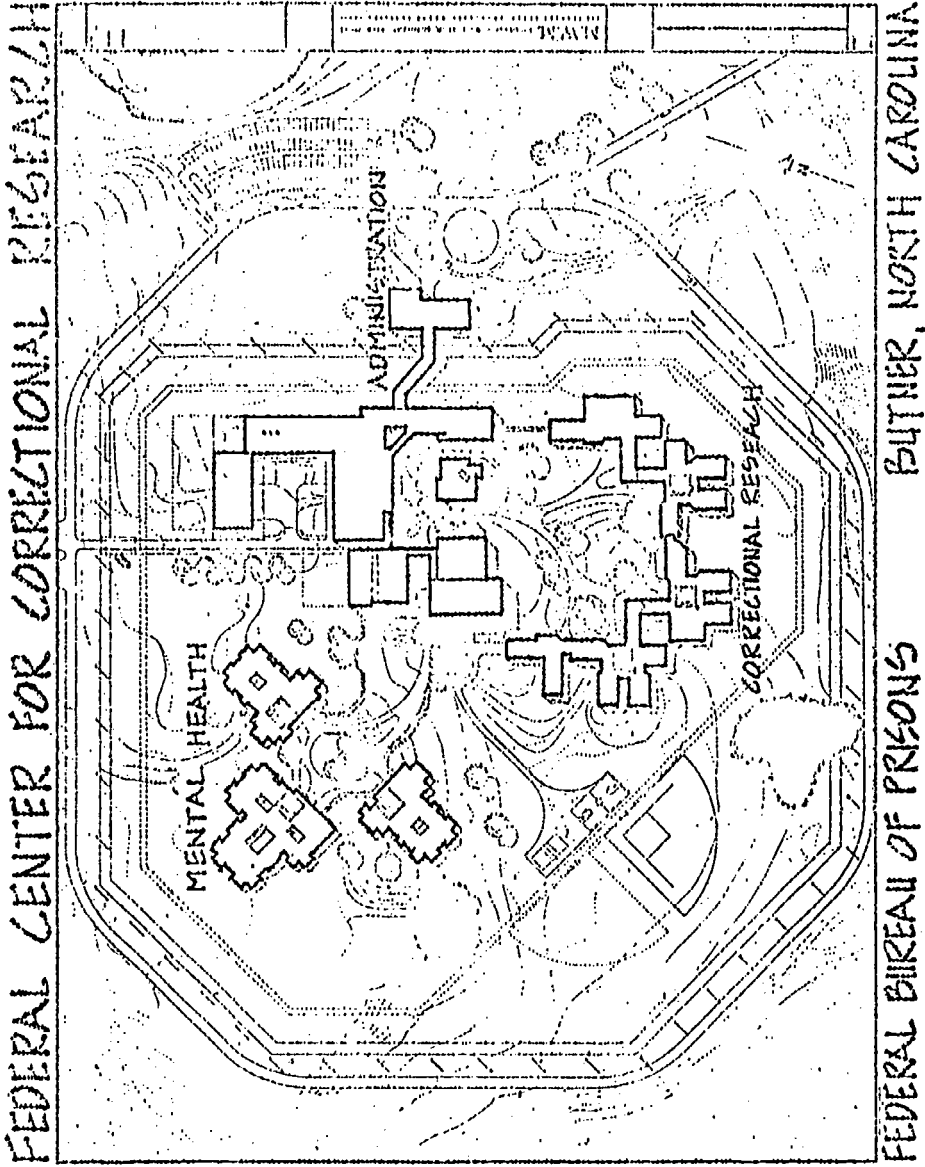
Total beds—388.

Square Footage—235,000.

Area Inside Fence—42 acres.

Construction Start—June 1972.

Construction Finish—February 1974.



FEDERAL CENTER FOR CORRECTIONAL RESEARCH

FEDERAL BUREAU OF PRISONS BUTNER, NORTH CAROLINA

[Item II.B.3.b]

REVISED PROGRAM DESCRIPTION, APRIL, 1973

The Federal Center for Correctional Research, now under construction, will be a unique facility in the federal correctional system to provide intensive care to acutely disturbed inmates in a 140 bed mental health unit. It also will focus on long term research for management and treatment of various types of offenders in four 50-bed Behavioral Sciences Units. Here, the Center will study and treat selected subgroups of offenders to devise effective treatment programs, many of which can be adopted by other correctional institutions.

MENTAL HEALTH UNITS

These units are designed to provide intensive care for a federal offender population of 38 women, 38 male youth, and 64 adult males who are in the acute phase of mental disturbance.

The objective of these programs will be to develop and implement intensive treatment approaches for psychotic and borderline psychotic patients who constitute a treatment and management problem beyond the capacities of other correctional institutions in the area east of the Mississippi. The objective will be to stabilize these special treatment cases so they can be returned as quickly as possible to the sending institution to resume their correctional treatment program. Most patients will be at Butner for a six to nine month duration. Patients who show little or no progress after eighteen months would be transferred to the Medical Center for Federal Prisoners at Springfield, Missouri for treatment appropriate for more chronic psychiatric disturbance.

While effective treatment of Butner's psychiatric patients will be a prime goal, the program will be carefully monitored and evaluated to study the relative effectiveness of different treatment techniques.

BEHAVIORAL SCIENCES RESEARCH UNITS

The behavioral sciences research units will attempt to develop more effective programs for various types of offenders. Population will be selected mostly from offenders in the general federal prison population claiming legal residence east of the Mississippi.

Inmates will participate in programs during a nine to twelve month period of intensive study and treatment to determine what kinds of correctional programs are effective with varying types of offenders under differing conditions.

The planning and design of treatment programs will continue to draw heavily on the research capabilities of nearby universities in the Raleigh-Durham-Chapel Hill area. Results will be monitored, published and made available to correctional administrators at local, state, and federal levels.

TRAINING

In developing more effective correctional programs, the Bureau places the highest priority on training and development of staff. The Butner program will have an integrated training program to develop more skilled staff not only for federal programs, but also for state and local programs. Program development has already begun with universities in the area, including Duke, North Carolina, North Carolina State and East Carolina State, to train university students in correctional techniques. Collaboration with the universities will range from residency training programs for Ph.D candidates to students working for Masters and Bachelors degrees, to short-term training for more specific programs, such as unit managers.

THE PHYSICAL PLANT

Instead of a traditional institution, the facility will have a more psychologically pleasing character, designed to be adaptable to changing research procedures. Rather than guard towers, underground electronic detection systems together with a mobile vehicular patrol will be used for more effective perimeter security. Windows of a special plastic and glass laminate with a built-in alarm will furnish better and more economical security as well as providing a better therapeutic environment.

252

The architectural firm is Middleton, Wilkerson, McMillan of Charlotte, North Carolina who are also providing construction management services for the project.

Total capacity is 388 beds.

Scheduled completion is April 1974.

[Item 11.B.3.c]

PROGRAM MASTER PLAN--SUMMER 1973

Foreword

This is a revised but still preliminary and incomplete version of the Program Master Plan. We can expect a new version every thirty to ninety days as program and research planning and growth continue. Those proposals that are carefully spelled out in detail, however, will remain stable as they have already been, in general, accepted by the planning staff in the Bureau of Prisons.

SECTION I--INTRODUCTION

A. Location

Butner is a very small town in the center of North Carolina with several major state institutions within its boundaries. These include John Umstead Hospital, a mental institution; Murdoch Center, with treatment for retardation; C. A. Dillon School for juvenile delinquents; the Rehabilitation Center for the Blind; the Alcoholic Rehabilitation Center; and a minimum security camp, Umstead Youth Center, which is part of the state correctional system. Aside from the obvious cooperative efforts with these state institutions, the community of Butner carries little in the way of resource. Butner, however, is in close proximity to the "Research Triangle Area" made up of the cities and communities of Durham, Raleigh and Chapel Hill, with each city containing a major college or university, i. e. Duke with a medical school, the University of North Carolina with a medical school and North Carolina State University. There are, in addition, several private colleges and two black universities which provide additional resource services. There is also a formal Research Triangle Park including business institutions, such as IBM, and many pharmaceutical laboratories. It is within this larger community then, already heavily committed to research, that the close working ties will be established.

B. Physical Characteristics of the Institution

The Federal Center for Correctional Research is a new institution. Under the direction of the architectural firm of Middleton, Wilkerson and McMillan of Charlotte, North Carolina, construction was begun in June 1972. The capacity is approximately 350 total beds, 235,000 square feet of buildings and 42 acres inside the fence with an anticipated opening in mid 1974. This institution is characterized by seven separate living quarters for inmates with each living unit containing a majority of individual rooms, meeting rooms, staff offices and recreational areas within its boundaries. There are certain other buildings of shared interest including a chapel; gymnasium and recreational area; a support building, housing clothing, commissary, food and barber shop; an educational building; an infirmary; a service structure containing the mechanical services and storeroom; and finally, an administration building which is located outside of the fenced enclosure. This will be a medium security institution with a double fence, underground perimeter security sensing devices, armed vehicular patrols, and replacing the security sash will be a special material, electrically wired for additional security within each unit.

C. Key Population Characteristics

1. *Mental Health.*—The three mental health units will be filled by referrals from institutions located in OMB Regions I-IV (east coast) with inmates across RAPS categories in various stages of their sentences.

2. *Correctional Program.*—The correctional program research units will be filled with some sub-segment spectrum of the inmates housed in federal facilities in Regions I-IV. This spectrum will be determined by the research program design.

D. Organizational Structure and Staffing Patterns

The anticipated staff of the Federal Center for Correctional Research is 211 positions, representing an inmate-staff ratio of 1.66 to 1. The basic organizational design will be functional participatory management with a functional unit sub-structure. There will be four principal divisions: the administrative services, the correctional program division, the research division and the mental health division. The administrative service is made up of the Warden and his office staff, the personnel office and the business office. The correctional program division is made up of the Associate Warden, Correctional Programs, the four correctional program units, food service, mechanical service, chaplain, correctional coordinator and community coordinator. The research division is made up of the Director of Research, the research coordinators and the record office and data coordination staff. The mental health division is made up of the Associate Warden, Mental Health, the three mental health units, the nursing service coordinator, the safety officer, education coordinator and case management coordinator. The organizational chart and the participatory management committees are located in Appendix B.

E. Statement of Mission

In the green book entitled "Behavioral Research Center, Butner, N. C.", the mission for the proposed facility was stated as "the treatment of mentally disturbed and violent offenders, for research leading to the management and correction of such behavioral problems, and for staff training in promising treatment techniques for serious deviant behavior". The method of actualizing this mission includes the following two mission statements:

1. *Mental health.*—The Mental Health Units will provide excellent acute and/or specialized treatment and/or forensic services for psychiatrically ill offenders from Region I—IV in all stages of their sentences. This program will be conducted in the context of a research setting to find increasingly effective methods of referral, evaluation, treatment and aftercare.

2. *Correctional Program.*—The Correctional Program Units shall, in an initial integrated design, test the best correctional and treatment modalities available in such a way as to provide usable and transferable models for other correctional settings (federal, state, local), these models to be fully researched in a prospective, longitudinal manner with full follow-up. The institution shall provide at least part of the initial training for such transfer of program models.

SECTION II—PROGRAM PRINCIPLES

A.1.—General Principles

1. To provide carefully selected personnel with full training experiences prior to opening and through continuing training post opening so as to maximize actualization of potential. This is not only to provide the Federal Center for Correctional Research with fullest manpower utilization but also recognizes the fact that transferability of programs, mental health and/or research, will require a transfer of knowledgeable, experienced personnel capable of training others.

2. To provide careful, full and accurate record keeping above and beyond the usual for an institution because of our research function.

3. To utilize functional participatory management so that all specifically treatment functions and specifically maintenance functions and mixed functions are carefully integrated into the total program model and the authority for implementation of same is shared by those concerned. This is in order to properly integrate the work load of the institution which would otherwise, through overdecentralization, result in inefficiencies of scale and performance.

4. To make proper and complete use of academic and other consultation and involvement of local and national community members and volunteers. An open situation with multiple involvements of outsiders will result in better community relations and a full general understanding of our research function. Moreover, the total environment in the institution will be more normalized by these contacts, especially in conjunction with the most modern policy procedures related to everyday inmate life.

5. To provide an environment that is understandable, reasonably rational and masterable by inmates and staff but is yet not so carefully and detailedly outlined as to have learning in this environment non-transferable to the less than rational outside world.

A.II.—*Specific Principles*

a. *Mental Health Units:*

1. That each unit (youth, adult male, female) establish clear, cooperative relationships with its small list of referring institutions in Regions I—IV. This will facilitate communication, referral and aftercare processes and general evaluation of the program.

2. That the units provide acute care; this care, in general, consisting of 90-180 days of care with some exceptions. That these units provide for carefully selected cases specialized care lasting longer than 180 days, but in no case should these units provide merely chronic, custodial care.

3. That if one or more universities are cooperative in assisting in the staffing and consulting for forensic work, that one or more of the units maintain a small sub-section for case studies for the United States Judiciary in conjunction with said university. This is in order to open up to the United States Judiciary in Regions I—IV the potentially rich forensic resources of the institution and surrounding academic community without overtaxing program staff.

4. Each unit should, in conjunction and cooperation with its referring institutions, insure that the aftercare provided at said institution is adequate to preserve and enhance the benefit accorded to the inmate during his period of treatment at the Federal Center for Correctional Research. This is in order to prevent the "revolving-door" phenomenon which occurs when the centralized treatment facility efforts are not followed up by adequate aftercare.

5. That such research as would lead to the enhancement and increase in efficiency of method of the curative treatment of psychiatric illness shall be done so as to incrementally improve the services provided by the three mental health units. This is necessary because with all the deficiencies of psychiatric treatment generally the differences between correctional settings and inmates and the general population has resulted in much of general psychiatric knowledge not being easily transferable.

6. These units shall be actively involved with the training of other federal correctional mental health personnel and in the training of mental health personnel generally in the research triangle area and nationally as there is a great dearth of individuals trained both in mental health and corrections.

b. *Correctional Program Research Units:*

1. All research programs shall either provide adequate community follow through by aftercare supplementation or not provide it for research control purposes. This necessity is indicated by repeated research findings that institutional improvement without community follow through tends to disappear over a two-year period.

2. Each individual shall have prescribed and shall follow an educational-vocational program with an emphasis on his/her capacity for productive interpersonal relationships. Upon release, he/she shall be prepared to work with a high expectancy of success with a high enough level of skill either to perform on the job and/or have entry level skills for training and with proper preparation of the place providing employment such that their expectancy is positive. This combination of high expectancy, high interpersonal and technical skill and reasonable community acceptance is demonstrated to result in better vocational success.

3. Each individual, post-release, needs an adequate positive social setting. There now exists four such well-established patterns: one is family adjustment, two is the therapeutic community or some other totally involving work setting, such as the military, three are deviant sub-cultures and four is the loner life-style which is only characterologically feasible to a small sub-segment of our population. In general, all inmates who had a family will be encouraged, counseled and given every assistance in maintaining and enhancing this family involvement. The others will be given assistance in methods of operationalizing a family and providing an equivalent social setting during the institutional time and post-release until such family-like involvement is operational.

4. All research programs shall effectively discourage overt and covert antisocial behavior. This will avoid the hypocritical involvement in programs that often saps their strength.

5. Staff and inmates will be required to participate in a joint effort. This will prevent the "we/they" split that typically polarizes and alienates the staff from the inmates.

6. Each program will be required to involve all staff and inmates in its functioning so as to prevent sterile, alienated roles for either staff or inmates.

7. Each program and all the programs together will make every effort to prevent negative cliques from forming in the institution so as to prevent the usual negativistic inmate compound culture which interferes with corrective programming.

8. Each program will be asked to develop its own integrated philosophy so as the members of the program, staff and inmate, have an understandable basis for decision making. This enhances the cooperation and coordination of all parties and appears to result in increased performance.

9. Each program will be asked to include within itself academic and other consultation as an adjunct to its basic program design. This will enhance the reputability and depth of each program without overrelying on academic conceptualizations.

10. Each program will be asked to provide for all the inmates needs and deficiencies that might prevent him from making a successful adjustment in the community. This is to prevent strengthening only specific areas in the inmates personality and technical skills while preserving other major areas of deficiency.

11. Each program will carefully use a variety of categorizing instruments to determine if its methods are more or less appropriate for each specific category but will preferably not use these for prescribing treatment especially in the early stages of the program. This is to prevent premature categorization with self-fulfilling prophecies prior to adequate information gathering and sorting.

12. Each program will have an adequate training program such that those staff that do rotate from program to program are quickly and competently integrated into the program and thus resulting in their getting, over a period of time, a good set of skills in each program area. This is to prevent rotating staff from getting treated as second class citizens and also provide them with a broad base for further promotion and development of their potential alongside of those that may have been employed with a high level of previous skill.

13. Each program staff will participate in the community follow-through for its post-release inmates to at least some extent. This will provide continuity of philosophy and practice and will also provide an interesting and broadening career development opportunity to institutional staff.

14. Preferably each program will harness the social pressure of its various component members for positive goals. These social pressures are a given in institutional situations and need harnessing as they often otherwise go opposite to the goals of programming.

15. The Research Department in its coordination with the programs will provide feedback to the programs as to their performance and as to new data as it comes along in a variety of areas so that the programs may constantly improve themselves, not only from their own natural development but from these inputs. The Research Department will then calibrate for such changes in programs as to be able to maintain the research design which should be so designed as to have this capacity. This will prevent the original research design from becoming a constraint and then a sterile instrument divorced from the actual procedures being followed in the units.

16. Each research program shall follow ethical guidelines to be determined in advance for all programs.

B. Current Implementation

Research and program planning to date have resulted in the ability to formulate and document the above principles in A. The broad measure of the above's feasibility will be that of whether, in fact, these guidelines and program principles will be practical and useable in operationalizing the institution.

C. Future Implementation

Increase program planning, community coordination, research staff and operational staff so as to adequately prepare for the institutional start up which will now take only four months total time rather than the original eight months planned due to the longer planning time and more complete staffing. Implementation target, September 1, 1973 pointing toward September 1 to November 1, 1974 opening date. The position responsible for implementation is that of Program Development Coordinator.

SECTION III—ASSESSMENT

A. Mental Health Units—List of Preliminary Proposed Measures

1. Number of patients referred vs. number of patients accepted. The difference between these two figures is a measure of the degree of our adequate communication to referring institutions.

2. Number of patients accepted who actually receive full treatment as prescribed. This measure would indicate the accuracy of our acceptance and diagnostic procedures vis a vis our ability to provide treatment and motivate patients to accept it.

3. Percentage of patients fully treated who are then transferred to referring institutions, other institutions or community care. This figure should be 100% as policy is not to retain chronic cases.

4. Percentage of cases referred to other institutions as fully treated who require no further in-patient treatment. This measure will represent the lasting effect of our treatment process.

5. Community follow-through as to success of patients when released to the community vis a vis both (a) criminal recidivism, and (b) relapse into mental illness for which they were treated. This will further measure long-term effect of treatment provided.

6. Number of mental health personnel trained for other institutions relative to number hired and/or needing training. This will measure relative input of Butner to mental health efforts of the Bureau of Prisons.

7. Number of employees hired or transferred in with no adequate prior experience or skills in the area of treatment of mental patients who are transferred out, skilled in such areas.

8. Production of scholarly papers in the area of treatment of mental disorders in correctional settings and other pertinent areas.

Correctional Program Research Units

1. Number of major research programs instituted at start up of institution.

2. Percentage of research population inmates who can be adequately followed which should preferably be 100% of population plus controls.

3. Percentage of inmates who can be provided programs that follow all the policy guidelines contained in Section II-b. This figure should also be 100%.

4. Each inmate will be carefully evaluated as to his deficiencies in areas that are necessary for community adjustment and success and each program will be measured by its success in eliminating these deficiencies.

5. Percentage of research population inmates that are provided adequate community follow-through.

6. Percentage of research population inmates released from programs who are adequately prepared for employment, their average and mean salary levels, work satisfaction and general level of success.

7. Percentage of research population inmates who are released to an adequate social setting.

8. A variety of measures will be needed to determine the degree to which each type of antisocial behavior is present or not present. For example, whether or not fighting occurs, whether or not exploitation occurs, whether or not gambling occurs, whether or not homosexual behavior occurs, whether or not escape plots occur, etc.

9. A careful analysis will be constantly maintained of the formation, evolution and dissolution of negative cliques.

10. Sociological-type testing will be used to see whether, in fact, there is an integrated philosophy in each program and whether, in fact, it is followed and to what degrees by its various members.

11. A variety of sociological instruments will be used to test the morale and joint effort of the staff and inmates. Also tested will be their positive involvement in programs.

12. Staff rotating in and out of each of the correctional program units will be pre and post tested as to the amount of skills in the specialized areas of the programs that they have learned.

13. We will establish if program staff involvement in community projects, in fact, does enhance performance in any way.

14. With sociological instruments, we will test whether social pressures are, in fact, harnessed to positive goals or not.

15. The number and amount of academic and other consultation will be recorded and some measure of the usefulness and whether or not the useful aspects were implemented will also be made.

16. Each theoretical categorization that is tested will include within it measures of its own reliability and validity.

17. All of the research population and matched controls will be followed for at least two years post release. The outcomes of the research, control and general populations shall be compared by such broad measures as absolute recidivism and other more specific measures yet to be specified.

18. The research department will be required to evaluate its own performance and/or to have a private research team to do same.

19. A long-term measure will be the total number of derivative programs begun in other settings based on one of the models we test, the number implemented, the number successful (see 17 above) and, finally, the number of third generation programs engendered which are also successful.

20. Finally, all programs will be initially carefully evaluated and then continuously evaluated to insure that it stays within the ethical guidelines set. (General comment: Most of the above measures are carefully not over specified at this time, leaving adequate room for further program and research planning and elaboration.)

SECTION IV—CURRENT OPERATIONS

Under the guidance of the Division of Planning and Development, with full cooperation of the various Central Office Divisions, and with significant inputs from federal and state institutions and agencies, the Bureau operations have consisted primarily of long-range, broad program development, operational planning, and the initiation of community public relations. The staff consists of a Program Development Coordinator, an Executive Assistant, a personal secretary and an administrative clerk. At the present time, the operations have resulted in the program development principles outlined in Section II, in the development of the staffing and organizational patterns outlined in Section I and in the Appendix, as well as having laid a solid foundation of good relations with the local academic, professional, governmental, business and lay communities. The outlines of a number of important specific projects have been identified for immediate exploration and implementation. These specific projects include but are not limited to aftercare supplementation, increased capabilities for our information system, regionalization of mental health services in OMB Regions I—IV, identification and review of effective correctional treatment modalities and specification of the unique content of these for training purposes.

SECTION V—FUTURE OPERATIONS

The major tasks before us in the next six months are the following:

1. To evaluate the inmate data system and existing information systems as to their ability to accommodate the intended research and to make such appropriate recommendations as may be necessary based on this analysis.

2. To select the four program models for the four correctional program research units to test and complete at least a rough outline of what they will be, how they will operate and what type and number of personnel will be necessary within the total possible complement of 211 for the institution as a whole. Once these are established, to begin to elaborate the manner by which inmates will come into these programs and the manner by which the entire project will be followed with suitable controls.

3. Our new Mental Health Coordinator will elaborate the mental health needs and ability to provide for them of the various institutions in OMB Regions I—IV and prepare a proposal for coordinating these efforts with our mental health programs. During the course of this, he will visit and set up initial coordinative relationships with each of these institutions. He will also develop our mental health training packages and coordinate with academic departments in local universities and assist with mental health recruiting.

4. Our Operational Systems Coordinator will coordinate for us in the Bureau's Washington Office, especially the various program changes that impinge upon the implementation of the Bureau's procedures or, conversely, such Bureau developments as may effect our planning and implementation effort.

5. The Operational Systems Coordinator will also have the responsibility with the aid and assistance of the Community Services Division, Bureau of Prisons, to evaluate the community after care supplementation aspect of the Correctional Program Units.

[Appendix A]

DETAILED POPULATION ANALYSIS

MENTAL HEALTH

We are awaiting a Mental Health Program Coordinator to communicate with each and every institution located in OMB Regions I—IV regarding local evaluation of the number of inmates eligible for referral and the type of aftercare services available at their institution.

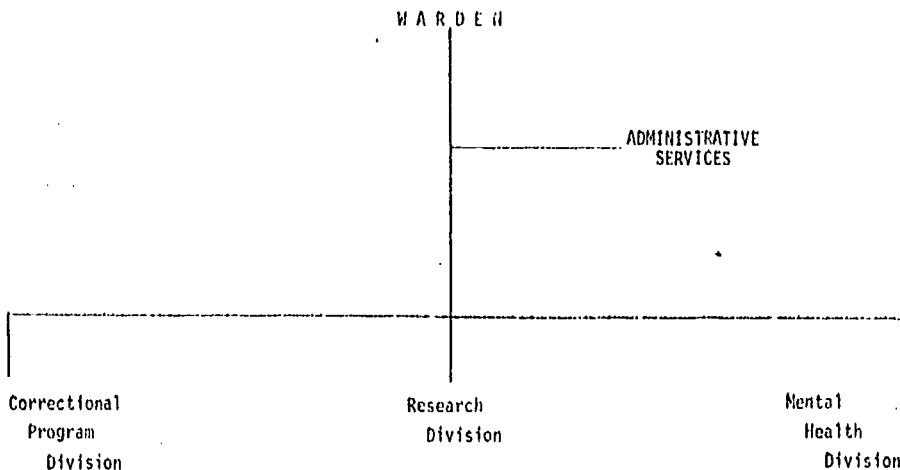
CORRECTIONAL PROGRAM RESEARCH

We have received and are in the process of evaluating the first computer printout categorizing the 11,000 inmates in Regions I—IV broken into various categories of research interest.

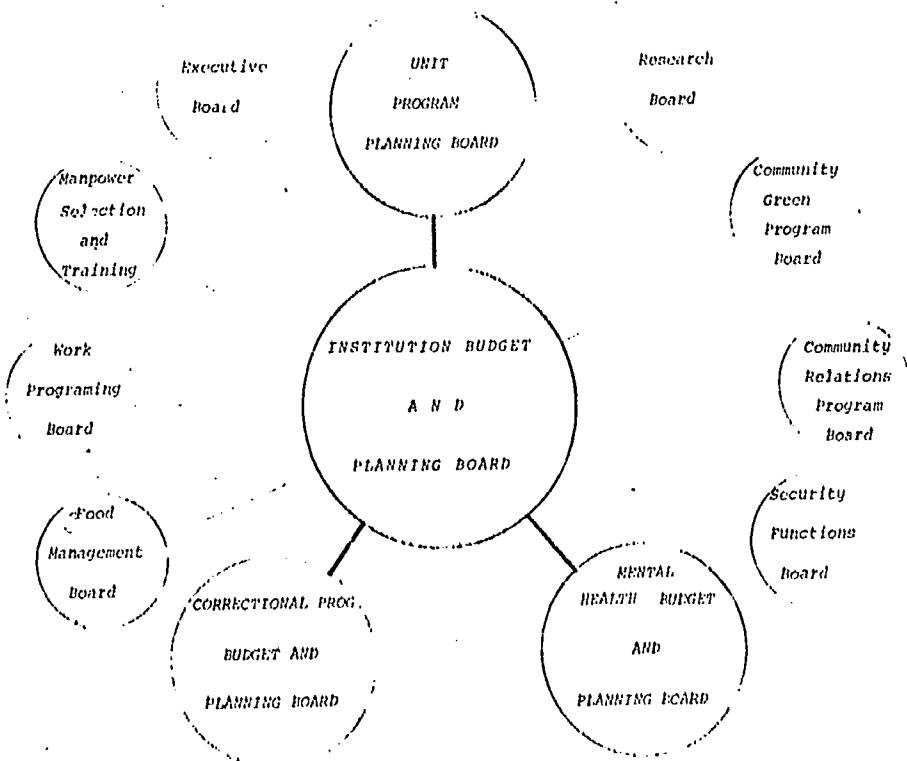
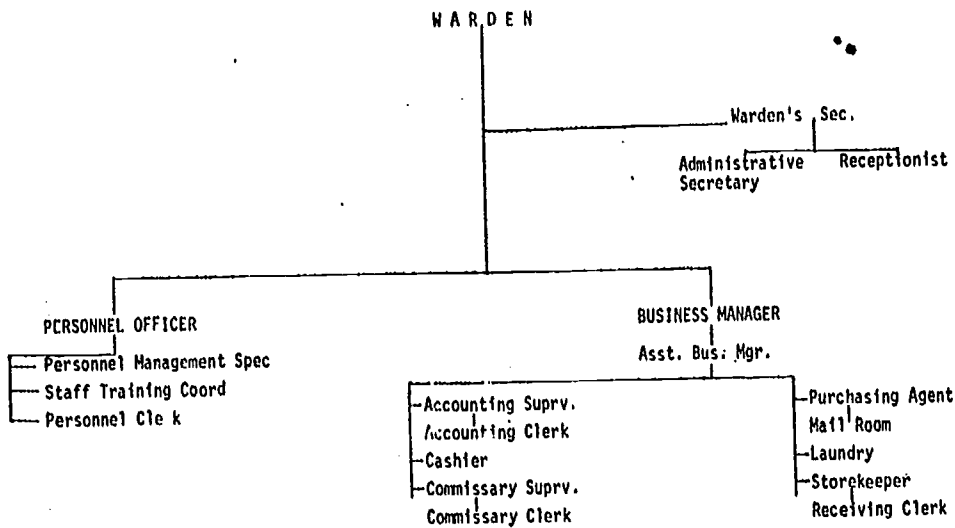
[Appendix B]

ORGANIZATIONAL CHARTS

DEPARTMENT OF JUSTICE
Bureau of Prisons
Federal Center for Correctional Research
Butner, North Carolina



ADMINISTRATIVE SERVICES



INSTITUTION BUDGET AND PLANNING BOARD

Warden—Chairman.
 Admin. Sec.—Recorder.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Director of Research.
 Business Manager.
 Personnel Officer.
 Manager, CPRU 1.
 Manager, CPRU 2.
 Manager, CPRU 3.
 Manager, CPRU 4.
 Manager, M H A.
 Manager, M H Y.
 Manager, M H F.

MENTAL HEALTH BUDGET AND PLANNING BOARD

Asoc. Warden, Mental Hlth.—Chairman.
 AW MH Sec.—Recorder.
 Business Manager.
 Personnel Officer.
 Case Management Ofcr.
 Education Coordinator.
 Safety Officer.
 Nursing Services Coord.
 Manager, M H A.
 Manager, M H Y.
 Manager, M H F.

CORRECTIONAL PROG. BUDGET AND PLANNING BOARD

Asoc. Warden, Corr. Prog.—Chairman.
 AW CP Sec.—Recorder.
 Business Manager.
 Personnel Officer.
 Corr. Coordinator.
 Comm. Coordinator.
 Chaplain.
 Chief, Mech. Services.
 Food Administrator.
 Manager, CPRU 1.
 Manager, CPRU 2.
 Manager, CPRU 3.
 Manager, CPRU 4.

UNIT PROGRAM PLANNING BOARD

Warden—Chairman.
 Admin. Sec.—Recorder.
 Director of Research.
 Manager, CPRU 1.
 Manager, CPRU 2.
 Manager, CPRU 3.
 Manager, CPRU 4.
 Manager, M H A.
 Manager, M H Y.
 Manager, M H F.

MANPOWER SELECTION AND TRAINING

Personnel Officer—Chairman.
 Admin. Sec.—Recorder.
 Staff Training Coord.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Director of Research.
 Ad hoc department representative.

WORK PROGRAMING BOARD

Chief, Mec. Ser.—Chairman.
 Admin. Sec.—Recorder.
 Business Manager.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Safety Officer.
 Manager, CPRU 1.
 Manager, M H Y.

EXECUTIVE BOARD

Warden—Chairman.
 Warden's Sec.—Recorder.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Director of Research.
 ad hoc additional membership.

SECURITY FUNCTIONS BOARD

Corr. Coord.—Chairman.
 AW CP Sec.—Recorder.
 Security Officer.
 Nursing Services Coord.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.

COMMUNITY GREEN PROGRAM BOARD

Chairman to be determined.
 Admin. Sec.—Recorder.
 Asoc. Warden Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Manager, CPRU 3.
 Manager, M H F.
 Education Coord.

RESEARCH BOARD

Director of Research—Chairman.
 Research Director's Sec.—Recorder.
 Administrative Assistant.
 Research Coordinators (5).
 Data Coordinator.
 Ad hoc program representative.

FOOD MANAGEMENT BOARD

Food Admin.—Chairman.
 Admin. Sec.—Recorder.
 Business Manager.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Manager, CPRU 2.
 Manager, M H A.

COMMUNITY RELATIONS PROGRAM BOARD

Community Coord.—Chairman.
 AW CP Sec.—Recorder.
 Chaplain.
 Case Management Coord.
 Staff Training Coord.
 Asoc. Warden, Corr. Prog.
 Asoc. Warden, Mental Hlth.
 Education Coord.

[Appendix C]

INSTITUTIONAL BLUEPRINTS

Institutional blueprints are available in the Office of Facilities Development and on site at the Federal Center for Correctional Research, Butner, North Carolina.

2112

[Item 11.B.3.d]

PROGRAM PLAN—HUMAN RESOURCES DEVELOPMENT UNIT

"The first and most basic principle of helping and human relations is the ability to see the world through the eyes of the other person. If we cannot see the world through the other's eyes, and communicate to him what we see, then all advice, all directions, all reinforcements, rewards as well as punishments, are meaningless.

"We are so accustomed as would-be helpers to making judgments of the helpee that we forget that the helping process cannot take place unless the helpee has made judgments of us and ceded us the power and recognition as agents of his change. We are so accustomed to seeking permission from above that we seldom obtain permission from below. The first order of business, then, must be getting ourselves and our own houses in order before embarking upon projects that would help others".

DR. R. R. CARKHUFF.

A. INTRODUCTION

There is considerable evidence supporting the position that training can be a preferred mode of treatment. One aspect of this concept emphasizes the importance of training "significant others" as a treatment alternative. "Significant others" have been defined as line correctional staff by several prominent correctional authorities. Drs. Sherman Day and William Megathlin documented line staff effectiveness in their study of the U. S. Penitentiary, Atlanta, Georgia. The Federal Bureau of Prisons has given considerable credence to this concept over the past few years, with its increased emphasis on staff training in general, the inception of Staff Training Centers and the Correctional Counselor training program in particular. A second modality would go even further and would eliminate the "middle man" by training the client or inmate directly.

A close look at this second modality reveals that it incorporates the best parts of the "significant others" concept, while simultaneously permitting the individual to choose his own future. The staff, as first role models, must prove that they have something that would be of value to the inmate; by their actions, their concern and their confidence, they must be "significant others". The program originates with the inmate's own frame of reference, so that he can explore where he is, examine where he wants to be and, as a result of the training, develop action programs to get there. As he progresses he becomes a "significant other" himself and assumes more and more control of his own future. This program has been used extensively in the community services fields and has proven very popular and successful with minority groups, educators, and social service organizations. The reason for its popularity is that it delivers the capacity for human achievement directly to the client. It is the beginning of a human technology of living, learning and working skills; the skills that enable an individual to be a responsible, contributing, whole human being.

B. PROGRAM PHILOSOPHICAL/THEORETICAL BASE

There are people who can live effectively in their world and there are others who cannot. To be sure not all those who cannot live effectively are incarcerated, but realistically one can assume that a felony conviction is usually a symptom of ineffective behavior. There is extensive evidence to indicate that significant human encounters may have constructive or deteriorative consequences, that is "for better or for worse". The less than effective person is a result of a series of retarding experiences and/or relationships. Similarly, the effective person is the product of a series of facilitative experiences. Another way of defining this is to say that the effective person is a growing person, rather than a deteriorating one.

Growth and deterioration can be measured on three basic scales; physical, emotional/interpersonal, and intellectual, and the three are inextricably related in both the effective and the ineffective person. Growth or deterioration takes place at crisis points in an individual's life. These points occur when there is conflict between the person's physical or psychological need to survive and his physical, emotional, and intellectual resources. The manner in which the individual handles each crisis point increases the probability of his re-

sponding in a similar manner at the next crisis point. That is to say the results of effective or ineffective behavior at crisis points are cumulative. It is likewise true that an individual's behavior at crisis points is predictable and that the indices of this predictability are his physical, emotional, and intellectual functioning. The reverse of this is obvious. To increase his effectiveness at crisis points, you must increase his current level of functioning; physically, emotionally/interpersonally, and intellectually. The means for this increase is training.

The model, then, for this unit is a training model; a training model of human resource development. Human resource development is skills acquisition; skills that are observable, measurable, trainable, predictable. In a systematic step-by-step program an individual can be trained in the skills necessary to live, to learn and to work in his world effectively.

An individual's ability to control his future is directly dependent upon his ability to make effective decisions at crisis points. These decisions are likewise directly dependent upon the skills that he possesses which, in turn, are directly dependent upon his level of functioning physically, emotionally, intellectually. A fully functioning person has a repertoire of responses that enables him to develop new programs for each situation that demands them as well as to react spontaneously in those situations for which he is prepared. A growing person can help others who are significant to him learn these same skills and thereby create a healthier environment for himself. A growing person no longer has to live by deceit and cunning, he can be free.

Every individual in our society needs skills, all kinds of skills, in all kinds of areas. He needs problem-solving skills to resolve problems of his own and of those close to him. He needs program development skills in order to sustain, develop and implement his own programs as well as those for others. Of all the life-skills however, the social and interpersonal skills each of us acquire over a lifetime appear to be the most critical skills of all. Persons who become incarcerated are at least, in part, a product of their many relationships with significant persons. Their present relationships reflect the difficulty of their past relationships. They have learned to respond to others in ways that others have responded to them. The inmate then, is both a product and a promulgator of his experiences, and the critical core of these experiences involves relationships with other human beings. There can be little argument that imprisonment itself has a tendency to produce a corrosive effect upon social skills. In many instances the corrosive effect itself may well be the significant contributor to the causes of recidivism. Interpersonal, problem-solving and program development skills together represent human achievements or living skills. They are the first and most important rung on the ladder of human effectiveness.

The next level of skills is educational achievement or learning skills which are based on human achievement. The resident can now relate effectively to his world and the people in it. He is ready to translate his understanding into learning skills that parallel the teacher's efforts. He understands curriculum development skills, diagnostic and goal setting skills, teaching methodology skills and classroom management skills as used by the teacher and he relates them to his learning material. He learns how to explore where he is in relation to educational or intellectual materials, how to understand where he is in relation to where he wants or needs to be and how to get there.

The next level is career achievement or working skills. The world of career achievement represents a developmental set of skills beginning with career expanding skills, which enable the individual to explore systematically career alternatives that meet his needs. Following career expanding, the individual needs career narrowing skills which let him systematically select the career that comes closest to meeting his values and whose entrance requirements he is capable of meeting. Next the individual learns career planning skills which enable him to develop systematic programs that will take him from where he is towards his career objectives. Finally, using career placements skills, the individual can systematically develop, acquire, and retain the job he has chosen.

This then, represents the current scope of the human technology of skills programs necessary for human resource development. The basis for all of these skills is training. The fundamental objective of human resource development is to identify the skills necessary to achieve, to train staff to use these skills, and

finally, to transfer the skills of our "raison d' etre"; namely, the inmates. Such an objective delivers the necessary skills to the inmate so that he is no longer dependent upon others to solve his problems, but can be proud, responsible, and free.

C. OPERATIONAL ASPECTS OF THE PROGRAM

The program is divided into three basic parts; the physical, the emotional/interpersonal and the intellectual.

The physical program will be a continuous physical fitness/exercise program which also will incorporate organized sports, individual exercises and periodic tests of functioning ability. The emotional program will incorporate training in interpersonal skills as well as specifically detailed practice in applying these skills in staff/inmate relationships, family relationships and involvement as helpers with some of the mental health patients. The intellectual program will incorporate not only problem solving, program development, learning and career achievement skills but also specific programs designed with the individual to increase his educational level and to set future goals and programs.

Upon arrival at the institution the individual is met by an inmate representative of the unit who will provide general orientation to both the institution and the unit. The inmate representative will be a unit position assigned to those advanced inmates functioning at high levels, physically, emotionally and intellectually. During the initial phases, staff will be required to serve in these roles, however, after the initial training of the inmates the most effective will begin to assume more responsibility for the unit. Following his orientation the new trainee will be evaluated against established, published criteria to determine his level of functioning in all these categories. At this point he will begin formal training.

The first training will be a program detailing the unit philosophy and imparting basic living skills. The course will be taught by inmate representatives as well as the staff member responsible for interpersonal training. The program will be followed by a reevaluation and the results of this evaluation will be used for classification or program purposes.

As this process was going on, the inmate has been meeting with his counselor and his caseworker in the context of establishing rapport, reviewing social history, evaluating release resources and other personal relevant data. Based on this information the inmate's significant family will be invited to attend the classification session. During this session, which will be attended by staff, one or more relevant inmate representatives, the inmate concerned and his family, the current functioning level will be discussed in all these areas. Specific programs will be established to raise all deficient areas to a minimum functioning level (level 3 on a 5 point scale). These programs represent the institutional goals, and, whenever possible, parole recommendation will follow their achievement.

At this time the family will be offered the opportunity to participate in a training program identical to the inmate's. This training could be conducted in major metropolitan areas or at the institution. If the family is not interested in training or cannot participate for any reason, extensive counseling and group discussion will be conducted at every opportunity to insure that they understand the program and its objectives. Community resources will be offered training opportunities as well so that they also are aware of the institutional goals and objectives. To the greatest degree possible, the inmate should be released into an environment to which he can relate and which is prepared to relate to him.

During the remainder of the inmate's incarceration, his time will be spent in additional training programs, i.e. learning and working skills and many specific goal oriented programs, physical training or exercise, G.E.D., remedial reading, vocational training and work programs. As his level of functioning increases, his level of responsibility and privileges likewise increase. High-functioning inmates occupy positions as counselors and associate trainers as well as in unit government and institutional councils. They are afforded opportunities for such privileges as furloughs, Special Progress Reports, parole recommendations, and work/study release. In the event that a high-functioning inmate is not able to be paroled for any reason or if the program is terminated or transferred, every effort will be made to place the inmate in a situation where he can utilize his abilities in a productive manner.

D. RESOURCE REQUIREMENT

The equation for Human Resources Development is: effective people + effective program = effective organization or mission achievement. Effective people are the most important ingredient. For this program to be successful, the staff must be selected on the basis of their effectiveness. To superimpose personnel selection criteria based on other measures is to build a potential for failure into the program. Therefore, we plan to utilize the principles set forth by Dr. Robert R. Carkhuff, the originator and foremost authority on this program.

The Bureau of Prisons already has a nucleus of personnel trained in this philosophy and selection will be made from this group for the following positions: Program Manager, Program Specialist and the two Correctional Counselors. The remaining unit staff (Caseworker, Education Specialist, Secretary and several Correctional Officers) if not already trained, will be selected using criteria developed to assess effectiveness in a helping role. Then staff training can be incorporated into the pre-opening training package that will include Bureau and institution orientation.

In addition to the staff resources, the extensive training involved in the program will require audio and video tape recording equipment, as well as good material reproduction facilities.

This program proposal was developed with the full cooperation of Dr. Carkhuff and his colleagues and represents his progress to date in the development of human resources. As an emerging innovator of further techniques, it is necessary that there be a continuing relationship between the program unit and Carkhuff Associates. They are prepared to provide technical expertise, training materials, academic inputs, new programs, and other necessary services. As further techniques or course materials are developed, the unit staff will adapt them to the correctional setting and implement them as appropriate.

E. FACILITY UTILIZATION

This program would utilize the full range of institutional services; food service, clothing, barber shop, chapel, etc. Specific program needs will require the utilization of the gymnasium and outdoor recreation area, the education center, and a room suitable for training groups of approximately 20 people (inmates, staff, family, community resources).

References

- Brewer, R. D., *Change Agent Training*, F. C. I. Fort Worth, Tex., 1971-1972.
 Carkhuff, R. R., *Development of Human Resources*, Holt, Rinehart, Winston, 1971.
 Carkhuff, R. R., *Helping and Human Relations*, Vol. 1 and 2 Holt, Rinehart, Winston, 1969.
 Day, S. R. and Megathlin, W. L., *The Line Staff as Agents of Control and Change*, American Journal of Corrections, May-June 1972.
 Montgomery, C. M., *Functional Unit 6*, F. C. I. Seagoville, Tex., 1973.

SECTION II—PROGRAM PRINCIPLES OF HUMAN RESOURCES DEVELOPMENT

I.—GENERAL PRINCIPLES FROM THE PROGRAM MASTER PLAN

1. To provide carefully selected personnel with full training experiences prior to opening and through continuing training post opening so as to maximize actualization of potential.

People are the most important ingredient to the success of this unit so they will be carefully selected. All personnel assigned to the unit will be given initial training specifically designed to insure their functioning at higher levels than the inmates entering the program. In addition, there would be a continuous training program involving staff training inmates, staff training staff, and inmates training inmates under staff supervision on a continuous basis throughout the program. After one year of operation each staff member would be capable of training other institution personnel in this program's methodology.

2. To provide careful, full and accurate record keeping above and beyond the usual for an institution because of our research function.

There will be no problem in maintaining complete and accurate records in accordance with whatever guidelines the research division establishes.

206

3. To utilize functional participatory management so that all specifically treatment functions and specifically maintenance functions and mixed functions are carefully integrated into the total program model and the authority for implementation of same is shared by those concerned.

Inmates, as well as staff, will participate fully in the total program model, with integration of work, play, study.

4. To make proper and complete use of academic and other consultation and involvement of local and national community members and volunteers.

The program would use direct consultation services of Carkhuff Associates, Inc. In addition, extensive use of community resources will be made to prevent isolation and misunderstanding and to normalize the environment as much as possible. In the initial phases the community will be brought into the institution but as soon as possible the emphasis will shift. Trained inmates will be utilized as volunteers to the community to provide training, counseling and other services.

5. To provide an environment that is understandable, reasonably rational and masterable by inmates and staff but is yet not so carefully and detailedly outlined as to have learning in this environment non-transferable to the less-than-rational outside world.

Each inmate, upon entry to the institution, will receive the same basic training given the staff members to insure that the total environment is mutually understandable, reasonable, rational, and masterable; and since the program is based on skills developed in the community, the learning in this environment will be transferable.

CORRECTIONAL PROGRAM RESEARCH UNITS FROM THE PROGRAM MASTER PLAN

1. All research programs shall either provide adequate community follow through by aftercare supplementation or not provide it for research control purposes.

This program would offer training to specific probation and parole officers, community treatment centers, and/or develop specific programs in selected communities to provide for the community follow through.

2. Each individual shall have prescribed and shall follow an educational-vocational program with an emphasis on his/her capacity for productive interpersonal relationships.

The individual will have a program of academic and vocational as well as interpersonal skills as indicated in the basic program design. Following a systematic program, the inmate will be reintroduced into the community by means of volunteer services, work/study release, and furloughs. By giving the individual an opportunity to display himself in a new way, the community expectancies can be altered to a more positive position.

3. Each individual, post-release, needs an adequate positive social setting.

While incarcerated, individual's families will be offered training while visiting the institution with the understanding that those on the outside are undoubtedly better able to incorporate the training into their lives than the inmate. This will enhance the environment to which the inmate must return upon release. If there is no family on the outside, every effort will be made to have a trained, sponsoring agency or individual available upon release. By using relocation, by training "big brothers", by utilizing already trained Human Resource Development personnel, a familiar, friendly environment will be created to cushion "release shock".

4. All research programs shall effectively discourage overt and covert anti-social behavior.

The basic ways this program would deal with overt and covert anti-social behavior are; first, with training, the inmate becomes identified with staff; second, a differential reinforcement level system; and third, confrontation in the context of a relationship between staff and inmate, inmate and inmate, staff and staff, is totally within the program model.

5. Staff and inmates will be required to participate in a joint effort.

The program model insures joint staff/inmate participation in all phases of unit activity. Since the only criteria of effectiveness is functionality and the modeling role is open and attainable by both staff and inmates, the we/they split or sterile and alienated roles can be eliminated.

6. Each program will be required to involve all staff and inmates in its functioning so as to prevent sterile, alienated roles for either staff or inmates (See second paragraph of Number 5)

7. Each program and all the programs together will make every effort to prevent negative cliques from forming in the institution so as to prevent the usual negativistic inmate compound culture which interferes with corrective programming.

Initial staff training will emphasize the institutional goals and objectives as superseding any program. By leadership and management, the program staff will be discouraged from a spirit of unhealthy competitiveness. (See also Number four above.)

8. Each program will be asked to develop its own integrated philosophy so as the members of the program, staff and inmate, have an understandable basis for decision making.

The training program will provide an integrated philosophy so that all decision making is based on the same understandable basis.

9. Each program will be asked to include within itself academic and other consultation as an adjunct to its basic program design.

The program will be responsive to significant inputs from outside research findings, community participants, and academic involvements in addition to the consultation services of Carkhuff Associates.

10. Each program will be asked to provide for all the inmates' needs and deficiencies that might prevent him from making a successful adjustment in the community.

The Human Resource Development model is designed to correct deficiencies according to individual needs, not limited to one or two specific areas.

11. Each program will carefully use a variety of categorizing instruments to determine if its methods are more or less appropriate for each specific category but will preferably not use these for prescribing treatment especially in the early stages of the program.

The program will allow selected research studies to be conducted within the unit from time to time using various techniques for categorization and study. The program, itself, will use categorizing instruments within the level system based on understandable and logical criteria such as physical, emotional and intellectual functioning and not related to behavioral characteristics or other less appropriate categorations. It is also important to note that these categories or levels are not negative in nature but represent positive, attainable goals. The degree to which they become "self fulfilling prophecies" is considered healthy.

12. Each program will have an adequate training program such that those staff that do rotate from program to program are quickly and competently integrated into the program and thus resulting in their getting, over a period of time, a good set of skills in each program area.

The training program while anticipating an 80 hour requirement could be expanded or contracted as time permits. The remainder of training is conducted on an ongoing basis.

13. Each program staff will participate in the community follow-through for its post-release inmates to at least some extent.

The community follow through and post release is considered an essential part and the training of those providing such services is a necessary part of the program.

14. Preferably each program will harness the social pressure of its various component members for positive goals.

The training model, the differential reinforcements and the group or individual confrontation will harness the component members for positive goals.

15. The Research Department in its coordination with the programs will provide feedback to the programs as to their performance and as to new data as it comes along in a variety of areas so that the programs may constantly improve themselves, not only from their own natural development but from these inputs.

The program will remain open to research as well as consultation inputs and make every effort to adjust positively to such feedback.

16. Each research program shall follow ethical guidelines to be determined in advance for all programs.

The program philosophy is based upon the principles of empathy, respect, genuineness, concreteness, immediacy and confrontation. To operate outside of these principles would be in direct violation of the program. We, of course, will follow any ethical guidelines developed for the institution as a whole.

[Item II.B.4]

REPORT ON RESEARCH PROJECTIONS, FORT WORTH FEDERAL CORRECTIONAL
INSTITUTION, FEBRUARY 9-12, 1973

(By Esther Heffernan)*

The following is a two-part report of an on-site visit to the Fort Worth Federal Correctional Institution, February 9-12, 1973. From discussions with Warden Charles Campbell, it appears that there were multiple purposes for the request for research, and this report reflects these purposes. The first part is an immediate analysis, based on limited interviewing and observation, of the general functioning of the institution, with specific attention given to the emerging patterns of adaptation within a co-correctional setting. The second is the formulation of a tentative and general research design for a more systematic study of the facility.

PART I—GENERAL OBSERVATIONS

The preliminary analysis which follows is based on four days of observation and interviewing at the institution. Through the extremely cooperative efforts of the Warden and his staff, it was possible to have a series of both selected and informal interviews, including some relatively lengthy private sessions with two white and two black women residents of differing offense backgrounds. Their backgrounds were similar to those which in the previous study of the D.C. Women's Reformatory would have placed the women in the "square," "cool," or "life" systems. In addition, four women from the original transfer group from Alderson were interviewed (three black and one of Spanish-speaking background) in a group setting to determine the forms of adaptation which have developed since the opening of the facility. It is interesting to note that the descriptions of their responses and adaptation to Alderson and their descriptions of "doing good time" were as would be predicted from their offense backgrounds. Five male residents and a common-law couple were also interviewed. Two of the interviews were private, and the others were in a group setting. They included men whose offense background and institutional records in other institutions would place them among the "life."

It appears that the distinction between the "square," "cool," and "life," developed in the D.C. research and paralleled in the studies of Irwin and Cressey continue to exist in Fort Worth, but only extensive interviewing will reveal additional adaptive patterns and changes which may occur in the normative patterns of "doing good time." Even limited interviewing revealed that "hard" and "easy" time have different reference here. Nevertheless, the boundary-maintenance between the groups continues as one "square" woman tactfully made very clear in commenting when one "cool" woman entered the interviewing situation that "although we live near each other, we really just don't know each other."

Interviews among the staff were more informal, with longer interviews with the warden, assistant wardens, the head of the women's unit, and the research director, and shorter informal conversations with the chaplains, counselors, work supervisors, and correctional officers. Equally informal were contacts with family members who were visiting residents and with volunteers and interns who were present during the weekend and the early part of the week. Many of the observations contained in this report were discussed during a two-hour staff meeting held during the afternoon of the last day at the institution.

It should be noted before beginning the more systematic and "objective" analysis of the institution, that it is impossible to convey the actual milieu of the facility. Anyone who has been in a correctional institution for any length of time is very much aware of the "feel" of a place—and it is extremely difficult to sort out the factor both objective and subjective that may be responsible. The often-repeated statement by a diversity of residents and staff that we have a "good thing going here" is reflected in quotations from two resident publications, which have a certain element of the "programming" and rhetoric found in much prison journalism but which ring true within the context of actual personal contact:

*Attached to February 10, 1974 letter from Norman Carlson to Chairman Bryn (Item II.A.8, above).

"The archaic, medieval penology of yesteryear is withering on its decaying vine as FCI, Fort Worth, plods forward with relentless strides, stumbling and grasping, but always forward in its dedication to valid 'correction' of those in need. Heretofore 'correction' has been but a gutless euphemism for the prisons of the decadent penal system. But here men and women, individually and collectively are dedicating 'their lives, their fortunes and their sacred honor' to the concept that the offender, however grievous, has worth and dignity, and his character can be renovated to the point of return to a life of purpose and productivity and real value. As in any new concept that breaks with the past, and renovation of timeworn and virtually dead traditions, FCI's new life and purpose is subject to constant and degenerate criticism from the dead who won't lie down. Often those with vision are termed 'dreamers,' or 'he's before his time,' etc. For us this is only partly appropriate—in time we are past due, but our dream is a living, breathing, embryo, conceived and dedicated in love and sacrifice. All of us involved are co-creators and perpetuators of this embodiment of truth and pure progress."

(Donnell Watkins)

"... We call our community 'The Alternative'—to emphasize that here is another way. We do not say that for everyone it is *the* way—we only say that, in the world of the prison system, its dehumanization, its games, and its phoniness, there is an alternative—and there are other voices, if you care to listen. These voices speak of health—of wholeness—of strength. They speak of feeling good. They speak of peak experiences, of 'getting high' naturally, of being 'turned on' by being straight with people. They speak of caring, of concern, of hope. Of course this sounds like bullshit to some of you who read this. And all that we can say is, 'If we find each other, it's beautiful. If not, it can't be helped.' No guarantees. Many risks. But, as the saying goes, 'No guts—no blue chips.'"

(Julius M. Collum, M.D.)

The rather mixed image of "plods forward with relentless strides, stumbling and grasping, but always forward," seems actually a very appropriate description of what appears to be happening at Fort Worth.

The emphasis in the popular media, and in descriptions of Fort Worth, on the co-correctional aspects of Fort Worth tend to obscure what appears to be much more crucial to the development of the institution. While the presence of men and women at the facility is a vital part of what appears to be the basic thrust of the program, co-corrections is not itself the fundamental difference between Fort Worth and other programs.

The more critical factors, mentioned by residents and members of the staff, are first: the extensive linkage between the institution and the wider community of Fort Worth, both in terms of work-release, study release, and volunteer programs outside the institution and the numbers of visitors and volunteers within the facility who are not staff members and who bring a non-correctional perspective; and secondly, the "philosophy" of corrections embodied in the program. The latter factor, expressed as "respect for your dignity," or "you're somebody here," reflects an effort on the part of at least some of the staff to develop an alternative to both the "treatment" and "security" approaches in corrections. In one sense it is an expression of the knowledge held by many personnel in the Bureau of Prisons that there are a multiplicity of U.S. Criminal Statutes and reasons for their violation, as well as a diversity of courts with differing philosophies of sentencing. Imprisonment itself is seen as the sanction, rather than as a first step to either "punishment" or "treatment." Within that context it is argued that multiple approaches should be developed to assure that the time spent in prison should be as non-destructive of persons as possible, with as many programs as feasible to assure that whatever factors led to the earlier conviction—whether personal or situational—would be mitigated. Ultimately, it becomes a question of "persons who care."

However, it is precisely in this area of models of criminality and corrections that there is the greatest conflict within the facility. Actually the term *conflict* may not be the most appropriate term to use to describe the situation, since in comparison with the underlying violence and passive aggression of most institutions, Fort Worth can best be described as conflict-free. Nevertheless, it is in the diversity of backgrounds from which the present staff at Fort Worth is recruited which provides both the greatest tension and probably the most

300

potential for growth. Just as the multiple units at Fort Worth are a reversal of the usual classification approach of the Federal Bureau of Prisons, so are the mixtures of personnel—men and women, U.S. Public Health and U.S. Bureau of Prisons plus those recruited specifically for the Fort Worth program. While this leads to inevitable misunderstandings, staffing nightmares, and organizational structures that defy description as well as charting, the net result during at least the initial development of the institution, is a constant re-evaluation of both procedures and assumptions on the part of the administrative staff, unit heads, correctional staff and treatment personnel—as well as the residents themselves. As noted by one of the assistant wardens, procedures from other facilities are almost automatically transferred, for example, strip and search on admission, and then only later is there a sudden realization that they are no longer appropriate, given the approach of the institution and the open visiting and work release programs.

The previous use of the facility as a public health hospital provided a line staff with a mixture of models, both "sickness" and "security," and a certain warmth and concern that correctional officers transferred from high security prisons were not expected to include in their role-expectations. In turn, other higher level personnel from a public health background or from the treatment staff of other correctional institutions also have a tendency to bring a "sickness" model that in a more subtle way than the "caging" model, does not fit the emerging philosophy of key staff members. (With the diversity of backgrounds, however, it should be noted that the "sickness" model is also held by an unknown percentage of the inmate population, though usually in description of "other residents," not themselves.)

The greatest area of tension appears to be at the correctional officer-counselor level, where the conflict of expectation from the change from a public health facility to a prison, and from a "regular" prison to a co-correctional and "open" facility has not yet successfully been worked out. It appears that in many cases the residents and administrative staff have "their good thing going" while the lower echelon staff are the most threatened and least aware of the full implications of the change in correctional models. This clash of perspectives is perhaps symbolically exemplified in the control officer who kindly presides over the constant flow of family visitors and volunteers that enter and leave the facility while wearing a miniature pair of handcuffs as a tie clip.

As a result, policies from "the front" are not always carried out (not an unusual situation in any formal organization), or are carried out in such a way as to frustrate their intent. One indication of this, beyond resident discussion of the situation, was the frequent request by the inmates for an opportunity to see the Warden. This appears, however, not only to be the result of breakdowns in communication or the desire for a reversal of lower-level decisions, but also the recognition that the Warden is the key person in dealing with the Parole Board and with external Bureau of Prisons administrative decisions. Nevertheless, both residents and staff mentioned that residents both "cover for" and socialize officers transferred to new duties or newly arrived at the institution from other facilities since they are also aware of the difficulties involved in re-working earlier staff-resident relationships. In turn, new officers in many cases are aware that there are different expectations, and are eager to conform, but are not quite sure whether the residents are to be trusted, what responsibilities they have for security, and whether the role-reversal of "we're all in this together," is legitimate.

The key phenomenon which is occurring at Fort Worth is the breakdown of expected role behavior on the part of both staff and residents—one is not expected to act like a con or a correctional officer, or as treatment or research personnel—and the result is both a sense of anxiety and a sense of freedom. In addition to, and crucial in the re-defining of the prison roles, is the extremely diverse combination of race, age, religion, regional and class backgrounds, as well as the well-publicized one of sex. None of these differences among both staff and residents have disappeared at Fort Worth (for example, the higher level staff are predominantly college-educated, white and male, while Chicano or even Spanish-speaking staff are far below their proportions among the residents), but there seems to be a remarkable muting of what in other institutions are the bases for sharp and sometimes violent cleavages. Sometimes the effect of these combinations is almost unnoticed, as in the presence of

women line officers as supervisory personnel. It is this area of changing role-definitions—or the rejection of "roles"—within the context of a multiplicity of backgrounds which makes systematic research critical.

It is within these much larger questions that the issue of co-corrections must be considered. It is only one of the many factors which make Fort Worth an extremely crucial institution in which many significant changes are occurring and in which the interaction of traditional correctional practices and inmate systems are in the process of transformation. However, from the point of view of "outsiders" and the Federal Bureau of Prisons, it appears that co-corrections may be the area that "makes or breaks" the institution. As mentioned to the staff, while in most other institutions the key motivation for many of the operational practices is that "we can't have a riot!", at Fort Worth it appears it is, "we can't have a pregnancy." In actuality, given the high rate of aggression and violence quite directly related to homosexuality in single-sex institutions, it is in this area alone that Fort Worth can legitimately be described as a "college campus." The atmosphere is similar in the sense that while the sexual component is not missing, neither is it the focal point nor the determinant of either the critical relationships or of the milieu of the facility. In turn, while this would require some careful research, neither the level of the relationships nor the number of potential pregnancies appear to be any higher than those dealt with by the Dean of Students at any college recruiting predominantly middle-class students. However, given the realities of public opinion and the possible consequences for the other aspects of the Fort Worth program, it is valuable to examine more closely this area of interaction, if for no other purpose than to explore the effects of normative action in this area on other portions of the program.

SPECIFIC DEVELOPMENT OF NORMS IN THE AREA OF HETEROSEXUAL RELATIONS

There appears to be a conscious effort on the part of residents to develop structures which will prevent "blowing it" or "messing up" which would result either in transfer to another institution, or perhaps more critically, in administrative changes either at the local or Bureau level which would destroy "the good thing going at Fort Worth." In the selective interviews there was a high level of integrative concern and identification with the institution, and particularly with the objectives and presence of Warden Campbell.

The formation of informal inmate norms to control heterosexual relations appears to reflect both the background of the residents and the situational adjustments required in a co-correctional facility. The general norm is to expect each woman resident to "pair" with someone. This lessens the possibility of a competitive struggle among the men which, given the unequal sexual ratio, might be expected to emerge. (Although the ratio lessens with the number of older men in the population who might be expected to opt for a role of father or uncle.)

According to several descriptions of the process, a new woman "looks over the situation," while interested men give some indication of their attributes and availability. The woman is then expected to make a choice. When a woman does not, or begins to "play the field," there is some pressure from both the men and women for her to "settle down." Among the women there is a concern that the new woman may endanger existing "walk-partner" arrangements, while apparently the removal of a woman from availability reduces tension among the men.

These general structures governing the interaction of men and women residents appear to be accepted by persons from varying backgrounds, since the "walk-partner" relationship itself does not conflict with normative positions outside the prison environment. However, the nature and level of these heterosexual relationships do vary, and the expectations of the women appear to determine the form which they will take. On the basis of limited interviewing among the diverse backgrounds, three or four patterns seem to emerge.

For women from a "square" background with an intact marriage, the relationship appears to be one of a "friend" or "brother" nature, or, in some cases, the safe choice of an older man who may play the "uncle" role. There is an understanding that the relationship is for mutual support, counsel, and some economic exchange. For a woman who does not have marital ties, the pairing may be defined as either a limited relationship, to be terminated with release and return to family and friends outside, or potentially as a long term

relationship which may be more comfortably explored within the present restrictions. Here, of course, there is always the possibility that the relationship will move beyond that initially anticipated by the couple or accepted by the institution.

For women who have been "professional" criminals, either with a background in prostitution or other areas of the rackets, it appears that at least initially relationships of any nature are developed rather hesitantly. With the general expectation of the professional to do "good time" and get out, there is no particular pressure to "mess up" with the restrictions involving either contraband drugs or sex. Rather interestingly, this adaptive position may support the rather limited homosexual activity present at Fort Worth among both men and women. Evidently "cool" members who would hesitate to become involved in the highly charged and coercive relationships in single-sex institutions, may engage in an instrumental homosexual relationship at Fort Worth, to lessen the need to be more deeply involved in a heterosexual relationship which might endanger their parole or lead to transfer, or interfere with their future "occupational" plans. In addition, for women who have been involved in commercial prostitution, the opportunity to relate to men outside a commodity role appears potentially to provide for the development of new expectations and role relationships after release. However, the usual "distancing" which makes them the group least apt to be "problems" from a disciplinary standpoint, also makes them least open to the changes in role definitions and self-identification available at Fort Worth.

On the basis of several interviews with men and women who had been actively engaged in the "hustle" and homosexual life of other institutions, two adaptive patterns appear to be emerging for "the life." Since the program at inmate community and the wider civic community, the very nature of the inmate "community" as a substitute or micro-society, and the prison as "home," is affected. With wider contacts with family and friends allowed (or the provision of substitute relationships through interested church and civic groups), and with the development of work and study release and furloughs outside and the presence inside of numbers of groups and volunteers who are not members of the parallel staff "life," much of the basis for the "life" is undermined.

For some former life members there is a deepening awareness that for the first time there is a "good thing going," and that they might be able to make it on the "outside" since they have been having some supportive experience of the outside "inside." Since they have been "through it all," the institution provides a setting which makes it possible to withdraw from "the life" through the opportunity for contact with "squares" who will accept you "as you are." The institution provides a supportive structure—potentially both affective and economic—for withdrawal from the prison cycle. However, the comment that there are "a lot of lonely people here—a lot of lonely people," would indicate that these contacts do not provide a full supportive system. Only systematic interviewing and the use of a questionnaire would provide some evidence of the level of resident relationships—either with the group, with staff, or with families and other non-institutional persons.

In any case, for those life members who see the institution as their first opportunity to escape the life, nothing that they can control is going to jeopardize that opportunity. These residents, who have had the experience of a very different environment in other Federal or State prisons, provide the core of residents who most clearly transmit the word not to do anything that might "blow it." Their gravest concern is that younger or inexperienced prisoners who might be expected to join "the life" in other institutions, will actively engage in either contraband or sexual activities. This would not only result in their transfer (which some old timers probably might not entirely oppose), but also in the imposition of restrictions which would result in Fort Worth becoming just another prison, with the consequence that the whole "life" cycle would reemerge. One of the men put it very directly:

"One night I was thinking of what I'd do if I were Warden. I decided that I'd put everyone who comes in here straight from the courts on a bus and run them up to Leavenworth for 30 days. Not long enough to have anything happen to them, but just long enough for them to realize what we've got going here."

For other "life" members, "time at Fort Worth is no different from time in

other prisons," and they perceive staff-inmate relationships and regulations accordingly. For those who have retained the perspective of the "life" from other institutions, or other residents who have not had much prison experience but who would in other circumstances have been recruited into the "life," have developed a justifying norm for violating the regulations prohibiting sexual intercourse. "The rule that we can't 'touch' is just unnatural!" However, whether the regulations will indeed be violated appears to depend more on the socialization process by previous members of "the life," as well as the presence of staff, volunteers, and other residents with counter-norms than on the considered calculation of detection and possible sanctions, though these play an obvious role. There is no question that the exploitive "hustle" and sex life exist at Fort Worth, although heterosexual relations may replace the homosexual structures of the single-sex institution. However, the level of activities appears to be low, since there is considerably less "pay-off" in terms of its value for symbolic inmate "control," for "keeping busy," and for actual economic gain, since alternative resources are available and the proportion of residents interested or supportive of the "hustle" appear to be small.

Several residents commented on the fact that the relatively sudden increases in population and the increasing numbers of residents with no experience in other institutions have limited the ability of the "older" residents to keep people from "messing up" or effectively dissuading them from "doing easy time" without any real change in attitude or life style.

One area where the adaptive heterosexual norms are not clearcut is in regard to the resident married couples. Here there is a direct normative conflict between the institutional regulations (which have been developed with the legal and community moral standards in mind regarding both pre-marital and extra-marital relations) and the whole question of marital rights. This is a critical question which has not been resolved in single sex institutions either, and state legislatures vary in their willingness to allow visitation privileges and furloughs. Are marital rights forfeited with the commission of an offense? Can institutions for internal regulatory reasons have the right to restrict family contacts? There have not been any precise answers to these questions within either the State or Federal systems, and they pose an even greater problem at Fort Worth. The staff, the couples involved and the other residents are normatively ambivalent. Generally conjugal relations are seen as a violation of regulations—and therefore serious—but at the same time as not "wrong"—and therefore not subject to the same formal and informal sanctions which cover other violations. As a result an informal "double standard" seems to have evolved which does not appear to be destructive of the normative structures, but which will remain a point of tension until there is some resolution of this conflict of rights.

Another area which may not be perceived by either the staff or many of the residents as an adaptive problem involves the informal and formal role restrictions placed on the women residents. It appears that the women may be more heavily restricted in order to "control" the male residents both in the formal system and in the informal expectations that women "pair" with some man. There is a sense in which the women are being "used" for the purposes of providing an alternative to the existing prison structures for men. Given the fact that the major administrative structures of the Federal Bureau, as well as the prison populations, are heavily male, this might be expected. As noted to the staff, however, in order to provide alternative roles and programs for women residents as systematically as those available for the men, it would be valuable to recruit women for the staff who are experienced in consciousness-raising but also sensitive to the racial and class differences in this area, as well as consider alternate career ladders not only for women residents in outside occupations, but also in administrative decision-making positions for women within the Bureau.

While there is a diversity of background among the women comparable to the men, there has always been a limited classification program available for women either between or within institutions. This has presented some serious disadvantages, beyond the geographical separation from families, since no woman could escape the pressure for homosexual familying, the hustle, and the presence of various types of violence within women's institutions by being a "good" prisoner and obtaining transfer to an "honor" institution, although in some institutions an honor cottage might be available.

Yet, there have been some unexpected advantages. For example, because there were no alternatives to Alderson, the disciplinary transfer to Fort Worth of women from Alderson, rather than the selective classification originally intended, has had the effect of providing some evidence that it is not the highly "selective" population of Fort Worth that has had such an extraordinary effect on the prison milieu, but rather the philosophy of the institution, the programs, and other factors that only systematic research can reveal. However, one consequence of the unplanned transfer is that women are present in the institution with sentence lengths which restrict their full participation in the programs. It would seem advisable that the general Bureau regulations should be suspended for persons committed to the Fort Worth facility and that parole decisions be as flexible as possible.

A second advantage of the lack of classification among the women's institutions has been the presence of women of a variety of age-grading, background, offense history and sentence length within a single institution, a situation which is now occurring at Fort Worth among the men. While there would have to be considerably more research in this area, it would appear that the very interaction within these groups, while productive of some of the tensions mentioned above, also does prevent the formation of a single "inmate culture" and provides between age groups not just the possibility of the widely accepted notion of the "hardened criminal's school for crime," but also provides the youthful offender with contact with older persons who can more graphically than any treatment or security personnel point out the consequences of entering into either "the life" or a professional criminal career. The age and security classification policy of the Federal Bureau available for men has tended to counteract this possibility. Fort Worth has partially provided an alternative to the general classification policy of the Bureau through the variety of units housing differing ages and offense backgrounds, as well as providing flexibility by developing a policy of voluntary transfer from one unit to another. In turn, a diversity of "units" might well be provided for the women, to supply some of the advantages of "classification" within larger structures which provided a diversity both of programs and personnel.

This final consideration leads to the question of the research which is necessary to test some of the generalizations mentioned above, not only in the areas of co-corrections, but in the more fundamental questions of changing correctional models and alternative classification policies.

III. DEPARTMENT OF JUSTICE: LAW ENFORCEMENT ASSISTANCE ADMINISTRATION

A. Correspondence

[Item III.A.1]

SEPTEMBER 28, 1972.

MR. JERRIS LEONARD,
Administrator, LEAA, Washington, D.C.

DEAR MR. LEONARD: In furtherance of a study of prisoners' rights and after discussion with NIMH, I have come to understand that LEAA has funded, during the past year, a program to study violent behavior and a classification index. Would you please send information concerning this project as well as LEAA funding for work by Dr. William Sweet, at Boston City Hospital.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item III.A.2]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., October 27, 1972.

Hon SAM J. ERVIN, Jr.,
Chairman, Committee on the Judiciary, U.S. Senate, Washington, D.C.

DEAR CHAIRMAN ERVIN: This is in response to your recent letter regarding a study of the classification of violent behavior.

The project to which you refer, the Medical Epidemiology of Criminals, was funded under a grant to the Neuro Research Foundation of Boston, of which Dr. William Sweet is President. This grant was awarded through the National Institute of Law Enforcement and Criminal Justice, the research arm of the Law Enforcement Assistance Administration, in an effort to develop a testing procedure to determine the extent of neurological and biological dysfunction in a violent prison population. It was anticipated that the tests and surveys so developed would yield diagnostic and predictive methods for creating a medical classification of violent people. Such a classification model would provide a method of measuring the potential for violence in individuals within the criminal justice system, to the extent that violence might be due to medical or biological causes.

Due to administrative problems with the grant, it was terminated prior to completion. We do have a report of what had been accomplished prior to the date of termination, a copy of which is enclosed for your information.

Your interest in this matter and the programs of the Law Enforcement Assistance Administration is appreciated. Please let me know if we can be of further assistance.

Sincerely,

JERRIS LEONARD, *Administrator.*

[Item III.A.3]

MARCH 22, 1978.

MR. JERRIS LEONARD,
Administrator, LEAA, Washington, D.C.

DEAR MR. LEONARD: It has come to my attention that the California Council on Criminal Justice is planning to contribute funds to a project to be managed by the University of California which will investigate violent behavior. The project will involve the use and development of psychological techniques to identify and treat aggressive behavior. In relation to this project, I would appreciate a response to the following questions dealing with the Law Enforcement Assistance Administration's role:

(200)

306

1. To what degree does LEAA fund the California Council on Criminal Justice? Has LEAA specified the use of funds by CCCJ for a study of violent behavior research? May the funds given the Council be spent on projects not approved by or reported to LEAA? If so, may the Council legally spend the unspecified funds on violent behavior research?

2. Does LEAA have copies of the California Council's study proposal? Please send copies of this proposal. Has LEAA reviewed and approved this project? Will any of the work in the project be performed by Dr. William Sweet, Dr. Vernon Mark, or Dr. Frank Ervin?

3. Does the LEAA fund other projects which involve violent behavior research such as the California project or the \$100,000 study which was conducted last year by Dr. Frank Ervin and others in several prisons to identify a classification system for violent offenders? Please send copies of any projects involving violent behavior research being funded by LEAA. If LEAA is funding projects for violent behavior research, please send copies of procedures concerning conduct and reporting by those projects.

4. Does the LEAA have guidelines for projects it funds employing human subjects? Please send copies of any such guidelines.

Thank you for your cooperation.

With kindest wishes,

Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item III.A.4]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., May 10, 1973.

Hon SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in further response to your letter concerning Law Enforcement Assistance Administration funding of programs for the investigation of violent behavior. The following paragraphs refer to the corresponding numbered paragraphs of your letter:

Paragraph 1.

a. *To what degree does LEAA fund the California Council on Criminal Justice?* LEAA annually awards block grants to the individual states for the improvement of their criminal justice systems. The CCCJ is the criminal justice planning agency for the State of California and has received approximately \$56 million in planning and action block grants for fiscal year 1973.

b. *Has LEAA specified the use of funds by CCCJ for a study of violent behavior research?* No such use of funds by CCCJ was specified.

c. *May the funds given the Council be spent on projects not approved by or reported to LEAA?* The award of block grant action funds is contingent upon the review and approval by LEAA of a state's annual comprehensive criminal justice plan, and these plans include all major programs and the projects of which they consist. Any project not included in an approved plan is subject to LEAA review and, as a matter of practice, is normally the subject of coordination between LEAA and the respective state planning agency during its formulative stage.

d. *If so, may the Council legally spend the unspecified funds on violent behavior projects?* Special measures have been taken to assure that medical research projects, including violent behavior research, will receive individual and prior approval by LEAA. The requirement for such approval is set forth in paragraph 26 of the LEAA Guideline Manual for Planning and Action Grants, the pertinent page of which is attached. (Attachment A). More specific and restrictive guidelines concerning the use of LEAA funds for such projects are under consideration.

Paragraph 2.

a. *Does LEAA have copies of the California Council's study proposal?* An application for block grant funds in the amount of \$750,000 for a project entitled Center for the Study and Reduction of Violence has been submitted to the CCCJ by the California State Health and Welfare Agency and a copy was received by LEAA's Regional Office in San Francisco on April 25, 1973.

02-7

b. Please send copies of this proposal. Copies of the proposal are attached. (Attachment B).

c. Has LEAA reviewed and approved this project? The proposal has not yet been reviewed by LEAA. At the April 27th meeting of the CCCJ, the California State Attorney General recommended that the Council appoint an advisory committee to hold public hearings on this proposal and that LEAA be represented on that committee.

Paragraph 3.

a. Does LEAA fund other projects which involve violent behavior research such as the California project or the \$100,000 study which was conducted last year by Dr. Frank Ervin and others in several prisons to identify a classification system for violent offenders? No projects similar to the California proposal or to that conducted by Dr. Ervin are being funded by LEAA.

b. Please send copies of any projects involving violent behavior research being funded by LEAA. LEAA's regional offices and the state planning agencies of each of the states are being queried concerning such projects. You will be furnished this information as soon as it is available.

c. If LEAA is funding projects for violent behavior research, please send copies of procedures concerning conduct and reporting by those projects. Reporting procedures for violent behavior research projects being funded by LEAA grants would be similar to reporting procedures for other LEAA funded projects. In the case of projects supported by discretionary funds, grantees are required to submit quarterly narrative and financial reports to LEAA. Copies of the Discretionary Grant Progress Report Form and the reporting instructions are attached. (Attachment C). Reporting procedures for projects supported by subgrants from block grant funds are prescribed by the state and normally consist of semi-annual narrative and financial reports. In addition, LEAA requires the states to include in their annual plan progress reports of those projects funded during the prior year.

Paragraph 4.

a. Does LEAA have guidelines for projects it funds employing human subjects? Yes, such guidelines are included in the LEAA Guideline Manual cited in answer to 1.d. above.

b. Please send copies of any such guidelines. A copy of the pertinent page from such guidelines is attached. (Attachment A).

Your interest in this matter and the programs of the Law Enforcement Assistance Administration is greatly appreciated. You will hear from me again just as soon as the additional material mentioned in paragraph 3.b. is available.

Sincerely,

DONALD E. SANTARELLI, Administrator.

[Item III.A.5]

U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., June 14, 1973.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights, U.S. Senate, Washington,
D.C.

DEAR MR. CHAIRMAN: This is in further response to your letter concerning Law Enforcement Assistance Administration funding of programs for the investigation of violent behavior.

Our regional offices, and through them each of the state planning agencies, have been queried regarding violent behavior research projects. The seven projects which have been identified as falling within this category are listed on the attached page and additional information on each project is enclosed. Four of the projects are supported by LEAA discretionary grants and three are supported by subgrants from state planning agencies using LEAA block grant funds.

None of the seven projects involve any type of psychosurgery or the use of experimental drugs. Two of the projects reflect some degree of clinical treatment methodology.

The project entitled Research—Penal Population, Grant Number

70-A-152-24, a neurological research grant to the University of Puerto Rico by the Puerto Rico Crime Commission, utilizes two types of drugs both of which are approved and authorized by the Puerto Rico Department of Health. There is no surgery involved and a special condition to the grant requires emphasis on the recognition of the individual human rights of the participants.

The project entitled Planning for the Treatment of the Repetitive Violent Offender, Grant Number 73ED-05-0005, supported by a discretionary grant to the Illinois Department of Corrections, also contains a clinical treatment component, although the project is still acquiring data for analysis. Dr. Frank Ervin, mentioned in your letter, is participating in the research but only as a consultant and only for ten days.

Please let me know if you wish us to furnish additional information.

Sincerely,

DONALD E. SANTARELLI, *Administrator.*

VIOLENT BEHAVIOR RESEARCH PROJECTS SUPPORTED BY LEAA FUNDS

A. DISCRETIONARY GRANT PROJECTS :

1. Planning for the Treatment of the Repetitive Violent Offender. Grant Number 73ED-05-0005 (a copy of the grant application is enclosed).
2. Multi-state Treatment of Special Offenders. Grant Number 72Ed-01-0010 (a copy of the grant application is enclosed).
3. Assault on Police. Grant Numbers 72-DF-06-0053 and 73-TA-06-0004 (a copy of the grant application is enclosed).
4. Reducing the Incidence of Violence. Grant Number 73ED-05-0009 (a copy of the grant application is enclosed).

B. BLOCK GRANT PROJECTS :

1. Research—Penal Population. Grant Number 70-A-152-24 (a copy of the progress report is enclosed).
2. Early Prevention of Individual Violence. Grant Numbers 1-J1-460 and 2-J1-993 (copies of four progress reports are enclosed).
3. The Prediction of Violence. Grant Number DS-306-72A (a summary of the project is enclosed).

[Item III.A.6]

APRIL 17, 1973.

Mr. DEAN POHLENZ,
*Assistant Administrator, Law Enforcement Assistance Administration, Wash-
ington, D.C.*

DEAR MR. POHLENZ: While awaiting a reply on my previous correspondence dealing with funding for the California Council on Criminal Justice, it has come to my attention that the Law Enforcement Assistance Administration, in conjunction with the Colorado Department of Institutions, is supporting a behavior modification unit at the Mount View Girls School known as the Closed Adolescent Treatment Center (CATC). I would appreciate a response to the following questions concerning this project, located near Golding, Colorado, involving violent behavior treatment.

1. The program is aimed at children or adolescents. Please send a copy of the program proposal. What are the LEAA review procedures employed in proposals for treatment programs? Please send a copy of LEAA guidelines in this area. Does LEAA consider this project an experiment? If so, please send LEAA guidelines for screening of proposals for experimental projects involving human subjects. Does LEAA maintain a review of this project and monitor its activities? Please send a copy of LEAA guidelines for project reporting and review.

2. It is not known how children are secured for the CATC. Please send copies of the selection, screening and referral methods employed in securing children. Whose consent is required prior to a child's admission to the center? What is the maximum age of the children in the project? Does EAA fund other programs which involve children in closed environments?

3. It is not known how long a child must remain in the project. What is the term of treatment? Are children placed in CATC for an indeterminate period of time, such as until treatment is reported as successful? What inspection procedures exist of the closed facility?

3 : 9

4. What records are kept in the project concerning a child? To whom are these records available? May records be challenged at a later time?

5. What therapies are approved for use in the project—psychiatric, drug, group or shock? Does a psychiatrist of psychologist approve all administrations of drugs or treatments to children? Will outside research be done in the project? Who reviews research proposals and maintains continuing review?

In addition to these questions concerning the CATC and in relation to our inquiry on the California Council on Criminal Justice study of life threatening behavior, I would appreciate a review and summary of all LEAA funds employed in projects studying violent or aggressive behavior or in projects involving treatment such as the CATC. You have already provided information on the project last year dealing with biological factors of aggression in prisoners; if there were any other such projects during the past year or any current or proposed studies of this nature, I would appreciate copies of the studies.

Thank you for your cooperation in this matter.

With kindest wishes,

Sincerely yours,

(SAM J. ERVIN, Jr., *Chairman.*)

[Item III.A.7]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., April 30, 1973.

HON. SAM J. ERVIN, JR.,
*Chairman, Committee on the Judiciary, Subcommittee on Constitutional Rights,
U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your recent letter regarding the Colorado Department of Institutions.

As you know, the Law Enforcement Assistance Administration provides funds to state and local units of government through block grants.

The program you have inquired about is within the jurisdiction of the Colorado Division of Criminal Justice, the State agency responsible for administering LEAA funds in Colorado.

I have asked G. Nicholas Pijoan, Executive Director of the Division of Criminal Justice, to provide me with all pertinent information on this matter and I will report to you as soon as possible.

Your interest in the programs of the Law Enforcement Assistance Administration is appreciated.

Sincerely,

DONALD E. SANTARELLI, *Administrator.*

[Item III.A.8]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., June 13, 1973.

HON. SAM J. ERVIN, JR.,
*Chairman, Committee on the Judiciary, Subcommittee on Constitutional Rights,
U.S. Senate, Washington, D.C.*

DEAR SENATOR: This is in further response to your letter regarding the Colorado Department of Institutions' Closed Adolescent Treatment Center.

The Closed Adolescent Treatment Center (CATC) is being supported by the Colorado Division of Criminal Justice in conjunction with the Colorado Division of Youth Services of the Colorado Department of Institutions from Law Enforcement Assistance Administration block grant funds awarded Colorado on the basis of its approved fiscal year 1972 comprehensive plan. The program proposals were submitted by the proponent, the Division of Youth Services, to the Colorado Division of Criminal Justice. The proposals were reviewed by the staff and supervisory board of the Division of Criminal Justice. The proposals were approved and funds awarded for the program on March 1, 1972, and for the evaluation on October 27, 1972.

LEAA Handbook, HB 4000.1, Discretionary, Technical Assistance and 407 Grant Monitoring Procedures, are guidelines utilized by LEAA in conducting review and monitoring of block grant (sub-grantee) projects such as the CATC. A copy of the monitoring report and the questionnaire used in monitoring the CATC are enclosed.

A copy of the CATC Program Policy Manual is enclosed. Selection, screening and referral methods used are detailed on page 6 of the Manual.

We are informed by the Division of Youth Services that no voluntary transfers or commitments to the Center requiring consent are considered. Admission is by court commitment to the Department of Institutions with recommendation for the CATC. The maximum age is 18, the minimum is 12. The Colorado Division of Criminal Justice has no approved funding of other similar programs.

A commitment to the CATC may not exceed two years and under normal circumstances, will not be less than six months. The specific term of treatment, within minimum-maximum limits, are contingent upon the child's response to the treatment program and to the establishment of supportive community services. The average length of stay at the CATC is currently eight months. Release information is provided on pages 1 and 2 in the enclosed CATC Program Policy Manual.

(The CATC is subject to inspection by:

State Health Department, Department of Institutions, State Industrial Commission, State Safety Office, and Arapahoe County Fire and Health Department.

Complete commitment and treatment records are kept on each client. Records are limited to social agencies with the consent of parents. These records are considered privileged information with controlled access. It is not known whether records can be challenged at a later time. The record keeping system of the CATC is discussed on pages 8 and 9 of the enclosed Policy Manual.

Minimal prescribed medication is used. Individual and Group Therapy is used extensively. No shock treatment is utilized whatsoever. Behavior modification is used only in the Point and Level System to reward positive behavior. A psychiatrist or psychologist does approve administration of medication or treatment to children. Description of the treatment program is provided on pages 3 and 4 of the enclosed Policy Manual.

Outside research and evaluation will be done by a private research firm of psychologists and psychiatrists as described in the enclosed monitoring report.

Enclosed herewith are: 1. LEAA Handbook HB 4000.1, 2. Region VIII Monitoring Document, 3. CATC Project Monitoring Narrative Memorandum, 4. CATC Project Manual.

Your interest in this matter and the programs of the Law Enforcement Assistance Administration is appreciated. Please let me know if you wish us to furnish additional information.

Sincerely,

DONALD E. SANTARELLI, *Administrator.*

[Item III.A.9]

JANUARY 14, 1974.

Mr. DONALD E. SANTARELLI,
*Administrator, Law Enforcement Assistance Administration,
Washington, D.C.*

DEAR MR. SANTARELLI: On March 22 of last year I addressed an inquiry to your office concerning LEAA funding for violence studies and behavioral research. I was particularly interested in information pertaining to the Center for the Study and Reduction of Violence at UCLA. Your responses were most informative, and your cooperation is appreciated.

Since that time I have received additional information and have had an opportunity to digest the material you sent in response to my earlier inquiry. The use of human subjects in biomedical and behavioral research raises several fundamental constitutional and ethical questions, and I believe LEAA must develop guidelines adequate to protect fully the constitutional rights of the subjects of LEAA-funded research in these areas. Of particular concern is a lack of needed supervision of biomedical and behavioral research projects that receive funds directly from LEAA through the Block grant system.

Since last March a great deal of information pertaining to the UCLA Center has come to my attention. Much of this information indicates that programs are being contemplated for the Center that raise profound moral and constitutional questions, and it would be extremely desirable for LEAA to conduct a comprehensive review and evaluation of the projects under consideration. In light of my concern, I would appreciate your response to the following questions:

1. In your letter of May 10, you mentioned that "the award of block grant action funds is contingent upon the review and approval by LEAA of a state's annual comprehensive criminal justice plan, and these plans include all major program and the projects of which they consist. Any project not included in an approved plan is subject to review and, as a matter of practice, is normally the subject of coordination between LEAA and the respective state planning agency during its formulative state." Does LEAA have any guidelines pertaining to what is to be included in a state's comprehensive criminal justice plan? Specifically, what guidelines insure that descriptions of individual plans will be included and that these descriptions will be comprehensive? What measures are taken to insure that plans not included in a state's annual report will subsequently be reviewed by LEAA to provide that plans not subject to prior coordination with LEAA are sufficiently reviewed thereafter?

2. In your response you mention that "special measures have been taken to assure that medical research projects, including violent behavior research, will receive individual and prior approval by LEAA." Are there additional measures other than those specified by paragraph 26 of the LEAA Guideline Manual? If so, would you please describe these special measures in as much detail as possible. You also mentioned that "more specific and restrictive guidelines concerning the use of LEAA funds for such projects are under consideration." What progress has been made in the development of more restrictive and specific guidelines since last May? Please include copies of all drafts that may have been produced pertaining to these additional guidelines.

3. In paragraph 2 of my March 22 inquiry, I asked whether Dr. William Sweet, Dr. Vernon Mark or Dr. Frank Ervin will perform any of the work in the UCLA project. Though your response went into considerable detail, a specific reply to this question was omitted.

I understand that Drs. Sweet and Ervin are both now associated with the neuropsychiatric institutes of UCLA, and that their work with violence reduction is closely aligned with the types of projects to be conducted at the Center for the Study and Reduction of Violence. Their work in the past has raised some questions with regard to the constitutional rights of the subjects of their experiments. Though none of their names appear in the *curriculum vitae* section of the most recent grant request for the UCLA Center, I note that Dr. Ervin's name appears several times in the original version of the grant request. Will Drs. Ervin, Mark or Sweet be associated in any capacity with the Center for the Study and Reduction of Violence at UCLA? Are they associated in any capacity with any other LEAA-funded studies?

4. What action has been taken since May concerning LEAA funding for the California project? I understand that LEAA has submitted the California proposal to the Department of Health, Education and Welfare for its opinion as to the validity of the project. I also understand the committee to review the LEAA proposal is co-chaired by Drs. Frank Ochberg and Saleem Shah. Who are the other members of the committee? Will the decision of the committee be binding as far as LEAA is concerned? Will the decision be based on the applicability of the California proposal to HEW guidelines concerning research on human beings?

Dr. Ochberg was formerly director of the California regional office of NIMH. Was he associated in any way with the formulation of plans for, or the operation of, the Center for the Study and Reduction of Violence. Dr. Shah is presently the Director of the National Center for the Study of Crime and Delinquency, an agency in NIMH. Was he involved in any way, with the formulation of plans for the Center? Will the grant be reviewed by any persons who have not had prior close connection with research into violent behavior?

If the decision of the committee is not to be based on the applicability of the proposal to HEW guidelines concerning human experimentation, what criteria will be used to determine whether or not the proposal contains adequate guarantees of the protection of the rights of human subjects to be used in the experimentation conducted by the Center?

5. You mentioned in your response that a copy of the grant request for the UCLA project was received by your San Francisco office on April 25, 1973. My initial inquiry was dated March 22. Is there any correlation between the receipt of the block grant request by LEAA and my inquiry? Specifically, would the grant request for the UCLA Center normally have been received by LEAA in Washington and subject to its review? What mechanisms other than paragraph 26 of the LEAA guideline manual are provided to insure that medical research requests for funding derived from LEAA block grants receive prior individual review and approval? What guidelines are used in the determination of a project's validity? What guidelines does LEAA use pertaining to the proper derivation of true informed consent from subjects of LEAA-funded medical research projects? What is LEAA's policy toward psychosurgery and aversion therapy? Are anectine, prolixin, thorazine, cyproterone acetate, or any emetics ever used in connection with LEAA-funded medical research projects?

6. On page 20 of the copy of the grant request for the California Center you included in your response of May 10, there is reference to the use of various California facilities in the development of "treatment models designed to ameliorate or supplant the expression of violent behavior." Among the centers to be used are Atascadero State Hospital, Camarillo State Hospital, and the California Medical Facility at Vacaville. Please enclose a complete listing of all such facilities that will be used in the testing of programs developed at the Center for the Study and Reduction of Violence.

Exactly what types of programs are to be tested at these satellite institutions? For each institution, please describe in detail the programs to be conducted. Will psychosurgery or any experimental surgery of any type be conducted at these institutions? Will aversion therapy in any form be tested? Will such biological techniques as hormone therapy be tested? What degree of control does LEAA have over these satellite programs? To what specific reporting requirements are these peripheral programs subject? Is it possible that plans formulated at the Center for the Study and Reduction of Violence which are unacceptable to LEAA could actually be executed at other institutions under the supervision of individuals that originally developed the plans under LEAA grant? Are individuals that conduct experimentation under LEAA funding subject to any contract or binding promise with regard to maintaining high ethical standards in the conduct of their experimentation?

For each of the outside facilities to be used in the program, has specific official permission been granted by the respective heads of the institutions? Please supply copies of all correspondence pertaining to the derivation of that permission.

7. Your follow-up letter concerning LEAA-funded violence study projects other than that at UCLA was received by the subcommittee on June 14. In that letter you included copies of progress reports relating to the three block grant projects mentioned. According to paragraph 26 of the guideline manual, the block grant projects should have received individual prior approval from LEAA. Were specific grant requests for these sub-grant projects received by LEAA prior to the beginning of the experiments? What was the nature of LEAA's approval of these projects, i.e., was the approval tacit or expressed, and was the approval based on individual grant requests? If the approval was not based on individual grant requests, please explain the process that was used. If it was based on the original grant requests, please enclose copies of the formal requests.

8. Is Dr. Frank Ervin presently associated in any capacity with project no. 73-ED-05-0005, "Planning for the Treatment of the Repetitive Violent Offender," at the Illinois Department of Corrections? The grant request specifies that the "immediate result of this planning effort would be a precisely detailed document which would concern itself with (1) the selection process, (2) the treatment program, and (3) the evaluation procedures." Has a preliminary draft of this document been produced? If so, please include copies of all such drafts. In the letter received on May 10, you indicated that projects conducted under discretionary grants must submit quarterly narrative and financial reports to LEAA. Would you please include copies of these reports for this and the other three violence studies (project nos. 72-ED-01-0010, 72-DF-06-0004, and 73-MI-05-0000) conducted under discretionary grants that you mentioned in your letter.

9. In the June 14 letter you referred specifically to grant number 70-A-152-24, a neurological research grant to the University of Puerto Rico.

You mentioned that the project utilizes two drugs approved by the Puerto Rico Department of Health. What are the names of these drugs and exactly what are they used for? Are the two drugs approved by the Food and Drug Administration? Due to a clerical error, the progress reports that were originally submitted to us have been misplaced, and information concerning these drugs may have been included in those reports. Would you please send additional copies of the reports along with any reports received since June 14, and the grant requests mentioned in question 7. If specific information concerning the drugs is not included on the reports, please elaborate.

You also mentioned that "a special condition to the grant requires emphasis on the recognition of the individual human rights of the participants." What exactly is that special condition, and how is it enforced?

10. On page 5 of the original version of the grant request for the California Center dated September 1, 1972, it says that

"It is even possible to record bioelectrical changes in the brains of freely moving subjects, through the use of remote monitoring techniques. These methods now require elaborate preparation. They are not yet feasible for large-scale screening that might permit detection of violence-predisposing brain disorders prior to the occurrence of a violent episode. A major task of the Center should be to devise such a test, perhaps sharpened in its predictive powers by correlated measures of psychological test-results, biochemical changes in urine or blood, etc."

From the most recent version of the grant request, I quote page 19:

"Studies of abnormal electrical activities within the brain, involving various forms of brain diseases and brain lesions, will be carried out in the neurological and physiological laboratories to clarify their relationships to various types of violent behavior. The subjects of such studies will include hyperkinetic children and individuals who have committed aggressive or violent sex crimes."

And from a memorandum dated March 29, 1973, concerning plans for a program to be conducted at the Atascadero State Hospital under the auspices of the Center for the Study and Reduction of Violence:

"Within our electrophysiological laboratory we presently have the capability of (1) programming the presentation of a wide variety of audio-visual stimuli with concurrent recording of (2) heart rate, both directly and in beats per minute, (3) galvanic skin response, (4) changes in penis volume, (5) electro-myographic responses, and (6) alpha and beta brain waves. We are presently in the process of developing portable bio-feedback devices which can be used for self monitoring *in vivo*."

Are any studies presently being conducted under block or discretionary grants that are concerned in any capacity with telemetry and electrophysiology as they relate to the identification and control of certain types of behavior? Are Drs. Barton L. Ingraham or Gerald W. Smith conducting projects under LEAA grants?

Needless to say, research programs such as those described above raise important questions which must be resolved both by LEAA and Congress. There is a serious issue of whether the federal government should be in a position of financing programs posing such extraordinary challenges to human freedom and dignity at all. Certainly LEAA ought to conduct a most searching inquiry before committing its funds to such a project, whether by discretionary or block grant. If, after such inquiry, LEAA were to support such projects, it ought first to develop stringent and exacting requirements for the control and maintaining of these experiments.

As you are aware, HEW and the Congress are now subjecting the question of federal financing of human behavioral research to close scrutiny. A series of guidelines on the ethical and administrative standards have been developed both in legislation and in regulations. I believe that LEAA ought to consider a moratorium on the further use of its funds for these purposes until it develops guidelines at least as comprehensive as those now under consideration by Congress and HEW. These guidelines should provide for specific approval by a special committee on research and ethics within LEAA and the Administrator's Office of any project, whether funded by block or discretionary grant, in the field of human behavioral research. These projects also should be subject to close institutional control and review and to prior approval by local, ethical committees as well.

3.12

I know that you appreciate the extreme importance of the questions raised by these projects. While I am aware that the questions I have asked will require a substantial amount of work, I believe that the subject matter's importance well justifies the burden.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item III.A.10]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., March 4, 1974.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Committee on the Judiciary, Subcommittee on Constitutional Rights,
U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your letter concerning Law Enforcement Assistance Administration funding of programs for the investigation of violent behavior. The following paragraphs refer to the corresponding numbered paragraphs of your letter:

1. State comprehensive plans are prepared pursuant to Sections 301 and 303 of the Crime Control Act of 1973 and LEAA Guideline M4100.1B "State Planning Agency Grants". A copy is enclosed.

Any program started by the state but not included in the state comprehensive plan would be detected by LEAA through its continuous monitoring process. This monitoring is directed at the funding activities of the state planning agency.

2. LEAA announced on February 14, 1974, a policy banning the use of LEAA funds for psychosurgery, medical research, behavior modification and chemotherapy. Copies of the Guideline and my announcement are enclosed.

3. & 4. LEAA has not received the potential UCLA project for funding consideration. Therefore, I am not in a position to comment on the details of the proposal.

Only Dr. Frank Ervin is recorded as being associated with any other LEAA funded studies. This association is discussed in paragraph No. 8 below.

5. The receipt of the UCLA material by the LEAA San Francisco Regional Office was the result of our request so that we could furnish the material to the Subcommittee in response to your earlier letter. The UCLA proposal was not finalized by California authorities and therefore was never formally submitted to LEAA. In response to the remainder of the paragraph, please see the enclosed Guideline and statement of February 14, 1974.

6. See No. 2 above.

7. Each of the block sub-grant projects referred to predated the promulgation of paragraph 26 of the Guideline Manual and was not subject to specific prior approval.

8. Dr. Frank Ervin is one of nine consultants budgeted under Grant 73-ED-05-0005. He is entered for ten days of consultation, which is the minimum time entered for any of the consultants, with some others involved for up to three months. As of February 7, 1974, he had devoted one and one half days to the project. The draft and project reports you requested are enclosed.

9. The two drugs are Noludar and Nembutal Sodium. The drugs are utilized as follows: Nembutal Sodium is used with inmates with a history of drug addiction during the electroencephalogram (EEG) process. Its use is to induce sleep while the EEG is made. Noludar is used with the control group with the same purpose as described above. The New York Office of the Food and Drug Administration states that both drugs have been approved by FDA for a number of years.

Enclosed is a copy of the progress report for this project, submitted by the Puerto Rico Crime Commission on June 30, 1973. This updates the previously submitted report, also enclosed.

The special condition included in the Commonwealth's comprehensive plan states: "Within 60 days of grant award grantee shall provide the Administration with substantial evidence indicating that participation in the Neurological Research Project is entirely a voluntary matter and that all inmates are fully

advised and legally capable of reaching a decision to participate." As a result of the special condition, the Puerto Rico Crime Commission provided the following documents which are enclosed:

(a) Internal memorandum of August 17, 1973, of the Puerto Rico Crime Commission.

(b) Model of agreement to participate in the project.

(c) Translation of a description of the procedures followed. (A copy of the original documents, in Spanish, is also enclosed.)

(d) Copy of a statement by Dr. Luis F. Sanchez-Longo, project director.

10. Excluding the block grant program in Puerto Rico which involves electroencephalograms, our records show no present programs relating to telemetry or electrophysiology.

Your interest in this matter and the programs of the Law Enforcement Assistance Administration is appreciated.

Sincerely,

DONALD E. SANTARELLI, *Administrator.*

[Item III.A.11]

JANUARY 11, 1974.

Mr. GERALD M. CAPLAN,
*Director, National Institute of Law Enforcement and Criminal Justice, LEAA,
Washington, D.C.*

DEAR GERRY: For your information, if nothing more, I am enclosing a letter from the Subcommittee to Don about LEAA funding of behavior modification experiments. This is a problem which greatly concerns us, and which we'd like to see LEAA take a strong position on. I know of four projects using LEAA discretionary funds—one very controversial one in Puerto Rico.

Personally, I find this problem both very disturbing and morally complex. I'd like to stir your interest and see if there is some way we can work together on it.

Regards.

Sincerely,

LAWRENCE M. BASKIR,
Chief Counsel and Staff Director.

[Item III.A.12]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., January 24, 1974.

Mr. LAWRENCE M. BASKIR,
*Chief Counsel and Staff Director, U.S. Senate, Committee on the Judiciary,
Washington, D.C.*

DEAR LARRY: Thanks for your letter of January 11th, regarding behavior modification experiments. I am not sufficiently familiar with the area, and your letter provides an occasion for me to get involved more deeply in it. My instinct is that the government ought to proceed very cautiously, but probably not ban all efforts in the field; however, I do feel strongly that LEAA does not have special expertise in this area, should probably stay out of it altogether, and that the logical agency to carry the responsibility is NIH.

The ABA at its annual meeting in Honolulu is presenting a program on behavior modification, and I have taken the liberty of suggesting your name as one of the panelists.

I have also taken the liberty of forwarding your letter to Chuck Work, our new Deputy Administrator. He is somebody you would enjoy meeting and perhaps we can have lunch one day soon.

Thanks again for bringing the Senator's letter to my attention.

Cordially,

GERALD M. CAPLAN, *Director.*

[Item III.A.13]

APRIL 2, 1974.

Mr. DONALD E. SANTARELLI,
*Administrator, Law Enforcement Assistance Administration,
 Washington, D.C.*

DEAR MR. SANTARELLI: A February 15, 1974 article in the New York Times refers to a computer printout listing some 400 LEAA-funded projects that are in some way related to the study or control of behavior. Although I understand that some of the projects referred to in the printout may not be directly relevant to the Subcommittee's study of behavior modification, please supply us with a complete copy nevertheless.

I understand that LEAA is preparing a clarification of its February 14 press release that announced the curtailment of agency funds for behavior modification and human experimentation. If this is true, would you please explain the clarification. Further, what concrete steps have been taken since February 14 to insure that no LEAA funds can or will be used for behavior modification, psychosurgery, or medical research?

Thank you for your continued cooperation with the Subcommittee, and I look forward to your prompt reply.

With kindest wishes,
 Sincerely yours,

SAM J. ERVIN, Jr., Chairman.

[Item III.A.14]

U.S. DEPARTMENT OF JUSTICE,
 LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
 Washington, D.C., April 23, 1974.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
 U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your letter requesting a copy of a computer printout of Law Enforcement Assistance Administration projects in some way related to the study or control of behavior.

"Behavior modification" has become a catch-all term popularly encompassing far more than the use of psychosurgery, aversion therapy, chemotherapy and other experimental medical procedures. In one sense, perhaps over 50 percent of LEAA programs involve some aspect of what might be called "behavior modification," in that the aim is to "modify" antisocial behavior so that a particular individual can become a useful and productive member of society.

The printout you requested was first prepared for a newspaper investigating "behavior modification." Because of the lack of definition of the phrase, the first large computer printout contains much irrelevant information. Three smaller printouts were then extracted from the first, one entitled Medical Research Projects and the other two designated Information for Specific Grants. The printouts are enclosed. May I point out that these are not exact replicas of those distributed to the press due to the continued updating of the computer base and the time elapsed since the earlier printouts.

In reference to the LEAA press release of February 14 and the steps taken to prevent LEAA funds from being utilized for human medical experimentation, we issued at the same time a LEAA Guideline Manual banning the use of LEAA funds for psychosurgery, medical research, behavior modification and chemotherapy. To date the Guideline has served to prevent LEAA funds from being used for these purposes and no need for clarification has arisen.

Your interest in the programs of the Law Enforcement Assistance Administration is appreciated.

Sincerely,

DONALD E. SANTARELLI, *Administrator.*

[Item III.A.15]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
NATIONAL INSTITUTE OF LAW ENFORCEMENT AND CRIMINAL JUSTICE,
Washington, D.C. May 24, 1974.

Mr. JOSEPH KLUTTZ,
Senate Subcommittee on Constitutional Rights, Russell Senate Office Building,
Washington, D.C.

DEAR MR. KLUTTZ: In connection with our telephone conversation of this afternoon, I have enclosed a copy of LEAA Guideline G 6060.1, issued on February 14, 1974, dealing with the subject of Psychosurgery and Medical Research. As is apparent from paragraph 5 of the guideline, it was our intention to prohibit the use of LEAA funds for support of projects involving the use or research of experimental medical procedures, particularly projects "that involve any aspect of psychosurgery, behavior modification (e.g., aversion therapy), chemotherapy, except as part of routine clinical care, and physical therapy of mental disorders."

We are retrieving the grant application for the Virginia project we discussed on the phone, and I will forward it to you early next week.

Sincerely,

GEORGE M. ALPRIN,
Director, Office of Research Programs.

[Item III.A.16]

JUNE 3, 1974.

Mr. DONALD E. SANTARELLI,
Administrator, Law Enforcement Assistance Administration,
Washington, D.C.

DEAR MR. SANTARELLI: Thank you for your response to my letter of April 2 in which I requested a copy of a computer printout listing LEAA-funded projects that are in some way related to the study of human behavior.

By way of providing further information for the subcommittee's study of biomedical and behavioral research, would you please forward a list of all projects described in the printout whose funding has been canceled pursuant to the LEAA press release of February 14 and the resulting guideline. As you suggested in your response of April 23, much of the information contained in the printout is irrelevant to your present concern. There are, however, a number of other projects listed that would appear to raise important constitutional and ethical questions when conducted in the absence of thorough professional and technical evaluation. Because, as stated in the press release, LEAA lacks the skills necessary to conduct such evaluations, I am particularly interested in the steps that have been taken to review funding for those other projects.

Because of a limited time schedule, I would appreciate a response to this request by Monday, June 17. Thank you very much for your continued cooperation, and I look forward to your prompt reply.

Sincerely yours,

SAM J. ERVIN, JR., Chairman.

[Item III.A.17]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., June 25, 1974.

Hon. SAM J. ERVIN, JR.,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: This is in response to your recent correspondence requesting a list of projects whose funding has been cancelled pursuant to the February 14, 1974, Law Enforcement Assistance Administration Guideline on Use of Funds for Psychosurgery and Medical Research.

As you will recall, the Guideline set forth LEAA policy not to fund grant applications involving the use or research of experimental medical procedures

on human subjects for the purposes of modification and alteration of criminal and other anti-social behavior. Under the terms of the Guideline, all such proposals will be carefully screened and funding denied where appropriate. Any questionable proposals will be referred to the Department of Health, Education and Welfare for review.

While the Guideline did not speak directly to the problem of ongoing projects, LEAA Regional Offices were directed to survey the various states as to projects affected by the Guideline and to take appropriate actions to end their support. Of the 55 jurisdictions responding, only eight indicated projects possibly covered by the ban (Arizona, California, Massachusetts, New Jersey, Ohio, Pennsylvania, Virginia, and Puerto Rico). Some of these had been terminated prior to the Guideline's promulgation, and decisions were made not to renew other projects.

Presently, only the status of two projects in Arizona remain in question: The Arizona State Justice Planning Agency, representatives of the State Supreme Court and the Superior Court of Pima County presently are reviewing two grants to the Superior Court of Pima County to determine whether they are admissible under the Guideline. The grants are \$10,675 for the Court Clinic Medical Fund and \$68,000 for the Pima County Court Clinic.

Your interest in this matter and the programs of the Law Enforcement Assistance Administration is appreciated.

Sincerely,

DONALD E. SANTARELLI, *Administrator.*

[Item III.A.18]

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
Washington, D.C., July 15, 1974.

HON. SAM ERVIN,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: We have reviewed the material contained in our files concerning the promulgation on February 14, 1974, of Law Enforcement Assistance Administration Guideline No. G6060.1, prohibiting the use of LEAA funds for projects involving psychosurgery or medical research, and have determined that it is appropriate that we supplement our June 25, 1974 communication to you on this subject.

While the LEAA review process has resulted in the findings indicated in the June 25 letter, we are supplementing that process with a further review of LEAA-funded projects, particularly those administered by the states under the block grant program.

You will recall that we previously submitted a print-out of approximately 400 projects which, given the limitations of the computerized information program in use at that time, were identified as being in some way related to medical research or behavior modification. Our supplemental review will include each of those 400 projects to assure that none are in violation of the letter or spirit of the Guideline. We expect this review to be completed on August 15, 1974, and will be pleased to provide you with the results of the review as soon as possible.

Your interest in the programs of the Law Enforcement Assistance Administration is appreciated.

Sincerely,

CHARLES R. WORK,
Deputy Administrator for Administration.

U.S. DEPARTMENT OF JUSTICE,
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION,
NATIONAL INSTITUTE OF LAW ENFORCEMENT AND CRIMINAL JUSTICE,
Washington, D.C., August 29, 1974.

[Item III.A.10]

Mr. LAWRENCE BASKIR,
Chief Counsel, Staff Director, Subcommittee on Constitutional Rights, Committee on the Judiciary, U.S. Senate, Washington, D.C.

DEAR MR. BASKIR: This letter supplements Mr. Work's July 15, 1974 communication to Senator Ervin, in which he indicated that a further review would be undertaken of LEAA-supported projects appearing on a previously forwarded computer print-out, in order to insure that none of those projects was in violation of the provisions of LEAA Guideline No. G 6060.1A. Following that letter, we instructed each of our ten regional offices by teletype to review on an individual basis all projects appearing on the print-out which had been awarded in their areas and which had not terminated naturally prior to the date of the guideline (February 14, 1974). We also instituted a review of those projects appearing on the print-out which had been funded at the central office level. The review has now been completed, and its findings are summarized below. In addition, the actual replies received from each of our regional offices are enclosed for your information; additional information with respect to any particular project can be obtained on an individual basis.

We are also enclosing a chart which fully indicates the statistical findings of the review. In brief, however, the results may be summarized as follows: the print-out contains 537 projects, of which 496 were funded through state planning agencies of the several states and 41 by the agency's central office. At least 390 of the total had finally terminated before the guideline was issued in February of this year. Of the remaining 147, 110 involve no medical procedures whatever; 35 either involve medical procedures which have been determined to be "routine clinical care" or fall within an excepted category under the guideline—methadone maintenance programs, for example.

Of the two that remain, we have determined that one of these projects does not violate the guideline, and have requested additional information as to the remaining project, No. 73DF560027, which is an award to the State of Wyoming for construction of a 62-unit psychiatric facility for the treatment of those adjudged to be criminally insane. From the descriptions of procedures which may eventually be employed in that facility, there is a possibility that some of those procedures may violate the guideline. Thus, we have requested further information as to that particular project, although it is to be noted that the facility is presently being constructed and is not yet operational.

Subject to the question raised about the Wyoming project, our review of the 537 projects appearing on the print-out has satisfied us that none of those projects which were active after February 14, 1974 (some of which, by the way, have terminated naturally since that date) incorporate procedures which violate LEAA Guideline No. G 6060.1A.

If we may be of further assistance, please do not hesitate to advise.

Sincerely,

GEOFFREY M. ALPRIN,
Director, Office of Research Programs.

Enclosures: 1. Chart, 2. Individual regional responses.

B. Related Materials

[Item III.B.1]

EXCERPTS FROM THE FINAL REPORT OF A STUDY OF "THE MEDICAL EPIDEMIOLOGY OF CRIMINALS"—NEURO-RESEARCH FOUNDATION, BOSTON, MASS.

LEAA GRANT NO. NI-72-023-G (SUCCESSOR TO NI-71-151-G) "FORENSIC EPIDEMIOLOGY"

Senior Investigators: Frank Ervin, M.D. and Lawrence Razavi, M.D.

Terminal report

This report covers work done to establish a Unit for screening prison inmates with medical disorders. It describes the production of a prototype screening system of psychiatric, psychological, genetic, neurophysiological and general medical tests for physical disorders related to habitually aggressive and violent behavioural illnesses in prison inmates. In the initial phase the plan has been to concentrate on those physical or constitutional measures which 1. have sound empirical bases; 2. appear to have an *a priori* relationship to behavioural illness; 3. offer a chance for improving mental illness by proper medical care as far as possible without the intrusion of irreversible custodial or medical procedures; 4. are within the capacity of normally equipped penitentiary clinics with regard to the actual application of tests and collection of data: processing of materials and analysis are referred to a central laboratory.

The work has been done in three phases:

1. Incremental clinical application of tests singly and in combination to self-referred psychiatric patients attending a hospital clinic with a complaint of repetitive and impulsive violence.

2. Parallel validation of the tests at the epidemiological level on populations of normal, criminal and mentally ill (institutionalized) subjects.

3. Technical (laboratory and data processing) development aimed at integration of methods and data (up to now handled in isolation) into a general data base.

The report divides into: A. A prototype manual which contains:

I. A list of tests, their description and purpose; methods of use (collection and recording of raw data).

II. Systems for coding and analysis of the data.

B. Technical addenda on the results of validation of the tests, and computer programs used for data processing. Examples of typical outputs are included as illustrative material.

The purpose of including details is to give concrete examples of time-consuming and essential, but too often disregarded, groundwork necessary for a multi-phase screening system. It cannot be emphasized too strongly that careful and cautious preliminary design and trial of such a complex system is absolutely necessary before it is used in general application for the collection of reliable and interpretable information on important socio-medical problems.

C. Publications: these contain in a discursive form the theoretical bases for this research and the practical results which may be obtained by its application to suitable penitentiary populations.

The problems encountered in this work have been:

1. Time consumption for

1.1 The development of unambiguous questionnaires

1.2 Development of generalizable computer programs together with specific modifications in software tailored to each source of data, and their aggregation into an overall inventory.

1.3 Design of logistics for combinations of tests, costing and practical integration in non-hospital premises.

2. Interpretation of the nature of this work and its objectives to outside "interests," particularly to those showing concern for neurosurgical treatment of behavioural disorders. While the screening tests aim at detection of a variety of disorders—epileptiform, endocrine and genetic—whose management is unrelated to surgery, it has been hard to escape the concern that they may lead to a diagnosis implying neurosurgical therapy, especially when they

include tests of brain function and, particularly, the electroencephalograph. Much of this is caused by press misinterpretation of reports but it may be combatted successfully, as has been done in local penitentiaries, by considerate, careful and full explanation of the nature of the work to inmates undergoing the medical examination. So far cooperation by inmates, even the habitually antagonistic type, has been good. It may be simplest to establish the Screen as part of the routine examination performed on admission to prison. (This has the added epidemiological advantage that it allows measures of incidence to be made.)

3. Acquiring and guaranteeing full-time skilled and senior personnel to work in a multi-disciplinary team over the period of time required for the social and scientific results of the work to bear fruit. It is important to note that this research is being conducted on a chronic disease and the essential requirement is for sufficient observations to be made over a period of time. The problem is analogous to the longitudinal study of factors entering into the etiology of heart disease: for such studies, a well-established population must be pursued by a properly integrated team of workers if worthwhile results are to be obtained which have bearing on prevention and therapy: the alternative approach is to select particularly high yield aspects of the problem and use the results obtained from successful conclusion of such studies to extend understanding of the overall implications of the work in the minds of the public and correctional agencies. This approach was, in fact, the one used in the disparate genetic, psychiatric and endocrine studies which were adopted as pilot projects for the current program, and there is no doubt that the results they produced defined the existence of specific medical problems hitherto undetected in prison inmates. The implication of these studies for rehabilitation, however, awaits the application of some combination of the individual tests, by units experienced in the laboratory and field reports of the work.

PROTOTYPE MANUAL

A prototype manual of tests available for use in the program is described in the following sections. This manual has developed in the course of studies using psychiatric, psychological, genetic and neurophysiological tests on cases with aggressive emotional illness in prisons or attending hospital psychiatric services. This collation contains a system of tests currently applicable in our work at, for instance, Bridgewater State Treatment Center for Dangerous Sexual Offenders: it will be modified according to the particular needs of future special prison populations.

The design objectives of the tests aim to satisfy one or more of these requirements:

1. Simplicity and low cost.
2. Proven value.
3. Immediate applicability.
4. Within the capacity of groups who have had experience in the design and management of prison studies.

Most of the tests are modifications of similar procedures used in the clinical diagnosis of behavioural disorder due to organic disease.

The need for modification of tests derives from:

1. The logistical problems incurred in the application to population surveys of a combination of tests formally used in individual clinical work. For example, blood samples are drawn both for chromosomal analysis and hormone assays: the former requires less than 10 ml., the latter up to 40. Both tests require at least one portion of unclotted blood, while the chromosome test in addition requires serum from 5 ml. of clotted blood, and the hormone assay requires that the sample be kept close to freezing temperature. In a survey that combines these techniques, 50 ml. of blood may be drawn all at once, but aliquots must be immediately transferred to separate containers which hold appropriate amounts of blood, clotted or unclotted, at normal or cold temperatures respectively.

Similar problems attend the adaptation of EEG tests which usually require tracings made during sleep: this may be difficult to achieve in the field, and may have to be replaced by a multi-lead analysis requiring computer assistance; also the application of a large series of psychometric questionnaires, which must be interspersed among other tests to avoid delay in the latter; and to allow respite between the questionnaires which themselves can lead to emotional variance if applied in unremitting sequence.

The logistical design and management of such combinations of tests and their application in the field requires time and trial.

2. The requirement that standardization be achieved to reduce replication error and hence to allow evaluation of all cases in a similar fashion without systematic error.

The need for a recording system depends on:

1. The ability of several centers' data to be processed centrally,
2. The collection, processing and recording of data to be done by semi-skilled technicians.

The need for computer programs based upon:

1. The problems of handling rapidly the analysis and cross-correlation of data taken in bulk from large numbers of individuals as opposed to a few or several items measured in one individual. The distinction here is in the measurement of population trends of several items, not all of which may be present in every individual contained in that population; as opposed to the integration of whatever measures, few or many, are available from a given individual in a clinical situation.

2. The problems of minimizing error due to fatigue or replication failure in human data processing as opposed to machine handling.

3. The protection of privacy of data obtained from patients a legal hazard.

The Manual is divided into two parts: Part I contains information on: (a) The nature and purpose of the tests in use; (b) Methods of collection and recording of test data.

Part II is composed of technical addenda on: (a) Validation results from application of the tests to sample populations inside penitentiaries and outside, (b) Computer programs for statistical processing.

The first part, therefore, is concerned with the collection and recording of materials and data, the second with their processing and analysis. It seems probable that the two functions can be separated in time and place; that is, tests can be applied and immediate results recorded at any prison(s), and the data then transmitted elsewhere for central processing.

Examples are given, in the first part, of completed forms and, in the second, of test data analyzed from such forms. Maximum use of computer processing is required for quantifiable data (Dermatoglyphic Analysis, CYBER Medical Examination) and least for qualitative data for which relatively few indices are obtained (Standardized Psychiatric Report, Affective Psychometric Tests). An overall list of tests is given in Table I.

A.1. Nature and purpose of tests (Tests are listed in Table I).

The tests are as follows:

TABLE I.—TABULAR OUTLINE OF SCREENING TESTS

Test title	Purpose: Measure of	Method, requirements	Time
1. Initial contact assessment.	Identity and complaint documentation.	Preliminary interview.....	10 min.
2. Standardized psychiatric interview.	Social-psychiatric. Background and current mental status (quantified clinical evaluation).	1. Self-answered questionnaires... 2. Summary abstract of above... 3. Informed psychiatrist's opinion of above.	Collection 30 min. Processing 1 hr.
3. Affective psychometric analysis.	Emotional status related to aggression.	1. Self-answered questionnaires... 2. Score computed from above... 3. Comparison with normative data.	Collection 40 min. Processing 1 hr.
4. Dermatoglyphic analysis...	Fingerprint character (related to chromosomal constitution).	Print.....	Collection 30 min., processing 2 hr.
5. Cytogenetic analysis.....	Chromosomal constitution.....	Blood sample.....	Collection 30 min., processing 3 d.
6. Electroencephalographic analysis.	Neurophysiological function....	Scalp electrodes.....	Collection 2 hr., processing 1 1/2 hr.
7. CYBER Lab.....	General medical condition.....	Automated module.....	Collection 45 min., processing 3 d.

1.1 Before any tests are performed the subject is informed of the nature of the procedures to be undergone: these are detailed in entry forms and the Flow Sheet and Flow Chart (Section 2.1) which are also used by the Unit to check the progress of the subject through the Screen. A preliminary demographic and medical questionnaire is filled out, documenting the patient's identity and complaint.

1.2 *Standardized Psychiatric Interview and Report* (see Section 2.2 for form).

This provides a measure of the subject's psychiatric history and present condition. It is based upon *standardized* interview and questionnaire procedures which are designed to provide the same approach to all subjects. This reduces bias and permits real comparisons to be made with qualitative data, otherwise hard to quantify.

In this report items extracted from The Clinic Contact Form, The Interview Form and The Personal Background Form are inserted in the appropriate blanks in the matrix to yield the final "report to physicians."

An evaluation of mental status is provided by the Psychiatric Evaluation Form (PEF). Each area of the PEF has been amplified by affect and/or behaviour descriptors. In completing the PEF, the interviewer uses the PEF form to indicate severity of, for example, suicide tendencies, and the descriptive manual to detail symptomatology.

The physician's report is therefore based on objective data gathered in a standardized fashion. The only areas written in an unspecified fashion are the chief complaint and present history of the patient, the diagnostic impression, disposition and recommended treatment.

The report is divided into two parts: the *Psychiatric and Social History*, and the *Current Mental Status*.

1.2.1 (The *test questionnaires* for Part 1 are described as follows (see section 2.2.1 for forms) :

PRELIMINARY CLINIC CONTACT QUESTIONNAIRE

This questionnaire is to be filled out by the clinic at the time of initial contact. It is designed to provide identification data useful for administrative purposes and some basic medical data as well.

PERSONAL BACKGROUND QUESTIONNAIRE

This questionnaire consists of 50 questions which have been precoded in terms of a number of alternative answers available to the patient. The questions concern the medical and family history of the patients. They deal with such content areas as: history of psychiatric illness, early signs of violence, family and personal evidence of physical illnesses that have genetic loadings, patterns of driving behaviour, criminal behaviour, social difficulties, and behaviour and symptoms associated with menstruation.

INTERVIEW QUESTIONNAIRE

The interview was developed to obtain information from the patients through the use of a structured interview. Some of the items are precoded and others are open-ended and they require a moderately skilled interviewer (a social worker, a psychologist or a psychiatrist). The content areas covered in the interview include: early childhood experiences, descriptions of parental behaviour, frequency of occurrence of family problems regarding school difficulties, violence within the family, marital problems, etc. At the end of the interview, the patient will be evaluated for the presence or absence of specific psychiatric symptoms. Evaluation will be based upon the Spitzer "Psychiatric Evaluation Form" (P.E.F.) This form covers such areas as social isolation, inappropriate affect, speech disorganization, grandiosity, agitation, etc.

A report is then made of the subject's Psychiatric and Social History which is abstracted from the three previous forms according to instructions followed by secretarial assistants (see Section 2.2)

1.2.2 Part 2 makes use of a *Psychiatric Evaluation Questionnaire* (see Section 2.2.2 for form) which documents current psychiatric systems elicited during interview and clinical observation of the subject by a trained observer.

1.3 *Affective Psychometric Analysis* (see Section 2.3 for forms).

These tests measure emotional status related to aggression, and use standardized questionnaires answered directly by the subject. No interview is necessary and this avoids mixed interpretation of emotionally variable responses. The elimination of the interviewer also reduces senior manpower requirements. The tests can be read by a skilled technician and scores made according to a simple formula. Since there are several questionnaires, some of which cross-check on each other, they are interspersed among the other

procedures: this allows time for the subject to come to equilibrium at each stage of the process of measuring emotions.

F-A-V Questionnaire.—This questionnaire consists of 22 questions concerning feelings and acts of violence. The respondent is asked to indicate whether each description is true for him using a three-point scale: never true, sometimes true, or often true. An overall score is obtained which reflects an individual's tendency to act violently.

F-A-S Questionnaire.—This questionnaire consists of 20 questions concerning sexual feelings and sexual behaviors. The respondent is asked to indicate whether each description is true for him using a three-point scale: never true, sometimes true, or often true. An overall score is obtained which reflects an individual's tendency to express his (her) sexual drive in overt forms.

Problem check list.—The problem check list is a modified version of the Mooney Check List, with an orientation towards more overt psychiatric problems, rather than toward the everyday problems of college students for which the test was originally designed. The test has a series of brief descriptions of problems which people sometimes have, for example, being overweight, being unable to hold onto a job, feeling afraid to speak up, confusion in religious beliefs, losing one's temper too easily, feeling rejected by one's family or embarrassment about sex. The items are actually grouped into a few major content areas: physical symptoms and problems, vocational difficulties, personal insecurities, difficulties over religious matter, difficulties in interpersonal relations, family problems, and sexual problems. This form is to be completed by the patient.

Barratt scale.—This scale is based on the work of Ernest Barratt, a psychologist who has done a great deal of work in an effort to develop a psychometric index of impulsiveness. The scale consists of 20 statements about an individual's typical behavior, each to be answered as "Yes" or "No". The overall score is believed to be a measure of impulsiveness.

M-D scale.—This scale was developed as part of a long-term study of manic-depressive patients. It consists of 52 statements about an individual's typical behavior, each of which can be answered as "Yes" or "No". The items can be scored in terms of two categories: those items that discriminate depression from normalcy, and those items that discriminate mania from normalcy. Two scores are thus obtained, a depression score and a mania score.

Monroe scale.—This is based upon the work of Russell Monroe concerning episodic behavioral disorders and epilepsy. He reports that a review of his clinical records revealed 18 statements often made by patients with "epileptoid" impulsive disorders. These statements have been slightly modified and associated with a four-point frequency scale ranging from "never" to "often". A single overall score is obtained.

M-M scales.—These scales are a selection of items from the MMPI. The only two MMPI scales that seemed to have some relevance to the objectives of the research project are the Sc or schizophrenia scale and the Pd or psychopathic deviate scales. However, an examination of the items that comprised these scales indicated that very few had face or content validity for the defined scale, and that the scales were too long (e.g. the Sc scale alone had 78 items). Therefore, 20 items, having the highest face validities were selected from each scale and incorporated into this new form. In addition, all 15 items of the L or Lie scale were added. The result is a 55 item test based directly on the MMPI, which provides three scores, a Lie score, a schizophrenia score, and a psychopathic score.

Emotions profile index.—This index consists of 12 affect words, such as affectionate, resentful, and obedient, which have been paired against each other in all possible combinations to produce 66 pairs. The 12 terms have been selected to sample all aspects of the trait or emotion language. Each term has then been coded to represent certain implicit emotional states which have been referred to as primary or prototype emotions in the theory proposed by Plutchik. The theory assumes that all emotions can be conceptualized as mixtures of two or more of eight primary emotions which have certain systematic relations to each other. Since each word on the MPE is scored for these emotion categories, whenever a patient makes a choice of one of the two items in a pair, he is building up a score on the primary emotions. The eight primary emotions have been labelled by the following general terms (with words in parentheses indicating the more familiar subjective aspect of the emotion): protection (fear), destruction (anger), incorporation (acceptance),

rejection (disgust), orientation (surprise), exploration (expectation), reproduction (joy), and deprivation (sadness).

Cattell culture fair IQ test.—This test was developed as a way of assessing intelligence in individuals who may differ widely in cultural background. The test items do not use words at all. The person being examined is presented with diagrams which show a progressive series of changes. He is then required to select the final correct diagram from a number of choices. The test has been well standardized and requires only 12 minutes of testing time.

1.4 Dermatoglyphic Analysis (see Section 2.4 for forms).

This is a physical (anthropometric) measure of the patterns formed by sweat gland ridges on the hands and feet. They represent the embryological development of the skin surface in these regions. They are known to differ between sexes and races, but are unrelated to age. They exhibit specific variations in known genetic diseases including chromosomal abnormalities of the kind found in habitually aggressive offenders. They are also valuable as a screen for cases on whom (more expensive) chromosomal tests are likely to be valuable.

FINGERPRINT CLASSIFICATION

All fingerprint classifications attempt to group patterns in uniform, meaningful classes. Differences in fingerprint classifications are due to:

- (1) the purposes for which the classification will be used,
- (2) the number of classes which is considered necessary by the classifier,
- (3) the factors which are considered important definers of pattern type, and
- (4) the evolution of fingerprint classifications.

The differences between the Henry-FBI classification of fingerprints and the medico-biological classification are mainly due to differences in purpose. The FBI system is intended for identification purposes, strict replicability, and with some modifications, ability to be encoded for computer retrieval. The medico-biological system is planned to be a quantifiable definer of body symmetry, to interpret the genetic and medical history of an individual, and to allow analyses of population statistics for genetic, epidemiological, and medicodemographic studies.

A classification system has been devised which satisfies most of the criteria for both FBI and biological purposes and which is essentially a modified version of the FBI's system so that the requisite medical information is also recorded. Both systems recognize the basic pattern types of arch, ulnar and radial loops, and whorls, but there are differences in the definition of tented arches, in the manner of counting ridges, and in the manner of arranging the order of pattern types.

The following are the FBI-Henry definitions of the pattern types:

Arch "In plain arches the ridges enter on one side of the impressions and flow or tend to flow out the other with a rise or wave in the center. There are three types of tented arches: The type in which ridges at the center form a definite angle; i.e. 90°. The type in which one or more ridges at the center form an upthrust. The type approaching the loop type, possessing two of the basic or essential characteristics of the loop, but lacking the third."

Loop The essentials of a loop are "a sufficient recurve; a delta (triradius) a ridge-count across a looping ridge."

Whorl "The whorl is that type of pattern in which at least two deltas are present with a recurve in front in each."

In the medico-biological classification, the following obtain:

Arch A pattern with no triradius

Loop A pattern with one triradius

Whorl A pattern with two triradii.

Accidentals are patterns with three or more triradii in both systems and are considered as whorls in both.

The definitions of the pattern types alone cause one major difference in the two systems—in the biological system the pattern type called tented arch is classified with the loops, not with the arch group. Furthermore, the patterns which are called tented arches are defined somewhat differently due to differences in methods of ridge-counting.

The next major consideration in pattern classification is symmetry. The FBI system specifies symmetry for the loops by calling a loop ulnar or radial, and whorls are specified as inner, meet, and outer sub-types. The biological system

is very similar, using the terms ulnar, symmetric, and radial to designate symmetry. In this sense, loops are sub-typed as ulnar loops, symmetric loops (tented arches of the FBI system), and radial loops; all three of these have only one triradius but differ in symmetry.

In the FBI system, whorls are sub-classified as inner, meet, and outer but because these terms are defined based upon the appearance of the printed pattern without regard to the hand, the ulnar-symmetric-radial designations of the biological system are reversed for the left hand. The following chart shows this:

FBI system, either hand	Biological system	
	Right hand	Left hand
Inner.....	Radial.....	Ulnar.....
Meet.....	Symmetric.....	Symmetric.....
Outer.....	Ulnar.....	Radial.....

The differences may be overcome by tracing from the right triradius to the left on a print of the left hand or by changing the FBI designation for the left hand.

In the FBI system, the whorl patterns are further subdivided into the plain whorl, the double loop, and the central pocket loop. This is essentially the same as the biological system except that the plain whorl type is subdivided into spiral and concentric whorls. All whorls are classified as ulnar, radial, or symmetric types.

Ridge-counting

In the biological system the first ridge-count is always the core itself, whereas in the FBI system neither the core nor the triradius is ever counted as the first ridge-count. This means that some patterns which would be classified by the FBI as tented arches are classified as ulnar or radial loops in the biological system. This change will not effect as many changes as the definition of the pattern type will. The biological system does *not* recognize the "spoiling of ridges" in which many patterns that are otherwise valid loops are classified as tented arches. It is mainly this characteristic which makes the FBI system difficult and requiring cross-referencing often, all of which would be unnecessary when the tented arch is considered as only a symmetric pattern with one triradius and no ridge-count.

Complex measures

Three complex measures of dermatoglyphic character have been developed as tests of organic (ectodermal) abnormality. These detect deviation from normal variation with respect to: 1. Sexual dimorphism; 2. Bilateral and cephalo-caudad symmetry; and 3. Focal morphogenesis.

The sample size required for detection of abnormal variation at each of these levels is smallest in sexual incongruity, intermediate in asymmetry and largest in focal malformation. So far the only measure for which the sample of data is sufficient is sexual dimorphism.

This measure is composed of four elements. Two show a characteristically sex specific dimorphic distribution in a sexually mixed sample of the general population: total finger ridge-count and finger pattern frequencies. The other two measures: total palmar a-b ridge count and total palmar \angle atd, are related to symmetry and local morphology. They are included because sexually dimorphic elements may be influenced by changes in symmetry or local morphology, and in small samples this influence may by chance become significant. The a-b ridge count and atd measures are included therefore to detect spurious promotion or reduction of sexual differences by chance differences between test and control samples due to a symmetry (the a-b ridge count), and local deformation due to age or usage (the \angle atd). As the significance test shows, no differences are seen in the last two elements; therefore differences found in the other measures may be interpreted as solely sex specific.

	Normal variation †	
	Male	Female
Total finger ridge-count.....	144.98 (σ51.08)	127.23 (σ52.51)
Finger pattern frequencies (A, LU, LR, W) (percent).....	4.3-61.5-5.9-28.3	5.7-65.6-4.8-23.9
Total palmar a-b ridge-count.....	83.04 (σ10.28)	83.01 (σ9.72)
Total palmar Σ a-d.....	85.0 (σ15.3)	85.9 (σ15.7)

† Data from Holt, 1968, English subjects; Cummins and Midlo, 1943, English subjects.

1.5 Cytogenetic Analysis (see Section 2.5 for forms).

Cytogenetic analysis measures chromosomal constitution in various tissues. It can be used to determine sex (including intersexuality) and to detect genetic anomalies due to changes in number or structure of chromosomes.

Two methods of cytogenetic analysis are used: chromatin assay and chromosomal karyotypy.

1. Chromatin assay makes use of cells from the lining of the mouth or from blood films. The cells are stained with two stains, toluidine blue and quinacrine mustard, which selectively demarcate, inside the nucleus, the X-(female) and Y-(male) sex chromosomes respectively. In this way the number and frequency of sex chromosomes can be measured as follows: XY Male, XX Female; XXY, XYY various types of intersex, XO, etc.

2. Chromosomal karyotypy makes use of blood cells which are grown in tissue culture. When these cells are in the process of division all the chromosomes become microscopically visible and available for enumeration and identification. The results of this test take longer to obtain than in chromatin examination, but provide in addition to a count of sex chromosomes, full data on the frequency of non-sex chromosomes and their structural appearance. Both these characteristics of genetic constitution may be found altered in mental illness.

The method used for chromosomal culture is described in Heuser and Razavi, *Methods in Cell Physiology*, IV, 1969.

Photographs of the chromosomes may be analyzed visually and the results statistically analyzed with computer assistance; an alternative approach is to scan the photographs electronically according to a program developed at the Stanley Cobb Labs by C. Freed.

Chromosome tests must be repeated because the proportion of cells affected may change over time.

1.6 Electroencephalographic Analysis (EEG).

This test measures electrical activity of the brain by placing electrodes on the scalp. The activity is related to neural function, and diagnostically useful variations are found in neurological diseases including epilepsy. Epileptiform EEG traces are sometimes found in habitually aggressive offenders.

Since the electrical activity of the brain is complex, changes with time or consciousness, and originates in many neural regions, some far below the surface areas immediately accessible to scalp electrodes, the data furnished by the EEG are usually suggestive rather than definitive and often require several tests taken at different times. The successful analysis of EEG data depends in part on the amount and detail of information available from multiple electrodes: hence there is benefit to be gained from computer processing.

1.7 CYBER LAB Medical Examination (see 2.6 for forms).

This group of tests aggregates a series of medical procedures routinely used in general clinical practice into a semi-automated battery applicable to a large series of individuals. They cover the following items:

Medical History—responses to a standardized questionnaire covering past medical history and current condition.

General Physical Measurements—height, weight, skinfold thickness, etc.

Vital Signs—temperature, pulse, blood pressure

Vision—acuity, phoria, colour, stereopsis

Audiometry

Pulmonary Function

Electro-cardiography

Urine Analysis

Blood Chemistry

Hematology.

The tests are applied by a skilled technician using standard questionnaires and instrumentation contained in a mobile module. Data from tests are recorded on computer memory and results printed automatically on a standard report form.

Extracts from CYBER LABS Inc. documentation follow:

VISION

To ease any tension that the patient may be feeling, the first tests performed are ophthalmological measurements. Most patients will be familiar with vision testing from prior experience and the passive nature of the tests should eliminate some anxiety as well as give the patient and the examiner a chance to establish rapport. The instrument used is a Titmus Optical Company professional vision tester. The following tests are a part of a standard test set:

Visual Acuity

The acuity of distant central vision is measured on each eye separately and both eyes together, using the Landolt Ring technique. The data are reported in Snellen equivalents ranging from 20/200 to 20/13. The ability of each eye and of both eyes to focus on a near object is measured and reported in a similar fashion. Eyeglasses are used if the patient normally wears them and this is noted in the report. In addition, if the patient has difficulty in the individual eye tests, the untested eye may be occluded. Such occlusion will also be reported.

Color Vision

Selected Ishihara slides are used to test for deficiencies of color vision. Bold numerals are represented in dots of various tints set amid dots of the same size, but of tints which are readily confused by color-blind people.

Phoria

Vertical phoria testing measures, in terms of one-half prism diopter steps, the relative posture of the eyes in the vertical plane when all stimuli to binocular fixation are eliminated. Data are reported in prism diopters of hypophoria or hyperphoria. The lateral phoria testing is done both near and far and measures, in terms of one prism diopter steps, the relative posture of the eyes in the lateral plane. Results are reported as the number of prism diopters of esophoria or exophoria. The lateral phoria test is done as a near point and as a far point test because accommodation and convergence may introduce additional postural problems at the near point.

Stereo-Depth

This test measures the patient's ability to judge relative distances when all clues except binocular triangulation are eliminated. The results are reported as the angle of stereopsis in seconds of arc (from 400 seconds to 20 seconds). These data can also be reported in Shepard-Fry Percentages.

In addition, tests for fusion, astigmatism and peripheral vision can be included in special series. Techniques other than the Landolt Ring technique are also available, at the option of the local Medical Director.

SPIROMETRY

Pulmonary function is assessed by the use of a Chemetron-NCG Pulmonary Function Indicator. This device measures the Peak Flow, the forced vital capacity (FVC) and the forced expiratory volume (FEV) in one second and three seconds. The data reported are FEV one second (FEV₁), FEV three seconds (FEV₃), total forced vital capacity (FVC), and the peak flow rate in liters per minute. The forced expiratory ratio (FER%) is calculated as FEV₁/FVC. In addition, the predicted vital capacity (PVC) based on age, sex, height and weight is given for comparative purposes and the forced expiratory ratio is calculated as FEV₁/PVC.

FVC is partly a measure of an individual's age, sex, height and weight and partly a measure of the efficiency of the rib cage and lung in moving. "Restrictive" lung disease such as fibrosis or ankylosing spondylitis tends to decrease the FVC, while athletic training will increase it.

FEV is lowered by changes affecting airways resistance, particularly asthma and emphysema. It should be noted the FEV% varies much less in a normal population than the other parameters.

The pulmonary function test is repeated twice at this point in the examination and then again after audiometry. Test repetition is advised because optimum results appear to be dependent on patient familiarity with the test. Flagging criteria are explained in the Cyberlab Physician's Handbook.

TONOMETRY

The intra-ocular pressure of each eye is measured using a Berkeley Mackay-Marg Electronic Tonometer. Asepsis is strictly maintained during this procedure. The generally accepted upper limit of normal range is 25 mm. mercury (there is no significant lower limit) and a measurement in excess of 25 mm. in either eye suggests the need for investigation by an ophthalmologist. Glaucoma is a major cause of blindness and is treatable and alterable if detected in the early stages of development. Such detection is accomplished in a satisfactory manner using tonometry.

AUDIOMETRY

Hearing is tested using the Tracor Rudmose ARJ-4A automatic audiometer. This is a discrete frequency von Bekesy audiometer which automatically records an individual's pure tone air conduction thresholds. Once the test has begun, it continues on without further attention or supervision. However, a test may be interrupted by the examiner or administered manually at any time.

The patient responds to the test by pressing a button during the period of time he can hear the pure tone signal and by releasing the button during the time he cannot hear the tone signal. While the button is depressed, the test tone stimulus decreases in level at the rate of 5 dB per second until the subject can no longer hear it. When he releases the button, the test tone stimulus increases in level at the same rate until the subject again hears the tone and presses the button. Every thirty seconds the audiometer automatically switches to another frequency. During the six-minute test both ears are tested separately at six frequencies covering the range from 500-6000 Hz.

The hearing thresholds for all the test frequencies are reported in the patient's summary report. If the hearing loss is greater than 30 dB at any frequency the value is flagged as abnormal. No allowance is made for the hearing loss which normally occurs with age (Presbycusis).

ANTHROPOMETRIC MEASUREMENTS

Anthropometric measurements consist of the patient's height and weight, chest, waist, and calf measurements and two measurements of skinfold thickness: triceps and subscapular. Skinfold thickness is a measure of obesity and can be converted to percent body fat. The measurement is taken using a Lange Skinfold Caliper. Flagging is done based on standard actuarial tables.

VITAL SIGNS

The patient's blood pressure, pulse, and oral temperature are the vital signs measured. Oral temperature is measured using an IVAC electronic thermometer with disposable probe. Blood pressure and pulse rate are taken in the standard fashion using a Tyco's sphygmomanometer and a stethoscope. The blood pressure is measured on both arms with the patient supine and immediately thereafter on the left arm with the patient sitting up. Significant differences in these measurements may be indicative of circulatory dysfunction.

The practice of making a sharp division between normal and abnormal blood pressures is arbitrary, since blood pressures follow a distribution curve, and vary with age, sex and other factors. Nevertheless, some line of demarcation is useful. In Cyberlab, any systolic pressure over 140 mm. or under 90 mm. is flagged as abnormal, except for people over fifty years of age, in which case 160 mm. is used as the upper normal bound. Any diastolic pressure outside of the range of 60-90 mm. is also flagged. Differences between systolic and diastolic pressures greater than 50 mm. and less than 20 mm. are also flagged. It should be emphasized, however, that the results are not necessarily abnormal. They *could* be abnormal and the flag is merely an indication to the physician who may want to pursue this finding in greater detail.

ELECTROCARDIOGRAPHY

A standard twelve-lead electrocardiogram is administered using a Burdick electrocardiograph. After the completion of all testing, the ECG tracing is

mounted in the standard fashion using a Littman ECG Mounter. The data may then be handled in either of two ways, depending on the specific service purchased: 1) The ECG can be sent as part of the report to the referring physician in its raw form; or 2) The ECG can be sent with a morphological interpretation by a cardiologist. This interpretation must be modified by the referring physician in light of any medication that the patient is presently taking.

CLINICAL LABORATORY

As part of most procedures, blood will be drawn for biochemistry, hematology and serology. All laboratory procedures are performed by automated equipment. A twelve-channel sequential multiple analyzer (SMS-12) manufactured by Technicon, Inc. performs the following tests on a seven (7) cc. sample of serum: Total Bilirubin, Calcium, Cholesterol, LDH, Phosphate, Total Protein, Albumin, Uric Acid, SGOT, Alkaline Phosphatase, BUN, and Glucose.

Hematology tests are performed on a five (5) cc. blood sample using the Technicon SMA-7. The following measurements are made: Red Blood Cell Count (RBC), White Blood Cell Count (WBC), Hematocrit, and Hemoglobin. The red cell indices, MCV, MCH, and MCHC, are also calculated by the SMA-7.

The ART test is used for the serological diagnosis of syphilis. If the specimen is reactive to any degree, confirmatory tests are recommended. Like all laboratory tests, the result of this test can only be evaluated by the referring physician in the context of his clinical findings.

In addition to the above tests a standard urinalysis is also performed routinely. Urine pH, specific gravity, glucose, protein, occult blood, ketones, and microscopic analysis are included in this test procedure.

The major disorders which may yield abnormal results in the biochemical data include, but are not limited to: diabetes, endocrine disorder, collagen disease, renal disease, intestinal disease, malignancy, myeloma, gout, atherosclerosis, cardiovascular disease, liver disease, anemia, and primary polycythemia.

[Item III.B.2]

CENTER FOR THE STUDY AND REDUCTION OF VIOLENCE, UNIVERSITY OF CALIFORNIA
AT LOS ANGELES

[Item III.B.2.a]

PROJECT DESCRIPTION, SEPTEMBER 1, 1972—CENTER FOR PREVENTION OF VIOLENCE,
NEUROPSYCHIATRIC INSTITUTE, UCLA

INTRODUCTION AND SUMMARY

The incidence of violent crime in America is higher than ever, and steadily increasing. Over the next 24 months more than one Californian out of every hundred will suffer violence at the hands of a criminal.

But the plague of violent crime is merely the tip of the iceberg. Most violence never becomes part of the crime statistics. Self-slaughter (one suicide every 15 minutes); carnage on the highway (60,000 to die this year); near fatal beatings within the home, never reported; these and millions of other individual acts of violence represent the background from which a deadly mugging or a madman's homicidal rampage emerge only as highlights.

Faced with such desperate circumstances a society naturally turns to established procedures: more police on the street, prisons in the country, guard dogs in the suburbs, super-locks on apartment doors. But these measures do not stem the rising tide of violence. They are like 18th century efforts to find safety from smallpox by avoiding crowds, burning incense, and praying daily. The Apocalyptic horse of Pestilence crushed such precautions beneath its hoofs.

Today, despite the urgent plea of the late National Commission on the Causes and Prevention of Violence, there is in the United States not a single major center devoted to research and education concerning the violent person. The Lemberg Center for the Study of Violence at Brandeis University in Massachusetts is concerned only with mass violence. The new Laboratory for Study of Stress and Conflict at Stanford is oriented mainly to research on the chimpanzee. The Center for Studies on Crime and Delinquency of the National Institute of Mental Health serves primarily to consider requests for support by individual investigators across the country, most of whom are concerned with social conditions, neighborhood problems, and penal reforms.

Now there is an unusual opportunity for California to take the lead in a field begging for leadership. Discussions by the Secretary of Human Resources, the Director of the Department of Mental Hygiene, and the Medical Director of the Neuropsychiatric Institute at UCLA, have led to the proposal that follows. It would establish a new, permanent Center for Prevention of Violence at UCLA, receiving major support from the State of California and, eventually, from Federal agencies and private foundations as well.

The proposed Center would be committed to the generation and dissemination of new knowledge about violence and its perpetrators. Its scope ranges from homicide to suicide, child abuse to assassination, the home to the prison. It undertakes to create both basic understanding and practical applications.

A violent act stems from the mind of a human being. What is the state of such a mind? There is no component of the mental health field that impinges more immediately upon the public interest and concern than does violent behavior and its perpetrator.

The failure of psychiatry and the behavioral sciences to focus more powerfully upon this problem in the past cannot serve to justify continuing neglect of a clear and present need. The proposed Center for Prevention of Violence represents a major step toward meeting that need. Therefore, I urge that careful and serious attention be given to this proposal.

LOUIS JOLYON WEST, M.D.,

Medical Director, The Neuropsychiatric Institute, UCLA.

Dimensions of the problem: Life-threatening and other violent behavior including homicide, suicide, physical and sexual assault, child abuse, berserk rage reactions, gang killings, etc.; together with commonly associated conditions such as alcohol and drug abuse.

Goal: The reduction of violence.

Objectives:

1. To gain greater understanding of causative and contributing factors involved in all forms of pathologically violent behavior.
2. To develop better techniques for: (a) Substantial prevention of violence. (b) Successful intervention during violent crises or attacks. (c) Effective postventive methods for victims, survivors, and families of both victims and perpetrators of violence. (d) Improved approaches to treatment, correction and rehabilitation of violent patients, offenders, individuals and groups.
3. To educate and increase awareness of persons in human relations fields, such as teachers, police, mental health professionals, etc., of the symptoms or signs of potential violence and methods of prevention, intervention and post-vention.
4. To develop greater comprehension of the dynamics of violence so that countermeasures can be instituted in families, schools, churches, recreation and leisure activities, work situations, and other areas of society to permit deflection of aggressive impulses into more adaptive, less violent modes of expression.
5. To disseminate public information, constantly updated by new research findings, better to prepare concerned members of the community to cope more effectively with violent and violence-prone people.

Background: No contemporary problem causes more universal concern than violence. The spectre of unprovoked attack haunts city-dwellers alone outdoors after dark. Even during the day, doors are triple-locked.

Violent acts are not perpetrated only by strangers. The daily paper in any large city is certain to contain accounts of a husband murdering his wife, a child killing a playmate, companions fatally injuring one another in a barroom brawl, parents battering a baby to death, family members finding the body of a suicide.

In 1968 there were more than 14,000 murders, 81,000 rapes, and 288,000 cases of aggravated assault in the United States, a 10-15% increase over the preceding year. There were also an estimated million cases of assault against infants and children, and 60,000 deaths and 8 million injuries caused by automobile accidents. Today all these figures are even higher.

This pervasive atmosphere of violence exerts a profoundly detrimental effect on the quality of American life. True, the media tend to report such events more fully than they do the happier side of life. Nevertheless violence is becoming a veritable plague in this country. Much of the growing recent

concern about drug abuse and alcoholism also relates to the frequency with which these problems are associated with acts of violence.

One response of society to this threat has been to flee the cities, lock the doors, avoid potentially dangerous situations, and to rely on law enforcement agencies to apprehend and punish those who commit violent assaults on others. But it has become increasingly clear that this approach is insufficient. It fails to get at the roots of the problem, and violence continues to spread.

In recent years, research has provided a growing body of data about violent behavior. However, knowledge at this time is still fragmentary, and even what we do know has not been sufficiently disseminated to the people who must cope with violence in the community.

A concerted effort is required to determine the causes of violent behavior and the means of modifying such behavior. This knowledge must then be conveyed to concerned professional people and to the general public. To accomplish this task most economically and effectively will require the combined efforts of experts from many fields.

Accordingly, it is herewith proposed that a Center for the Reduction of Violence be established by the Neuropsychiatric Institute (NPI), UCLA. Although the headquarters of this enterprise will be at or near the NPI, some of its research and educational activities will be performed at various other appropriate locations throughout the state.

Program: A major thrust of the Center's work will move into the largely unexplored interface between biological and psychosocial aspects of violent behavior. This biosocial approach requires a multidisciplinary staff, with professional roots mainly in psychiatry, neurology, and the behavioral sciences.

Considerable attention will focus on violent individuals who because of biological, emotional or characterological disturbances, are prone to life-threatening behavior. The Center's mission will be to reduce manifestations of violence by such people. To accomplish this they must be studied carefully. Methods of preventing or modifying their violent behavior must be developed. Furthermore, the Center should be organized and operated in such a way that it is continually translating new research into positive action, and transmitting new knowledge to others.

As the Center develops, and pursues various studies of violent behavior and its control, it will require the services of scientists from such widely divergent areas of expertise as psychiatry, neurology, neurophysiology, neurosurgery, genetics, pharmacology, epidemiology, psychology, and anthropology, as well as experts in education, communication, community service and the like. As this transpires there will be a growing necessity to harmonize the efforts of these various specialists into a unified whole.

However, it will be impossible in the initial stages of the program for all these people to work under one roof. Even in the long run it would be impractical and undesirable to gather all experimental subjects in one location. Some people can and should be studied in the laboratory. Others must be studied in the community, in prisons, in mental hospitals, or wherever practicable.

Nevertheless, it is vital that these projects not be conducted in isolation from one another. The Center, if it is to accomplish a significant breakthrough in knowledge about violence and develop more effective techniques for dealing with it, should be more than the mere sum of the activities of isolated individual scientists and scholars.

Thus the Center must deliberately facilitate cross-fertilization of ideas among brain researchers and social scientists, epidemiologists and psychiatrists, pharmacologists and criminologists. Such contacts doubtless occur now on an informal and random basis to some degree. As they are purposely increased many-fold, exciting new hypotheses and fruitful lines of research will undoubtedly evolve. This can be expected greatly to increase the productivity and ultimate value of the Center.

Research: The following major lines of investigation are projected.

1. Epidemiological

The Center will gather and evaluate information on where, when and by whom violent acts are committed. Ordinary crime statistics are of limited value in studying all facets of violence, and often require interpretation and further analysis if they are to provide valid baseline data. Skilled epidemiologists should be able to locate focal points of violence and to measure the

spread of violence from these foci, thereby enabling other members of the Center to concentrate their activities more effectively. Epidemiology can also play an important role in monitoring the impact of various treatment and prevention programs subsequently identified or even initiated by the Center.

2. Biological Factors

(a) *Genetic*.—Recent evidence from studies of violent prisoners suggests that a disorder in sex chromosomes (the XYY defect) may be associated with the presence of violent behavior. This line of inquiry should be pursued. At the same time, a long-range study should be instituted to identify children who have this type of genetic abnormality, and to compare their development with that of children who have normal chromosomes. Detailed studies should yield valuable clues to factors that inhibit or encourage development of violent behavior patterns in children of different genetic constitutions. Such research has great implications, especially with the growing development of means of practical intervention to overcome hereditary defects.

Evidence is also mounting that predisposition to alcoholism may be inherited. Because of the notorious connection between alcoholism and violent behavior, this avenue should be explored thoroughly. Predisposed individuals, identified early enough, could be prevented from developing alcoholism.

Other genetic correlates of violence will also come under scrutiny as the Center's program develops.

(b) *Biochemical*.—Many investigators have hypothesized that hormones are an important determinant of aggressive behavior. Excessive secretion of testosterone in males is thought to be related to uncontrolled aggression, and in females there is a definite relationship between incidence of violent behavior and hormonal changes associated with the menstrual cycle. Much remains to be learned about such factors and about effective remedial measures.

Alcohol and drugs significantly relate to the expression of violence. Some correlations appear to be primarily generated by social factors surrounding use of these substances, while others are undoubtedly related to their bio-chemical effects on the individual, especially in terms of brain function. Many studies along these lines must be done.

New drugs now being tested in Europe and (very recently) in America hold promise for diminishing violent outbursts without dulling other brain processes. These drugs should be tested in the laboratory and then in prisons, mental hospitals, and special community facilities. Preliminary studies reported thus far have been largely clinical, without rigorous scientific controls. Proper experiments must be done as soon as possible.

Other applications of pharmacology to control of aggressive behavior are certain to emerge.

(c) *Neurological and Neurophysiological*.—The brain is the organ of behavior. Approximately 5-10% of the population suffers from some impairment of brain function. The proportion is probably much higher among inmates of prisons and institutions for the criminally insane.

In some patients, outbursts of uncontrolled rage have definitely been linked to abnormal electrical activity in deeply buried areas of the brain. It has been possible in the laboratory to arouse violent rage reactions by applying minute electrical stimulation to these areas.

Techniques have recently been devised which may permit surgical treatment of violence-producing epileptic foci hitherto inaccessible. However, these procedures are new and relatively untested. We are a long way from a full understanding of how dysfunction of these centers of primitive emotion in the brain may be treated, and how they relate to—and are normally controlled by—higher thought processes.

For many years, neurologists have measured the electrical activity of the brain with electrodes attached to the scalp. Abnormalities in brain wave patterns have been found associated with many conditions, including epilepsy. Until recently, these measurements have been possible only under laboratory conditions. Now, by implanting tiny electrodes deep within the brain, electrical activity can be followed in areas that cannot be measured from the surface of the scalp.

It is even possible to record bioelectrical changes in the brains of freely moving subjects, through the use of remote monitoring techniques. These methods now require elaborate preparation. They are not yet feasible for large-scale screening that might permit detection of violence-predisposing brain

disorders prior to the occurrence of a violent episode. A major task of the Center should be to devise such a test, perhaps sharpened in its predictive powers by correlated measures of psychological test results, biochemical changes in urine or blood, etc.

The relationship of brain function to indiscriminately aggressive and impulsively violent behavior seen in hyperkinetic children, to the lack of impulse control that gives rise to child-battering, to the genesis of sex crimes, to random assaults on strangers, etc., remains to be understood.

No one claims that all violent persons have abnormally functioning brains. However, it is essential to discover those individuals who are so afflicted, in order that corrective and preventive measures can be undertaken for their own protection and for the safety of society.

3. Psychosocial factors

The Center will be fundamentally concerned with violence as it involves *people*. Even self-directed violence—suicide—which is a proper concern of the Center, involves relationships between the self destructive person and significant others in his environment. In fact, there is a high correlation between suicidal and homicidal impulses; in England and Denmark (where records are excellent) one third of those who commit murder go on to kill themselves. In order to understand violence, we must explore the inner workings of people who relate to themselves and others in a violent manner, and analyze the interpersonal dynamics which lead to the act of violence.

Accordingly, the Center must conduct careful studies of violent individuals and those with whom they interact. It will be necessary to scrutinize intensively the relationship of violent behavior to such factors as the individual's attitudes, his way of reasoning, his methods of controlling impulse and action, his perception of other people, and his mode of adaptation to his environment. Based on such studies, methods must be devised to ameliorate or transform inappropriate and destructive expressions of aggression.

Attention will also be given to the direct and indirect victims of violence, in order to minimize the deleterious effects of the initial act. The question of victim-proneness, a phenomenon suspected to account for the peculiar frequency of assault on certain persons, will also be explored.

The effect of communications media in promoting or inhibiting violence is an area rich in experimental possibilities and practical applications. Immediate attention should be directed to this problem, held to be greatly in need of further study by the National Commission on the Causes and Prevention of Violence.

In some cultures, interpersonal violence is rare or unknown. Sophisticated comparisons of these cultures with our own may help us to isolate factors which foster violence and may point the way to corrective measures. At the same time the violence-provoking propensities of cultural uprooting, rapid social change or "culture-shock," must receive careful attention.

4. Animal models

Subhuman primates (apes and monkeys) can be used fruitfully in many experiments to augment studies of human beings. Their natural behavior is more open to close observation than is that of humans. Their environment (physically and socially) and their brains (structurally and chemically) can be manipulated in the laboratory. They can be deliberately provoked to violence, or subjected to medication and brain surgery, with objective consequences of major applicability to *homo sapiens*. Experiments with selective breeding, impossible in humans, can lead to better understanding of genetic factors in aggression. Developmental studies of infant monkeys by Harlow at Wisconsin have already provided powerful leads for research on humans.

The objective of primate studies by the Center will be to facilitate understanding of violent behavior and its control in humans, by working with animals whose biological, neurological and behavioral systems most closely resemble our own. Such investigations can help to generate basic concepts about aggressive behavior, while at the same time permitting more daring experiments than would be possible otherwise. Good research on primates will accelerate progress in dealing with biological and environmental aspects of the problem of violence, and should also be helpful in developing more effective means of changing and preventing violent behavior in man.

Production: The output of the Center can be grouped under three general headings: research, education and service. Some general areas of research from

which new knowledge will be produced have been described briefly above. These will, of course, be reported in scientific publications. They will also be transmitted in appropriate form to many individuals, groups, and agencies for application.

An integral part of the Center's activities will be a broadly conceived educational program designed to communicate up-to-date and scientifically valid information about all aspects of interpersonal violence to as wide an audience as possible. To this end, faculty members will deliver special lectures and conduct courses at the undergraduate and graduate levels in the University. They will also provide continuing education to physicians, mental health professionals, civil service personnel, welfare and public health workers, judicial and law enforcement personnel, and the community at large. An important part of this program will be the production and distribution of educational materials such as pamphlets and films, as well as other techniques aimed at narrower audiences.

As an adjunct of its educational program, the Center will develop and maintain an information service and library on the subject of violence for the use of its staff, and to be made available to other qualified investigators and scholars. This library should develop into a major resource for those working on this problem in California.

Although the Center will not be primarily a treatment facility, experimental-clinical services will comprise significant aspects of its program. Given the necessary facilities, the Center will carefully study and treat a limited number of violent patients, at the same time gathering research data, and demonstrating improved methods of management and behavior change for the instruction of others who must deal with violent persons in the community or elsewhere. The Center may also conduct or sponsor demonstration treatment programs at other facilities such as state mental hospitals and correctional institutions.

Another service of the Center will be consultation with individuals, groups and agencies attempting to cope with violent behavior. It may also develop crisis intervention services such as a violence control desk (perhaps on the suicide-prevention model).

Other appropriate services will doubtless be requested of the Center as its work progresses and its reputation grows.

Evaluation: Measures of cost-benefit analysis may eventually be applied to certain segments of the Center's activities. One of the main concerns of its staff will be development of experiments to test the validity of their own conclusions about the nature of violence, and to test the efficacy of control measures developed by the Center or by other workers in the field. Ultimately the best test of the Center's value will be in the extent to which it succeeds in its aim—the reduction of violence.

Administrative support: An organized activity of the extent and complexity of the Center for Reduction of Violence will require first-rate support services.

The initial cadre of key personnel should include a highly-qualified administrator, a space design specialist who will help assure the most effective use of temporary quarters and assist architects in the design of a permanent facility, a fiscal officer, an information management expert, a librarian, an experienced computer programmer, and necessary secretarial support.

During the next two years there should be recruited a personnel assistant, an account clerk, a property clerk, a graphic artist, a clerk to assist the administrator and his secretary, a reproduction clerk, a program support specialist to assist in obtaining and managing outside grants and contracts, a receptionist and PBX operator, a second programmer, a key punch operator, and a clerk to assist the information specialist and his secretary.

In the fourth year, another personnel assistant should be added; as well as a purchasing officer and a clerk to assist the fiscal officer. By the fifth year, the personnel assistants will probably need an additional clerk.

Under this growth plan the administrative staff would number 8 the first year, 12 the second year, 19 the third year, 22 the fourth year and 23 the fifth year after the Center is formed. During the initial years, members of the staff will necessarily perform several functions that will later be taken over by others.

RESEARCH PROPOSALS RECEIVED OR IN PREPARATION FROM PRESENT FACULTY

Ransom J. Arthur, M. D., Adjunct Professor of Psychiatry.
Norman Q. Brill, M. D., Professor of Psychiatry.

- Dennis Cantwell, M. D., Assistant Professor of Psychiatry.
 Stephen D. Cederbaum, M. D., Assistant Professor of Psychiatry and Pediatrics.
- Michael Chase, Ph.D., Assistant Research Anatomist.
 Sidney Cohen, M. D., Adjunct Professor of Psychiatry.
 Barbara F. Crandall, M. D., Assistant Professor of Psychiatry and Pediatrics
 Robert B. Edgerton, Ph.D., Associate Professor of Anthropology and Psychiatry.
- Frank R. Ervin, M. D., Professor of Psychiatry.
 Barbara Fish, M. D., Professor of Child Psychiatry (November, 1972).
 Ira M. Frank, M. D., Assistant Professor of Psychiatry.
 Roderic Gorney, M. D., Associate Clinical Professor of Psychiatry.
 Richard Green, M. D., Associate Professor of Psychiatry.
 John Hanley, M. D., Associate Professor of Psychiatry.
 Marvin Karno, M. D., Associate Professor of Psychiatry.
 Julian Kivowitz, M. D., Assistant Professor of Psychiatry.
 Lissy F. Jarvik, Ph.D., M. D., Professor of Psychiatry.
 Murray Jarvik, Ph.D., M. D., Professor of Psychiatry and Pharmacology.
 Philip R. A. May, M. D., Professor of Psychiatry.
 Charles McCreary, Ph.D., Assistant Professor of Medical Psychology.
 Michael T. McGuire, M. D. Associate Professor of Psychiatry.
 Armando Morales, D.S.W., Assistant Professor of Psychiatric Social Work.
 Lawrence E. Newman, M. D. Clinical Assistant Professor of Psychiatry.
 Garrett J. O'Connor, M. D., Associate Professor of Psychiatry.
 James O. Palmer, Ph.D., Associate Clinical Professor of Psychiatry.
 Morris Paulson, Ph.D., Associate Professor of Medical Psychology.
 Fred Penrose, M. S. W., Associate in Social Work.
 Robert T. Rubin, M. D., Visiting Professor of Psychiatry.
 R. Wyman Sanders, M. D., Associate Professor of Psychiatry.
 E. A. Serafetinides, M. D., Ph.D., Professor of Psychiatry.
 Edwin S. Shneidman, Ph.D., Professor of Medical Psychology.
 Robert J. Sparkes, M. D., Associate Professor of Medicine, Psychiatry and Pediatrics.
- Richard Walter, M.D., Professor of Neurology and Psychiatry.
 Louis Jolyon West, M. D., Professor of Psychiatry.
- Epidemiology of Violence* (Arthur, R. J.).
Metabolic and Chromosomal Analysis of Violent Youngsters (Cederbaum, S. D., Crandall, B. F. & Sparkes, R. J.).
Metabolic and Chromosomal Analysis of Violent Adults (Rubin, R. T. & Jarvik, L. F.).
Biological Predictors in Early Childhood of Subsequent Impaired Impulse Control. (Fish, B.).
The XYY Child: Genetic and Developmental Implications for Violence. (Kivowitz, J. & Jarvik, L. F.).
Violence and the Brain: Bioelectrical and Behavioral Studies (Hanley, J., Ervin, F. R. & Serafetinides, E. A.).
Electroencephalographic and Psychometric Predictors of Violent Behavior in Adolescents (Palmer, J. O. & Walter, R.).
Neural Mechanisms Underlying Violent Behavior: Brain Information Center Survey and Analysis (Chase, M.).
Primate Models for Research on Violence (McGuire, M. T. & Ervin, F. R.).
Pharmacology of Violence-Producing and Violence-Inhibiting Drugs (Jarvik, M.).
Violence Related to Alcohol and Drug Abuse (Cohen, S.).
Marijuana Use and Violent Behavior (Brill, N. Q.).
Violent Sex Offenders: The Biology of Causation and Control (Green, R.).
Violence by Automobile: Alcohol, Drugs and Driving (Frank, I. M.).
Violence and the Hyperkinetic Child (Cantwell, D.).
Children Who Kill: A Study of Homicidal Juveniles (Newman, L. E.).
The Battered Child and His Family (Cantwell, D. & Paulson, M.).
Firesetting in Children (Penrose, F.).
Clinical Control of Violent Behavior (May, P. R. A.).
Modification of Violent Behavior: A Boys' Camp Method (Sanders, R. W.).
The Absent Father and the Violent Son: Family Dynamics and Corrective Measures (Newman, L. E.).

[ITEM III.B.2.b]

EXCERPTS FROM GRANT REQUEST TO LEAA FROM THE CENTER FOR THE STUDY AND REDUCTION OF VIOLENCE*

11	Health and Welfare Services Project Location City (11-100)	Los Angeles, California	Project Location State (11-100)	Los Angeles
12	FEDERAL FUNDS	MATCHING FUNDS	OTHER (NON-FEDERAL FUNDS)	TOTAL FUNDS
13	1,570,000	2,550,000		4,120,000
14	Type of Grant (Federal Funds) (11-100)			
15	California Council on Criminal Justice (CCJ)			
16	Type of Project (11-100)			
17	Type of Action (11-100)			

*Enclosed in May 10, 1973 letter from Donald Santarelli to Chairman Ervin.

16. *Project Summary.*—The Center for the Study and Reduction of Violence at the Neuropsychiatric Institute at UCLA, will investigate precipitating factors and consequences of individual acts of violence, including child battering, homicide, suicide, physical and sexual assault. It will also study the relationship of alcohol and drug use to violence including highway accidents.

The Center will develop instruments for the assessment and prediction of dangerousness techniques for life-saving intervention during violent episodes (including reduction of injury to either police officers or suspects during the course of arrest), methods of assistance for victims of violence and survivors of those who die by violence, analysis of the relationship between violence portrayed in the mass media and violence acted out by individuals, and other innovative methods to assist society in reducing the threat of harm from violent behavior.

The Center will disseminate information to professionals and paraprofessionals in fields related to mental health, education, penology, law enforcement, and community relations. It offers educational programs designed to assist families,

339

employers, churches, and other community groups in understanding and preventing violence. At the same time it will evaluate its and other related programs.

* * * * *

PROJECT NARRATIVE

32. *Problem Statement:*

a. Detailed description of the nature, scope, and degree of the problem.

Violence is destructive aggression—behavior which injures or destroys another person, or property. Violent behavior is often intense, immoderate, furious, and uncontrolled. In America violence has risen to a level that makes it a foremost issue of national concern. The rising tide of violent behavior which disturbs the tranquility and threatens the well-being of Americans includes homicide, suicide, physical and sexual assault, gang wars, senseless maniacal killings, mass murders and "executions," assassinations, the battering and abuse of children, deadly mayhem on the highways, and—during skyjackings—in the air. It is difficult to estimate the total number of violent acts which are committed. Many such acts fail to be reported. During 1971, however, over 100,000 crimes involving violence were reported in the State of California.

Efforts to develop an understanding of the nature of violent behavior require complex formulations on multiple levels, including, for example: biological factors (genetic structure, hormonal factors, metabolic processes, brain damage and/or disease, and the use and abuse of various drugs and of alcohol); psychological factors (delayed maturation, character neurosis, psychosis, and depression); and social factors (family problems, educational deprivation, poverty, and cultural alienation).

b. Definition of the problem in work load or statistical terms and sources of data.

The State Department of Corrections, the Department of Mental Hygiene, the Youth Authority, and the universities, are at the present time independently engaged in examining the causes of violent behavior. Additionally, the judiciary, law enforcement officials, correctional officials, psychologists, social workers, physicians, and other private and public groups and agencies all play some roles related to the prevention, detection, control, and treatment of violent behavior. However, no single group has had responsibility for either the systematic review of existing techniques employed in the prevention, detection, control and treatment of violent behavior, or for coordinating the development of more effective methods to detect, prevent, control, and treat the expression of violent behavior.

The Center for the Study and Reduction of Violence will group together at a central point resources related to the study and reduction of violent behavior. The Center will enable university based behavioral scientists, in cooperation with the state government, the judicial system, and law enforcement agencies, to focus upon the problem of violent behavior, not only in detail and at many different levels, but also comprehensively, and to add to knowledge concerning the process of violent behavior and develop models for reducing the damage which results from violent behavior.

Work load includes: (1) establishing the Center physically, (2) establishing cooperative relationships with scientists, governmental agencies and units, corrections and law enforcement agencies and officials, and other elements which comprise the criminal justice system; (3) planning and carrying out a wide variety of appropriate investigations; (4) developing and producing appropriate and effective training, educational, treatment, and prevention models.

33. *Approaches Considered:*

a. Brief description of each of the alternative approaches considered and reasons for not selecting them.

It is tempting to approach the problem of violent behavior from a single level or direction, and to neglect or overlook other possible approaches. For example, it would be possible to concentrate on the role of biological abnormalities, or on the role of brain dysfunction, in the causation of some violent destructive acts. Those factors are important elements in the causation of some destructive acts, and excellent facilities and highly trained personnel for the

carrying out of research related to biological, medical, and brain disease are located at the UCLA Medical Center. But exclusive concentration on this approach was rejected because any one-sided approach is destined to fail in achieving the primary purpose of the Center for the Study and Reduction of Violence, which is to assemble into a meaningful pattern data from many different sources. Thus it was decided that the Center must have a multi-disciplinary, multi-level, group approach to the effort to increase understanding of and develop solutions for the problem of violence.

Another possible approach to the problem of violent behavior might be a focus upon programs of action designed to bring about certain types of social change—programs which would exclude basic research. Such an approach is, however, unsuitable for a university-based center. It was decided, instead, to engage in the design of small pilot research programs, and to incorporate the results of such investigations into models which would be presented for consideration by appropriate therapeutic, correctional, or law enforcement agencies and personnel.

Finally, it was decided to exclude major consideration of problems such as group violence, political dissent, revolution, and war from the program of the Center. One reason for this decision was the existence of other centers (notably the Lember Center for the Study of Violence at Brandeis University) whose primary concern is collective violence. Therefore the Center for the Study and Reduction of Violence which will be located at UCLA will focus upon individual violence.

b. Complete description of the proposed approach.

The Health and Welfare agency recognizes its responsibility to promote programs which contribute to the safety of Californians. The agency believes that a Center for the Study and Reduction of Violence will make a substantial and significant contribution to the safety of the citizens of California.

The Center will represent the only program in the United States which is dedicated to the comprehensive study of individual violent behavior and to the systematic development of improved detection, prevention, control, and treatment models.

The emphasis in this approach is on violent behavior as a threat to the health and safety of the citizens of California. The approach emphasizes the work of health-oriented behavioral scientists in close cooperation with colleagues in diverse fields and disciplines, including the social sciences, history and the humanities, ethics and philosophy, political science and government, business administration and management, governmental agencies, law, law enforcement and corrections, and specialists in education and in the use of media—all forming a genuinely multidisciplinary team.

The compelling reason for following the approach outlined above is the fact that a problem so highly complex and multidimensional as the problem of violent behavior demands for its understanding and solution a comprehensive program which draws upon all possible sources of knowledge and translates that knowledge into useful methodology.

Over the past several years various study groups, committees, and commissions have called for the establishment of a program similar to that outlined above, including the *Final Report of the National Commission on the Cause and Prevention of Violence*.

c. Reasons why this proposed approach was selected and the evidence which indicates that it will be effective.

As indicated in (b.) above, the compelling reasons for use of the approach indicated in this program is the fact that the problem of violent behavior is highly complex in respect to both causation and effect, demanding the application of as wide a variety of resources as possible, and in a coordinated manner, and under the auspices of institutions experienced in the development of knowledge and its application to the solution of problems.

d. Indication of appropriateness of this agency to conduct the project.

The plan for establishing the Center for the Study and Reduction of Violence has been initiated by the State of California Health and Welfare Agency. Since violence adversely affects the safety of the citizens of California, and since violence is regarded by the citizens of California as the single most serious social problem confronted by them in their daily lives, it is wholly appropriate for this agency to initiate a project which will deal in a positive manner with the problem of violence.

Moreover, since the broad objective of the project is to establish a center which brings to bear upon the problem of violence the resources of the University, in cooperation with State and law enforcement agencies of all types, it is wholly appropriate for the state-supported University of California to be constituted as the agency which will conduct the project.

To recapitulate: this project is being initiated by the State of California Department of Health and Welfare, and will be conducted by the University of California at its Los Angeles campus. The University of California Los Angeles is a highly appropriate location for the Center. It provides a unique combination of resources unequalled in any other single location in the state. These resources include a top-ranked medical school, a well-established and world-renowned department of psychiatry with a *large neuropsychiatric institute and hospital, and outstanding neurological, psychiatric, brain research, social research, sophisticated data processing and computer services and facilities*, and excellent liaison with other university departments of behavioral and social sciences. Moreover, outstanding schools of social welfare, public health, and law are located at UCLA, and will participate in the work of the Center for the Study and Reduction of Violence.

e. Indication of capabilities of this agency to conduct the project.

This agency has unique capabilities for conducting the establishment and operation of the Center. The University offers skilled and experienced management, auditing, and general administrative consultations services and support. The various departments of the University have on their staffs highly qualified and experienced personnel distinguished in many fields. The Neuropsychiatric Institute has an ongoing working affiliation with state mental hospitals and with the corrections system. Members of the staff of the Neuropsychiatric Institute and of the Department of Psychiatry has performed consultation services for many community agencies and for the courts. There exist facilities of many kind for positive support of the Center, including facilities for large meetings, laboratory facilities, facilities for data processing and analysis. The University has initiated and carried out the establishment of a number of Institutes and Centers for studies in various fields.

f. Indication of other projects which relate to this proposal and a description of their relationship.

We know of no other projects which are characterized by the broad goals being proposed in this application.

g. Identification of duplicate services or programs.

No other Center which duplicates the purposes and programs being proposed herein for the Center for the Study and Reduction of Violence has been identified by us.

h. Indication of the cost-effectiveness of implementing this project versus the other alternatives considered.

A comparison of the concept of the Center for the Study and Reduction of Violence with alternatives which involve piecemeal research and an absence of comprehensive planning and coordination makes it appear evident that the proposed integrated and comprehensive approach is more efficient and more effective from the standpoint of cost-effectiveness.

i. Identification of the need for this particular project in this particular area.

The need for this project is indicated by the fact that *responsible study groups, committees, and commissions have recommended the establishment of such a center*. The need for the creation of a Center for the Study and Reduction of Violence is great, both because of the magnitude of the problem of individual violence and because the citizens of California have expressed deep and legitimate concern about the problem of violence.

j. Brief summary of the progress made in prior funding year(s) toward attaining the project's overall goal.

No progress was made toward establishing the Center prior to the present funding year (1972-1973). During the present fiscal year (1972-1973) several planning conferences have been organized and held. *Individual investigators have begun some tasks, financed by the Neuropsychiatric Institute and the Department of Mental Hygiene*. A search has been made for space for the Center at an appropriate location. Plans have been made and work has commenced toward accomplishing feasibility studies and some small pilot studies related to a survey of violence in California, determinants of violence, violence against children, violence in the schools, selected biological aspects of

violence, and assistance for victims of violence and for their families. Additional studies to be conducted during the present fiscal year include feasibility of violence-prevention crisis services, *a review of the literature on violence behavior as it relates to certain brain mechanisms*, and an analysis of suicide in individuals under thirty years of age (which has increased by 300% to 400% in the last decade).

The Governor of California, in his State of the State address of January 1973, announced that a Center for the Study and Reduction of Violence would be established at UCLA. Implementation of that authorization, and initiation of planning, feasibility, and pilot studies is being undertaken at the present time (March, 1973).

34. *Project Objectives:*

a. Clear concise statements of precisely what the project is expected to accomplish.

1. *Definition of the epidemiology of individual violent behavior, its underlying etiology, its social, psychological, and physiological correlates.*

2. *Identification of determinants of individual violence, and testing of predictors of various forms of violent behavior.*

3. *Documentation of the circumstances and conditions under which violent behavior is likely to occur and/or to be repeated.*

4. *Definition of the ethical contingencies which must be considered and taken into account in undertaking field observations on human beings, human experimentation, and the development of models for detection, prevention, control, and treatment of individual violence.*

5. *Development and testing of models for the control, treatment, and prevention of violent behavior.*

6. *Study of, and work with, persons who have been victims of violence, as a means of developing more effective techniques for counseling and rehabilitation for those traumatized persons; evaluation of proposals for the relief, by legislative or other means, of persons who have been the victims of violence.*

7. *Development and dissemination—through educational, training, publications, and informational programs—knowledge, techniques, and models useful in detecting, preventing, controlling, and treating violent behavior, and in postvention with victims of violence and their families.*

35. *Methodology:*

a. Part I. General Statement on Tasks, Methods, Procedures and Strategies. The objectives enumerated in 34. a. will be implemented through the establishment of a Center for the Study and Reduction of Violence at the University of California Los Angeles.

While the Center will devote a substantial proportion of its work to the compilation of a body of knowledge concerning the causation and process of violent behavior, the *basic thrust* of the Center's program *will be the development and demonstration of practical applications of models for the detection, prevention, control, and treatment of violent behavior*, and for assistance in rehabilitation of victims of violence.

The research aspects of the Center's activities will provide material for incorporation into models. This will involve research to determine what data are available, and what can be developed, as well as to evaluate the effectiveness of existing models.

The development aspects of the Center's activities will provide the models viewed as most appropriate and promising for the reduction of violent behavior. Models will be used for incorporating knowledge and innovative techniques into university educational programs, community training programs, the judicial system, law enforcement practices, and Agency projects and practices. The use of models will provide maximum transportability and marketability of knowledge concerning violent behavior.

The *ethics and legal components* will provide guidelines for experimentation and development of models of violent behavior.

Research will focus on defining correlates of dangerous behavior and upon *the development and testing of scales and procedures for classifying, predicting, controlling, and modifying violent behavior*. Three dimensions will be examined: *epidemiological factors; biological factors; and psycho-social correlates.*

Epidemiological Factors: The Center *will gather and evaluate information on where, when, and by whom violent acts are committed.* Epidemiologists will

locate focal points of violence and measure both the spread of violence from and the control within these foci. Such factors as the prevalence and incidence of violence and the relationship between changes in society, the legal system, law enforcement practices, the family structure, deprivation through poverty, the changing role of religion, the impact of mass media, and gang behavior will be encompassed within the epidemiological studies. Epidemiology will also play a role in monitoring the impact of detection, prevention, control, and treatment programs identified or developed by the Center.

Biological Factors: The Center will investigate genetic, biochemical, neurological, and neurophysiological elements of violent behavior. The effects of hormones on aggressive behavior will be studied in biological laboratories. New drugs now being developed hold some promise for the lessening of violent outbursts without a negative effect on other brain mechanisms and processes. These drugs will be tested in laboratory situations within the Center programs, and in related Health and Welfare Agency programs. Other applications of pharmacology will be developed in the course of the Center's activities. Studies of abnormal electrical activities within the brain, involving various forms of brain diseases and brain lesions, will be carried out in the neurological and physiological laboratories to clarify their relationship to various types of violent behavior. The subjects of such studies will include hyperkinetic children and individuals who have committed aggressive or violent sex crimes.

Psycho-social Factors: The Center will be fundamentally concerned with violent behavior as it involves people. The Center will study the relationship of violent behavior to such factors as the individual's attitudes, way of reasoning, methods of controlling impulse and action, perception of other people, and mode of adaptation to environment, as well as the impact upon behavior of such environmental factors as overcrowding and excessive noise levels.

Attention will be given by the Center to the direct and indirect victims of violence, in order to minimize the deleterious effects of the violent act.

The development programs will concentrate on models which can be piloted or implemented in public or private facilities. The program will involve five basic models: education, detection, prevention, control, and treatment.

Educational Models: The Center will be concerned with translating the products of research and development activities into educational and training materials and models. These models will include pilot programs, designed to provide skill in identifying, classifying, controlling and treating violent behavior. For example: seminars and training programs for professionals, e.g. psychiatrists, law enforcement personnel, judges, lawyers, teachers, social workers, and others who must deal with persons characterized by violent behavior; seminars and training for professionals who must deal with juveniles; curricula for university-based courses for mental health, correctional, legal. * * * material for the general public, community groups, and the universities; additionally, the Center will initiate faculty, judicial, and law enforcement affiliations for qualified persons, and student stipends for the pursuit of interdisciplinary graduate training in violent behavior. The interdisciplinary study will encompass such diverse fields as medicine, law, psychology, corrections, education, and sociology.

Detection, prevention, control, and treatment models can be viewed as points on a continuum. Each point represents a successive progression of intervention in violent behavior.

Detection Models: Among other detectors the Center will develop behavioral indicators, profiles, scales, biological correlates, and social and environmental predictors of violent behavior.

Prevention Models: Intimately aligned with the systematic establishment of a body of knowledge relative to the causes and detection of violent behavior is the development of preventive models. The models will assist appropriate persons and agencies, e.g., school administrators, law enforcement personnel, governmental departments, to design and develop special programs to reduce the overt expression of violent behavior.

Control Models: Beyond the detection and general prevention of violent behavior, the paramount public need is to control the expression of such behavior when a clear and present danger exists. The development of functional models within an ethically and legally sound framework will represent the prime objective of the Center. Included within this area will be models

designed to control the activities of identified sociopaths, sex offenders, murderers, juvenile gang members, and persons who abuse drugs and alcohol. Emphasis will be placed on models which protect society from the destructive actions of dangerous individuals. The Center will be responsible for reviewing, developing, and testing a wide range of control models, ranging from supervisorial models to halfway houses, to chemical and physical controls.

Treatment Models: Commensurate to the requirement for control of violence will be the development of *treatment models* designed to ameliorate or supplant the expression of violent behavior. Treatment programs will emphasize patient/inmate performance and responsibility in demonstrating alternative and socially acceptable behaviors. A partial list of facilities which will be used to develop treatment models and implement pilot and demonstration programs are: Atascadero State Hospital; Camarillo State Hospital; UCLA Neuropsychiatric Institute; California Medical Facility, Vacaville.

Legal and Ethical Guidelines: The Center will examine the legal and ethical guidelines and scientific philosophy surrounding human experimentation. The Center will develop and adopt legal and ethical parameters for the prevention, control, and treatment of violent behavior. The research and models developed by the Center will adhere to these legal and ethical parameters.

a. Part II. Detailed description of each task and the method, procedure, or strategy to be undertaken for attaining each objective.

Note: For description in this portion of the narrative, the work of the Center is divided into *tasks* assigned to *task force* groups. The description of each task and task force will include items (a) through (f) under section 35, together with the evaluative data requested in 38 (below).

Task I: To Establish the Center.

By July 1, 1973 the first phase of organization of the Center for the Study and Reduction of Violence will have been completed. The Center will be under the jurisdiction of the University of California Los Angeles, and there will be suitable arrangements—through an Advisory Committee and a Coordinating Council—for close cooperation with the various agencies of the State of California represented by the Health and Welfare Agency, including corrections and law enforcement, as well as the state hospital system and the University system.

There remains the task, during the first year of operation, to establish the Center physically in the space selected for its location, to acquire equipment and supplies, and to bring together qualified investigators and representatives of many disciplines involved in the study and remediation of various aspects of violent behavior. In the early operations of the Center great emphasis will be placed upon workshops, planning conferences, the securing of expert consultation, and the development of evaluation procedures so that the Center may proceed in an orderly and effective manner toward the achievement of its objectives.

Staffing for this task force is as follows:

L. J. West, M.D., Director of the Neuropsychiatric Institute, will represent the Center for the Study and Reduction of Violence in its relationships with the University of California Los Angeles the Medical School, and the Health and Welfare Agency. He will serve on the Advisory Committee of the Center, and will be consulted by the Director on major policy decisions and overall direction of the Center.

Robert E. Litman, M.D., who has been designated to be Director of the Center, will be responsible for all operational phases of the program, for overall planning, development, and evaluation, and for all research and development activities. He will relate the goals of the Center to the needs of the public; will recruit the most talented personnel available; will set policies in collaboration with the Advisory Committee, the Coordinating Council, and the Director of the Neuropsychiatric Institute and University authorities. The Director will be responsible for securing funding for the continuation of the Center beyond the initial period of establishment, and for relating the work of the Center to work being done throughout the nation and the world in related fields so that there will be a minimum of duplication and a maximum of fruitful interchange and accomplishment.

An Assistant-to-Director will aid in program development and in recruitment of personnel; will assist the Director in all areas of his responsibilities; will assist in the preparation of reports on various phases of Center operations and

in preparation of proposals for funding; will make routine operating decisions in consultation with the Director and/or other appropriate individuals; will maintain records and flow charts indicating status of each task force in relations to the carrying out of its objectives; will be responsible for maintaining continuing cooperation and close liaison and departments, schools, and centers on the UCLA campus; will perform special assignments on instructions of the Director.

A Chief of the Section on Evaluation and Planning will work under the Director of the Center to establish effective evaluative mechanisms for all aspects of the educational, training, and research programs of the Center. These evaluative mechanisms will function in such a manner as to provide ongoing, objective, evaluation for all phases of the Center's activities, and to make recommendations concerning changes, additions, and/or deletions in respect to tasks being performed and methods of implementation of goals. In addition, the Chief of the Section on Evaluation and Planning will actively participate in all phases of the planning of the Center's programs, and will serve as a member of the Committee on Ethics of the Task Force on Law Enforcement, Law and Ethics.

The above individuals will be available at all times to members of the staff of the Center, for consultation and assistance in the carrying out of their tasks, and will encourage all staff members to communicate problems promptly in order that difficulties may be solved with as little delay as possible. Weekly meetings of the entire Center staff will be held at which ideas will be exchanged and concerns of staff shared. These meetings will represent both planning and evaluation experiences, and will ensure the close involvement of the entire staff in the effort to achieve the goals of the Center. The Director and/or the Chief of Evaluation and Planning will chair these meetings and act as facilitators.

A Public Information Officer will prepare news releases and feature stories for distribution to media, in order that the work of the Center, and its existence as a State resource, may be known as widely as possible. The Information Officer will establish and maintain master press lists on local, statewide, and national levels, will prepare public service announcements, will develop and maintain working relationships with members of the press, and broadcasting media, will handle all requests from the public and media for information, will arrange conferences with members of the press, will cooperate with the public information officers of other branches of the University, the Center for the Health Sciences at UCLA, and state agencies, and will assist the Director and other staff members in the preparation of written documents, including proposals for funding and reports.

A Computer Specialist-Statistician will supervise all aspects of research design as related to the gathering and analysis of data, will provide consultation to researchers in the formulation of investigations requiring the use of computer technology, will maintain liaison with the campus computer facilities used by the Center, will prepare estimates of costs, will participate actively in the evaluation of the work of each task force, will analyze and report on the feasibility, from the standpoint of statistical reliability, of investigations proposed for inclusion in the work of individual task forces.

Secretarial and clerical personnel will be employed to provide appropriate supportive tasks.

Criteria for evaluation of the performance of this task will be as follows: Existence of a physical plant for the operations of the Center, suitably equipped, and supplied as indicated in the Budget; space for staff to carry out its work; sufficient clerical and administrative workers; adherence to the personnel and administrative policies of the University, with the keeping of appropriate records in relation to disbursements, personnel, and other phases of the Center's administrative responsibilities; the holding of weekly problem-oriented staff conferences, and at least four major planning conferences; the existence of reports on consultation and evidence that the consultants have contributed materially to the development of the Center; the preparation of complete reports on the progress of the Center toward its stated goals.

The task of establishing the Center is expected to be substantially completed within two years, at which time the Center will continue its operations with minimal assistance from the California Council on Criminal Justice.

Task II: To Utilize Effective a Task Force on Law Enforcement, Law, and Ethics.

This task force will employ a multi-dimensional approach to consider all points of view related to controversial aspects of the development of innovative approaches to the detection, prevention, control, and treatment of violent behavior. For example, it will subject to scrutiny the range of considerations which must be taken into account in connection with experiments which utilize human subjects. It will consider the ethical problems related to the use of prisoners as subjects for experimentation. It will consider the ethical problems inherent in the possible identification (labeling) of violence-prone individuals before they have committed an act of serious violence. It will consider questions relating to the nature of "informed" consent, in the light of recent challenges to the traditional understanding of that term. Among other tasks which this unit will address itself to will be the development of a position paper and guidelines on the following subject: In the event that the Center for the Study and Reduction of Violence is successful in efforts to develop reliable predictors and/or determinants of some types of violent behavior, so that it becomes possible to *predict the probability of occurrences* of those types of violence behavior, and to identify certain individuals who are characterized by a very high probability of committing individual acts of serious violence, what are the practical aspects and problems related to the initiation of preventive treatment of such individuals, and what ethical considerations must guide the process of bringing such individuals into treatment situations designed to reduce the likelihood that such individuals will commit acts of serious violence?

Persons representing as wide as possible a spectrum of political, philosophical, ethnic, and religious backgrounds will be invited to participate in discussions of the above problems and to cooperate in the formulation of position papers and guidelines.

The Task Force on Law Enforcement, Law, and Ethics will maintain liaison, and consult with state and local agencies concerned with law enforcement, corrections, and the courts, and has the responsibility of securing and maintaining cooperative relationships with those agencies.

An effort will be made to develop research approaches which utilize law enforcement and corrections personnel as participant-researchers in the problems which they encounter in the course of their work.

Staffing requirements of the Task Force on Law Enforcement, Law, and Ethics include:

A Coordinator (*James Fiek, former high ranking officer in the Los Angeles Police Department* and now a member of the Department of Political Science at UCLA) who will be responsible for ensuring that the Task Force maintains liaison with key agencies and departments in the area of law enforcement corrections, probation, and other areas of the criminal justice system of the State of California. The Coordinator will be responsible for working with the Director to formulate and implement programs in the Center which will respond in an innovative manner to the needs and concerns of the criminal justice system.

A Specialist in Law and Ethics (*Richard A. Wasserstrom, Ph.D., LL.D., Professor of Philosophy and Law, UCLA*) who will conduct and organize studies and deliberations related to the ethical and legal considerations involved in the goal of the Center, and will supervise the preparation of position papers related to those considerations.

A Field Liaison Specialist (TBA) who will travel throughout the State of California, maintaining contact with local officials in the area of law enforcement, corrections, detention, probation, and other elements of the criminal justice system in the field. The Field Liaison Specialist will report back to the Center on the problems of and the needs of those systems and officials, and on the usefulness of the Center's program as it relates to those groups as consumers.

The above staff members of the Task Force on Law Enforcement, Law, and Ethics will meet regularly with the Director and with other key Center staff members involved in administration, evaluation, and planning.

The success of the Task Force on Law Enforcement, Law, and Ethics will be evaluated on the basis of (a) the degree to which it succeeds in receiving and interpreting the needs and concerns of the law enforcement and criminal

justice community to all of the other task forces within the Center, (b) the degree to which it succeeds in transmitting the information and findings developed by the Center to the law enforcement and criminal justice systems, working with the task force on education and training, and in helping those systems to improve performance, (c) the degree to which it provides the Center as a whole with a sound legal and ethical basis for its ongoing activities.

Task III: To Develop and Maintain Facilities for Education and Training, and the Communication of Knowledge in Useful and Available Forms to Various Consumer Groups.

This task force will provide library and bibliographic services concerning violent behavior, both to staff members of the Center and members of the public. It will design innovative educational models, and will produce educational and scientific monographs, pamphlets, brochures, educational materials, and multi-media presentations including films, videotapes, tapes, and graphics. Consumer groups will include mental health personnel educators, law enforcement personnel, students, corrections workers, offenders, and the public in general.

The Task Force on Education and Training will play a key role in communicating—promptly and accurately—the knowledge developed through the research activities of the Center to all individuals and groups in the California community who are concerned with the problem of violent behavior and ways in which the effects of such behavior can be mitigated and reduced. Such reliable and up-to-date information is necessary to the formulation of community action with respect both to the reduction of individual acts of serious violence and assistance to the victims of such violence. The education and training component will therefore function in close relationship with, and as an adjunct to, all other task forces of the Center.

Meetings, conferences, and training programs, including workshops, will be conducted by this task force, both at the premises of the Center and in the field.

The educational programs of the Center will be coordinated with the programs of the State Department of Health, the California Department of Corrections, the California Council on Criminal Justice, with local school systems throughout the State, and with other appropriate groups and agencies. The task force on education and training will translate the research and study findings of the Center into tangible and applicable models related to training and education. It will identify and develop appropriate projects and initiate and catalyze their study in terms of education and training.

During the first year of operation of the task force on Education and Training, the multi-media audio-visual unit will produce four 30-minute films. The tentative schedule of those films is as follows:

- (1) Film concerning the problem of the battered child, and methods for assistance and treatment of both children and families of battered children.
- (2) Training film on the operation of programs for the treatment and rehabilitation of heroin addicts.
- (3) Training film on police intervention in family crises.
- (4) Training film on Psychiatric Emergency Team intervention in family crises.

Staffing requirements of the Task Force on Education and Training are as follows:

An Education and Training Specialist who will plan, organize, administer and evaluate the Center's training and education programs as described above, and will determine needs for educational services, developing major and short-range program objectives and evaluating progress in achieving those objectives.

A Librarian-Bibliographer will supervise the building of a library, and administer its operations.

A Media Coordinator will be responsible for initiating planning of the media-related projects of the Center, and will assume full responsibility for the conception, design, and execution of all technical aspects of film and videotape production, working with all other staff members of the Center to interpret their needs in terms of the area of his responsibility.

A Film and TV Production Supervisor, and a film and TV Production Specialist, who will work under the direction of the Media Coordinator to perform all of the technical tasks necessary to produce education and training films and videotapes of high professional quality.

Appropriate clerical and secretarial support.

Task IV: Research and Development: In this application, funds are requested for the six operational task forces described below. Additional funds will be obtained to carry out additional specific projects.

Task IV-A: Survey of Violence in California: This task is characterized by the following component tasks:

To develop with maximum rigor definitions of the forms and types of violence to be identified, measured, counted, or estimated in the survey; to scrutinize available statistics in California and to analyze their validity; to conduct field investigations and interviews in an attempt to develop firm incidence and prevalence rates of various violent phenomena in the State and in selected populations. Special attention will be paid to the degree to which certain types and categories of violence are under-recorded in the available statistics; and finally, utilizing the baseline data developed in the course of the above survey, investigations and evaluations components of the Center will conduct operational analysis of the effectiveness of various experimental attempts to reduce the level of the designated categories of violence in selected areas among selected populations. The major known correlates of violence are sex (male), age (youthful), ethnicity (black), and urbanicity. Violent behavior appears, additionally, to be related to participation in subcultures with particular attitudes towards the value of human life, and with attitudes equating violent physical expression with "manliness." "Subcultures" may be viewed as regionally based, that is, composed of neighborhood associations. One strategy to be utilized will be selective sampling of metropolitan neighborhoods in California, to discover and compare norms of violence among various ethnic groups (Caucasian, Black, Chicano, and Oriental). Varying, normatively based, personal perceptions of what constitutes violent behavior and of what circumstances demand official intervention undoubtedly influence regional "reporting rates" for violent behavior. Selected sampling of ethnic communities to investigate non-official estimates of the occurrence of violent behavior and the norms surrounding such behavior will provide a "correction factor" for official statistics.

The staff required for the task Survey of Violence in California, and the program responsibilities of task force members, is as follows:

A full-time Sociologist with experience in criminal justice research will coordinate the work of the Survey; a Public Health Specialist (MPH) with experience in Epidemiology, and experience in the development and evaluation of educational programs based on epidemiological research will organize and supervise on-site programs related to the Survey; an experienced Statistician, with extensive experience in data processing and the use of computers, will provide ongoing statistical support for the Survey.

Consultants with special experience in the collection, publication, and evaluation of criminal statistics and vital statistics will be utilized; the equivalent of two full-time field investigators to check on the methods in various localities by which criminal and vital statistics are collected and recorded, and also to do field investigations in selected spot check areas to collect data on the incidence or unreported violent behaviors, will be employed. Medical and Psychiatric consultation, especially from psychiatrists, psychologists, and social workers with extensive experience in epidemiological investigations involving psychiatric and mental health problems will be utilized. Appropriate clerical and secretarial support will be required.

Available resources to be utilized in carrying out the Survey are the Survey Research Centers of the University of California Los Angeles and the University of California Berkeley. Field workers studying violence as it is observed in hospitals will select institutions, with emergency rooms, as listed in the American Hospital Association Guide to the Health Care Field (1972). This publication provides data concerning all hospitals in the State of California. Data on deaths including suicide and homicide may be obtained for the last ten years for a moderate fee, using data stored on computer tapes, from the California Department of Vital Statistics. The staff of the Center for the Study and Reduction of Violence has already established close relationships with the Chief Medical Examiner-Coroner of the County of Los Angeles and with many of the hospitals in the Southern California area.

Task IV-B: Determinants of Violence:

General Discussion: The task is to develop models for the prediction of the probability of subsequent violence in individuals concerning whom a decision

must be made whether to hold the individual in a situation where relatively extensive external controls exist, or to utilize minimal external controls, or to release the individuals with minimal external controls. Decisions regarding the extent and nature of external controls necessary for the safety of an individual and of others with whom an individual may come into contact are made daily at many levels of the social and criminal justice systems. Some of the situations in which actions are taken with respect to this problem are based in part upon judgments of the dangerousness of individuals, and occur in such situations as the follows:

Police Officers called upon to intervene in family violence.

Police Officers' decisions on whether to hold a subject in jail or to release the subject after questioning.

Court decisions concerning bail.

Court decisions on sentencing and probation.

Decisions by corrections officials concerning the placement of an offender, and readiness for parole.

Decisions concerning the type of Aftercare required by individuals discharged from institutions.

Decisions concerning placement of juveniles in work camps and/or in foster homes.

Decisions concerning hospitalization of mentally disordered persons who are a danger to themselves or others.

Decisions concerning discharge of mental patients from hospitals.

Decisions concerning suspension and/or expulsion of school children or, conversely, their readmission to school.

In summary, this task force will conduct research with the aim of providing data, testing devices, and similar prediction instruments which may be of assistance of personnel involved in making the above and similar decisions.

Previous research on the problem of prediction of violence such as homicide, suicide, and assault, yields helpful clues, but has failed to provide objective instruments that are more valid than the "clinical" evaluation of the experienced worker. Some of the reasons that previous efforts have had but limited success are as follows:

It is unreasonable to expect to develop a unitary predictor of the disposition to violence. Violent behavior comprises a variety of dissimilar acts, performed by a variety of different persons, at different time periods in their lives, and with different determinants of the behavior. Experience suggests that in constructing objective scales, or item pools, or checklists, a somewhat different instrument will be required for each decision-making site. The problems, the people, and the behavior, constitute in each setting a task which is unique, although it may share many features with the prediction task in other settings. This leads to the conclusion that a somewhat different approach to the problem of prediction of dangerousness is needed for each setting in which the decision must be made concerning disposition or diversion.

Moreover, certain items carry so much weight that they must be considered separately. Such items include age, sex, ethnic background, and urbanicity. Other key items which would be considered as predictors would include previous history of violent behavior, together with the circumstance of such violence, and its chronicity; the situation into which the individual is moving; and the mental and physical status of the individual.

Specific Procedures

The task force will conduct this investigation in five phases, as follows:

1. Review of existing data, including a bibliographical survey.
2. Selection of three sites at which potentially dangerous individuals are seen, and at which pilot investigations of the determinants of violence can be conducted. Three provisional settings have been identified, as follows:
 - (a) Municipal court decisions on the sentencing of convicted offenders where psychiatric-psychologic consultation has been solicited by the court. The task is to explore the prediction of future dangerousness in these offenders.
 - (b) The second setting will be a correctional institution for prisoners convicted of felonious assault and/or homicide. The decision which will be studied concerns release of prisoners with the problem being the prediction of the likelihood of repetition of violent behavior.
 - (c) The third provisional setting is the neighborhood served by an individual police facility. The problem concerns the escalation of individual violence in

neighborhood situations and the decision by police concerning the type of intervention appropriate to reduce the possibility of danger of destructive violence to individuals.

3. Enumeration of significant items or variables which might possibly discriminate, according to various experts, between potentially dangerous and potentially nondangerous individuals. During phase three the task force will interview experienced decision makers working in the chosen settings concerning the basis upon which they reach their decisions. *Sample case histories* and situations will then be presented to the experts, who will be asked to rate the individuals involved in the sample cases for dangerousness. The experts will be asked to identify specific criteria they use to arrive at their decisions. These criteria then become items for an item pool from which will be constructed a rating scale. The items are expressed clearly and without ambiguity, so that a clear, codeable, reply may be given. Further tests are then conducted to ensure that the items are understood clearly by persons who use the item pool, and that they are responded to in a reliable way.

4. During the fourth phase of the investigation on determinants, *retrospective studies of individual case records are performed*, and the cases are rated on the items developed in phase three. This is a retrospective study of cases in which the outcome is known. The purpose of such a retrospective study is to distinguish which of the items developed in phase three do in fact discriminate between outcomes which are violent and those which are nonviolent. Suitable statistical procedures will be developed and applied to the analysis of this data. In the past we have employed discriminate function analysis to select items which could successfully predict the probability of certain individuals committing suicide. The task force will select items which predict violent outcome, and will construct scales which are suitable for use in the setting for which they were originally designed.

5. In phase five the scales or *checklists will be used by appropriate personnel as part of a prospective study*. The details of the design of this phase of the investigation will be worked out in field conferences with representatives of cooperating agencies. This final phase validates the prediction instrument through follow-up studies.

The tasks outlined above require for their completion, a minimum of four years. Phases one, two, and three are expected to require one year for their completion. Stage four will require an additional year; stage five an additional two years. This task force will produce several completed prediction instruments suitable for extensive use. To the extent that these procedures are successful in three settings, the same procedures will subsequently be applied—with appropriate variations—to a number of other decision-making settings.

Staffing for this task force will include the Center Director, Robert E. Litman, M.D. as the leader of the task force, together with a full-time research psychologist, a statistician, a part-time staff psychiatrist, and a part-time research psychologist with special experience in court-consultation work. In addition there will be appropriate clerical and secretarial support, and extensive use of coding and key-punching personnel.

The progress of the task force on determinants of violence may be evaluated on the basis of its adherence to the schedule in that by the end of the first year the first three phases of work should have been carried to completion in at least two of the three settings designated.

Task IV-C: Biological Aspects of Violence:

This task includes four sub-components, all involving biological aspects of the development and the behavioral expression of violence in human beings. A fifth sub-component involving research in the biology of aggression in primates will be planned by this task force but will not be activated during the first year of the operations of the Center. The components of this task are as follows:

The question of violence in females will be examined from the point of view that females are more likely to commit acts of violence during the premenstrual and menstrual periods. Previous investigations have indicated that as much as 75% of female violent acts occur during 20-25% of the days of the monthly cycle. This project will investigate the relative strength of hormonal and psychosocial factors which in combination affect the high risk of violence during the female cycle. Hormonal monitoring will be done by the determination of estrogen and progesterone levels in the plasma: The findings of this study will have direct application to the medical treatment of potentially violent females.

The senior investigator for this task force on the biological aspects of violence is Richard Green, M.D. He will carry out a special *analysis* of a group of boys presently under study who are characterized by low levels of aggression. He will compare these boys with groups of boys who display average levels of aggression and with another group of boys who have excessive levels of aggression involving episodes of violent behavior. There will be studies of hormonal levels in these males and also studies of their interactions with their families. This study has important implications for the theory of constitutional predisposition to violence, and it may also have important therapeutic implications in the design of parent education programs.

A third task for Dr. Green's task force will be the *investigation of the feasibility of using the drug Cyproterone Acetate in the treatment of violent sex offenders such as rapists and child molesters*. Several investigators in other countries have reported that this drug produces a temporary, safe, and reversible suppression of androgen secretion in males. For this reason Cyproterone Acetate has been accepted for use in the United States for the treatment of certain types of cancer in males. It has been observed that *suppression of androgen secretion often reduces or eliminates the urge toward violent activity in male sex offenders*. It is theoretically possible that offenders who have received this drug might then be safely transferred to a residential institution in a local community. In such a residential situation, after care, psychological treatment and therapy, might be carried out in a more normal environment than that offered by a prison hospital. If the treatment proves successful, the drug would be cautiously withdrawn, and the offender kept under careful observation.

A further task of the biological aspects task force of the Center will be to coordinate preliminary studies in California on persons with the chromosome defect *XXY*, and on the relationship of this defective genetic condition to violent behavior on the part of the persons who carry this genetic abnormality. Reports from other countries and from the United States have been conflicting and confusing on the matter of whether or not there is a real disposition toward violence on the part of persons who carry an extra Y chromosome.

The staffing requirements of the task force on biological aspects of violent behavior include a full-time psychiatric investigator (Richard Green, M.D.), a research psychologist half-time (Merilee Oakes, Ph.D.), a research assistant, and appropriate clerical support. This personnel will collect suitable subjects and interview them; keep suitable records; see that blood specimens are secured and analyzed for hormone levels; and conduct experiments in an orderly manner, keeping in mind the ethics of human experimentation and the right of prisoners and hospital patients in connection with participation in human experiments.

The research staff of the task force on biological aspects of violence has available to it resources of Harbor Hospital and the hospital at the UCLA Medical Center for the housing of patients and for the conducting of laboratory examinations.

Evaluation of the work of the task force on biological aspects of violence should be based both upon contribution to knowledge and contribution to the development of improved treatment models. The task force on violence in females should report on cause-effect relationships which will be meaningful to gynecologists and internists in prescribing medication for female patients which would relieve the physiological states found to be associated with premenstrual and menstrual-correlated violent behavior. The study of *nonviolent youngsters* is, again, in the field of basic knowledge, but it should yield definite recommendations for the detection of potential violence-producing behavioral interactions in family situations. The investigation of Cyproterone Acetate may take months, or years, to complete, in view of the problems related to securing subjects, treating them, and following up their subsequent course of behavior. Evaluation criteria should require that the first steps in this program have been completed in an orderly and productive manner by the end of the first year, with a progress report describing what has been accomplished, problems encountered, and future course of contemplated tasks. In respect to the evaluation of work related to the *XXY* research, various facilities for identifying violent *XXY* subjects should have been located and feasibility studies conducted, together with preparation of a cost benefit analysis on carrying out a large scale study on the *XXY* problem.

Task IV-D: Violence Against Children—Prevention and Treatment Models.

Existing data suggest that there are approximately 7,000 young children victimized by serious physical abuse in California every year. Since 1967 Dr. M. Paulson and his staff at the Neuropsychiatric Institute have been studying battered children with an emphasis on treatment of those children and on changing the behavior of maltreating parents. It has been Dr. Paulson's hypothesis that characteristics of abuse-potential could be detected before-the-fact, and that as a result family pathology might be treated before the child is victimized, or early in the course of the child abuse syndrome.

In this study the family histories and follow-up records of approximately fifty families are being examined and analyzed. The data include MMPI tests, ongoing observations of abused children and their parents by mental health professional staff, and other data. During the first phase, follow-up observations will be made on children and parents who have already been seen and treated in the past. Data accumulated over six years will be analyzed to provide a basis for future intervention programs and new approaches to treatment. These new approaches will be applied to new families with battered children, and the effectiveness will be evaluated. This project is expected to produce a model for successful family intervention on behalf of battered children—intervention which can be applied in hospitals, doctors' offices, and mental health facilities.

The staffing required for this task includes a senior research psychologist (M. Paulson, Ph.D.), a research assistant with abilities as a group therapist (preferably a psychiatric nurse), psychiatric and statistical consultation, and appropriate clerical support.

Resources to be utilized by the task force on violence against children will include interview rooms, recording equipment, computer facilities, and the facilities of the multi-media audio-visual component of the Center for the Study and Reduction of Violence.

By the end of the first year, the task force should have produced a book on the problem of battered children and methods of treatment and work with families on prevention of further injuries; a film on the same subject should have been produced in cooperation with the task force on violence against children by the multi-media audio-visual unit of the Center; previously existing data should have been processed and evaluated, and new groups of parents should have been incorporated into a study using improved intervention techniques. It is expected that the film produced on the problem of child abuse will be useful for training and education of hospital employees, police, mental health workers, physicians, and other front line workers who encounter the syndrome of battered babies and severe child abuse.

Task IV-B: Violence in Schools—Prevention Models

The task force on violence in schools (under the direction of Irving Berkovitz, M.D., Senior Psychiatric Consultant from the County Health Services Department Mental Health Division to the Los Angeles Unified School District) will survey the problem of *violence in the schools from the standpoint of behavioral scientists*. Dr. Berkovitz has organized a series of one-day regional conferences on the problem of violence in schools. At the first conference (February 1973) representatives from 20 schools, together with representatives from a number of community organizations, discussed various problems, and it was indicated that there has been a continually rising number of threats, beatings, sexual assaults, and homicidal assaults occurring on school premises. Several categories of violence were described. These categories include violence by students towards students, violence by students towards teachers, counter-violence by teachers and school personnel toward students, and finally, an alarming increase in violence toward students and school personnel from non-students—that is, strangers from outside the schools. A number of schools and school districts have sought to use a variety of approaches directed toward the reduction of these different categories of violence in the schools. Participants in the conference reported that while some of the experimental approaches have failed, other new approaches have been relatively successful. For example, representatives from the Duarte school district reported considerable success in reducing school tension and the number of violent incidents through an overall plan which included the selection and training of students to act as monitors in crisis periods and to assist in keeping order, mobilization of parental support, development of a hot-line rumor control telephone service, and direct efforts to

improve the morale of teachers and to encourage greater communication and greater friendship between students and teachers.

The task force on violence in schools will cooperate closely with the task force on a survey of violence in trying to define categories of degrees of violence in schools, so that incidents of violence may be given a gradation of severity and counted in number and quality, so that a given school, during a given time period, may be evaluated in terms of the seriousness of the problem of violence.

The task force on violence in the schools will continue to survey the community for approaches to the reduction of school violence that have had some success in practical application. These approaches will be combined into a more total approach that will be tested during the school year 1973-1974 in two junior high schools which have agreed to participate in the program. One of these junior high schools is located in a predominantly Black ethnic area; the other in a predominantly Chicano area. The plan of the task force is to survey the schools on the initial level of violence, and then to introduce new anti-violence programs.

The two programs will be presented to the respective schools by ethnic field workers, and will be monitored by consultants. Staffing required for this task includes Dr. Berkovitz, as planner, originator, and coordinator; a research assistant, two part-time field workers, and appropriate clerical support.

Evaluation of the task force on violence in schools should be based upon the following criteria: completion of a comprehensive review of existing efforts on the part of the schools to decrease violent behavior; combination of successful aspects of those efforts into a model for the reduction of violence in schools; design of a model susceptible of explanation, demonstration and application in school situation; completion of an experiment designed to test the feasibility and to demonstrate some decrease in school violence as a result of introduction of the model.

Task IV-F: Serious Sex Offenders—Treatment Model.

The task force on serious sex offenders will focus, during the year 1973-1974 on serious sexual offenses, and particularly on forcible rape. The task consists of several components, including the following:

(1) The study of the rapist. Rape is a pathological expression of several psychiatric problems. Some of these problems are sexual, some are related to factors of aggression, and some are related to the inability of the individual to cope with minimal every day problems of life.

(2) The task force will be concerned with the problems faced by the victims of rape, and will develop sympathetic understanding, examination, and treatment of persons who have suffered the traumatic effects of victimization of forcible rape.

(3) This project is concerned with the *treatment of violent sexual offenders in special hospitals*, and rehabilitation through after-care programs specifically designed to introduce the offender back into the community in a protected living environment to further his rehabilitation.

Staffing this task force as Senior Investigator will be Joshua Golden, M.D., who will interview rapist offenders and their victims. Among Dr. Golden's tasks will be the development of close cooperative relationships with the workers at Atascadero State Hospital and with police investigators in Los Angeles and other counties. An effort will be made to select and train several police officers whose work brings them into relationship with rapists, either in the process of apprehension or of interrogation, or through other appropriate assignments for participation in the task force as part-time investigators. It is believed that the creative use of police officers as participant-observers in the work of the task force will add important knowledge to an understanding of the phenomenon of rape.

The task force on serious sex offenders will, in addition, conduct a feasibility study of the design of a new type of residential facility to be used as a half-way, or part-way, residential facility for the after-care of persons who have been discharged from a hospital for mentally disturbed sex offenders.

For purposes of evaluation, this task force should be expected to produce a monograph on the design and functioning of a new type of residential community-based facility for the rehabilitation of violent sexual offenders. In addition, it should produce scientific reports, and eventually a book, on the psychological and social factors involved in a large series of rape occurrences.

These factors would include elements in the lives of both the perpetrator and victim which happen to put them into proximity at the time of the violent episode, and would also describe the subsequent life experiences of both persons. The task force should be expected to produce a series of recommendations dealing with improved techniques for the detection and prevention of rape, with improved after-care for victims of rape, and with the treatment and rehabilitation needed to reduce the possibility of recidivism in persons who have been convicted of rape.

36. Work Schedule: As indicated in the above discussion of the various tasks, and the methodology associated with those tasks, different elements within each task will require differing amounts of time for their completion. In general, the work of the task forces will be of an ongoing nature, featured by the completion of successive phases—accompanied by reports, presentation of models, and presentation of recommendations, and other appropriate and concrete contributions to the solution of the problem of individual violent behavior. It is contemplated that the Center for the Study and Reduction of Violence will become a permanent and ongoing institution.

37. Systemwide Impact: 1. Impact on Police (including all law enforcement agencies): The essential impact of the program of the Center for the Study and Reduction of Violence upon the police and law enforcement system will be the provision of a broader range of alternatives and options related to the making of appropriate decisions when confronted with situations, during the course of their activities, in which the risk of violence is inherent. For example, the Center will develop models for training programs for personnel as a means of reducing the probability of violence during those occasions when the police are called upon to intervene in family disputes. Another impact of the Center upon the law enforcement system will be to *increase the efficiency techniques for improved diversion of non-criminals into ancillary helping channels along medical and paramedical concepts*. The Center may have an eventual impact upon the reporting of crime, through its efforts to increase the reliability of reporting of certain previously under-reported types of violence. Finally, by stimulating some law enforcement personnel to view themselves as investigators with a research function, the Center may contribute to the trend already in existence toward an increasing professionalization of police personnel. It is expected that some law enforcement personnel, as a result of their work with the Center, will choose to go on to advanced studies related to the work of the Center, and to take degrees in those studies.

2. Impact on Courts (including all courts, the district attorney's office, and the public defender's office). The Center's impact upon the courts and the district attorney's and public defender's offices will be that of improving decision making by providing better indicators of the potential dangerousness of accused offenders. Moreover, to the extent that improved treatment models are developed and applied, there will be less frustration of efforts to rehabilitate offenders, so that increasing numbers of such individuals may remain in the community as productive individuals, relieving the judicial system to a corresponding extent. It is expected that the ethical and legal investigations of the Center will be of assistance to the courts in efforts to interpret questions related to civil rights and constitutional law.

3. Corrections (including jails, institutions, and camps, and the probation office and parole offices). With respect to this area, the Center will have an impact in improving the decision making process regarding the question of whether or not to release a prisoner. There will be an impact in the form of improved treatment within institutions themselves, in the form of new and promising techniques for after-care of offenders who are returned to their home communities and who require new types of assistance in readjusting to life situations outside of an institution. In addition, the Center will develop new types of intervention and treatment models which may be applicable for use in parole offices and/or work camps, probation offices, and similar intermediate detention situations and facilities.

4. Other community based projects. The Center for the Study and Reduction of Violence will have an impact on many community projects. For example, the Center plans to investigate the role and effectiveness of treatment programs for heroin addicts, comparing the incidence of violent behavior among individuals being maintained on methadone with the incidence of violent behavior among heroin addicts who are in non-medication after-care programs (for example, parolees from the federal facility on Terminal Island).

Agencies Contacted: In the course of developing plans for the establishment of the Center for the Study and Reduction of Violence, a large number of agencies has been contacted, including (but not limited to) the following agencies.

Department of Corrections, State of California (Allen Breed)
 District Attorney's Office: Field Station (A. T. Collier)
 Monterey County Sheriff's Department (Wm. A. Davenport)
 Los Angeles Police Department (D. Gates)
 California Peace Officers Association (J. Glavas)
 Vacaville State Hospital (Luk Kim)
 Los Angeles County Probation Department (G. Pedersen)
 Los Angeles District Attorney's Office (Quon Kwan)
 Department of Corrections, State of California (R. Procunier)
 Police Department, Cypress, California (Geo. Savord)
 Department of Corrections, State of California (S. Shepard)
 Los Angeles County Peace Officers Association (A. Sill)
 Los Angeles County District Attorney's Office (R. Sinetar)
 State of California Attorney General's Office (E. Younger)

38. *Evaluation Design*. Criteria for evaluation have been included in the description of work task and methodology for each of the task forces indicated in Section 35 of this grant application. Evaluation of the Center for the Study and Reduction of Violence as a total program will be the responsibility of the Advisory Committee and the Coordinating Council. The Advisory Committee will be appointed by the President of the University of California, upon consultation with the Secretary of the Health and Welfare Agency and the appropriate University Chancellors. *The Advisory Committee* will meet regularly with the Center Director and participate actively in evaluating the Center's objectives, programs, and effectiveness. In so doing, it will provide a continuous review of the Center for responsiveness of the Center's efforts to the national context and the Health and Welfare Agency. *The Coordinating Council* will be appointed by the Secretary of the Health and Welfare Agency. It will work in cooperation with the Center's Advisory Committee to assist the Center in the pursuit and accomplishment of the objectives and priorities set forth by the Health and Welfare Agency, and will evaluate the work of the Center.

The Task Force on Administration, Planning and Evaluation of the Center for the Study and Reduction of Violence will, in addition, provide for ongoing evaluation of Center operations, and report on progress of the Center for purposes of internal evaluation.

Because new approaches to complicated problems are to be explored and developed, it can be anticipated that there will be changes in tasks and in strategies during the course of ongoing Center operations. Blind alleys will be abandoned; promising new avenues will be followed up. At the end of the first six months of operations, a detailed and comprehensive internal evaluation will be conducted, and a Progress Report will be issued indicating what has been accomplished, the difficulties which have been encountered, and changes which may be indicated in method of approach or personnel. This report will be prepared under the direction of the Center Director, and will be submitted to the staff of the California Council on Criminal Justice by January, 1974.

[Item III.B.2.c]

MEMORANDUM ON THE CENTER FOR THE STUDY OF VIOLENT BEHAVIOR

PREPARED BY THE COMMITTEE OPPOSING PSYCHIATRIC ABUSE OF PRISONERS—APRIL 5, 1973

In his January, 1973, State of the State message Governor Reagan announced the formation of a Center for the Reduction of Life-Threatening Behavior. Several proposals have been drafted to obtain funding for this project, the most recent of which has been submitted March 1 to Dr. Stubblebine and the CCCJ, and which will be considered by the Senate Health and Welfare Committee on April 11th. The project has been re-named the Center for the Study of Violent Behavior.

We recognize, as all citizens must, that violence is a major concern today. It is therefore uncomfortable for us to be put in the position of opposing an attempted solution to this most severe problem. Nevertheless, because we are concerned both with the reduction of violence and with the protection of human rights, we are forced to object strenuously to a plan which is lacking in scientific merit and which contains no ethical or legal safeguards against abuse.

In 1968 California officials secretly amygdalotomized three prisoners, paying scant regard to legal and ethical issues of informed consent. This serious tampering with the human brain yielded no favorable results for reducing crime or violence. In fact, the prisoner reported by officials to be the most improved is still in prison. His old symptoms have returned, and he now suffers additionally from memory loss and other effects of the brain destruction. A program of mind-crippling psychosurgery was nearly established in 1971, before secret documents came to public attention and forced the Department of Corrections and the University of California, San Francisco (which had agreed to perform the operations) to back off from their plan. The proposed Center for the Study of Violent Behavior represents a resurrection of this same scientifically invalid, ethically deficient, and legally questionable practice. Although the present proposal represents only a small proportion of the research to be conducted by the Center, already the guidelines are clear as to the direction in which the Center's work will be navigated. Chemical castration, psychosurgery, and testing of experimental drugs on involuntarily incarcerated individuals are prominent features of the proposal. Notably lacking is research into the ethical and legal limitations on such activity. In the press release accompanying the proposal Dr. Stubblebine emphasizes that the Center will "develop standards to absolutely protect the legal, civil, and human rights of any person volunteering to participate in any program to be conducted by the Center." No such research is outlined in the proposal, yet the projects it seeks to fund immediately involve the most severe intrusion into the human psyche. The proposal establishes no mechanisms to protect the rights of the persons who will be experimented upon.

In an age of rapidly advancing technology, when new methods of scientific control of mind and behavior are becoming a reality, and when the cry for law and order at any cost is at its most shrill, it is necessary to be even more sensitive to the preservation of human dignity and fundamental principles of liberty and freedom. It is also necessary to be sensitive to the possibility of political manipulation of scientific research to repress healthy dissent and legitimate disagreement in a changing society. Our examination of the proposed Center convinces us that it is particularly susceptible to political manipulation, totally devoid of protections for human rights and liberties, scientifically inadequate, and generally unresponsive to the pressing need for a decrease in the level of violence in our culture. A brief examination of the reasons why we are forced to this conclusion follows.

POLITICAL MANIPULATION

It is significant that the latest proposal does not address itself to the key administrative points: how the Center is to be structured and who shall control it. Examination of earlier drafts of the Center proposal, in which these points are covered in some detail, reveals that the original plan for a partly University-controlled Center has been replaced with a facility controlled by politically appointed State officials. For example, in Draft No. 2 it is stated that the University of California will obtain direct operational control almost immediately and that the Health and Welfare Agency (HWA), in establishing the Center, will conform to policies and procedures of the University (p. 11). In draft No. 3, however, control by U.C.L.A. has evaporated. Fiscal and operational control is vested in two committees, neither of which contains a University majority. Draft No. 3 drops the requirement that HWA meet U.C.L.A. policies and procedures.

In Draft No. 2 the "Advisory" Committee to assist the Director in running the Center is to be appointed by the President of the University after consultation with the secretary of HWA. The Committee is to be composed of 80% faculty members of "University-related" members and 20% State of California members. One important function of the Committee is to make the operation of the Center and its research and action projects responsive to the needs of HWA (p. 14).

Draft No. 3 retains the "Advisory" Committee and its functions, but makes a highly significant alteration in its structure. Under the new draft, the ratio of University to State members is reduced from 80%-20% to 50%-50%, thus insuring that the University will not control the Center. In addition, now that the University has lost control of the Committee, the function of the "Advisory" Committee becomes one of governance. Page 8 of Draft No. 3 states that "The Center will be within the University of California, and will be controlled by an Advisory Committee composed of University and State members." Thus this Committee is advisory in name only; in actual fact it replaces the Director as the governing agent of the Center.

Draft No. 2 gives the Director authority to secure non-State funding without the consent of the State's Coordinating Council (p. 13). Draft No. 3 gives the Director no such authorization, thus making all outside funds politically dependent on State approval and appraisal.

In addition to an "Advisory" Committee, both drafts include plans for the establishment of a Coordinating Council to be composed *exclusively* of State officials appointed by the Secretary of HWA. In Draft No. 3 the membership of this Council includes members of the legal, medical, and law enforcement communities on an *ex officio* basis (p. 7). Draft No. 2 contained no such provision. The explanation for this change is found in the objectives of the Center. Draft No. 3 states that the Center will serve as a focus for the University, the State Government, the judicial system, and law enforcement for the development of models to reduce violence (p. 8). Draft No. 2 did not as clearly tie the Center into providing models for the judicial and law enforcement officials. Both drafts, however, view the function of the Coordinating Council as insuring that the programs at the Center pursue the objectives and priorities of HWA. One wonders what happens to academic freedom when the funding and direction of University professors is dictated by political appointees. The Council is also designed to see that programs developed at the Center be put into use by the appropriate State agencies (Draft No. 2, p. 14; No. 3, pp. 7-8).

The Coordinating Council in both drafts is given the authority to review and clear all grant requests not generated by the Center, which indicates that research and action outside the University will be funded through the nominally University-based Center. Where will these outside researchers be located? Will they work in the State prisons, which are specified as loci of the Center's work in Draft No. 2, but which are not named specifically in Draft No. 4?

Summary. The Center will be controlled by State officials who will determine what research and what action is carried out, how funds are to be acquired and disbursed, and how Center programs are to be implemented. U.C.L.A. will control the day-to-day operation of the Center but will have minimal ability to set goals and policies. The progression from Draft No. 2 to Draft No. 3 clearly shows the intention of HWA to retain full decisional control over the Center's work. Since the University has no members on the Coordinating Council and only 50% representation on the Advisory Committee, it is clear that control is never really turned over to U.C.L.A. Regrettably, we have not yet had time to examine whether the California Constitution and laws establishing the University of California allow this type of Center to be under its auspices. Our initial reaction is that there is a Constitutional problem presented by the control mechanism as presently conceived.

This Center is, in short, a laboratory for the Department of Corrections and law enforcement officials with the diaphanous veneer of U.C.L.A. used to make it appear to be a respectable University research facility. The analogy of weapons research under Defense Department grants to University science departments immediately springs to mind. Thus, rather than basic, solid research on violence and its causes, we will see programs of control, detection, and prevention developed for implementation by law enforcement officials. Indeed, early drafts of the Center proposal indicate that these are its primary goals (Draft No. 2, p. 2; No. 3, p. 1). Both drafts concentrate on "detection, prevention, control and treatment" while virtually ignoring the most important aspect of all: the causes of violence. Such a set of applied goals, ignoring the cause, is inconsistent with an understanding of the nature of violence but perfectly compatible with suppression techniques whose nature is to impose violence on individuals in the name of medical treatment and/or law enforcement.

ETHICAL QUESTIONS

As noted earlier, the emphasis in Dr. Stubblebine's press release on development of ethical and legal strictures on research and testing is nonexistent in the actual programs sought to be funded. It seems quite clear that the Center is not concerned with these matters, since it intends to use chemical castration drugs on involuntarily committed men (Draft No. 4, p. 25), psychosurgery and other mind-destroying interventions into the brain (p. 27 and the *San Francisco Examiner* (April 1, 1973) report of remarks by Drs. West and Stubblebine), and other types of human experimentation (pp. 12, 31, 35) before any guidelines have been developed as to the legality or ethical validity of these practices. A sensitivity to human values and legal rights would have made the investigation of the moral, legal and religious aspects of the question of violence the top priority that must be resolved before any human research begins. The fact that this has not been done speaks for itself.

Draft No. 4, the current draft, thus intends immediately to begin research with human subjects. To the best of our knowledge this research has not been cleared by the appropriate U.C.L.A. Committee on Human Experimentation. The University of California, San Francisco, regulations require that "No grant or contract will be approved and no gift will be accepted until the protocol has had campus approval" (emphasis in original). We assume that U.C.L.A. has similar regulations. Has their Committee on Human Experimentation approved the proposal? Have they seen it? If not, how can the Center legally operate? It should be noted here that if the Committee had already given permission they would have done so in the absence of a scientifically rigorous program and in the absence of ethical and legal limitations built-in to that research. If HWA presently funds the Center without the Human Experimentation Committee having been consulted, HWA may itself be in violation of the law.

Another point which may be subsumed under the heading of Ethical Questions is the lack of research on control over the technologies being developed. With the heavy emphasis on prior detection and subsequent suppression of violent behavior, it is certain that techniques of control will be developed which are potentially capable of political abuse by governmental authorities. We have far too many examples in this century of humanely intended research being politically used for inhumane purposes. Nowhere in the several drafts of the proposal is there any mention of a program to evaluate methods for preventing abuse of scientific research on violence. If our technology continues to advance significantly further than our ability to control that technology, we will become helpless to resist being oppressed by it. Thus research on control would seem to be a logical high priority, but it is wholly absent from the proposal. Since implementation of the Center's research and action is placed in the hands of correctional, law enforcement, and public school officials, there is even greater need to devise methods to protect citizens against manipulation for political purposes.

SCIENTIFIC MERIT

Draft No. 4 contains the fullest statement so far of the nature of the research and action to be conducted at the Center. cursory examination suggests that most of the projects are too vague to constitute scientific research and too incomplete to be seriously considered for funding. Closer examination reveals some terrifying implications.

Certain projects could be legitimate and useful, such as those which seek to coordinate the literature on violence (p. 23) or establish emergency service (p. 56). But other projects are more questionable. Why establish a public relations television program ("Violence Clinic") now when the research that is to be the basis of the programs has not yet been begun? Why fund a project on Cultural Differences in Violent Behavior from State welfare monies when the diverse American sub-cultures are not involved, but rather the investigators want a paid trip to Yemen to study what they call a tribe of "Indlans" who take an exotic narcotic drug?

Of far more serious concern are the projects which involve direct intrusion into the minds and bodies of human subjects. To fund such projects on the basis of a two or three paragraph general description is to throw scientific methodology out the window. In almost all cases these projects have no fully defined goal and no specified procedure for achieving a goal. In some cases the research has already proven to be ineffective. For the purposes of this

memorandum we would like to concentrate on the project which attempts to link Violence Prediction and Brain Waves. At least one-third of the total number of projects are based on the same scientific view.

This project has been done before. It is basic psychosurgery, and associated attempts to develop mass screening methods to detect the "potentially violent" person, with no scientific basis for understanding the causes of violence. The theory which is advanced to support this research has been expressed by Drs. Vernon Mark, William Sweet and Frank Ervin. In the summer of 1967 they published in the *Journal of the American Medical Association* a letter suggesting that the Detroit riot of that summer was caused not by poverty, poor housing, etc., but by individuals with malfunctioning brains. This thesis is further expounded in Mark and Ervin's book, *Violence and the Brain*, which describes their preference for psychosurgery and indicates their desire to develop mass screening methods to predict violence through a battery of tests to be applied to the general public, or segments thereof, in routine examinations. But these doctors have not been content to sit in academic offices and expostulate theories of social control. Using almost \$1,000,000 of Federal money; they have performed brain operations to control violence. In one instance they secured the patient's consent while he was having his brain electrically stimulated. He later retracted this consent but was coerced into changing his mind again. In another case their patient committed suicide after two operations, when a third was being planned, an outcome which the psychosurgeons found to be "gratifying", since the woman's ability to plan and execute her death showed that the brain operations had not impaired too drastically her cognitive facilities. Michael Crichton's terrifying novel, *The Terminal Man*, is based on one of the patients of Drs. Ervin, Mark, and Sweet. The proposal listed on page 27 of the current draft is the Ervin-Mark-Sweet research project. Dr. Ervin is presently on the faculty of U.C.L.A. An earlier draft (No. 1, of the proposal indicates that he will take part in the research. Why is he not listed in the recent proposals when it is his ideas and his experience which forms the background of this program? Is it conceivable that he would not participate in a program that has been his life's work? And why did Dr. Ervin come to U.C.L.A. just as funding appeared to be imminent for continuation of his research in Boston?

The proposal to equate violence with brain dysfunction, which is so prominently featured in several of the projects under submission in Draft No. 4, was considered recently by Congress when Ervin, Mark, and Sweet applied directly to Congress for an additional \$1 million to continue their scientific exploits. Congress finally turned them down after investigation disclosed the shoddy operation they were running and the scientific invalidity of the approach they were taking. It was shortly after the denial of this money to Ervin-Mark-Sweet that the announcement was made by Dr. Earl Brian, Secretary of HWA, that \$1 million would be given to fund the U.C.L.A. Center. Coincidence?

We do not have answers to the questions of the preceding two paragraphs, but we do have the following information about Dr. Ervin and his colleagues. Fuller documentation is available for each of the facts stated below.

An internal document from the Federal funding source, the Law Enforcement Assistance Administration (LEAA), indicates that the Boston group (Ervin-Mark-Sweet) engaged in the following practices: they paid a consultant at twice the lawful daily rate in violation of express terms of their grant; they attempted to purchase equipment on a non-competitive basis from a company in which Dr. Ervin is the major stockholder; Dr. Ervin left the project without notifying LEAA, which he was required to do, and appointed as a replacement a non-qualified person. In addition, a scientific peer review of their research, requested by LEAA, found that it "contributes relatively little to our knowledge of biological factors in violence" and concluded that the project was "unsatisfactory" in carrying out the stated aims of the original grant proposal. "The authors have not come up with any test procedure for the identification of violent criminals and have advanced no concepts of heuristic value that might serve as a basis for further work." (emphasis added) The psychosurgery trial now being litigated in Detroit has revealed that one of the doctors at the Lafayette Clinic visited the Boston group and what he found was "quite disturbing": low morale on the part of the staff, low level personnel preparing

the report to the funding source on the results of the program (not one member of this staff was a physician), and poor results only partially describe Ervin-Mark-Sweet's scientific research. Corroboration of this viewpoint was obtained from other doctors who had worked with them. Dr. Jose Delgado of Yale complained of "sloppy" practices. Most important of all is the fact that their research did not and cannot establish a link between temporal lobe epilepsy and violence. Careful reading of their publications shows that they use psychosurgery to pacify patients who then still retain their brain disorders but no longer cause as much trouble to their caretakers. Ervin-Mark-Sweet do not seem to believe in follow-ups, but what evidence does exist suggests that their patients have become duller people. One is presently in a V.A. hospital in Los Angeles and is expected never to return to society again. Ervin and Mark describe him in *Violence and the Brain* as a "brilliant engineer." Society has lost the value of his mind through the intervention of the Boston group. This must not be allowed to happen at U.C.L.A.

Other projects in Draft No. 4 are also open to serious question. One illustration is provided by the Treatment of Violent Young Offenders project at page 46. It need only be pointed out that solitary confinement, torture, electric shock, and mind-altering drugs have all been used under the label of "behavior modification," the technique proposed for this experiment. In California in particular, these practices have been undertaken on prisoners and mental patients as "treatment." Dr. Stubblebine has been quoted by the *San Francisco Examiner* as saying that this behavior modification project will employ punishment—what kind of punishment is not stated. Does Dr. Stubblebine know? Does he care one way or the other? Should open-ended funding be given for "punishment?"

CONCLUSION

This brief memorandum concludes by placing the Violence Center in the perspective of other voices heard around the country as to the "answer" to violence. A Santa Monica psychosurgeon has spontaneously offered to do brain operations on California prisoners, especially young aggressive males. Dr. Ralph K. Schwitzgebel, a colleague of Dr. Sweet, and Dr. Robert L. Schwitzgebel of the Claremont Graduate School in California have just published a book, *Psychotechnology: Electronic Control of Mind and Behavior*, in which they describe the present and potential use of brain implants and radio telemetry to monitor human emotions, location, and behavior, and to control behavior in various fields, including law enforcement. Dr. Barton Ingraham and Dr. Gerald W. Smith, both recent recipients of Ph.D. degrees from the School of Criminology, University of California, Berkeley, recently advocated the permanent implantation of radio receiver-transmitters in the brains of parolees (*Issues in Criminology*, Fall, 1972). They envision the automatic monitoring of parolees by a computer which, if it detected a *probability* of misbehavior by the parolee, would cause him to abandon his activities by delivering an electrical shock to his brain and/or by calling the police to his radio-monitored location. A number of prototypes of such devices have been tested under field conditions, and the Schwitzgebel brothers have designed methods to insure that the wearer of the device cannot remove or disarm it.

A recent report, not yet fully confirmed, discloses a program in California to computerize files on "pre-delinquent" children so that early behavior problems can be filed and the individuals who exhibit these tendencies can be checked for the rest of their lives. The computer files of these primary-grade children are prepared without the consent of their parents and are tied into the files of law enforcement agencies.

This is a grim picture indeed. We ask that U.C.L.A. not become a place where politicians obtain the techniques for scientific pacification of our population. As taxpayers we ask that money be spent only on carefully drafted proposals with at least a possibility of reducing the level of a healthy violence in our society and that a blank check not be given to pursue research on methods of repression. As concerned citizens we ask that strict adherence be paid to the legal rights and guarantees of freedom which serve as a cornerstone of our nation. And finally, as human beings we ask for the preservation of our dignity.

[Item III.B.2.d]

"THE UCLA PROJECT ON LIFE-THREATENING BEHAVIOR: SOME FACTS, APRIL 4, 1974

For some time a number of faculty members from several departments at the University of California have sought support for studies relating to life-threatening behavior. Some of these studies are already in progress. All of them are socially important, ethically sound, and scientifically valid. This faculty group approached the California Department of Health more than a year and a half ago to request a large grant.

The Department of Health agreed to support the UCLA proposal, and asked the California Council on Criminal Justice (CCCJ) to put up half the money. After extensive hearings, CCCJ unanimously endorsed the UCLA program (then called the Center for the Study and Reduction of Violence) in July, 1973.

The University proposed to establish a program that would include a small core group of resource people, a media laboratory, and a number of studies. These were to cover: "Work on the epidemiology of violence in California; child abuse (thousands of infants are crippled or killed each year by their parents); homicide among children (increasing); suicide among young people (also increasing); the prediction of pathological outbursts by disturbed individuals; cross-cultural studies of violence; treatment methods for both perpetrators and victims of violence (including rape and other violent sex offenses); postventive help for the survivors of those who die violently; community crisis centers for the assistance of those seeking help for control of their own violent impulses; drug and alcohol-related violence (including that on the highways); animal models of violence and aggression; and others including a study of ethical problems of research on violence." (UCLA public information release, March 23, 1973).

The orientation of this program was multidisciplinary. It was to provide an integrated consideration of how medical, psychological, social and cultural factors interact to influence the act of violence, its perpetrator and its victim. While biological variables were included in several studies, the preponderance of emphasis was on the psychological and sociocultural aspects of certain types of life-threatening behavior. Mass violence, collective violence, large-group conflict and war were excluded; these issues have been extensively studied elsewhere. The UCLA focus was to be on the individual and the small group, including the family.

No psychosurgery (or surgery of any kind) was ever contemplated. No dangerous experimentation was to be carried out on prisoners or anyone else. No abrogation of human rights would be permitted. The reality was a consortium of approximately 30 faculty members planning to pool their efforts in studying some life-threatening behaviors of special concern to the health- and mental health-related disciplines.

Elaborate controls and safeguards (including those for confidentiality and informed consent) govern all work with patients and research subjects at the UCLA Center for the Health Sciences, or by UCLA faculty anywhere. This Project was no exception.

The goal was to make a contribution in an area of great relevance and concern to the community, for the benefit of all. Those most affected by violence—poor people, minority groups, the underprivileged in general—would obviously stand to benefit the most.

Unfortunately, public concern was stirred up by a barrage of misinformation initiated by a small group of persons who for various reasons were politically opposed to the proposed enterprise. This group has issued a steady flow of distortions, quotations out of context, references to irrelevant documents, and outright falsehoods which have been widely disseminated, quoted and requoted. Their campaign had sufficient political impact to block establishment of the program, and even led to intimidation of some of the would-be investigators. Such an outcome obviously has very serious implications for academic freedom.

A revised version of the proposal is now being prepared for submission to NIMH, despite continuing contumely and attack. The faculty's intent remains as previously described: "... To study a variety of pathologically violent behaviors; their causes and precursors; conditions that foster or aggravate them; acceptable methods of preventing or diminishing such behaviors and

preconditions; and techniques for treating or mitigating the harmful consequences . . . (This) program will concentrate on violent behaviors that take place in an individual or small group setting; behaviors that are irrational, impulsive or uncontrolled; behaviors that are likely to bring perpetrators and/or victims into the sphere of responsibility of health-related professions, either directly or through consultation with other disciplines." (June, 1973, official proposal).

If funds are obtained, the work will be administered in the Psychiatry Department's well-established Laboratory for the Study of Life-Threatening Behavior under the direction of Edwin S. Shneidman, Ph.D., Professor of Medical Psychology, Sociology, and Psychology. Dr. Shneidman is also editor of the Journal, *Life-Threatening Behavior*. The Coordinator of the Project is Joshua Golden, M.D., Associate Professor of Psychiatry and Assistant Dean of the School of Medicine. Dr. Golden is an authority on psychosomatic medicine and human sexuality. A current list of individual project titles and participants is attached.

The revised Project on Life-Threatening Behavior will be subject to all proper safeguards and controls before any work can be initiated. There will be no surgical procedures, no experimentation of any kind involving prisoners, no noxious conditioning or punitive behavior modification procedures. A sworn affidavit to this effect is on record in the Chancellor's office. Governance of the Project is a University responsibility. Regardless of the sources of research funds, University constraints and procedures will always apply.

The Project on Life-Threatening Behavior must be reviewed in many ways by many groups. These include a special Chancellor's Advisory Committee, the School of Medicine's Human Subjects Review Committee, and the Project's National Advisory Council (see attached list of members). It must be approved by both the Chancellor and the Board of Regents before going to NIMH. A Public Advisory Committee will be appointed if the program finally comes into being. And the state legislature will undoubtedly require its own review before removing its present proscription against initiation of the work.

Some of the well-informed individuals and groups that have endorsed the Project include the Dean of the School of Medicine, the Chancellor of UCLA, the Medical Director of the American Psychiatric Association, the Citizens Advisory Mental Health Council of California, the Faculty Council of the UCLA School of Medicine (representing the entire faculty), and 123 full-time members of the Department of Psychiatry. It is hoped that other fair-minded colleagues, in the interests of academic freedom and of the great public need for new work on this problem, will add their support.

Few research proposals have ever included such elaborate procedural safeguards. All of those connected with this effort hope that these procedures will finally be given a chance to function, and that the concerned scientists will be allowed to proceed with this legitimate and important task without further harassment.

[Item III. B.2.e]

To: UCLA Center for the Study and Reduction of Violence.
From: Richard Laws, Ph.D., Staff Psychologist—Experimental, Atascadero State Hospital.

Date: March 29, 1973.

Subject: Research projects for fiscal year 1973-74.

My input to the research program at Atascadero State Hospital has been in application of my knowledge of conditioning techniques to the study and treatment of sexual offenders, development of a comprehensive program for treatment of these patients, development of an electrophysiological laboratory, and in the planning and production of training films for use with this population.

Within our electrophysiological laboratory we presently have the capability of (1) programming the presentation of a wide variety of audio-visual stimuli, with concurrent recording of (2) heart rate, both directly and in beats per minute, (3) galvanic skin response, (4) changes in penis volume, (5) electromyographic responses, and (6) alpha and beta brain waves. We are presently in the process of developing portable bio-feedback devices which can be used for self-monitoring *in vivo*.

My interests are primarily in the alteration of human sexual responsiveness. It should be emphasized that none of the procedures to be described are intended to function as the sole means of treatment; rather, they are intended to complement concurrent education and social re-training activities.

Following are brief descriptions of the research projects planned for FY 1973-74:

1. *Biofeedback and Self-Control.* We have coupled an audio feedback device to a standard penile transducer. A subject wearing the transducer on his penis hears an audio signal that increases in direct proportion to the expansion of the transducer as he becomes sexually aroused. While concurrently recording sexual response, heart rate, galvanic skin response, and muscular tension, we propose to retrain fantasy in the aggressive sexual offender. We will accomplish this by fantasy training as previously reported by Hilgard and by Marquis. There have as yet been no investigations of the physiological correlates of fantasy re-training. One of the clinical problems one frequently sees is that rapists tend to persist in sadistic fantasy and this would appear to be a fertile population for study. This procedure would apply to about 30% of the population.

2. *Fading Procedure to Alter Sexual Responsiveness.* This procedure involves the "fading in" of appropriate sexual stimuli during arousal to inappropriate sexual stimuli in order to change sexual responsiveness. Two slide projectors are positioned so that their images overlap on a screen. When a subject becomes aroused to a deviant stimulus, a superimposed non-deviant stimulus is gradually faded in while the deviant one is faded out. Thus, in terms of retraining, the subject learns to experience sexual arousal in the presence of a new or unfamiliar stimulus. When coupled with social re-training, this procedure has been shown to be effective in altering sexual preference. This technique is most useful with male and female pedophiles who represent about 55% of the population.

3. *Shaping of Sexual Response.* Although it has rarely been attempted, there is no reason to suppose that the sexual response is not amenable to operant reinforcement, i.e. provision of a desired reward following production of a response to some criterion. This reward could be money, points exchangeable for something, time to look at a deviant stimulus, etc. Starting at some very low criterion, the subject would be required to produce a penile response to an appropriate stimulus using appropriate fantasy. Once he could easily reach this criterion for longer and longer periods, the criterion would be raised as well as the time period for maintaining the response. This procedure would be most useful with those patients who are generally impotent except when confronted with deviant stimuli and would be applicable to anyone who engages in the deviant behavior exclusively, about 50% of the population.

4. *Classical Conditioning.* The simplest of the conditioning procedures, this involves the simple temporal pairing of deviant stimuli (unconditioned stimulus or US) and non-deviant stimuli (conditioned stimulus or CS) while penile changes are concurrently monitored. In the typical procedure the CS is presented first, goes off and is followed by the US. After many pairings, presentation of the CS alone will elicit the conditioned response (CR). A variation is called backward conditioning where the US is on first, followed by the CS. In either case, a large response to the CS following training is the criterion of conditioning. This is also an attempt to change sexual responsiveness and could be applied to 50%-60% of the population.

5. *Satiation.* Satiation simply refers to overloading the subject with constant display of deviant stimuli. Many patients respond to only deviant stimuli. In this procedure two motion picture projectors and two slide projectors run continuously, providing the subject a massive overdose of deviant stimulation while his sexual response is monitored. The point here is to give him more than enough of what he wants in order that he may become unresponsive to these particular stimuli, and over a long enough span of training, become uninterested in them. *This procedure is useful for those individuals with highly specific or exotic sexual interests, e.g. fetishists, those turned on only by pornographic materials, etc. It would apply to about 10% of the population.*

6. *Exposure.* Many patients simply are ignorant of the details of appropriate sexual behavior and are therefore unresponsive. The exposure procedure simply provides motion picture and still representations of non-deviant sexual behav-

for while sexual response is monitored. While the mechanism of action is not clear, exposure appears to contribute to changes in sexual responsiveness much in the manner that implosion desensitizes fear responses. Although time-consuming, this procedure is applicable to 75% of the population.

7. *Dimensions of Sexual Interest.* This procedure is not treatment, but rather a method of investigating the sexual interest patterns of pedophiles. Subjects are shown a series of 132 slides which are evenly divided between adult females, males and pre- and post-pubescent boys and girls, all nude. When each slide is displayed it is out of focus. By manipulating a hand-held push-button, the subject can focus the slide, then maintain it in focus by pushing at the correct rate. If he stops button pushing, the slide goes back out of focus and the next one appears. It usually takes the subject 20-30 pushes to focus the slide. We count all pushes beyond the focus point as "interest" responses. We can then evaluate the data in terms of what was looked at: (a) full body, (b) face only, (c) area from shoulders to waist, and (d) area from waist to mid-thigh. Similar data using non-pedophilic subjects and a different method were published by Freund who hypothesized that children, rather than being desired for themselves, were used as adult surrogates. Our early returns with pedophile subjects tend to confirm these results. This method is applicable to 55% of the population.

[Item III.B.2.f]

STATE OF CALIFORNIA, DEPARTMENT OF MENTAL HYGIENE,
NEUROPSYCHIATRIC INSTITUTE,
CENTER FOR THE HEALTH SCIENCES,
Los Angeles, Calif., January 22, 1973.

J. M. STUBBLEBINE, M.D.,
Director of Health, Office of Health Planning, State of California, Sacramento,
Calif.

DEAR STUB: I am in possession of confidential information to the effect that the Army is prepared to turn over Nike missile bases to state and local agencies for non-military purposes. They may look with special favor on health-related applications.

Such a Nike missile base is located in the Santa Monica Mountains, within a half-hour's drive of the Neuropsychiatric Institute. It is accessible but relatively remote. The site is securely fenced, and includes various buildings and improvements making it suitable for prompt occupancy.

If this site were made available to the Neuropsychiatric Institute as a research facility, perhaps initially as an adjunct to the new Center for Prevention of Violence, we could put it to very good use. Comparative studies could be carried out there, in an isolated but convenient location, of experimental or model programs for the alteration of undesirable behavior.

Such programs might include control of drug or alcohol abuse, modification of chronic antisocial or impulsive aggressiveness, etc. The site could also accommodate conferences or retreats for instruction of selected groups of mental health-related professionals and of others (e.g., law enforcement personnel, parole officers, special educators) for whom both demonstration and participation would be effective modes of instruction.

My understanding is that a direct request by the Governor, or another appropriate officer of the State, to the Secretary of Defense (or, of course, the President) would be most likely to produce prompt results. Needless to say, I stand available to participate in any way that might be helpful.

Sincerely yours,

LOUIS JOLYON WEST, M.D.,
Medical Director.

[Item III.B.2.g]

PRESS RELEASE FROM CALIFORNIA STATE HEALTH AND WELFARE AGENCY

NOVEMBER 8, 1973.

California Health and Welfare Secretary Earl Brian today said that the "barbaric" slaying of nine people in Victor, California last Wednesday "again

underscores the immediate need to take positive action to protect our citizens from violent crimes."

"In just four years in California we have had 62 mass murder victims—62 innocent people brutally slain by sick individuals. Murder seems to have become an everyday reality in our society, taking the lives of persons from all walks of life, such as the killing of Oakland School Superintendent Marcus Foster last Tuesday," Brian said.

"Some of these killers have previous records of confinement in our state prisons, or treatment in our community facilities and state mental hospitals. This only reaffirms what we have been saying again and again: currently we do not have the knowledge or expertise to be able to predict violent behavior in individuals, nor do we have a system in law to properly protect the public from potentially violent persons.

"Last January Governor Reagan proposed the formation of a Center for Study and Reduction of Violence, under the joint sponsorship of the Health and Welfare Agency and the University of California at Los Angeles. This Center was proposed so that we could assemble all available research on the causes of violence, initiate further comprehensive studies, and eventually furnish law enforcement officials, mental health officials, and corrections personnel with realistic methods of detecting and preventing bizarre violent acts such as these mass murders. That proposal was specifically blocked by the state legislature in its 1973 session.

"We have also supported a revision of the state's system for handling mentally ill persons confined by the criminal courts. That bill, AB 1758, would transfer the responsibility for housing sick criminal offenders from the Department of Health to the Department of Corrections. Through this change we would be able to provide proper mental health service to these disturbed individuals in separate, more secure medical-psychiatric facilities, for protection of the public.

"In another example of callous disregard for public safety, the bill was referred to Limbo in committee, where it has languished since last June.

"While some elements of the legislature have seen fit to take these subjects lightly, we have gone ahead and initiated a special task force within the Department of Health to study all existing laws and administrative regulations relating to the mentally disordered criminal offenders to try and find better ways to protect both the public and the individual rights of the patient.

"Since these few legislators have tied our hands on initiating the Center for the Study and Reduction of Violence, and have pigeonholed legislation for reforming the Mentally Ill Penal Code commitment system, I am compelled to make a public plea for quick action by the legislature when they reconvene in January. Sixty-two people have died in barbaric mass slayings; many more have died in individual murders. I implore the leadership of both parties in the legislature to move, and move quickly, on these urgently needed programs," Brian concluded.

[Item III.B.3.]

CLOSED ADOLESCENT TREATMENT CENTER—PROGRAM DESCRIPTION*

The Closed Adolescent Treatment Center bases its program on a combination of three treatment modalities, although other approaches are used in addition when necessary. In brief, the I-level system is used for classification, matching with staff, and matching with peers. The Behavior Modification program is the backbone of the program, beginning very intensely, and having less importance as the child increases his/her ability to assume responsibility. As the individual reinforcement through the point system lessens in importance, the group through increased responsibility in Guided Interaction Therapy, becomes more important. Ideally, then, the student learns to handle his own behavior, then to be concerned with the behavior of his peers, and eventually he learns to handle himself in social environments outside of the institution. Following is a more detailed description of the three interacting approaches.

* Enclosed in June 13, 1973 letter from Donald Santurelli to Chairman Ervin (Item III.A.8. above).

I. THE INTERPERSONAL MATURITY LEVEL SYSTEM OF CLASSIFICATION

All students are given an I-level diagnosis in the Juvenile Reception Diagnostic Center. This is the differential diagnosis and treatment system devised by Margeurite Warren and her associates in the California Youth Authority. Arthur Dorsey, Chief of the Probation Department of San Diego County, has devised a method of matching staff and students in two general groups rather than in the strictly homogeneous groupings originally devised in I-level research. Because of the simplicity and apparent value of this manner of dividing groups, our program has chosen Dorsey's approach. Below is a schematic diagram of the two groups for those familiar with the I-level system.

I-2		I-3	I-4	
Instrumental.....	Acting out aggressive....	Cultural conformist, Manipulator.....	Neurotic acting out.	
Expressive.....	Acting out passive.....	Culturally immature.....	Neurotic anxious.	

The staff then is divided into Instrumentals and Expressives. Briefly, the criteria used for this division are as follows:

Instrumentals—Those who have major concerns with control, achievement, and task completion.

Expressives—Those who have major concerns with nurturance, openness, and resolution of feelings.

The two different groups of staff are matched with the students and each group does the majority of treatment and makes the treatment decisions for the students in their groups.

II. BEHAVIOR MODIFICATION

In general, this is a combination of a point and level system. Points are given 4 times a day in 7 areas which measure the major difficult areas for these youth (e.g., relationships with adults, relationships with peers, being straight). Points range from 0 to 3. There are no negative points given so that the weaker students are not penalized and end up always "in the hole" point-wise. Reinforcements for points are generally increased privileges and they are arranged so that adequate progress earns about 1 increased privilege every week or ten days. Team movement is determined both by acquisition of points and GIT approval. The teams range from 1 to 5 with great differences in both privileges and responsibilities. Students begin the program on Level 2—that is they are treated as responsible individuals until they show differently. A "bust" to Team 1 occurs if there is a Critical Incident (both of these are described in the attached program). There is one "Team" at each end of the continuum for special circumstances: Monad, at the lower end, and Special Status at the upper end. Monad is a very sparse program which uses concrete reinforcers for those students who are not functioning in the point system. Special Status is a sort of Halfway House arrangement for students moving out into the community.

Discipline is described in the attached program and involves both a student "hooking" procedure and 10 minute trips to a "Time-Out" room to remove social reinforcement.

III. GUIDED INTERACTION THERAPY

GIT is basically an intensive group therapy approach with emphasis on the use of positive peer pressure. As is known, most of these youths have long-standing difficulty in relating to adults, but listen readily to peer advice. The GIT approach strongly encourages the principles of helping and caring for each other. Groups meet 6 days a week for 1½ hour sessions.

The makeup of staff of the Closed Adolescent Treatment Center was designed to provide an optimal combination of both Instrumental and Expressive individuals, and in general to combine Correctional and Mental Health approaches. The job classification chosen as the best available to combine these qualities was that of Camp Counselor, a category devised in the planning for the Youth Camps in Colorado. One benefit of this category is that it combines treatment with daily living experience duties in the job specifications. Also, it has the

added benefit of having very loose educational requirements so that individuals of varied backgrounds can be hired. The present staff consists of the following individuals: 1 Clinical Psychologist (Team Coordinator), a part-time Psychiatric Consultant, 1 Social Worker, 1 Sr. Correctional Counselor, 3 Psychiatric Nurses, 1 Recreational Therapist, 1 Occupational Therapist, 2 Special Education Teachers, 4 Camp Counselor III, 5 Camp Counselor II, and 5 Camp Counselor I. The staff rotates shifts about once a month and the majority work a 4 day week, 10½ hour shift. This allows maximum coverage during critical periods of the day, and also allows considerable overlap of shifts for maximum team communication. The program, through this system, is as extensive and structured on weekends and evenings as it is during weekdays.

DAILY SCHEDULES

A. *Week days*

- 6:30 AM—up, personal hygiene—make bed.
- 7-7:30, prepare dining tables—breakfast cleanup.
- 7:30-7:45, clean room.
- 7:45-8:30, work detail and inspection.
- 8:30-10:00, school or RT.
- 10-10:30, break
- 10:30-12, school or RT.
- 12-1:00, prepare dining table—eat lunch—clean up.
- 1-2:30, RT or OT 1 day/week will need business meeting to pay points and vote on levels.
- 2:30-4:30, GIT.
- 4:30-5:00, break
- 5-6:00, prepare dining tables, eat dinner, clean up.
- 6-7:30, quiet room, OT or RT.
- 8-9:00, snacks.
- 9:00, lights out (until Level III—then 10 PM lights out).

B. *Weekend*

- Sat. 7:30-9, up, personal hygiene, eat.
- 9-12, unit clean up.
- 12-1, lunch.
- 1-2, "Turn-on Group"—(informal values type meeting).
- 2-5, activities and free time.
- 5-6, dinner.
- 6-9, evening activities and snacks.
- 9 PM, lights out (until Level III—then 10 PM lights out).
- Sun. 7:30-9, up, personal hygiene, eat.
- 9-12, "Turn-on Group"—free time.
- 12-1, lunch.
- 1-3, personal laundry.
- 3-4:30, GIT.
- 4:30-5, break.
- 5-6, dinner.
- 6-9, evening activities and snacks.
- 9 PM, lights out (until Level III—then 10 PM lights out).

TEAM I

Method of arriving

No student enters the program on Team I. A student is "busted" to Team I for two reasons: 1) a Critical Incident, or 2) joint decision of staff and GIT, because of total lack of responsibility and/or gross misbehavior.

DESCRIPTION AND PURPOSE

Team I is a discipline team to correct gross misbehavior and lack of responsibility. It is more of an individualized program than any other team (except Monad, where concrete reinforcers are used instead of points). This individualization is designed to reinforce small increments in positive behavior. It is achieved by starting the student out with the base privileges and restrictions (listed below) and setting up a schedule of points to earn the extra

privileges individually for each child (rather than on a set number of points for everyone as it is on higher teams.) Individualization is also achieved by staff making extra effort to give reinforcement (both verbally and point-wise) at scoring sessions more frequently and for smaller improvements in behavior than on other Teams.

Another important factor on Team I is peer isolation. Since the student has demonstrated gross misbehavior, he is obviously not being effected positively by the peer culture and is not helping them either. Therefore, he is removed from contact with them until he improves. Although basically isolated until he earns limited activities, the student should have three regular work details a day (if possible just with Team I) and calisthenics, if possible. Also, staff should assign activities while student is in his room, such as: sanding a piece of furniture, writing life history, or cleaning.

Discipline while on Team I is somewhat different from other teams since peer communication is limited. If the Team I student violates a house rule, and other students are present, they may say "Check yourself" (that's all). If he continues, they should book him (without speaking). (If they don't book him, staff should book them for supporting delinquent activity.)

More likely, there will be no other students present, and in that case staff should check and book violations of house rules, and have discipline committee meetings and remove earned privileges. In any point category that can't be rated, the student should get a 1.

These privileges are all the student gets as soon as he is "busted". Anything else must be earned.

1. Bed and linen only in room.
2. Meals in room (no snacks or desserts).
3. Five cigarettes (1 after breakfast, 1 in midmorning, 1 after lunch, 1 in GIT, and 1 either after dinner or before bed.)
4. State Clothes.
5. Attend GIT.
6. Emergency phone calls only.
7. Communication with staff only.
8. In bed (and lights out) one hour before Team II.
9. Out of room only for work detail, calisthenics and bathroom.

PRIVILEGES TO BE EARNED

The order in which these privileges are earned and the points required will be determined by the GIT group and staff as soon as possible after being "busted". The student will be on base privileges until that time. The following are privileges to be earned, but are not rank ordered, and they can be arranged in almost any order:

- (a) Eat in dining room with Team I at separate table (no talking, may have desserts and snacks).
- (b) Limited cottage movement. This means they may participate in recreational activities (OT, RT, TV) separate from other kids and at staff discretion and convenience for two hours a day (maximum). The student may also request extra work detail or calisthenics at staff discretion and convenience.
- (c) May attend school at teacher's discretion and in whatever manner or order he or she requests (e.g., take tests, individually, with Team I, with all Teams).
- (d) May receive mail and write one letter a week.
- (e) May go to bed (lights out) at same time as Team II.
- (f) May have reading material in room, assigned by teacher.
- (g) May wear personal clothes.
- (h) May earn minimum allowance (50¢ per week and order from canteen).
- (i) May talk to other Teams.¹

PROMOTION TO TEAM II

Promotion varies with each individual based on required points set up by staff and GIT, and also based on staff and GIT approval.

¹ This should be a final privilege before moving to Team II.

TEAM II

Purpose

1. Student treated as responsible, respected person until student shows otherwise.
2. Student begins identifying and working on problems.

Privileges

1. Can wear personal clothes and wear make-up.
2. May have desserts and snacks.
3. Bed at 9 PM weekdays and 10 PM weekends (Fri. and Sat.).
4. Unrestricted consumable items.
5. Communicate with anyone except Team I.

Points required

6. 200—May have limited reading and writing materials in room.
 7. 500—may receive packages and/or may order from canteen.
 8. 800—may decorate room.
 9. 1000—cottage movement with advisors.
 10. 1200—may participate in enrichment program.
- 1400 points required to move to Team 3.

TEAM III

Purpose

1. Continue working on own problems.
2. Begin helping others to identify and work on problems.

Privileges

1. Bed at 10:00 PM—may earn up to 2 hours later on weekends through school program.
 2. Cottage movement without supervision—notify staff.
 3. Two 5 minute monitored phone calls per week (e.g., 1 in, 1 out, or other combinations).
 4. May go to dances.
 5. Canteen privileges (supervised).
 6. 100—May have personal radio (not a radio supplied by CATC).
 7. 200—Volunteer may begin attending GIT groups.
 8. 300—Supervised walks with staff, 1 per week for ½ hour, limited to grounds.
 9. 400—May become advisor.
 10. 500—Gym privileges, 1 day per week, with other Team III members having 500 points.
 11. 600/1000—Family may visit with staff present/ or volunteer.
 12. 800—Staff supervised activities (movies, gym) out of cottage but on grounds.
 13. 1200—Unlimited walks on grounds with staff.
- 1450 points required to move to Team IV.

TEAM IV

Purpose

- A. Start testing ability to handle responsibility off grounds
- B. Further develop care and help for others.

Privileges

1. Unrestricted bedtime hours.
 2. Doors to room open at staff discretion.
 3. 10 minute unmonitored phone calls (maximum 2 calls) per week.
 4. Free mornings two times per month.
 5. 300—supervised activities off grounds.
 6. 600—friends may begin attending GIT groups.
 7. 600/1200—family or volunteer may visit without staff present.
 8. 900—unsupervised walks on grounds or with member of Team 5.
 9. 1200—friends may visit with staff present after attending 5 GIT group meetings).
- 1450 points required to move to Team IV.

TEAM V

Purpose

- A. Continue testing responsibility.
- B. Begin formulating plans for release.

Privileges

1. Choice of appliance (radio, TV; etc.)
2. Meet with parole or probation officer.
3. May have 8 hours off grounds under adult supervision.
4. May have weekend passes.
5. May accompany another student on visit with adults.

Team 5 no longer on point system. Times of grounds privileges to be decided by GIT group with staff approval.

MONAD

Method of arriving

This team is for students who refuse to work on the program or their delinquency problems and who prefer to do "hard time". It is strictly a staff decision as to whether or not a student goes to Monad, and should be used only in extremely difficult cases, such as: repeated "busts" to Team I, absolute refusal to work on progress, or repeated Critical Incidents.

Description of program and purpose

Time spent on Monad is lost time in that no points are earned to get out of the program. Immediate concrete privileges are earned rather than points. Monad is a stark, unpleasant situation designed to motivate students to work on their problems. There is a minimum 24 hour stay.

Base privileges and restrictions

1. Mattress on floor in room (that's all).
2. Pajamas or nightgown only.
3. Nutritious meals, but not appetizing (e.g., mush, pureed meals, Granola, other cereal, soup, vitamin pills).
4. Doing menial, monotonous work or calisthenics several times a day in order to earn concrete reinforcement.
5. Emergency phone calls only.
6. Communication with staff only.

Earned privileges

Immediate concrete reinforcers will be earned by a prearranged schedule set up by staff, selected from the following list (which is not arranged in any particular order).

- a. Cigarettes (no more than 5 a day)
- b. Regular meals (in room)
- c. Bed
- d. State Clothes
- e. One or two hours of recreation a day
- f. The privilege to participate in the program (attend GIT and earn points) ¹

How to be promoted from Monad

Staff decides how and when a student gets off Monad and if he goes to Team I or back to original team.

SPECIAL STATUS

Purpose

- (A) Finalize Plans for Release and Follow-up
- (B) Release

Privileges

- (A) No automatic busts—Staff makes disciplinary decisions
- (B) May work or attend school off grounds
- (C) Pre-release or Half-Way House

Note: GIT Group and Staff must approve all—level moves, passes, visits off grounds, visits with volunteers, family or friends (off and on grounds)

¹ Should be last privilege.

POINT CATEGORIES

1. Relationship with Adults

Does interact with adults, accepts criticism, is friendly vs. Withdraws, back-talks, curses (out loud or under breath), glares, interrupts, hassles for attention, overly dependent.

2. Relationship with Peers

Effective and appropriate interaction—is friendly to all peers, confronts peers about negative behavior, accepts criticism from peers, is concerned and helpful with peers, vs. Belittles (ranks) others, pressures, fights, carries rumors, argues frequently, overly submissive, overly dependent, withdrawn

3. Self-Maintenance

Clothes, neat, repaired, and appropriate (not too revealing), no body odor, mulls clean. Wears clean underwear (and bras for girls), hair brushed, teeth clean vs. Is sloppy and generally not clean, clothes not mended or inappropriate

4. Attitude Toward and Quality of Work

Works willingly, volunteers, does an excellent job, and needs little supervision, or works well if supervised (average) vs. Has to be prodded to work, needs constant supervision, refuses to work

5. Willingness to Participate

Encourages others and actively involved. Or attends activity, but doesn't seem in the mood for it, and not well involved vs. Participates but is disruptive or refuses to participate

6. Impulsive Behavior

Shows self-control, tolerance of frustration, patience, ability to put off rewards vs. "Wants what he wants when he wants it," strikes out impulsively (verbally)

7. Being Straight

"Levels" with people, is open, honest, admits to part in conflicts, takes responsibility for own actions vs. Plays a delinquent role (acts tough, "fronts people off"), impresses others with made up stories, being phony, lying, conning, manipulating

8. Personal Contract

Individualized for each student.

Scoring: In all of these categories, except personal contract, the scoring is as follows: 3 = good. Did better at positive things than usual or than others. 2 = average. Did the positive things most of the time. 1 = below average. Did some negative things. 0 = poor. Did several negative things, or one thing quite intensely.

The *Personal Contract* is scored once a week, and changes points as follows:

1st Contract

- 10 = good.
- 7 = average.
- 5 = below average.
- 0 = very poor.

2nd Contract

- 12 = good.
- 9 = average.
- 5 = below-average.
- 0 = very poor.

3rd Contract

- 15 = good.
- 12 = average.
- 5 = below average.
- 0 = very poor.

CRITICAL INCIDENTS

The following are considered critical incidents and will result in an immediate bust to Team I. This includes copping out to a critical incident.

1. Attempted AWOL
2. AWOL
3. Physical assault on staff or student
4. Possession of drugs or intoxicants (this includes bringing drugs or intoxicants back to the unit from pass).
5. Taking drugs or intoxicating vapors (this includes coming to the unit high).
6. Any smoking in room (includes smell of smoke).

Any critical incident on Team I will have consequences to the student decided by GIT and Staff.

Time on Team Level I will be decided by GIT and Staff. There will be three possible alternatives for getting off Team Level I.

1. Student will remain on Team I for specified time and begin program all over again.

2. Student will enter accelerated program, i.e., week in each level until he or she reaches level they were busted from.

3. Student can return to previous level.

The alternative chosen for leaving Team I is the decision of GIT and Staff.

DESCRIPTION OF TIME OUT AND GUIDELINES

Time-out will be utilized for students at staff's discretion—with the understanding that at least two staff determine a student's need for a time-out period. Time-out will be for a specified 10 minute period only. These are possible guidelines for utilizing time-out.

1. Continued direct refusal of an order
2. Continued verbal assault on staff or another student
3. A student may request time-out when they feel they need it.

GYM POLICY

Students on Team II, or those on Team III who have less than 500 points, may earn Gym on Wednesdays based on their participation in their respective GIT groups; and on Sundays based on their behavior over the weekend. Students on Team I who have earned appropriate amounts of points on Team I may be included in Sunday Gym Group.

Wednesday.—GIT Instrumental and/or Expressive groups may earn the privilege of going to Gym on Wednesday afternoons based on their participation as a group in GIT for the six previous sessions. Each student will be graded at the end of each session. He will be told his grade during the summary by the group leader and that grade will be recorded in that group's GIT notebook.

The grading will be as follows: +1 for positive interaction, showing real concern for others, being straight, confronting peers; 0 For very little or no interaction, or where student shows nearly equal amounts of both positive and negative interaction; and -1 For negative interaction, disrupting the group, "copping an attitude", delinquent talk or running games.

Charles Franklin and Chuck Wier will determine the total number of points their respective groups must earn. The required total may vary according to number of students involved in the group and realistic expectations for that group at that time.

Sunday—group behavior.—The entire student group (except Monads and some Team I) may earn Gym on Sunday afternoons based on their behavior as a group during the weekend. It will be determined by the total number of points earned by all students from the 2:30 PM grading period Friday until the 2:30 PM grading period Sunday, inclusively (7 grading periods). The total number of points required may be found by multiplying the number of students earning points by 85 (if ten students were earning points a total of 850 points would be required).

If one or more students are put on Monad Status prior to 2:30 PM Friday they would not be included in the number of students earning points. However, if one or more students are put on Monad between 2:30 PM Friday and 2:30 PM Sunday the number of students originally figured will not be changed. This is to promote all students to help eliminate misbehavior.

Loss of gym privileges.—An AWOL or attempted AWOL from Gym (going to, at, or coming from) will result in all usual restrictions for a critical offense,

plus automatic loss of Gym for a minimum of two weeks (may be longer at staff discretion). Staff will determine any discipline of group based on their knowledge of the AWOL plan and to what extent they tried to prevent it.

Other incidents (refusing to participate, damaging equipment, refusing a direct order, etc.) will be handled by usual booking and discipline procedure. (Bookings will result in loss of next earned Gym privilege.)

HOUSE RULES FOR CATC STUDENTS

1. No negative talk, like "How nice it was to get stoned", or "what fun I had on the run".
2. No yelling or running in or across cottage or talking out the windows.
3. No racial slurs.
4. No drug oriented posters, clothing, or other material.
5. No talking about AWOL on the unit.
6. No threats of physical violence.
7. Do not support self-destructive behavior, e.g., supplying drugs, not booking violations of rules, hiding AWOL plans.
8. No deliberate disregard or sabotage of rules—no student is to interfere when staff is correcting another student.
9. No foul language on the floor or off the unit.
10. No using record player or television without permission.
11. No entering the office without permission.
12. If sick and excused from school must remain in bed in your room.
13. If student does not attend activities must stay in his or her room.
14. No homosexual or heterosexual behavior (includes such things as pressuring, notes, pairing off, kissing, sitting or lying on each other.)
15. No lying or covering up inappropriate behavior.
16. Dress appropriately at all times—girls dresses not more than 6 inches above the knees, tops and shorts that are not revealing, wear bras. Boys—wear shirts at all times, no bare chests. All students to be neat and clean at all times.
17. Help keep the unit clean: (a) Chores *must* meet unit standards; (b) Personal bedroom spotless—bed made neatly, floor dusted and mopped, everything put away and in its place; and (c) Cottage will be cleaned daily.
18. No self-mutilation—tattooing of self or others, piercing ears, etc.
19. No meetings in rooms or without staff member in area.
20. No borrowing or trading of clothes, make-up, cigarettes—*anything*.
21. Do not associate with Team I members except in group (GIT).
22. No wrestling or horseplay.

DISCIPLINE

Discipline is a tool and often is misunderstood. Discipline teaches the responsibility of doing something hard. It is a very important part of growing up to be a socialized and responsible person. A result of discipline is realizing the effects of your own actions. Discipline also helps to alleviate guilt feelings. Discipline teaches an awareness of the results of one's own actions. The purposes of discipline are:

- (1) To break down one's front or delinquent role.
- (2) To control behavior.
- (3) To break bad habits.
- (4) For motivation.
- (5) To teach responsibility to oneself.

DISCIPLINE PROCEDURES

A. Booking

Students will book (write a ticket) other students for breaking rules in the following manner:

- (1) First, warn the person of the infraction by saying "check yourself!". If they persist, book them, and tell them you are booking them.
- (2) Do not make invalid (revenge, petty) bookings. (The staff will screen out invalid bookings and confront the person who did it.)
- (3) Any student may book another student for breaking a rule violating discipline already imposed. The student does not have to be in your GIT group.

(4) Staff may ask members of a student's group to book the student if necessary (for example if no one else sees the offense). If they refuse, a small group meeting should be held to discuss why. If the staff member continues to feel concerned, he or she may book members of the group for supporting someone else's destructive behavior.

(5) To book someone, make out a booking slip, list the offense, name of the offender, the date, and sign your name. Deposit the booking slip in the special box in the office. Booking slips will not be looked at until the next discipline session.

B. Discipline Committee

(1) The Discipline Committee has complete responsibility for carrying out the discipline procedures with the support of all students and staff. The committee will meet as necessary. All bookings will be handled on the same day, if possible.

(2) The Committee will consist of one student from each GIT group (rotating) and two staff (rotating).

(3) The policies of the committee will be:

a—Discipline will be appropriate to the individual and designed to meet the needs of the individual.

b—The Discipline Committee (or GIT Group) can bust a student to a lower level for a Critical Incident; otherwise, *points cannot be taken away.*

c—In case of a tie vote Dr. Agee will break the tie.

d—Do's and Don'ts

1. Don't remove points, except on a Team Bust

2. Don't make a Team Bust except for a Critical Incident

3. Do choose an appropriate discipline, e.g., sitting in corner, losing desserts, losing recreation, work discipline.

e.—When called before the Committee, a person must stand erect, not talk, and must listen to the Committee. Then the person must accept or reject the discipline.

f.—If discipline is rejected, then the person goes to his room and stays there until the next Discipline Committee meeting and asks to be reviewed. While in his room the person should think about the offense and the discipline. Later a member of the Committee will check with the person to see if they have changed their mind, asking "how badly do you want to change". An individualized program may be suggested if a person continues to reject discipline.

g—What goes on in Discipline Committee is confidential, but a person can talk about their discipline elsewhere.

EMERGENCY MEDICAL PROCEDURES

Medical emergencies are defined as: Breathing complications; uncontrollable medical emergency, e.g. status epilepticus, diabetic episode; eye injuries; ingestion of foreign object; broken bones; and uncontrolled, excessive hemorrhage.

These conditions will be identified by the staff on duty. If a nurse is not present a call system will be used. There will be provided through inservice basic first aid in treating these conditions. There will also be provided a means for getting the patient to the closest medical treatment facility—Ft. Logan or Colorado General Hospital.

Transportation and extra coverage will be provided through MVGS. If this is not sufficient, an ambulance will be provided.

Medications and Supplies.

Medications will be provided by individual prescriptions.

All medications will be under double lock and narcotics under triple lock. Keys will be in the hands of an R.N. at all times.

Emergency supplies such as oxygen, suction, suture trays and gavage trays, etc. will be on the unit under lock. All other CMS supplies (needles, syringes, band aids, first aid) will be on the unit and under lock.

EDUCATION PROGRAM

The Education Program is based on individualized instruction for each student. The students are split into two groups, each group comes to school for

an hour and a half a day for the basic program. Then on a voluntary basis they can fit additional school time into their day's activities. When a student comes in he is tested for his reading level and possible learning disabilities. We then place him in the appropriate cycle of our score reading program. This cycle is composed of paperback reading, creative writing, the Hoffman Reader, and the various components of the Educational Development Laboratory's Learning 100 program. In addition to the core reading program we have a variety of materials in math, history, science and English to fill the specific needs of the individual students. Each student's former school record is evaluated. He then can do work and earn credits in the areas where he is lacking. Hopefully, each student will be qualified to return to the school or vocational program appropriate to his age, interests and abilities. Above all we attempt to make learning an enjoyable experience with therapeutic value as well as skill improvement as our goal.

From zero to three points are earned in each of four categories during the school period. The categories and explanations are included on the following page. On the basis of the points given over a seven day period each student receives up to \$2.50 for commissary use. In general as much immediate reinforcement as possible is given for self-improvement and creativity in the school setting.

SCORING AREAS FOR SCHOOL

From 0 to 3 points will be earned in the following areas:

Cooperation and Independence

Getting started and studying on your own without continuous need of supervision. Cooperation with the teacher when he is available to help you. Participation in all class activities.

Quality of Work

All work should be done with neatness and care for its quality. Doing work which isn't specifically required will be especially rewarded. Marked improvement in any areas such as reading skills is also important.

Care of Machines and Other Materials

Machines should never be played with. They should be taken care of and put away properly. All materials should be returned to their proper place and maintained neatly.

Relationship with Peers and Adults

All relationships should be considerate and respectful. Participation in group discussions and group projects is important. There should especially be no interference with another student's work.

PURPOSE OF O.T.

The purpose of Occupational Therapy is to help build self esteem, work habits, attention span, frustration tolerance, and basic skills through the use of craft activities.

The youth will be guided to make his decisions and choices of activities from those activities that will promote the above mentioned skills necessary to return the youth to the community.

The craft activities will be graded, so within the same craft there will be a range of easy-to-difficult skills required. This is needed to help improve acquired skills and provide a new challenge.

The skills that will be acquired can be used when the youth returns to the community, as a profit making skill, as a constructive use of leisure time, as a hobby, or as a simple activity of daily living.

The O.T. room will be available in the evenings after school and on weekends. There will be craft activities available through which the youth will be able to channel aggression, hostility, and other unacceptable behavior. This will teach the youth that in O.T. he can build his personal integrity as well as vent his unacceptable behavior in an acceptable way.

OCCUPATIONAL THERAPY ACTIVITIES

Ceramics—sculpture,
Copper and Aluminum tooling.

Macrame.
 Mosaics.
 Block printing—linoleum and vegetable.
 Needlepoint.
 Sewing—ties, vest, simple blouses, pants, headbands.
 Painting.
 Drawing.
 Decoupage.
 Wax—candle making or wax carving.
 Making stuffed animals.
 Plaster cast projects.
 Wall hangings.
 Stichery.
 String art.
 Woodcraft.
 Tie dying.
 Jewelry making.
 Leather—hats, moccasins, vest, belts, purses, wallets.

RECREATION PROGRAM

During the time slots and days which will be set aside for recreation, we have set a short term program which will meet the immediate needs as the program begins and takes shape. This program has been arranged to include weekends, especially Sundays.

On week day mornings we plan to make use of the gym for callisthenics. This will cover ten minutes of our time, for the rest of the period we will play basketball and volleyball.

In the afternoons the kids may shoot pool, play ping-pong, table games, read books or magazines, or play cards. We will also have arts and crafts available if desired.

On weekends we plan to show a movie, play coed volleyball, and involve the kids in Arts and Crafts which are time consuming. There will be socials some weekends, and work will start on a GIT newspaper which will carry the theme of our program. There are some special events planned around weekends only.

The long term plans call for more involvement on the kids' part, with the idea of full participation, not only on their part, but staff also.

Special events—for weekend only

1. *Talent Show*: The kids will have a chance to display any talent they possess.
2. *"Duh Good Ole Days"*: Staff dressed in western garb will run "games of chance" concessions using play money. (5 Card Stud, Black Jack & a Roulette Wheel to name a few.) There will be ceramic prizes awarded. Beer (Root Beer) will be special drink of the evening"
3. *Fun Day*: Track and Field events, at its conclusion we'll serve refreshments, and award certificates to *everyone* for participating.
4. *Huck Finn Day*—Everyone dressed as kids, we'll play some games popular at the turn of the century, and some games from the "NOW" generation. This will be followed by a picnic.
5. *What-U-C-Is-What-U-Get*: By the use of Video Tape we will let the kids choose either a commercial or their favorite TV program and put together short skits, these will be viewed on Sunday evenings, preferably after dinner.

Special tournaments and leagues

1. One on One Basketball
 2. 2 or 3 man Basketball Teams
 3. Pool, Dominoes
- These are for boys and girls.

Coed volleyball

Names for teams will be drawn from a hat.
 Each kid will have the chance to keep score and officiate.
 Participation of all the kids as well as staff will be expected.
 The objectives we have set in the Long Range Goals and Special Events are as follows:

1. To give the young adults a sense of what fun fair competition can be.

2. To get the young adults to learn to adjust to different people whose ideas and ways differ from their own; for them to learn to adjust to these people and actually get along, not only with these individuals, but anyone they may come in contact with.

3. To be fair and honest and enjoy it.

4. To give them a sense of responsibility and enjoy having it.

DATA ON STUDENTS ADMITTED TO THE CLOSED ADOLESCENT TREATMENT CENTER

[Name Omitted] Age: 18 County: Adams Diagnoses: I-level: I, Nx; Borderline schizoprenia.

Offense history.—Assault—Delinquency charges pending. Currently on a CHINS.

Prior treatment.—Probation (Adams Co.); Adams Co. Juvenile Detention Center; Mile High Boarding Home (Adams Co. Welfare); Bethesda Hospital, 2X; Neuville Center.

[Name Omitted] Age: 15 County: Denver Diagnosis: I-level: I, Cfc (I, Na); Delinquent.

Offense history.—Burglaries; Receiving stolen goods; chronic glue sniffing; runaways; shoplifting. More than 20 contacts in Denver Co. from July 1966 to Feb. 1971.

Prior treatment.—Savio House; Lathrop Park Youth Camp; Lookout Mt. School for Boys.

[Name Omitted] Age: 12 County: Arapahoe Diagnoses: I-level: I, Cfm; Borderline mental retardation/passive aggressive personality. CHINS.

Offense history.—Threatened to kill parents & sister by stabbing; set fire in home; runaway.

Prior treatment.—Ft. Logan Mental Health Center; Arapahoe Mental Health Clinic.

[Name Omitted] Age: 14 County: Adams Diagnoses: I-level: I, Nx (I, Na); Over-anxious reaction of adolescence. CHINS.

Offense history.—Frequent runaways; school truancies; drug abuse; escape from authorities.

Prior treatment.—LMSB (ITC); Denver General Hospital; Adams Co. Mental Health Center; Adams Co. Detention Center.

[Name Omitted] Age: 16 County: Kiowa Diagnoses: I-level: I, Na; Unsocialized-aggressive reaction of adolescence. Delinquent.

Offense history.—Theft, shoplifting, runaway from mental hospital; joy riding; self-mutilation.

Prior treatment.—LMSB; La Junta Boys Ranch; Colo. Youth Center; Adams Co. Detention Center; Adams Co. Mental Health Clinic 2X; Kiowa Co. Probation.

[Name Omitted]. Age: 15 County: Adams Diagnoses: I-level: I, Nx; Psychoneurotic reaction. CHINS.

Offense history.—Shop lifting; continued & frequent runaways which endangered health; beyond parental control.

Prior treatment.—Adams Co. Welfare; Ft. Logan MHC; Neuville Center; MVGS;

[Name Omitted] Age: 14 County: Denver Diagnoses: I-level: I, Nx (I, Na); sociopathic personality. Delinquent.

Offense history.—Theft, malicious mischief, arson, joyriding, curfew violation.

Prior treatment.—Probation—Denver Co.; Ft. Logan MHC.

[Name Omitted]. Age: 16 County: Denver Diagnoses: I-level: I, Cfc (I, Na); Neurotic reaction of adolescence. CHINS.

Offense history.—Accessory to burglary, truancy, runaway, possible use of marijuana, LSD, toxic vapors; beyond parental control.

Prior treatment.—Our House—Greeley; Denver Youth Services School (Half-Way House School); Westside Mental Health Center; Ft. Logan MHC; Mt. Park Crew, Denver; Denver Probation.

[Name omitted] Age: 17 County: Denver Diagnoses: I-level: I, Na; Passive-aggressive personality. CHINS.

Offense history.—Runaways, auto theft, assault and battery; attempted burglary; disturbance.

Prior treatment. Ypsilanti, Michigan State Hospital; Ft. Logan MHC; Child Guidance Clinic; Beth Moser Mental Health Clinic, Jackson, Mich.

[Name omitted] Age: 15 County: El Paso Diagnoses: I-level: I₃ Mp (I₄ Na); Severe adjustment reaction to adolescence; Antisocial personality. CHINS.

Offense history.—Shoplifting; family disturbance; beyond parental control; runaways.

Prior treatment.—Neuville Center; MVGS; University Park Psychological Center; El Paso Co. Welfare.

[Name omitted] Age: 14 County: Denver Diagnoses: I-level: I₄ Na; Antisocial personality. CHINS.

Offense history.—Burglary, theft, toxic vapors, glue sniffing, self-destructive behavior.

Prior treatment.—Colo. Psychiatric Hospital; Colo. Youth Center; Denver Juvenile Hall; LMSB; Frontier Boys Ranch; Juvenile Hall School Program; Denver General Hospital—Emergency; East Side Neighborhood Health Center; Boys World Ranch Inc., Ft. Morgan, Colo.

[Name omitted] Age: 16 County: Denver Diagnoses: I-level: I₄ Na; Antisocial personality; latent schizophrenic reaction. Delinquent.

Offense history.—Burglary; assault & battery; joyriding, carrying a deadly weapon; use of toxic vapors; runaways.

Prior treatment.—LMSB; Jefferson Co. Jail; Colo. State Hospital; Juvenile Hall, Denver; Denver Childrens Home; Colorado Boys Ranch; Denver General Hospital—Emergency; Colorado Youth Center; Denver Child Welfare.

[Name omitted] Age: 14 County: Jefferson Diagnoses: I₄ Nx; Situational adjustment reaction of adolescence. Delinquent.

Offense history.—Breaking & entering; vandalism; runaway; theft; attempted suicide.

Prior treatment.—Colorado Psychiatric Hospital; Ft. Logan Mental Health Center; Boulder Co. Jail.

[Name omitted] Age: 15 County: Denver Diagnoses: I-level: I₃ Cfm (I₄ Nx); Passive aggressive personality. Delinquent.

Offense history.—Assault; runaways; sexual acting-out; drug abuse.

Prior treatment.—Denver Child Welfare (custody); Panshan Community Group Home; Denver General Hospital; Denver Dept. Welfare Receiving Home.

[Name omitted] Age: 16 County: Denver Diagnoses: I₂; Passive aggressive personality. Delinquent.

Offense history.—Drug abuse; runaways, theft, assault, AWOL's from MVGS.

Prior treatment.—Ft. Logan MHC; MVGS; Westside MHC (refused services); Child Welfare; Denver Juvenile Hall; Zebulon Pike Det. Center; DGH after overdose.

[Name omitted] Age: 15 County: Denver Diagnoses: I₃ Cfm (I₄ Nx); Neurotic depressive reaction with drug abuse and runaway reaction. Delinquent.

Offense history.—Use of toxic vapors; runaway from Juvenile Court; AWOL from MVGS 7 times.

Prior treatment.—Foster home(s); Probation, Denver Co.; Denver Co. Welfare; MVGS.

[Name omitted] Age: 17 County: Jefferson Diagnoses: I₄ Nx; Overanxious reaction of adolescence. CHINS.

Offense history.—Burglary (own home); assaults, runaways, family and school disturbances.

Prior treatment.—Jefferson Hall; Family Therapy; Jeffco Youth Center; Meska Foster Home; Ft. Logan MHC; Jefferson Co. MHC; Walsenburg Jail; 'Our House'—Greeley.

[Name omitted] Age: 14; County: Mesa Diagnoses: I₃ Cfc (I₃—I₄ borderline); Passive-Aggressive Personality. CHINS.

Offense history.—Runaways from home, from foster homes, from school; assault on school counselor; drug abuse.

Prior treatment.—Idler Foster Home, Fruita, Colo.; Mesa Co. Detention; Henderson Group Home; Mesa Co. Jail; Occupational Training Center, Dist. # 51.

[Item III.B.4]

EXCERPTS FROM ADDITIONAL LEAA GRANT REQUESTS, ENCLOSED IN JUNE 14, 1973
LETTER FROM DONALD SANTARELLI TO CHAIRMAN ERVIN (ITEM III. A. 5, ABOVE)

[ITEM III.B.4.a]

PLANNING FOR THE TREATMENT OF THE REPETITIVE VIOLENT OFFENDER

U.S. DEPARTMENT OF JUSTICE FEDERAL BUREAU OF INVESTIGATION ADMINISTRATION		APPLICATION FOR GRANT DISCRETIONARY FUNDS PAGE 1	
Agency Name for a grant under Division 504 The Illinois Crime Center 210 State Street Chicago, Illinois 60601		PLEASE PRINT OR TYPE IN CAPS AND UNDERLINE Application Number 0008-05-ED-73	
Title of Project as indicated in the proposal and for the Department of the Repetitive Violent Offender		Date Received 7/25/73	
Purpose of Project (Check one) <input checked="" type="checkbox"/> Original <input type="checkbox"/> Revision <input type="checkbox"/> Continuation of Grant No. _____			
Project Length _____ 24 _____ months		\$ LEAA Support Sought \$ 100,000	
Name of the Federal Agency or Governmental Unit Department of Corrections 111 East 60th Street Chicago, Illinois, 60601, (312)793-2955		CO Project Director Name, title, address, and telephone Arthur V. Huffman, State Criminologist Illinois Department of Corrections and Dr. Norval Morris, University of Chicago 111 East 60th Street, Chicago, Ill. 60601 (312)793-2435	
Name of the State, Local, or Federal Agency or Governmental Unit Department of Corrections 160 N. LaSalle St., Springfield, Illinois, 62706 (312)793-2955		Official Authorized to Sign Application (Name, title, address, and telephone) Peter B. Fansinger, Director Illinois Department of Corrections 160 N. LaSalle St., Chicago, Ill., 60601 (312)793-2955	
Summary of Project (In approximately 200 words, the most important parts of the statement of project and application form 21 page 21, briefly covering project goals and program methods in all stages and evaluation.			

The cost of criminal violence is substantial both in terms of human suffering and in dollars. However, while some attention has been given in the literature to the violent offender, very few attempts have been made to develop programs for such individuals. At this time the Illinois Department of Corrections is committed to developing a viable program for the effective treatment of the repetitive violent offender.

This grant request is for the purpose of bringing together a high level group of practioners, administrators, scholars and researchers to devote a major effort to planning such a program.

The immediate result of this planning effort would be a precisely detailed document which would concern itself with (1) the selection process (2) the treatment program, and (3) the evaluation procedures.

In addition, the development of a fully functioning institution and the training of its staff will be planned and partially implemented by this team.

21. PROJECT PLAN AND SUPPORTING DATA

Please state clearly and in detail, within ten pages if possible, the aims of the project, precisely what will be done, who will be involved and what is expected to result. Use the following major headings:

- P. I. Goals.
- P. II. Impact and Results.
- P. III. Methods and Timetable.
- P. IV. Evaluation.
- P. V. Resources.

Number subsequent pages consecutively, i.e., Application Page 8, Application Page 9, etc. See page 7 for further guidance.

PLANNING FOR THE TREATMENT OF REPETITIVE VIOLENT OFFENDER

Statement of problem

The cost of criminal violence is substantial both in terms of human suffering and in dollars. However, while some attention has been given in the literature to the violent offender, very few attempts have been made to develop treatment programs for such individuals. Indeed, only very few such attempts have been made in the world. Only one of these (Hestedvester, Denmark) has achieved any degree of success. No similarly comprehensive effort has ever been made in this country. Several institutions in the United States have made some approaches in this direction, but have not confined themselves to the violent offender.

The Illinois Department of Corrections has a population of some 6,500 adult inmates in its institutions. Of the 4,182 admissions during the year 1971, 1,280 were committed to the institutions for the following violent crimes: Murder, 134; manslaughter, 163; mayhem or bodily harm—battery, 88; assault to commit mayhem or bodily harm, 4; assault to kill, 58; armed robbery, 385; assault to robbery, 2; forced rape, 54; attempted rape, 10; assault to rape, 1; and robbery, 391.

This figure represents over 25% of the total inmates committed to the institutions in 1971. Applying this figure of 25% to the inmates presently confined to the institution brings the total number of these persons confined in the institution because of violent crimes to over 1,500.

It is this type of offender, i.e. the offender who in the perpetration of his criminal act has either violently injured or seriously threatened to do so, that most greatly contributes to society's anxiety. In addition, it is this type of offender, whose personality structure and behavior is repetitively violent, that tends to create and encourage a violent institutional atmosphere permeated by fear on the part of both staff and inmates.

To date no intensive treatment program for the violent offender and particularly the repetitively violent offender is operational in this state. But, at this juncture in time the Illinois Department of Corrections is committed to developing a viable program for the effective treatment of the repetitive violent offender.

As stated above, no such program exists in Illinois nor in the United States. Nevertheless, the practical and scholarly expertise is available to plan such a comprehensive effort without having to resort to changes in power over the individual, without changes in legislation and without abridging due process. Our goal is to gather knowledge leading to the better understanding, treatment and control or repetitive violent behavior without abuse of human rights in either acquisition or application of that knowledge.

Expected Contribution to Law Enforcement Improvement or Crime Prevention or Control

Specifically detailed criteria will be developed to clearly identify the repetitive violent offender. The document developed by this planning team will precisely detail the treatment program designed for the repetitive violent offender. A detailed "manual" of the methods and criteria used in the evaluation of the entire selection process and treatment program will be prepared by this planning team.

Impact and results**Anticipated Results of Project**

This grant request is for the purpose of bringing together a high level group of practitioners, administrators, scholars and researchers to devote a major effort to planning an institution and program for the treatment of the repetitive violent offender. The Department of Corrections has committed itself to the establishment of such a program and will provide a facility for its implementation. The results of this planning effort will be a document which will precisely detail (1) the selection process (2) the treatment program and (3) the evaluation procedures. In addition, the development of a fully functioning institution and the training of its staff will be partially implemented by this team.

Ultimate impact anticipated on law enforcement activities or crime control or prevention effectiveness.

The consequences of such a program would be substantial. It should diminish fear in both the community and in our prisons. If such a program were effective, the loss of individual liberty would be greatly reduced, the cost to the community would be reduced and the cost to the potential victim would be reduced. Such a program would allow the most aggressively dangerous element in our prisons to be out of the regular prison population. The effect of this should be to allow a greater flexibility and safety in programming within the general prison community. That is, if the violent offender were removed, the prison staff would hopefully no longer have to spend the majority of their time reacting to the problems created by the smallest percentage of the inmate population.

It must be stressed that the purpose of such a violence program would not be to remove the "radical element", the "political antagonist", or the "disruptive element" that prison administrators are so eager to have transferred from their institutions. Rather, this program concerns itself with the offender who has established a repetitive pattern of violent acting out, in the community and in prison. It is towards this offender that our efforts should be directed.

Methods and timetable

Steps and stages of the project

The Department of Corrections is unlikely to be able to undertake this effort utilizing its own resources. While the applicant has competence in program planning and administration, it does not have the scholarly expertise needed to develop the best kind of program possible for the violent offender. In addition, the demands on staff time for ongoing programs is substantial and would significantly reduce the availability of intensive planning efforts solely within the Department.

There are, however, a number of opportunities currently becoming available that could be tapped in order to provide a combination of departmental staff and outside experts and scholars to develop a significant plan in this regard. Specifically, the Adlai Stevenson Institute of the University of Chicago is independently pursuing an effort to put together a scholarly effort toward integrating the body of practical and empirical knowledge available in the world today on violence. That effort will result in the proximate availability of the most comprehensive compilation of data, theory and research in the world. Such an effort on their part makes the forging of the theoretical and empirical knowledge bank into a practical programming process quite feasible. This grant effort would capitalize on that independent effort and utilize the expertise being independently gathered at that Institute. In addition, we would utilize and rely on the network of communication which exists between several institutions in California and Maryland and the new federal facility planned at Butner, North Carolina and Canadian and overseas efforts in this area, to gain additional inputs throughout our process of planning.

Essentially, this grant proposal requests to undertake the collection of scholars and practitioners both from outside and within the Department in an effort to develop a practical plan for the establishment of an actual program for the repetitively violent offender.

The planning group being established by this proposal would concern itself with a variety of efforts. Specifically, they would produce a detailed product that concerned itself with (a) the selection process (b) the treatment program; and (c) evaluation. They would also plan the stages of growth towards a fully functioning institution and the training of its staff.

The Selection Process. The specific criteria for the selection of offenders appropriately placed in such a program must be developed. These criteria would be stated objectively, definitively and operationally. Success in making the selection criteria precise, of course, requires substantial review of literature, procedural operations in other countries and the empirical examination of large numbers of actual records of offenders. The end product should allow selection of appropriate residents on operational bases and not on less precise clinical judgments.

The Treatment Program. The end product of this planning group would include a massive, precisely detailed program plan, including release proce-

81

dures. Thus, at the time this facility became operational, the staff would have its treatment plan and programs operationalized and detailed in an explicit and comprehensive fashion. The availability of such a document is, of course, extremely unique in the traditional operation and development of programs.

Evaluation Procedures. Inextricably related to any effort such as this one proposed here is the early application of a comprehensive research and evaluation program. The planning group would also have, by the time the facility became operational, the "manual" of evaluation. That is, the operational details of the research to be carried out, the variables to be studied, etc.

In summary, this proposal permits the intensive integration of the practitioner and the scholar in an effort to develop an extremely detailed and concrete operational manual for the establishment of a viable treatment program for the repetitively dangerous offender. The Department of Corrections has committed itself to the establishment of such a program. The experts are available and similarly committed to the need for a program and are willing to devote their energies in this direction. The funding of this planning group would therefore allow for the reality to occur. The results of such a project should not only be of obvious benefit to our correctional efforts within Illinois, but such consequences would also be international in scope.

Work Schedule For Each Stage and Time Involved.

Months 1-6--August '72--January '73.

Assemble Planning Team.

Hiring Planning Staff.

Develop Tentative Plans for Design of Facility.

Develop Tentative Design for

(1) Selection Process.

(2) Treatment Program.

(3) Evaluation Procedures.

Months 7-12--February '73--July '73.

Develop Training Program for Key Staff.

Hired Key Staff for Program.

Finalize Draft of

(1) Selection Process.

(2) Treatment Program.

(3) Evaluation Procedures.

Draft Reviewed by Consultant Scholars.

Months 13-24--August '73--July '74.

Prepare Operational Budget For Program.

Finalize Plan For

(1) Selection Process.

(2) Treatment Program.

(3) Evaluation Procedures.

Hire and train additional program staff.

[ITEM III.B.4.b]

U.S. DEPARTMENT OF JUSTICE LAW ENFORCEMENT ASSISTANCE ADMINISTRATION		APPLICATION FOR GRANT DISCRETIONARY FUNDS PAGE 1	
Application is hereby made for a grant under Section 305 of the Omnibus Crime Control and Safe Streets Act of 1968 (PL 90-351) in the amount and for the purposes set forth in this application.		(LEAVE BLANK FOR OFFICIAL USE ONLY) RECEIVED 73ED-01-601 Date Received JUL 15 1971 Region Assigned	
1. Short title of Project: (do not exceed one typed line) Multi-state Treatment of Special Offenders NORTHEAST REGION			
2. Type of Application: (check one) <input checked="" type="checkbox"/> Original <input type="checkbox"/> Revision <input type="checkbox"/> Continuation of Grant No.			
3. Discretionary Program Under which Application is Made: Corrections Improvement Programs			
4. Project Duration: Total Length <u>18</u> months		5. LEA Support Sought: <u>124,400 (12 Mos.)</u> <u>148,472 (18 Mos.)</u>	
6. Applicant or Implementing Agency or Governmental Unit: (Name, address, and telephone) Rhode Island State Planning Agency 265 Melrose Street Providence, Rhode Island 02907 401 277 2620		7. Project Director (Name, title, address, and telephone) Professor William Curran Socio-Technical Systems Associates 29 Commonwealth Ave., Boston, Mass. 262-4370	
8. Financial Officer (Name, title, address, and telephone) Rhode Island State Planning Agency 265 Melrose Street Providence, Rhode Island 02907 401-277-2620 Mr. David Chiras, Financial Officer		9. Official Authorized to Sign Application (Name, title, address, and telephone) John Kilduff, Director Rhode Island State Planning Agency 265 Melrose Street Providence, Rhode Island 02907 401 277 2620	
10. Project Summary - Summarize, in approximately 200 words, the most important parts of the statement of project plan presented in application item 22 (page 6), briefly covering project goals and program methods, impact, scope, and evaluation.			

This project will focus upon an in-depth study of the need for, and feasibility of, developing a multi-state program for the handling and treatment of special offenders (deviant offenders) currently incarcerated in the adult correctional and mental institutions of New England.

The project will identify inmates/patients (deviant offenders), develop a model classification system of such offenders related to their treatment potential and strategies for implementing treatment/facility programs to deal with the problem.

Factors of institutional setting and personnel, characteristics of deviant offenders as perceived by administrators, other professional staff and offenders themselves as well as others in the correctional and mental health service system in each state will be studied. The major objective of the project is to develop a blueprint treatment/facility program for impacting the problem of the deviant offender and an accompanying strategy/action program for early implementation of a multi-state program.

The New England Correctional Coordinating Committee will be the sub-grantee and administering agency for the grant in behalf of the Rhode Island State Planning Agency. The project will be conducted by Socio-Technical Systems Associates.

Personnel who will be associated with this project are listed beginning with the last paragraph on page 10 of the proposal and continuing through page 13. A brief description of staff and consultants is provided and the type of assignment designated for each is noted. In addition, a curriculum vitae of grant, is also attached. The salary for Professor Curran, designated as \$200/day is the standard rate charged by STSA for managing partners of the firm on each of its contracts and grants.

The computer item of \$2,250.00 for an 18 month period may be broken down as follows:

383

	Amount
Programming (33 h at \$12.50/h) -----	\$450
Keypunching (250 h at \$6/h) -----	1,500
Machine time (1 h at \$225/h) -----	225
Miscellaneous (tape storage, paper, etc.) -----	75
Total -----	2,250

These costs are predicated on the development and implementation of three different types of interview questionnaires and schedules. Semi-structured personal interviews will be conducted with 300 prisoners.

Interviews will also be conducted with 240 line, supervisory and administrative personnel in the 12 institutions as well as administrators of correctional departments in each of the six states and directors and other key personnel in state mental health and other related mental health organizations. Pertinent information will also be abstracted from the records of approximately 6,000 inmates of the 12 institutions.

**FEASIBILITY STUDY FOR THE HANDLING AND TREATMENT OF SPECIAL OFFENDERS
(DEVIANT OFFENDERS) IN ADULT CORRECTIONAL INSTITUTIONS**

BACKGROUND

Deviant offenders in correctional settings, classified variously as mentally ill, dangerous, sexually disruptive, or retarded have been considered an important factor in reducing the effectiveness and efficiency of institutional progress. Many administrators believe that the institutional operation is ill-equipped and not designed to provide the proper treatment or rehabilitative needs for these individuals. Consequently, daily operational demands and institutional order and flow are often disrupted and impaired. The legacy of these disruptions has traditionally meant additional sanctions, distorted communication between inmates and administrative staff and a general rise in institutional tension. Hence, the overall effectiveness in achieving the goals of the system is drastically reduced.

Initiated by the recommendations of the Task Force on Corrections, the President's Commission on Law Enforcement and the Administration of Justice, the New England Correctional Coordinating Committee and other regional-wide organizations have been exploring the feasibility of a regional approach to the care and treatment of deviant offenders in order to maximize the benefits of scarce resources and establish high equality facilities to respond to the difficult problems posed by this special group.

John A. Gavin, former Commissioner of Corrections of Massachusetts, was appointed a consultant by LEAA to visit the Corrections and mental health leaders in the six New England states for the purpose of ascertaining the need for a feasibility study to deal with the problem of the deviant offender on a multi-state basis. These meetings indicated that there was a need for such a study, and representatives from all six states so stated (see letter from Gavin to Mrs. Jeanne Morton, April 10, 1971).

The report of progress on the New England deviant offender project by John A. Gavin of April 15, 1971 reflects the deviant offender problem as seen generally in each of the six New England states. Judge Welsberger, the Chairman of the New England Governors' Committee on the Deviant Offender, commenting on his home state, stated that Rhode Island currently has a very serious problem with this type of offender, who is either in the criminally insane section of a mental hospital or at the Rhode Island State Prison. These individuals are seen as management problems, quasi-psychotic or psychopathic, for whom there is no suitable treatment or housing available for appropriate handling. William F. Kearns, Jr., Commissioner of the Department of Mental Health and Corrections for Maine, stated that, "The problem of effectively handling the deviant offender has been as persistent and difficult in Maine as in other jurisdictions."

John R. Manson, Commissioner of the Department of Corrections for Connecticut, stated that they perceive the deviant offender as not only the aggressive, acting out prisoner, but also the passive criminal psychopath who commits repeated offenses. He stated that, "The present inadequacies of re-

sources to treat this category of offender . . . disposes us very favorably to this study."

Parker L. Hancock, Warden of the New Hampshire State Prison, indicated that there is a very substantial need for continued in-depth study of the deviant offender problem. He indicated that in New Hampshire the situation is becoming worse since they are "now receiving drug dependent individuals from the courts who definitely are real sick people, some of whom are psychotic or close to being psychotic."

Representatives from Massachusetts and Vermont also expressed similar concerns and needs regarding better solutions for dealing with this type of prisoner.

GOALS

While there is near unanimity among both correctional and mental health administrators that the treatment of these individuals requires alternative methods to those currently employed, there is, however, little agreement about the reasons why certain individuals are such as "persistent institutional problems, and less agreement as to what would be a more effective plan for treating these individuals.

The purpose of this project will be to determine the nature and extent of problems with deviant offenders within New England state prisons, with implications for maximizing the effectiveness of multi-state programs. While there has been a recent national survey of treatment programs for the mentally ill offender (Schledemandel and Kanno, 1969) and numerous studies of institutional organization, reorganization and change (Cressy, 1961; Seliger, 1969), the proposed study will focus specifically on the problem of special or deviant offenders from the point of view of administration, line personnel and inmates in the several New England states. This approach will permit not only an opportunity to determine the perceived problem within the corrections program, but to inter-relate the impact of the functional interaction of the variables of setting, personnel and characteristics or typology of the inmates perceived as deviant. In addition, the differences in alternative opportunities for referral in the various states will be taken into account. The Gavin report clearly reflects the existing conditions in adult correctional institutions calling for new capabilities for the problems enumerated by representatives of the correctional system in New England.

IMPACT AND RESULTS

The analysis of data obtained through this project could provide the guidelines for critical policy and action decisions in the correctional field. The capabilities for implementation are found in the regional organizations that have actively supported the need for a feasibility study. These regional groups include the New England Governors' Conference, the New England Correctional Administrators' Compact, the New England Correctional Coordinating Committee, and the New England Regional Commission on the Deviant Offender. These organizations offer a unique opportunity for action upon the findings and recommendations of the proposed exploratory study. Concrete recommendations that would emanate from the findings of this project could lead to programmatic implementation not only in the New England states, but could project a model of national relevance.

METHODS

The study will focus on the state prison population within each of the six New England states. Adults who are serving sentences in facilities for long-term offenders (over two years) will be studied.

In New England there exist twelve adult correctional institutions with a total population of prisoners numbering 6,000. The estimate of the number of offenders within such institutions who might qualify for special attention totals about 1,250 persons. It has been estimated that at any one time there are 100-150 individuals among these special offenders who are perceived as severely deviant, disruptive or unmanageable within the institutional program. Therefore, this study would attempt to identify and intensively study this core group. The study will take a contextual and "systems" approach in studying the interrelationships of the individual, his relationship to the group, and the organizational forces operating in each "critical incident." This means that

there must be an examination of the "inmate code" and peer-group norms in addition to other organizational forces that operate to maintain an equilibrium within the institution. The deviant offender will be studied with these organizational factors in mind, while maintaining a focus on the conditions needed to maximize the opportunities for rehabilitation and social and psychological competency in the outside community.

The statistical design will compare the deviant group with a comparison group of 200 inmates randomly selected from the population of the twelve correctional institutions. The statistical comparison of the two groups should highlight individual characteristics that differentiate the special offenders from the prison population as a whole. The deviant sample will be identified in the course of interviewing line, supervisory, and specialized administrative personnel in each of the institutions. Therefore, in obtaining data from staff that will characterize the perceived deviant offender problem within each institution, individuals most frequently chosen by staff as the deviant will be selected for inclusion in the sample. The number of such interviews will be approximately 240, with twenty being conducted in each of the twelve institutions.

Standard instruments will be used where appropriate to assess attitudes relevant to self and to the setting. In addition, questionnaire material will be developed to assess individual judgment related to treatment programs within the institution and its impact upon the individual.

Inmates will be interviewed and asked to complete rating scales only with their consent and then with the approval of authorities. The proposed interviews will not deal with details of the offense for which he is incarcerated, but will focus on his present circumstance as he perceives it, and attitudes regarding these circumstances and conditions. Prisoners will also be asked to nominate names of those whom they consider to be deviant. These results will be compared to those obtained through interviews with line, supervisory and administrative personnel. There will be emphasis on types of programs that are in effect and those that are perceived as lacking, but should be used.

Conditions to maintain confidentiality and anonymity will be respected in order to avoid identification of data with specific individuals.¹

The physical facilities of each institution will be inventoried with a view toward assessing current use and adaptability for the treatment and management of the special offenders group.

Secondary data will be obtained from inmate records regarding personal history, criminal and mental illness data, and comparing the study and control samples. Thus it will be possible to compare characteristics of special offenders with other offenders within the institutions as well as compare differences among the twelve institutions in the six state region.

The channels of referral from the prisons through mental health facilities and parole programs will be identified. Interviews would be conducted outside the prison system to trace the variety of referral systems used by the institutions. Sixty interviews (10 in each of the six states) would be conducted with key officials in specialized mental health facilities and state parole offices.

In addition, while the study of the prisons is continuing, there will be conducted a survey of multi-state programs in corrections in other parts of the country, with a view toward obtaining data through mailed questionnaires of the experiences encountered in such programs.

Reports from persons familiar with the corrections and mental health issues raised in this project suggest that an in-depth analysis of the problem would provide an opportunity to more effectively and confidently make decisions with respect to a multi-state effort in this area.

TIMETABLE

The project is planned for an 18-month period. For the first three months, staff will be hired, interview schedules constructed, sampling procedures developed and preparation made for the full scale field test.

¹ Boruch, R.F. Maintaining confidentiality of data in educational research and systematic analysis. *American Psychologist*, 1971 26 413-430. Schwitzgabel, R. Ethical Problems in Experimentation with Offenders. *American Journal of Orthopsychiatry*, 1968, 38, 738-748.

During the next twelve months the data collection phase will be completed. The final three months will be devoted to data analysis and report preparation although some data analysis will be initiated concurrently with the field test.

The project budget is prepared in relation to this time schedule.

EVALUATION

It will be necessary in each of the six states involved in the Feasibility Study to assess the characteristics and differences among the various correction institutions. Within the methodological framework, the following areas will be explored:

1. What types of inmates are perceived as deviant or troublesome within the institutional setting?
2. How are these inmates characterized by the administration and staff?
3. How is their deviance currently being handled?
 - a. Within the correction's facility?
 - b. Alternatives to the institution, e.g., mental health facility, etc?
4. What statutes are available in the state for alternative handling/treatment of various categorized deviants in the system?
5. What is the size of the base population that will be dealt with?
 - a. How many men in the prison?
 - b. What percentages are seen as deviant?
 - c. How many are referred to alternative programs?
6. What are the similarities and differences between states with respect to the deviancy "problem"?
 - a. As perceived by the administrator?
 - b. As perceived by the staff?
 - c. As perceived by the inmates?
7. What effect does the identification as deviant have on their experiences within the institution?
 - a. Length of sentence (comparing similar offenses and actual sentences)?
 - b. Treatment by other inmates?
 - c. Treatment by staff?
8. Description of population: age, sex, types of offenses, mental health history, family, socioeconomic background, etc. An in-depth psycho-social examination of the deviant inmate designed to assess his impulse control and integrative mechanisms, plus neurological data contributing to episodic disordered behavior will be included.
9. Relationship between correctional institutions and state mental hospitals, e.g., Bridgewater in contrast to other state hospitals with minimum security provisions.

PLANNING FOR PROGRAM

In total, the project will provide an in-depth study of the problem of the deviant offender, current approaches to the problem in each of the six states and an identification of needs and resources in the states. Based upon findings, a determination would be made of the feasibility for developing special treatment programs for these offenders. Various alternative treatment programs would be considered and cost estimates provided possibly both for individual states as well as for a multi-state program.

In effect the outcome would be a blueprint for the provision of a model classification system of deviant offenders, a determination of their treatment.

[ITEM III.B.4.c]
ASSAULT ON POLICE

FEDERAL GOVERNMENT ASSISTANCE PROJECT DESCRIPTION		FEDERAL AWARD NUMBER PROJECT NUMBER GRANT NUMBER	
This project is supported under Title I of the Crime Control and Law Enforcement Act of 1970, as amended. For further information, please contact the nearest office of the LEAA Staff, or project director. Please identify by grant number.			
1. NAME OF PROJECT Assault on Police		2. PROJECT DIRECTOR Samuel G. Chapman Oklahoma University	
3. NAME & ADDRESS OF GRANTEE Oklahoma Crime Commission 135 North Lincoln Blvd. Oklahoma City, Oklahoma 73105		5. NAME & ADDRESS OF SUBGRANTEE University of Oklahoma Research Institute 1808 Newton Drive Norman, Oklahoma 73069	
4. AMOUNT OF AWARD \$300,000 (Part C) \$300,000 (Technical Assist.)		7. PERIOD OF AWARD February 1, 1973 - January 31, 1974	
8. NEW PROJECT AMT. 700,043	9. TOTAL PROJECT PERIOD 12 Months	10. DATE OF AWARD 1 1973	

SUMMARY DESCRIPTION OF PROJECT

This project was originally awarded as of November 1, 1972, with \$300,000 1973 Part C funds and \$300,000 1973 TA funds. We were unable to secure adequate hard-match for the Part C funds which necessitated a trade for 1972 Part C funds. These new awards are not new commitments, but are only accounting transfers. No new announcements are necessary.

These funds are to be used in the University of Oklahoma to research and identify the cause of the critical increase in police assaults. The specific aims of the proposed research are:

1. Socio-psychological profiles of police assaulted and assailants.
2. Descriptions of environmental and situational factors attending or contributing to assaults.
3. Identification of common triggering mechanisms incident to assaults.
4. Analysis of management and supervisory tools and techniques related to assaults and recommendations for their improvement.
5. Analysis of police section and training related to the prevention and handling of assaults and recommendations for improvement.
6. Analysis of police personal defense systems, weapons and techniques with recommendations for improvement.
7. Analysis of legal or regulatory processes associated with assaults and recommendations for improvement.

\$300,000 is requested under National Scope Program.

[ITEM III.B.4.d]

REDUCING THE INCIDENCE OF VIOLENCE

THE ILLINOIS DEPARTMENT OF CORRECTIONS ADMINISTRATION		ILLINOIS DEPARTMENT OF CORRECTIONS PAGE 1	
Application is hereby made for a grant under Sections 209 and 405 of the Omnibus Crime Control and Safe Streets Act of 1968 (P.L. 90-351) as amended in the amount and for the purpose set forth in this application.		LEAVE BLANK FOR OFFICIAL USE ONLY Application Number 0007-05-60-73	Budget Number 73 60 - 05 - 000
Date Received		Region Assigned FIVE	
REDUCING THE INCIDENCE OF VIOLENCE			
1. Name of Applicant: ILLINOIS DEPARTMENT OF CORRECTIONS			
2. Organizational Unit: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Department of Social Services			
3. Organizational Program Under Which Application is Made:			
4. Project Duration: Total Length 36 months 12-month grant		5. LEAA Budget Request: \$ 200,000.00	
6. Applicant or Implementing Agency or Governmental Unit (Name, address, and telephone)		7. Project Director (Name, title, address, and telephone)	
Illinois Department of Corrections Joseph S. Coughlin, Acting Director 160 North LaSalle Street (312) Chicago, Illinois 60601 793-2955		Victor Semen ILLINOIS DEPT. OF CORRECTIONS 160 No. LA SALLE ST CHICAGO ILL 60601 793-2685	
8. Contact Person (Name, title, address, and telephone)		9. Official Authorized to Sign Application (Name, title, address, and telephone)	
Henry J. Petrilli General Services Administrator Illinois Department of Corrections 201 Albany Building (312) Springfield, Illinois 62704 525-4630		Joseph S. Coughlin, Acting Director Illinois Department of Corrections 160 North LaSalle Street (312) Chicago, Illinois 60601 793-2955	
10. Project Summary: Summary of approximately 100 words, the most important parts of the statement of project presented in application item 71 (page 7). Include activity project goals and program methods, budget, dates, and staff.			

The Division of Adult Parole Services, Illinois Department of Corrections proposes, through this project, to reduce the number of violent crimes committed by ex-offenders, who have histories of violent criminal acts. More than half of the adult parolees currently supervising by the Illinois Department of Corrections were originally committed to prison for crimes against persons.

We propose to develop concentrated services in two Chicago communities and six other Illinois cities, under the supervision of a project director and four casework supervisors. The supervisory staff will be responsible for the activities of six clerks, fifteen correctional parole counselors and four treatment specialists.

The treatment specialist will provide treatment services for the target population on an individual, group and family basis. The caseload for correctional parole counselors will consist of twenty-five to thirty-two clients. Such a caseload size will enable correctional parole counselors to increase inter-action with their clients. It is anticipated that the increased inter-action will result in the correctional parole counselor being able to provide more effective services to violent-prone clients.

It is further anticipated that funding and implementing this project will reduce the incidence of violent crimes committed by clients residing in the target areas.

[Item III.B.4.e]

PUERTO RICO CRIME COMMISSION,
San Juan, Puerto Rico, August 17, 1973.

To: Mr. Dionisio A. Manzano, Executive Director.
From: Mrs. Saira G. de Torres, Corrections specialist.
Subject: Neurological Research project.

Through the process of monitoring and supervision of the Neurological Research Project, I have observed that the participation of the inmates is on a voluntary basis. A sample from the total population is selected utilizing statistical formulas. Inmates included in the sample are interviewed by the project staff and the project is explained to them. Those who are interested and willing to participate sign a form in which they so state. The inmates that refuse to be included are substituted from the sample.

During project implementation 5 inmates out of 290 have refused to be included in the Neurological Research Project. Two of them were afraid of the EEG examination and the other three were not interested in the project because they could not anticipate any personal benefits from it.

As you know this project is being evaluated by our Evaluation Unit and in a near future you will have the final report available. The question of the voluntariness of the participation of the inmates is one of the subjects being evaluated.

RESEARCH AND DEVELOPMENT (INCLUDING EVALUATION), PROGRAM J-2—RESEARCH—
PENAL POPULATION OBJECTIVES

To contribute to crime prevention and rehabilitation efforts by conducting a research project in adult institutions to establish a neurological profile of inmates afflicted with organic cerebral damage or disease.

PROGRAM BUDGET

	1969	1970	1971
Part C.....	0	\$50,000	0
Part E.....	0	0	0
Committee/other.....	0	40,471	0
Total.....	0	90,471	0

PROGRAM SUBGRANTS

1. Neurological Research—Penal Population, University of Puerto Rico
(70-A-152-24, \$50,000)

This is a demonstration and research project conducted by the School of Medicine of the University of Puerto Rico to develop a neurological, medical, psychological and social profile with volunteer adult inmates from the State Penitentiary. Physical brain damage and other neurological conditions will be studied among the prison population. At the same time, specialized treatment will be offered to the subjects in the sample, and other inmates on a voluntary basis. The project aims to detect possible organic damage and its relation to aggressive behavior and crime.

Since initiation date in July 1971, the following activities have been developed:

- (a) Project staff was recruited and trained in the specialized field of neurological research.
- (b) The methodological design of the research component was constructed.
- (c) The sample was selected.
- (d) The research instruments (questionnaires, etc . . .) were developed and verified.
- (e) Seventy-three inmates and 16 patients from the Medical Center serving as a control group have been evaluated.

PROGRAM IMPACT

Prior to the establishment of this program, no formal professional research had been conducted in Puerto Rico to attempt to correlate crime among adult

offenders and organic brain damage. This program is the first scientific research to cover a comprehensive study of offender traits including medical characteristics.

PROGRAM IMPLEMENTATION PROBLEMS

1. It was difficult to find an agency to develop the program. The Department of Health, who was the first to apply, gave up in their intent. The School of Medicine was finally encouraged to implement the program.
2. Difficulty in the recruitment of staff in this highly specialized field.

USE OF PROGRAM RESULTS IN FUTURE PLAN DEVELOPMENT AND IMPLEMENTATION

Concrete results are not expected to be available from this program for several years. If profiles of this type can be constructed and validated, the program results will be used as a basis for the creation of voluntary preventive treatment programs in the community.

* * * * *

5. Special condition.

To insure voluntariness by participants in the project, the following condition was included in the Commonwealth's Comprehensive Plan.

"Within 60 days of grant award grantee shall provide the Administration with substantial evidence indicating that participation in the Neurological Research Project is entirely a voluntary matter and that all inmates are fully advised and legally capable of reaching a decision to participate"

As a result of the condition, the Puerto Rico Crime Commission forwarded the following information:

- (a) Internal memorandum of August 17, 1973 of the Puerto Rico Crime Commission (State Planning Agency).
- (b) Model of agreement to participate in the project.
- (c) Translation of a relation of how the project sample (participating inmates) is selected (copy of original document, in Spanish, is also enclosed)
- (d) Copy of certification by Dr. Luis P. Sanchez-Longo, project director.

[Item III.B.4.f]

EARLY PREDICTION OF INDIVIDUAL VIOLENCE

TEXAS CRIMINAL COUNCIL PROJECT QUARTERLY REPORT NO. 2, OCTOBER 20, 1971

From: Blair Justice Ph. D., Project Director, Office of the Mayor, City of Houston, Texas (Grant No. 1-31-460)

A. PROJECT ACTIVITIES

1. Investigation into the Identification of Early Warning Signs of Violent Behavior and the Most Effective Means of Early Intervention—997 individuals who were in elementary school in 1955-58 had social histories worked-up on them at the time because they were beginning to show learning or behavior problems in the classroom. A search for those individuals is being made in the files of the Texas Department of Corrections and the Harris County Juvenile Probation Department, in hopes of tracing those who ended up committing violent crimes. In the Texas Department of Corrections, 57 have been located, and in the Juvenile Probation Department, 45 have been found to have been processed since the individuals were in elementary school 15 to 17 years ago.

In-depth interviews were conducted with those individuals and their families who could be reached (14 so far), in hopes of establishing patterns of early warning signs. The interviews are still continuing but such patterns are already beginning to emerge. Patterns of early warning signs are also being sought in the original social histories of all 977 persons identified 15 to 17 years ago.

In addition to tracing individuals who ended up committing violent crimes, intensive interviews will be conducted with a group of individuals among the 997 cases who did *not* end up committing violent crimes. This group will serve as a comparison, or control, group for the violent individuals and will give more information about different patterns that seem to be indicative of early warning signs of violent behavior by pointing out factors that *prevented* some individuals from getting into more serious trouble.

Information has been gathered on the community agencies contacted by parents of the 997 cases or by the individuals themselves at the time they were identified as having trouble. It is hoped that such information can indicate what was done, what could have been done, and how much co-operation there was between the families and the community agencies. With such information at hand, some model can be developed on just how various community agencies and resources can be more effective at the time when children are first showing signs of trouble.

To supplement information gathered in the interviews, a literature review is being conducted to learn what part community agencies have played in assisting pre-delinquents and recidivists, what evaluation has been made of the effectiveness of agencies involved in such a role, and what kinds of agencies seem to be most contacted and involved.

Content analysis of literature from books and journals, in psychology, psychiatry, sociology, penology, criminology, law and education is continuing with the aim of identifying early warning signs of assaultive behavior.

The 800 interviews with professionals in such fields as mentioned above have been completed and the results are being collated into workable form. Distinct early warning signs have been identified, as have been suggestions as to appropriate action to be taken in response to these early warning signs.

The information gathered from the literature content analysis and the 800 interviews has been brought together to form the basis for two types of handbooks. One is for parents from low socioeconomic-low education strata, and the other is a more detailed form designed for teachers and parents. Both handbooks are designed to identify early warning signs of violent behavior and to make suggestions as to effective interventive action. The handbooks are now in the final drafting stages.

A possible third handbook, for usage by law enforcement personnel, is in the developmental stage.

2. Research into Factors Related to Violent Recidivists Undergoing "Pull-Ups" or "Turn-Arounds"—Contact was made with 30 individuals who have served several terms for violent offenses but have now been in the free world long enough to convince authorities that they have "pulled up" or "turned around." A film on just what factors seem to be of influence in individuals who break their own "cycle of violence" is now in the scripting stage and will be ready for production in the next few weeks.

3. Compilation and Production of Bibliographic Material Pertaining to Violent Crime and Prevention—All citations have been gathered and organized for a publication that will be of use to persons needing information on causes of violent crime, prevention, and programs designed to alleviate the problem. The publication, a bibliographic index entitled *Personal Violence: An Index for Understanding and Prevention*, is presently in the computer processing stage. The index covers the time span of 1951 to 1971 and includes over 1500 citations.

A second bibliographic index, *Crime and Health*, is in the process of being compiled. Over 400 citations have already been gathered. [Ed. Note: An earlier report on this project described this bibliographic index as focusing on "factors pertaining to health problems and physical defects as they relate to predisposing people to crime."]

4. Production of a Central Computerized Information—Activity continues in the collection of data pertaining to violent crime and predisposing factors. This information [bibliographic material and the results of content analysis of literature] is being put on computer tapes in a central source for quick retrieval. It is planned that information relating to prevention action programs, location, sponsorship, cost, and funding will also be computerized as part of a central information center.

5. Production of a Psychometric Instrument for Distinguishing Violent Personalities from Non-Violent Ones—This is an activity that has grown out of the need for some kind of psychological inventory which a person can take and which can produce results that can be analyzed by computer. The Birkman Method, which has been validated on 30,000 cases in industry in terms of predicting job success or failure, has now been given to approximately 100 persons in the Texas Prison System with backgrounds of violent offenses and 120 persons with backgrounds of non-violent offenses. Results so far show there is a sharp distinction in the personalities of the two groups. The two groups also show a sharp distinction from the non-criminal population. The Birkman

Method consists of a social perception section, a self image section, an interest survey and a vocabulary test. It is planned to continue testing this instrument as to its effectiveness in not only distinguishing violent personalities but also in predicting what kind of personality is more likely to engage in violence. A paper on the Birkman Method is being delivered by the Project at the Southern Medical Association Convention in Miami, on November 4, 1971.

B. PERSONNEL

On August 7, Dr. Rita Harvin began employment as Project Phase Coordinator. Dr. Harvin's duties include: (1) giving close attention to all phases of the project, including development of questionnaires, interviewing, development of bibliographic indexes, and their publication content analysis of literature and thesaurus recordings, and new phases that will be unfolding during the current project year; (2) evaluation of project member performance and accomplishment of project goals; (3) helping to develop material, written or audio-visual or both, on intervention techniques for families, teachers and children, and (4) other functions requested by the Project Director.

Also on August 7, Richard McCreary joined the staff as Project Psychometrist. Mr. McCreary's duties include: (1) working on psychometric instruments that give promise for distinguishing violent personalities from non-violent; (2) helping to develop materials, written, or audio-visual or both, on intervention techniques for families, teachers, and children; (3) pursuing the possible relationship between body buffer zones and potential for violence, and (4) helping to evaluate the reaching of project goals.

In addition, with the initiation of those activities directed toward the production of a color pilot film, the position of a media specialist has been filled by Hal Stiles.

C. GRANTEE CONTRIBUTION

To date, project activities have generated \$19,379.10 toward the second year project commitment of \$60,959.00.

[From the Houston Post, May 16, 1972]

RESEARCHER SEEKS REASONS FOR VIOLENCE

(By Mary Jane Schier)

Why do some people and not others commit crimes of individual violence—crimes of murder, rape, aggravated assault and armed robbery?

What factors from their childhood might be blamed?

When are the first clues indicating criminal tendencies visible?

How can these early signs be used to start a preventive program?

Who should spot these symptoms and what kinds of interception would be best?

These and dozens more questions about individual violence have been troubling Dr. Blair Justice for several years. In recent months, he has begun to find some answers.

Now two-thirds through a 3-year project on the early prevention of individual violence, Justice believes there are at least four major patterns that when found in children should spell W-A-R-N-I-N-G.

These signs are:

- Excessive chronic fighting continuing for years and resulting in other youngsters being seriously hurt or property damaged.
- Numerous school problems, including frequent truancy and various learning and behavioral troubles.
- Severe temper tantrums long past the pre-school age.
- Inability to get along with others and constantly wanting to be left alone.

"Of course, some of these behavior patterns will be seen in the most normal of children. But the concern should come when these four problems are seen simultaneously over a long time," Justice observed.

His conclusions came after complicated, costly research supported largely by the Texas Criminal Justice Council.

"And we're not through by any means," Justice said during a report on his team's first two years of work.

Three sources have been used to help the group arrive at its answers.

The first involved compilation of all written materials on individual criminal violence from 1950 until 1971. Once these were reviewed a comprehensive bibliography listing more than 1,500 references was prepared.

The next phase was interviewing about 800 professionals engaged in multi-disciplinary work with troubled youths and adults. Their observations and opinions were evaluated.

The third facet dealt with examining records of 990 elementary age children whose parents and teachers were interviewed between 1955 and 1958 in a cooperative project of the Houston School District and the Texas Institute of Child Psychiatry.

Efforts were made by Justice's team to trace the 990 children and to correlate their early signs of violent tendencies with what happened to them.

"Our followup showed that 50 of them were in the Texas Department of Corrections and at least 60 more were located from juvenile probation files. . . How many more may have gotten into trouble we don't know yet because we haven't traced them all," Justice explained.

The first result of the project was publishing five booklets designed to be used by parents of youngsters living in disadvantaged areas.

Each of the four warning signs is discussed in a separate pamphlet and the fifth is concerned with agencies that can help.

Those five booklets and a bigger, more comprehensive book aimed at better-educated parents should be completed by mid-May.

These materials, Justice said, will be disseminated with the help of schools and agencies who deal in problem-solving.

Meanwhile, his group is putting the final touches on two films which will be distributed to pre-release centers, probation officers, juvenile counselors and neighborhood centers in poverty areas.

The films deal primarily with former criminals who have managed to break the violence cycle and go straight.

Justice began the project two years ago when he was executive assistant to Mayor Louie Welch and head of the city's human relations division.

The city received a grant from the Texas Criminal Justice Council and then contracted with the University of Texas School of Public Health to perform the research.

Justice is professor of social psychology at the school. He said the Justice Council will have spent about \$344,000 on the project when it is completed.

The Moody Foundation gave the group \$25,000, most of which went for making the two 28-minute films.

Justice and his group of 12 researchers realize their work will be largely academic until the information is made available to many people.

"That's what the third year is all about—dissemination," he said.

Still another booklet has been prepared during the project and that deals with the biological factors associated with crime.

Brain damage, chromosomal abnormalities, auditory, speech and visual defects, mental retardation, cosmetic problems and others are discussed in relation to the role these health difficulties play in triggering violence.

"Often times, there is some combination of psychological, social and biological factors involved in crimes of individual violence," Justice said.

As expected, his group learned that the kids who go on to perform murder, rape and armed robbery come primarily from poor homes which suffer numerous problems.

Dr. Rita Harvin, a social psychologist and the team's research coordinator, said she hopes the project can be enlarged later to include making books for troubled children and actual intervention steps.

"We're just really beginning," she said of the first two years' efforts.

Justice emphasized the importance of getting teachers and other school personnel and various community agencies involved in long-range programs.

AN EFFORT TO DISTINGUISH THE VIOLENT FROM THE NONVIOLENT¹
 (Blair Justice, PhD, and Roger Birkman, PhD,² Houston, Tex.)

The authors describe a psychologic tool to classify those who are violent and those nonviolent. They believe this offers a valuable means for separating these groups in a prison population, one from the other, when looking forward to successful rehabilitation.

On September 13, 1971, the most bloody prison clash of the century occurred at Attica, New York. In the wake of the outbreak questions began to be asked about the purpose of correctional institutions in the United States. If the purpose is to rehabilitate—as the word "correctional" implies—then it must be asked whether rehabilitation is actually being conducted at most penal institutions. If rehabilitation was a principal factor in the lives of the prisoners at Attica Correctional Facility, could such a bloody clash have occurred? If a correctional institution actually does rehabilitate, then would there be conditions against which a large number of inmates revolt? If a correctional institution actually does rehabilitate, then would inmates resort to the taking of hostages and demonstrating defiance to the point that occurred at Attica?

It is entirely possible, of course, that no matter how effective programs of rehabilitation are, there will be some inmates who are not reached. But there is strong evidence today that the number who are not reached is much too high. One reason is that there is too little differentiation among the type people who are placed in prisons for "corrections." Prisons are called upon to rehabilitate the physically handicapped, the mentally ill, the mentally defective and the aging. Inmates with these special problems can be found easily in correctional institutions already overloaded with persons who have broken the law but who have no overt sign of physical handicap, mental illness, retardation or crippling effects from old age.

Since correctional institutions have limited resources for rehabilitation, it seems desirable, if not mandatory, that they be given the tools to use those resources in as an effective way as possible. One type of tool would be the development of other kinds of institutions to rehabilitate persons in prison with physical or mental handicaps. The Texas Department of Corrections reports that nearly 24% of its inmates are mentally defective. Some 77% are reported as having below-average intelligence.

So that rehabilitation can be more effectively applied, there is also another type tool that would appear to be helpful to the authorities—to those who not only administer prison programs, but also to those outside of penal institutions who make decisions on parole, who conduct probation efforts, who do employment counseling, and to those who conduct preventive programs in an attempt to head off criminal behavior. This tool comes from an effort to distinguish the violent from the nonviolent by use of psychologic tests. If it is possible psychologically to differentiate persons with violent backgrounds from those with nonviolent records, it also may be possible to predict which individuals are likely to demonstrate violent behavior as opposed to those who get into trouble but do not commit violent crimes.

Using a psychologic instrument called the Birkman Method, results to date suggest that the violent can be distinguished from the nonviolent. In addition, both violent and nonviolent offenders seem to show personality patterns or characteristics that are sharply different from persons with no criminal background.

It is believed that the use of such a psychologic tool would enable penal authorities to channel their rehabilitation efforts more effectively, or at least give greater individuation to the programs that are designed to rehabilitate. Such a test also should be useful to authorities concerned with employment of offenders once they are released, and with younger persons who may need special attention to keep them from heading down a road to violent crime or nonviolent criminal activity.

¹ Read before the Section on Neurology and Psychiatry, Southern Medical Association, Sixty-fifth Annual Meeting, Miami Beach, Fla., Nov. 14, 1971.

² From the School of Public Health University of Texas, Houston, Texas and from Management, City of Houston, Tex.

This project was partially funded by the Texas Criminal Justice Council and the Law Enforcement Assistance Administration.

705

METHODS

The Birkman Method, which consists of a self-image and social perception scale plus an interest survey and intelligence test, was given to 173 white inmates of the Texas Department of Corrections. Ninety-five had records of violent crimes such as murder, rape, assault, and robbery with a deadly weapon; 78 had committed nonviolent offenses, such as burglary, theft, forgery, and check passing. The 2 groups were matched for: age (an average of 29.4 years for the violent and 29.5 for the nonviolent); education (both groups had completed 8.7 years of school); intelligence (both scored the same on a vocabulary test); and "educational equivalent" (7.8 versus 7.9 on an educational achievement test).

The responses of both groups of inmates were compared with those from 1,445 men employed in the "free world." The nonoffender group consisted of laborers, clerical and sales personnel and production workers.

The Birkman Method consists of 234 items calling for a True or False response to each. It begins with 117 statements as to what the test subject perceives other people believe or feel. The statements in the social perception part are then repeated in the self-image section, where the subject responds in terms of what he himself believes or feels. Both sections are scored in terms of such trait clusters as self-consciousness, dominance, materialism, tenacity, depressiveness, sociableness, restlessness, energy and indecisiveness.

The interest survey section asks each subject to state which of 4 occupations appeal to him most and next to most. Twenty-four occupations are listed in clusters of 4.

The vocabulary section consists of 13 words and asks for definitions of each word.

The Birkman Method has been used in industry since 1954 to predict successful and unsuccessful performance on a wide range of jobs.

RESULTS

The prisoners' scores on the trait clusters were factor analyzed. This analysis revealed a specific factor for violence.

Separating the offenders into violent and nonviolent groups and analyzing their test records with a multiple discrimination function analysis produced an overall difference between the groups that was significant beyond the 0.05 level.

On the basis of this analysis, an equation was derived which was then used to predict which of the prisoners belonged to the violent group and which to the nonviolent group on the basis of their individual test scores. Table 1 shows the hits and misses in terms of prediction of the 2 groups.

TABLE 1

	Hits	Misses
Violent.....	60	18
Nonviolent.....	73	22

When personality profiles were charted for the offenders, it was found that those with violent backgrounds differed more in intensity than in trait from those with nonviolent criminal records. Both groups differed substantially from the "free world" worker sample, both in intensity and trait.

Both the violent and nonviolent were found to have strong negative self-images. The nonviolent seemed more able to give expression to hostile feelings by working with their hands. The hostility of the violent was directed more toward people. When individual traits were compared, differences were present, but it should be emphasized that these differences are not as significant as the combination of traits and the violence factor found most predominantly among those with violent backgrounds.

The differences found in terms of individual traits included these: *materialism*—the violent, more than the nonviolent, saw other people as being materialistic, competitive and aggressive; *insistence*—the nonviolent, more than the violent, saw other people as in need of structure. The violent seemed to project

inner needs to be free and unstrained to other people; *energy*—the violent, more than the nonviolent, saw other people as seeking ways to gain ends without expending much energy of their own. The violent seemed to consider violence itself as a shortcut to gain ends; *self-criticism*—the nonviolent, more than the violent, showed a greater tendency to be self-critical. The violent did not seem as likely to blame themselves, although this might just be a cover-up for deep feelings of inadequacy; *individuality*—the violent, more than the nonviolent, saw themselves as having more individuality and being more nonconforming; *self-consciousness*—the nonviolent, more than the violent, expressed more self-consciousness, which seemed to act as a restraining influence on drastic behavior; *sociableness*—the nonviolent, more than the violent, saw themselves as being more sociable and without as much hostility.

Differences were also found among interest items. The nonviolent, more than the violent, expressed interest in occupations requiring interaction with other people and persuasive skills. The violent, on the other hand, showed a sharper interest in social service. The violent seemed to regard social service as giving a person power or dominance over others. This could be a compensating mechanism for deep feelings of dependency. The nonviolent were more interested than the violent in clerical jobs. The nonviolent seemed to be more willing to work with details and to practice the self-discipline necessary to do so. The violent expressed a greater interest in art and music. Both fields seemed to provide an avenue of escape or to feed fantasies.

In both the violent and nonviolent, there was evidence that a balanced integration of traits was more often absent than in the case of the worker group. Conflicting traits represented the pattern often found in the population of offenders. The violent, for example, showed that under routine conditions there was a preferred style toward passiveness. Under pressure, however, the passiveness turns to fierce aggressiveness. When under pressure, both the violent and nonviolent put much emphasis on direct, self-assertive, face-to-face contact with other people. Both also expressed a sharp tendency for avoiding methods and procedures that do not involve novelty, change or spontaneous action. Again, the difference between the violent and nonviolent was one of intensity.

DISCUSSION

There have been numerous attempts at predicting or identifying individuals likely to display violent, assaultive, or hostile aggressive behavior, using psychologic tests. Projective techniques, particularly the Thematic Apperception Test, have been used for the identification of violence-prone individuals,¹ but no studies were found which were truly predictive in nature.²

In addition to the projective tests, there have been attempts at developing scales appropriate to prison populations.³ The MMPI has probably been the most frequently used personality test of this type.⁴ When the specific variable of violence is considered, a number of previous studies appear relevant.⁵ Some of the more significant studies using the MMPI are those dealing with the 4-3 pattern. Three studies found that a large proportion of individuals in prison populations showing a certain MMPI profile (the 4-3 pattern) also had a history of violent antisocial acts.^{6,8} However, in another MMPI study of violent offenders, the 4-3 pattern did not emerge.⁹ The discrepancy could come from a number of sources.

¹ Brenner MS: The relationship between TAT hostility and overt hostile behavior as a function of a self-report anxiety. *Amer Psychol* 18:391, 1963

² Megargoe EI, Cook PE: The relation of TAT and inkblot aggressive content scales with each other and with criteria of overt aggressiveness in juvenile delinquents. *J. Project Techn* 31:48-60, 1967

³ Gough HG, Wenk EA, Rozycko VV: Parole outcome as predicted from the CPI, and MMPI, and a base expectancy table. *J. Abnorm Psychol* 70:432-441, 1965

⁴ Mandel NG, Barron AJ: The MMPI and criminal recidivism. *J. Criminal Law, Criminol., and Police Science* 57:35-38, 1966

⁵ Panton JH: The identification of habitual criminalism with the MMPI. *J. Clin Psychol* 18:133-136, 1962

⁶ Sines JO: Actuarial methods in personality assessment. *Progress in Experimental Personality Research*. Edited by B. Maher. New York, Academic Press Inc., 1966

⁷ Davis RR, Sines JO: An antisocial behavior pattern associated with a specific MMPI profile. *J. Consult Clin Psychol* 26:229-234, 1971

⁸ Persons RW, Marks PA: The violent 4-3 MMPI personality type. *J. Consult Clin Psychol* 30:180-190, 1971

⁹ Carrol JJ, Poller GB: An MMPI comparison of three groups of criminals. *J. Clin Psychol* 27:240-242, 1971

SUMMARY

In evaluating the results of previous attempts at identifying violent, or violence prone individuals using psychologic tests, it would be fair to say that the problem has become increasingly complex. Different studies have found contradictory results, this being true for both projective (Tat) and paper and pencil tests (MMPI).

In addition to the contradictory results, there also have been other problems in applying these instruments in such a way that prison authorities can find them of use. There are 2 basic explanations for why it is believed the approach inherent in the Birkman Method offers promise for identifying the potentially violent and for being of assistance in rehabilitation efforts. These explanations include:

(1) The nature of the structured psychologic questionnaire used in this study. The questionnaire is nonclinical and nonstatistical in its basic orientation. Theoretically, the use of traditional clinical or symptom-oriented tests which have been developed, standardized, and validated according to vigorous statistical procedures should have provided a suitable means for discriminating prisoner groups. In practice, however, test construction has centered in the development of mathematical models which have lacked a suitable theoretical framework. These have resulted in the construction of measuring instruments which are not sensitive enough to discriminate between groups consistently unless they represent clinical extremes. Mathematical models are essential, but they have imposed serious limitations on diagnostic and predictive procedures.

The social-, self-, and job-perception approach to behavior applied in this study appears to supply the conceptual framework needed. It offers the possibility of building a bridge of understanding between the specialties of medicine and psychology on the one hand, and the common sense reasoning of those without professional training on the other.

(2) The second explanation concerns the use of computers and appropriate, highly sophisticated "software" programs. Developments in computer technology permit the calculation of multiple regression equations with the capability of processing over 100 variables simultaneously. Multiple regression equations allow us to go beyond the unrealistic use of a single predictor of future behavior.

It is now possible to deal with the interrelationships of large numbers of predictors instead of the usual one, or at best, 7 to 8 which were considered the maximal number feasible when calculations were confined to the use of desk calculators. Social problems can now be studied more realistically as social problems as a whole in which everything relates to everything else. Institutions, men, and actions must be seen together to be understood, directed or controlled. Responsible officials have had to rely on an inadequate mixture of interviews, past records (or similar single predictors), and enlightened judgment in predicting future violent behavior.

Any speculation or conclusions drawn from the data developed from this study must, of necessity, be provisional in view of the complexity of the problem. However, the findings do appear to lend support to the belief that the use of psychologic tools will enable penal authorities to channel rehabilitative efforts more effectively.

Possibly one of the greatest benefits is that authorities now have a reliable means of developing and applying job and career planning information routinely. Medical doctors, as well as all officials concerned, can save endless hours of interviewing and probing when a prisoner takes some nonclinical, nontechnical questionnaire, and the results can be objectively analyzed and the findings quickly applied.

Results of the questionnaire should enable officials both in and out of the penal system to tailor-make rehabilitation programs to fit the personality or to use limited resources in the most productive manner. The Birkman Method should also help officials in making judgments as to which inmates appear to be the most employable in the free world. Outside the prison system, the method should be of use in establishing programs that best fit young people who appear to be headed for serious trouble if appropriate intervention is not taken.

Acknowledgments. The authors wish to express their appreciation to Dr. George Beto, Director of the Texas Department of Corrections; Howard Sub-

lett, Warden of the Jester Pre-Release Unit of TDC, and John Driskill, then Superintendent of the Unit. Also much gratitude is due Dr. Roy Mefford of the Veterans Administration Hospital in Houston who did the statistical analysis.

[ITEM III.B.4.g]

THE PREDICTION OF DELINQUENCY

University of the Commonwealth System
 of Higher Education
 Broad Street & Chestnut Avenue
 Philadelphia, Pennsylvania, 19122

1976/112
 Leonard P. Sivitz
 216-767-3723
 Non-profit Educational Institution

Prediction of Delinquency

Number of Subjects	20,066	1st Quarter		
Number of Missing Data	14,527	2nd Quarter		
Number of Predictions	34,592	3rd Quarter		
		4th Quarter		

None Good Fair Poor

1. Reported Date of Completion: June 1973

2. The purpose of this project is to determine the extent to which the prediction of delinquency can be improved by using a computer program. The program is designed to predict delinquency for Automatic Interaction Detection (A.I.D.) programs. It has been completed for eight specified subpopulations and accompanying flow charts have been completed. A.I.D. is a computer program which is used by taking that delinquent base. Any predictor (independent) variables, such as the level of the group sum of squares deviations for the dependent variable, and/or other. Because several of the independent variables had a large number of unknown or unknown A.I.D. runs, with those variables deleted, in order to permit the prediction instrument. At the same time, work has been done on the portion of the study on juvenile delinquency. The complete universe of families changed with order at that of about for the years 1970-72 has been obtained as well as details of the crime. Presently additional data is being collected on the boys' social backgrounds and previous criminal records.

[Handwritten signature]

Approved: _____
 Date: _____

GOVERNOR'S JUSTICE COMMISSION PROJECT REVIEW SHEET		<small>FORM JAMES 1111</small> CG-305-72A <small>UNCLAS</small> 10/16/72 <small>LEAD Compliance</small>
Temple University <small>UNIVERSITY OF THE COMMONWEALTHS</small> Non Profit Educational Institution <small>UNIVERSITY OF THE COMMONWEALTHS</small>		
A. Research and Development (Including Evaluation) <small>UNIVERSITY OF THE COMMONWEALTHS</small>		<small>Project Reference</small> 10/16/72
B. Research and Development <small>UNIVERSITY OF THE COMMONWEALTHS</small>		<small>Project Reference</small> 10/16/72
1. 14,527 Analytical Contribution 2. 2,050 Federal Funds 3. 34,592 Total	20,065 Part C 0 Part E	53.7% Salaries 19.9% Contracted Consultant Services 10.6% Indirect Costs
<p>Project Description: This application is for continuation of subgrant CG-085-70A, "The Prediction of Delinquency". During the first year of the project, research is devoted to constructing instruments to predict recidivistic delinquency based on data and information gathered from the Juvenile Court files of six counties in Pennsylvania: York, Erie, Dauphin, Montgomery, Philadelphia, and Allegheny.</p> <p>This project is a sub-study of last year's project and will specifically concentrate on analysis of Philadelphia juvenile murderers, all of whom had juvenile court records prior to their committing homicide. Intensive study will be conducted of the characteristics of Philadelphia juvenile male offenders who have within the last three years engaged in gang killing. Data will be collected from Juvenile Aid Division (police) Juvenile Court, and District Attorney's office records of all juvenile homicides committed since September 30, 1969. The analysis of this information will be carried out in the third phase of this study.</p>		
SUBGRANT STAFF RECOMMENDATION: <small>COMMENTS:</small>		<small>DATE</small> 10/16/72 <small>BY</small> CK
EXECUTIVE STAFF RECOMMENDATION: <small>COMMENTS:</small>		<small>DATE</small> 10/27/72 <small>BY</small> JK
COMMISSIONER'S RECOMMENDATION: <small>COMMENTS:</small>		<small>DATE</small> 11/2/72 <small>BY</small>
<small>COMMENTS:</small>		<small>DATE</small> 12/4/72

400

INFORMATION FOR SPECIFIC GRANTS

PAGE 1
04/10/74

GRANT NUMBER: 70A5725224
AWARD AMOUNT: \$50,000

GRANTEE NAME AND ADDRESS:
MEDICAL SCIENCE DEPT. UNIV. OF P.R.
PUERTA DE TIERRA
SAN JUAN PR

SPA NUMBER:
70A19224

PROJECT TITLE:
NEUROLOGICAL RESEARCH

PROJECT SUMMARY:
THE PURPOSE OF THIS PROJECT IS TO CONTRIBUTE TO THE CRIME PREVENTION EFFORT BY ATTEMPTING TO CORRELATE CRIMINAL BEHAVIOR WITH ORGANIC CEREBRAL DAMAGE IN THE PENAL POPULATION. IT HAS BEEN ESTABLISHED BY STUDIES IN THE UNITED STATES AND ENGLAND THAT A GREAT PERCENTAGE OF CRIMINALS HAVE ABNORMAL ELECTROENCEPHALOGRAMS. (SEE REFERENCES) ONCE SUITABLE TECHNICAL AND PROFESSIONAL COMPETENCE IS ESTABLISHED, AND SUFFICIENT EXPERIENCE IS GAINED AND ANALYSED IN THE PROJECT'S FIRST PHASE, A PROSPECTIVE COMMUNITY SEARCH CAN BE MADE LOOKING FOR YOUNG INDIVIDUALS WHO MAY SUFFER FROM UNDIAGNOSED CEREBRAL OR NEUROLOGICAL PATHOLOGY WHICH MAY CONTRIBUTE, OR IN SOME MANNER BE SIGNIFICANTLY ASSOCIATED WITH CRIMINAL BEHAVIOR.

GRANT NUMBER: 71AS060218
AWARD AMOUNT: \$34,512

GRANTEE NAME AND ADDRESS:
CITY OF SANTA PAULA
910 VENTURA ST.
SANTA PAULA CA 93060

SPA NUMBER:
A-218-1

PROJECT TITLE:
COMMUN-BEHAVIOR MODIFICATION PROGRAM FOR PRE-DELINQUENTS

PROJECT SUMMARY:
THIS IS A PROPOSAL TO DEVELOP, AS AN ALTERNATIVE TO INSTITUTIONALIZATION, A FAMILY ORIENTED, COMMUNITY BASED RESIDENTIAL TREATMENT CENTER FOR EIGHT PREDELINQUENT BOYS IN THE COMMUNITY OF SANTA PAULA. THE EMPHASIS WILL BE UPON KEEPING THE BOYS IN THEIR OWN COMMUNITY, WHERE THEIR PROBLEMS EXIST, AND IN PROVIDING TREATMENT FOR THE VARIOUS ENVIRONMENTAL COMPONENTS ASSOCIATED WITH THEIR OVER ANTI-SOCIAL BEHAVIOR: THE FAMILY, SCHOOL AND COMMUNITY. THE DEVELOPMENT OF NEW, ACCEPTABLE BEHAVIOR PATTERNS RESULTING IN THE ELIMINATION OF IRRESPONSIBLE ACTS BY THE MINOR WILL ALLOW HIM TO BE RETURNED TO HIS OWN HOME. THIS IS NECESSARILY CONDITIONED UPON HIS PARENTS' DEMONSTRATED APPLICATION OF NEWLY FORGED BEHAVIOR MODIFICATION TECHNIQUES. STAFFING WILL CONSIST OF TWO TRAINED FULL TIME GROUP HOME PARENTS, RELIEF GROUP HOME PARENTS, AND VARIOUS IN-KIND STAFF SERVICES. UNDER THE DIRECTION OF A COMMUNITY BOARD OF DIRECTORS, THE PROGRAM WILL MARSHAL ALL COMMUNITY RESOURCES WHICH APPEAR TO HOLD THE MOST PROMISE IN DIVERTING THE YOUTH FROM RECIDIVISM AND THE CONSEQUENT REINVOLVEMENT IN THE JUVENILE JUSTICE SYSTEM.

GRANT NUMBER: 71AS060385
AWARD AMOUNT: \$86,677

GRANTEE NAME AND ADDRESS:
CO. OF SAN DIEGO PROBATION DEPT.
PACIFIC HWY.
SAN DIEGO CA

SPA NUMBER:
A-385-71

PROJECT TITLE:
SIMPLIFIED ANALYTICAL METHODS OF BEHAVIORAL SYSTEMIZATION

PROJECT SUMMARY:
THE SAMHS PROJECT IS IN ITS SECOND YEAR OF OPERATION. BASICALLY, THE CONCEPT IS THAT PROVIDING PARENTS WITH MATERIAL WHICH WILL ASSIST THEM IN DEALING WITH THEIR CHILD'S BEHAVIOR, THE BEHAVIOR OF THE CHILD WILL BECOME LESS DELINQUENT. THE METHOD OF APPROACH IS TO PROVIDE A SERIES OF TEN LECTURES AND SMALL GROUP REINFORCEMENT, LED BY A QUALIFIED CHILD AND ADOLESCENT PSYCHIATRIST. THESE MATERIALS ARE REINFORCED STILL FURTHER BY WRITTEN MATERIALS AND HOMEWORK ASSIGNMENTS. YOUNGSTERS AND THEIR PARENTS ARE ACCEPTED BY THE ENTRY POINT IN THE PROBATION SYSTEM, AND THE PARENT OF ANY 601 CHILD MAY BE OFFERED PARTICIPATION IN THE PROGRAM IN LIEU OF COURT ACTION OR IN ADDITION TO COURT ACTION. IN THE INSTANCE OF THE PROGRAM AS AN ALTERNATIVE TO COURT ACTION, PROJECT STAFF PROVIDES SUPERVISION FOR THE PERIOD OF PROGRAM ENROLLMENT, AND SHORTLY THEREAFTER, THE CASE IS CLOSED. IN THOSE CASES WHERE COURT ACTION IS NECESSARY, FOLLOWING COMPLETION OF THE PROGRAM, THE PARENT IS OFFERED THE OPPORTUNITY OF A HEARING WHERE TERMINATION OF LEGAL STATUS IS CONSIDERED. RESEARCH IS PROVIDED BY THE SAN DIEGO STATE COLLEGE FOUNDATION WHICH WILL LARGELY CONSIST OF

401

(Full listing comprises approximately 400 behavioral research projects funded by LEAA.)

Excerpts from Computer Printout
April 10, 1972

[ITEM III.B.5]

DO NOT WRITE

INFORMATION FOR SPECIFIC GRANTS

PAGE 2
04/10/74

MEASUREMENT OF ATTITUDINAL CHANGES ON A PRE- AND POST-BASIS, AS WELL AS CHANGES IN RECIDIVISM IN A RANDOMLY SELECTED TARGET AND CONTROL GROUPING. THE PROJECT WILL PROVIDE INVOLVEMENT FOR APPROXIMATELY 500 PARENTS DURING THE PROJECT YEAR, AND WILL

GRANT NUMBER:
71AS064400

AWARD AMOUNT:
\$119,744

GRANTEE NAME AND ADDRESS:
COUNTY OF ORANGE PROBATION DEPT.
700 CIVIC CENTER DRIVE WEST
SANTA ANA CA 92702

SPA NUMBER:
A-440-71

PROJECT TITLE:
BEHAVIOR ASSESSMENT AND TREATMENT CENTER

PROJECT SUMMARY:

THIS PROJECT ENTAILS THE DEVELOPMENT OF A CENTRALLY LOCATED RESOURCE FOR MULTIDISCIPLINARY ASSESSMENT, RELATED DISPOSITIONAL PLANNING AND DIRECT TREATMENT OF JUVENILES, AT POINT OF PREINTAKE/INTAKE. THESE SERVICES WILL BE MADE AVAILABLE TO THE VARIOUS REFERRING AGENCIES THROUGHOUT THE COUNTY (I.E., POLICE, SCHOOLS, DELINQUENCY PREVENTION ACTION PROGRAMS) WHO ARE REQUIRED TO DEAL WITH JUVENILES (AND FAMILIES) MANIFESTING SYMPTOMS OF EMOTIONAL DISTURBANCE AND BEHAVIORAL MALADJUSTMENT, OF VARYING DEGREES OF SEVERITY. PRESENTLY, THE AVAILABILITY OF SUCH SERVICES IS WORFULLY INADEQUATE, AS REVEALED IN A SURVEY OF POLICE, SCHOOLS, AND OTHER AGENCIES, CONDUCTED IN PREPARATION FOR THIS GRANT PROPOSAL. THE PROJECT HAS THREE MAJOR OBJECTIVES: (1) PROVIDE INCREASED, EASILY ACCESSIBLE, MULTIDISCIPLINARY ASSESSMENT AND TREATMENT SERVICES TO REFERRING AGENCIES IN THE COMMUNITY; (2) DEVELOP A MODEL INTAKE PROCESS, AND DEMONSTRATE ITS DIFFERENTIAL EFFECTIVENESS - AS COMPARED WITH CURRENT PROBATION DEPARTMENT INTAKE PRACTICES - IN MAXIMIZING USE OF DETENTION, AND REDUCING RECIDIVISM; (3) DEVELOP OBJECTIVE, EMPIRICALLY BASED CRITERIA FOR DECISION-MAKING IN DISPOSITIONAL PLANNING (AT POINT OF INTAKE). THIS FIRST PHASE OF THE BEHAVIOR ASSESSMENT AND TREATMENT CENTER PROJECT FOCUSES ON POINT OF INTAKE, AND CAN: (1) ACCOMPLISH EARLY IDENTIFICATION AND TREATMENT OF EMOTIONALLY DISTURBED AND

GRANT NUMBER:
71AS480460

AWARD AMOUNT:
\$182,877

GRANTEE NAME AND ADDRESS:
CITY OF HOUSTON
900 BRAZOS
HOUSTON TX 77002

SPA NUMBER:
71J010460

PROJECT TITLE:
PREVENTION OF INDIVIDUAL VIOLENCE

PROJECT SUMMARY:

THE GOAL OF THE PROJECT FOR EARLY PREVENTION OF INDIVIDUAL VIOLENCE IS THE DEVELOPMENT OF EFFECTIVE TOOLS WITH WHICH TO BRING ABOUT PREVENTION OF INDIVIDUAL VIOLENT BEHAVIOR. IT IS THE PRIMARY OBJECTIVE OF THIS PROJECT TO IDENTIFY POTENTIAL EARLY WARNING SIGNS OF INDIVIDUAL VIOLENT BEHAVIOR, TO DETERMINE APPROPRIATE COMMUNITY AND INDIVIDUAL RESPONSES TO THESE SIGNS, AND TO MAKE THIS AND OTHER PREVENTIVE ACTION PROGRAM INFORMATION IDENTIFIED DURING THE PROJECT AVAILABLE TO COMMUNITY RESOURCES AND INDIVIDUALS WHO CAN UTILIZE THE INFORMATION FOR EARLY PREVENTION OF INDIVIDUAL VIOLENT BEHAVIOR. MOST OF THIS ACTIVITY HAS BEGUN IN THE FIRST PROJECT YEAR WHICH ENDS MAY 1, 1974. THE PROJECT IS ALSO CONCERNED WITH THE DEVELOPMENT OF A CENTRAL COMPUTERIZED INFORMATION BANK THAT WILL PROVIDE BIBLIOGRAPHIC REFERENCES ON POTENTIAL EARLY WARNING SIGNS AND INDIVIDUAL VIOLENT CRIME AS WELL AS PREVENTIVE ACTION INFORMATION REGARDING COMMUNITY RESOURCES AND RESPONSES TO INDIVIDUAL VIOLENCE AND CRIME. PROJECT ACTIVITY IS ALSO EXPECTED TO INCLUDE, AS A PREVENTIVE ACTION RESOURCE, THE DEVELOPMENT OF "TURNAROUND GROUPS" OF INDIVIDUALS WHOSE RECORDS INDICATE PRIOR INVOLVEMENT IN VIOLENCE BUT WHO HAVE NOW "TURNED AROUND" IN TERMS OF THEIR OWN BEHAVIOR.

402

INFORMATION FOR SPECIFIC GRANTS

PAGE 3
04/10/74

GRANT NUMBER:
72DF400053

AWARD AMOUNT:
\$300,000

GRANTEE NAME AND ADDRESS:
UNIV. OF OKLAHOMA RESEARCH INSTITUTE
1808 NEWTON DRIVE
NORMAN, OKLAHOMA 73069

SPA NUMBER:

PROJECT TITLE:
INVESTIGATE ASSAULT ON POLICE

PROJECT SUMMARY:

THIS PROJECT WAS ORIGINALLY AWARDED AS OF NOVEMBER 1, 1972, WITH \$300,000 1973 PART C FUNDS AND \$300,000 1973 TA FUNDS. WE WERE UNABLE TO SECURE ADEQUATE HARD-MATCH FOR THE PART C FUNDS WHICH NECESSITATED A TRADE FOR 1972 PART C FUNDS. THESE NEW AWARDS ARE NOT NEW COMMITMENTS, BUT ARE ONLY ACCOUNTING TRANSFERS. NO NEW ANNOUNCEMENTS ARE NECESSARY. THESE FUNDS ARE TO BE USED IN THE UNIVERSITY OF OKLAHOMA TO RESEARCH AND IDENTIFY THE CAUSE OF THE CRITICAL INCREASE IN POLICE ASSAULTS. THE SPECIFIC AIMS OF THE PROPOSED RESEARCH ARE: ANALYSIS OF MANAGEMENT AND SUPERVISORY TOOLS AND TECHNIQUES RELATED TO ASSAULTS AND RECOMMENDATIONS FOR THEIR IMPROVEMENT. ANALYSIS OF POLICE SECTION AND TRAINING RELATED TO THE PREVENTION AND HANDLING OF ASSAULTS AND RECOMMENDATIONS FOR IMPROVEMENT. ANALYSIS OF POLICE WEAPONS AND TECHNIQUES WITH RECOMMENDATIONS FOR IMPROVEMENT.

GRANT NUMBER:
72ED440010

AWARD AMOUNT:
\$188,472

GRANTEE NAME AND ADDRESS:
RHODE ISLAND STATE PLANNING AGENCY
269 MELROSE STREET
PROVIDENCE RI 02907

SPA NUMBER:

PROJECT TITLE:
MULTI-STATE TREATMENT OF SPECIAL OFFENDERS

PROJECT SUMMARY:

THIS PROJECT WILL FOCUS UPON AN IN-DEPTH STUDY OF THE NEED FOR, AND FEASIBILITY OF, DEVELOPING A MULTI-STATE PROGRAM FOR THE HANDLING AND TREATMENT OF SPECIAL OFFENDERS (DEVARIANT OFFENDERS) CURRENTLY INCARCERATED IN THE ADULT CORRECTIONAL AND MENTAL INSTITUTIONS OF NEW ENGLAND. THE PROJECT WILL IDENTIFY INMATES/PATIENTS (DEVARIANT OFFENDERS), DEVELOP A MODEL CLASSIFICATION SYSTEM OF SUCH OFFENDERS RELATED TO THEIR TREATMENT POTENTIAL, AND STRATEGIES FOR IMPLEMENTING TREATMENT/FACILITY PROGRAMS TO DEAL WITH THE PROBLEMS. FACTORS OF INSTITUTIONAL SETTING AND PERSONNEL, CHARACTERISTICS OF DEVIANT OFFENDERS AS PERCEIVED BY ADMINISTRATORS, OTHER PROFESSIONAL STAFF AND OFFICERS THEMSELVES AS WELL AS OTHERS IN THE CORRECTIONAL AND MENTAL HEALTH SERVICE SYSTEMS IN EACH STATE WILL BE STUDIED. THE MAJOR OBJECTIVE OF THE PROJECT IS TO DEVELOP A BLUEPRINT TREATMENT/FACILITY PROGRAM FOR IMPACTING THE PROBLEM OF THE DEVIANT OFFENDER AND AN ACCOMPANYING STRATEGY/ACTION PROGRAM FOR EARLY IMPLEMENTATION OF A MULTI-STATE PROGRAM. THE NEW ENGLAND CORRECTIONAL COORDINATING COMMITTEE WILL BE THE SUB-GRANTEE AND ADMINISTERING AGENCY FOR THE GRANT IN BEHALF OF THE RHODE ISLAND STATE PLANNING AGENCY. THE PROJECT WILL BE CONDUCTED BY SOCIO-TECHNICAL SYSTEMS ASSOCIATES.

GRANT NUMBER:
73ED170005

AWARD AMOUNT:
\$100,000

GRANTEE NAME AND ADDRESS:
ILLINOIS DEPT OF CORRECTIONS
160 N LASALLE STREET
CHICAGO, ILLINOIS 60601

SPA NUMBER:

PROJECT TITLE:
PLANNING FOR THE TREATMENT OF REPETITIVE VIOLENT OFFENDERS

PROJECT SUMMARY:

THIS AWARD OF \$1000,000 IS MADE UNDER THE GENERAL SPECIFICATIONS AND REQUIREMENTS OF THE 1972 GUIDE FOR DISCRETIONARY GRANT PROGRAMS, AS AUTHORIZED BY PUBLIC LAW 90-351. UNDER THE TERMS OF THIS GRANT, A VIABLE PROGRAM FOR THE EFFECTIVE TREATMENT OF THE REPETITIVE VIOLENT OFFENDER WILL BE DEVELOPED. PLANNING AND PROGRAM DEVELOPMENT WILL BE ACCOMPLISHED BY BRINGING TOGETHER A HIGH LEVEL GROUP OF SCHOLARS, RESEARCHERS, PRACTITIONERS AND ADMINISTRATORS TO PRODUCE A COMPREHENSIVE, DETAILED DOCUMENT WHICH WILL DEFINE: 1. THE SELECTION PROCESS; 2. THE TREATMENT PROGRAM; 3. THE EVALUATION PROCEDURES. A FOURTH COMPONENT WILL PROVIDE FOR THE DEVELOPMENT OF A FULLY FUNCTIONING INSTITUTION FOR VIOLENT OFFENDERS, AND THE TRAINING OF ITS STAFF WILL BE PLANNED AND PARTIALLY IMPLEMENTED.

403

INFORMATION FOR SPECIFIC GRANTS

PAGE 4
04/10/74

GRANT NUMBER:
73E0170009

AWARD AMOUNT:
\$290,000

GRANTEE NAME AND ADDRESS:
ILLINOIS DEPT OF CORRECTIONS
400 ARMOY BLDG
SPRINGFIELD ILLINOIS 62706

SPA NUMBER:

PROJECT TITLE:
REDUCING THE INCIDENCE OF VIOLENCE

PROJECT SUMMARY:

DISCRETIONARY GRANT APPLICATION NUMBER 0009-05-60-73 FOR \$290,000 LEAA FUNDS, SUBMITTED UNDER THE GUIDE FOR DISCRETIONARY GRANT PROGRAMS, FY 1972 AS A PROGRAM TO BE SUPPORTED BY FUNDS THAT HAVE BEEN SET ASIDE BY THE ADMINISTRATOR FOR SPECIFIC PROJECTS OF SPECIAL CHARACTER WHICH DO NOT LEND THEMSELVES TO MULTIPLE AWARD ON THE SOLICITED PROPOSAL BASIS APPLICABLE TO PROGRAMS ANNOUNCED IN THE GUIDE. THE ILLINOIS DEPARTMENT OF CORRECTIONS, ADULT PAROLE DIVISION PROPOSES A PROGRAM REDUCING THE INCIDENCE OF VIOLENCE. IT IS A COMMUNITY BASED PAROLE OPERATION, FOCUSING ON THE VIOLENT OFFENDER. IT'S GOAL IS TO REDUCE THE NUMBER OF VIOLENT CRIMES COMMITTED BY EX-OFFENDERS. THEY PROPOSE TO CONCENTRATE THE PROGRAM IN SIX TARGET AREAS THROUGHOUT THE STATE. THESE AREAS HAVE APPROXIMATELY 477 VIOLENT PRONE PAROLEES. BY PROVIDING INTENSIFIED SERVICES FROM THE COMMUNITY BASED OFFICES, THEY ANTICIPATE A REDUCTION IN CRIMES OF VIOLENCE AND REDUCTION IN THE RATE OF RECIDIVISM. THIS WOULD BE ACCOMPLISHED BY THE HIRING OF 29 PROFESSIONAL STAFF PERSONNEL AND THE REORGANIZATION OF THE STATE'S EXISTING THREE ADULT PAROLE SUPERVISION ZONES INTO SIX TARGET AREAS. EACH AREA WILL HAVE A TREATMENT SPECIALIST WITH SPECIALIZED TRAINING. A THREE MONTH INITIAL PERIOD FOR RECRUITMENT, TRAINING AND SETTING UP THE COMMUNITY BASED OFFICES IS REQUIRED.

GRANT NUMBER:
73TA400004

AWARD AMOUNT:
\$300,000

GRANTEE NAME AND ADDRESS:
UNIV OF OKLAHOMA RESEARCH INSTITUTE
1808 NEWTON DRIVE
NORMAN, OKLAHOMA 73069

SPA NUMBER:

PROJECT TITLE:
ASSAULT ON POLICE

PROJECT SUMMARY:

THIS PROJECT WAS ORIGINALLY AWARDED AS OF NOVEMBER 1, 1972, WITH \$300,000 1973 PART C FUNDS AND \$300,000 1973 TA FUNDS. WE WERE UNABLE TO SECURE ADEQUATE HARD-MATCH FOR THE PART C FUNDS WHICH NECESSITATED A TRADE FOR 1972 PART C FUNDS. THESE NEW AWARDS ARE NOT NEW COMMITMENTS, BUT ARE ONLY ACCOUNTING TRANSFERS. NO NEW ANNOUNCEMENTS ARE NECESSARY. THESE FUNDS ARE TO BE USED IN THE UNIVERSITY OF OKLAHOMA TO RESEARCH AND IDENTIFY THE CAUSE OF THE CRITICAL INCREASE IN POLICE ASSAULTS. THE SPECIFIC AIMS OF THE PROPOSED RESEARCH ARE: ANALYSIS OF MANAGEMENT AND SUPERVISORY TOOLS AND TECHNIQUES RELATED TO ASSAULTS AND RECOMMENDATIONS FOR THEIR IMPROVEMENT, ANALYSIS OF POLICE SECTION AND TRAINING RELATED TO THE PREVENTION AND HANDLING OF ASSAULTS AND RECOMMENDATIONS FOR IMPROVEMENT, ANALYSIS OF POLICE WEAPONS AND TECHNIQUES WITH RECOMMENDATIONS FOR IMPROVEMENT.

ITEMS RETRIEVED

10

406

GRANT NUMBER:
69A5270027AWARD AMOUNT:
\$3,576GRANTEE NAME AND ADDRESS:
CITY OF MINNEAPOLIS
CITY HALL
4TH ST. & 4TH AVE.
MINNEAPOLIS MN 55415SPA NUMBER:
14-XX-10-07-010PROJECT TITLE:
DOMESTIC DISTURBANCE TRAINING PROGRAM

PROJECT SUMMARY:
THE FOLLOWING IS A FINAL REPORT OF THE RESEARCH, TRAINING, AND OBSERVATIONS OF THE PROJECT DIRECTOR AND CONSULTANTS CONCERNED WITH THE IMPLEMENTATION AND DIRECTION OF THIS PROJECT. BEGINNING IN THE LATE FALL OF 1969, AFTER A MEETING OF VARIOUS DEPARTMENT HEADS AT THE UNIVERSITY OF MINNESOTA, THE DECISION WAS MADE TO HAVE PSYCHOLOGISTS PARTICIPATE IN A RIDE-ALONG PROGRAM WITH POLICE OFFICERS FOR THE CITY OF MINNEAPOLIS TO MAKE AN OVER-THE-SHOULDER EVALUATION OF POLICE REACTION AND INTER-ACTION WHEN CONFRONTED WITH DOMESTIC DISTURBANCES. SIXTEEN SUCH PSYCHOLOGISTS PARTICIPATED IN THIS PROGRAM. AS A RESULT OF THESE OBSERVATIONS, A MODULE CONSISTING OF 26 VOLUNTEERS FROM THE MINNEAPOLIS POLICE DEPARTMENT WERE PUT THROUGH A PILOT TRAINING PROGRAM IN DOMESTIC RELATIONS. OF THE INITIAL 24 MEMBERS, 12 COMPLETED THE PROGRAM IN ITS ENTIRETY. (SEE PROGRESS REPORT DATED SEPTEMBER 30, 1970) A SECOND SESSION WAS SCHEDULED INVOLVING THE ENTIRE RECRUIT CLASS WHICH GRADUATED FROM THE MINNEAPOLIS POLICE ACADEMY IN DECEMBER OF 1969. THIS PARTICULAR GROUP WAS CHOSEN BECAUSE OF DISCUSSION DURING THE PILOT PROGRAM INDICATING THE NEED FOR SUCH TRAINING FOR THE YOUNGER OFFICERS. AFTER COMPLETING THE SECOND TRAINING SESSION, A THIRD GROUP CONSISTING OF AN ENTIRE SHIFT FROM THE SIXTH PRECINCT (MODEL CITY) WERE SUBJECTED TO A

GRANT NUMBER:
69A5371002AWARD AMOUNT:
\$18,359GRANTEE NAME AND ADDRESS:
DEPT OF JUV. CORRECTIONS
MC DEPT OF YOUTH DEVSPA NUMBER:
35-001-169-12-69-AS-6PROJECT TITLE:
AN EMPIRICAL EVAL. OF DEL. TYPOLOGIES + TREATMENT

PROJECT SUMMARY:
THIS RESEARCH PURPORTS TO DETERMINE, AS ITS MAJOR OBJECTIVE, IF DELINQUENCY PRONENESS SCORES AND RECIDIVISM RATES ARE REDUCED WHEN INCARCERATED JUVENILE DELINQUENTS ARE DIAGNOSED INTO CRIMINOLOGICAL TYPOLOGIES AND THE THEORETICALLY APPROPRIATE CORRECTIVE TECHNIQUE IS APPLIED. AS A SECONDARY OBJECTIVE, THIS RESEARCH SHALL CONCERN ITSELF WITH THE OBSERVATIONAL ANALYSIS OF A TRAINING SCHOOL SOCIAL STRUCTURE UNDERGOING CHANGE. THE OBSERVATIONAL ANALYSIS OF SEMI-PROFESSIONAL CORRECTIONAL PERSONNEL OUT COMPLEX FORMS OF CORRECTIONAL THERAPY UNDER THE DIRECTION OF PROFESSION PERSONNEL, AND THE OBSERVATIONAL ANALYSIS OF THE DIFFICULTIES INHERENT IN MAKING ACCURATE CRIMINOLOGICAL DIAGNOSES.

GRANT NUMBER:
69N1060095AWARD AMOUNT:
\$6,380GRANTEE NAME AND ADDRESS:
NATIONAL COUNCIL ON CRIME & DELINQUENCY
DAVIS CA

SPA NUMBER:

PROJECT TITLE:
ASSAULTIVE EXPERIENCE & ASSAULTIVE POTENTIAL

PROJECT SUMMARY:
THIS STUDY, SPONSORED BY THE NATIONAL COUNCIL ON CRIME AND DELINQUENCY, IS DIRECTED BY A WELL KNOWN PSYCHOLOGIST, ERNST WENK. USING SUBSTANTIAL DATA GATHERED ON SEVERAL THOUSAND DELINQUENTS OVER A 2-YEAR PERIOD (1964-69), THE STUDY PROPOSES EXPLORATORY RESEARCH AIMED AT BETTER PREDICTION OF ASSAULTIVE BEHAVIOR.

***** MEDICAL RESEARCH PROJECTS *****

PAGE 2
04/10/74

GRANT NUMBER:
69N1110002

AWARD AMOUNT:
\$150,000

GRANTEE NAME AND ADDRESS:
NAT. COMMITTEE THE CAUSES PREVEN. VIO.
726 JACKSON PL. N.W.
WASHINGTON DC

SPA NUMBER:

PROJECT TITLE:
SPEC. RESOURCE PROJ. ON THE CAUSES & PREVENT. OF VIOLENCE

PROJECT SUMMARY:
THERE ARE A TOTAL OF NINE STUDIES INCLUDED IN THE PACKAGE WHICH WAS CONTRACTED FOR BY THE NATIONAL COMMISSION ON THE CAUSES AND PREVENTION OF VIOLENCE. THERE ARE THREE MAJOR RESEARCH EFFORTS AND SEVERAL SMALLER ONES. THE MAJOR EFFORT IS UPON VARIOUS ASPECTS OF CIVIL DISORDERS. EMPHASIS IS ALSO PLACED UPON THE PREVENTION AND REDUCTION OF CRIME. THE NATIONAL INSTITUTE OF LAW ENFORCEMENT AND CRIMINAL JUSTICE CONTRIBUTED \$150,000 OR ABOUT 75 PERCENT OF THE TOTAL COST OF \$196,000 OF THE PROJECTS.

GRANT NUMBER:
69N1110022

AWARD AMOUNT:
\$25,000

GRANTEE NAME AND ADDRESS:
NATIONAL RESEARCH COUNCIL
WASHINGTON DC

SPA NUMBER:

PROJECT TITLE:
EVALUATION OF OCC. OF XYV CHROMOSOME CONDITION IN MAN

PROJECT SUMMARY:
THE OBJECTIVE OF THIS PROPOSAL IS TO EVALUATE ALL AVAILABLE INFORMATION ON CHROMOSOMAL ABERRATIONS AND THEIR RELEVANCE TO CRIMINALITY. A REPORT WILL BE PROVIDED TO THE INSTITUTE AND RECOMMENDATIONS WILL BE MADE WITH REGARD TO AREAS OF INQUIRY WHERE ADDITIONAL RESEARCH WOULD BE MOST LIKELY TO YIELD VALUABLE INFORMATION.

GRANT NUMBER:
69N1120135

AWARD AMOUNT:
\$90

GRANTEE NAME AND ADDRESS:
JEROME STUMPHAUZER
TALLAHASSEE, FLORIDA

SPA NUMBER:

PROJECT TITLE:
MANUSCRIPT - CJ PROBLEMS AND RESEARCH

PROJECT SUMMARY:
BEHAVIOR MODIFICATION WITH JUVENILE DELINQUENTS; INCREASED DELAY OF GRATIFICATION IN YOUTHFUL OFFENDERS THROUGH EXPOSURE TO HIGH-DELAY-PEER-MODELS.

GRANT NUMBER:
69N1190132

AWARD AMOUNT:
\$175

GRANTEE NAME AND ADDRESS:
STEPHEN D. FORD
DES MOINES, IOWA

SPA NUMBER:

PROJECT TITLE:
MANUSCRIPT - CJ PROBLEMS AND RESEARCH

PROJECT SUMMARY:
CONCERNS THE ISSUE OF WHETHER THERE ARE CERTAIN KINDS OF HUMAN BEHAVIOR WHICH THE CRIMINAL LAW CANNOT COERCE.

406

GRANT NUMBER: 69N1240113 AWARD AMOUNT: \$250 GRANTEE NAME AND ADDRESS:
KIT G. JOHNSON
ANNAPOLIS, MARYLAND

SPA NUMBER: PROJECT TITLE:
MANUSCRIPT - CJ PROBLEMS AND RESEARCH

PROJECT SUMMARY:
ADOLESCENT DRUG USE SURVEY: I. AGE AND SEX DISTRIBUTION, II. HONESTY AND ATTITUDES, III. DRUG USE CORRELATIONS, IV. DEMOGRAPHIC, SOCIAL, AND ENVIRONMENTAL CORRELATIONS.

GRANT NUMBER: 69N1360024 AWARD AMOUNT: \$37,746 GRANTEE NAME AND ADDRESS:
THE CITY COLLEGE RESEARCH FOUNDATION
THE CITY UNIVERSITY OF NEW YORK
NEW YORK NY 10031

SPA NUMBER: PROJECT TITLE:
PHYSICAL ENVIRONMENT & URBAN STREET BEHAVIOR

PROJECT SUMMARY:
THIS PILOT PROJECT WILL EXPLORE THE IMPACT OF PHYSICAL ENVIRONMENT UPON URBAN STREET BEHAVIOR IN A SELECTED AREA OF NEW YORK CITY. IT IS BASED UPON THE ASSUMPTION THAT ASPECTS OF THE PHYSICAL ENVIRONMENT CAN BE STRUCTURED IN A MANNER WHICH WILL CHANNEL THE CREATIVE ENERGIES OF YOUNG PEOPLE AND ADULTS TO CONSTRUCTIVE RATHER THAN CRIMINAL STREET BEHAVIOR. ONLY A LIMITED AMOUNT OF RESEARCH HAS BEEN DONE IN THIS AREA.

GRANT NUMBER: 69N1360028 AWARD AMOUNT: \$64,955 GRANTEE NAME AND ADDRESS:
THE CITY COLLEGE RESEARCH FOUNDATION
THE CITY UNIVERSITY OF NEW YORK
NEW YORK NY 10031

SPA NUMBER: PROJECT TITLE:
POLICE MANAGEMENT OF CONFLICTS AMONG PEOPLE

PROJECT SUMMARY:
THIS PROJECT IS AN EXTENSION OF RESEARCH DONE BY THE CITY UNIVERSITY OF NEW YORK WITH THE NEW YORK POLICE DEPARTMENT. THE RESEARCH WILL TRAIN SELECTED MEMBERS OF THE PUBLIC HOUSING POLICE FORCE AS SPECIALISTS IN FAMILY CRISIS INTERVENTION. AN EVALUATION OF THE TRAINING WILL BE MADE IN TERMS OF SUCH VARIABLES AS THE REDUCTION IN THE NUMBER OF INJURIES SUSTAINED DURING FAMILY CRISIS INTERVENTION.

GRANT NUMBER: 69N1480055 AWARD AMOUNT: \$6,000 GRANTEE NAME AND ADDRESS:
TRAVIS COUNTY JUVENILE COURT
2515 SOUTH CONGRESS AVENUE
AUSTIN TX 78704

SPA NUMBER: PROJECT TITLE:
AUGMENTATION OF MORAL JUDGEMENT IN THE JUVENILE DELINQUENT

PROJECT SUMMARY:
THE RESEARCH CONSISTS OF INVESTIGATING THE EFFECTS OF MODELING BEHAVIOR ON THE MORAL JUDGEMENT OF DELINQUENTS. THE IMPLICATION OF THIS BEHAVIOR ON THE MORAL JUDGEMENT OF DELINQUENTS, THE IMPLICATION OF THIS RESEARCH RESIDE IN ITS POSSIBLE APPLICATION TO THE

TREATMENT OF JUVENILE DELINQUENCY. FINDINGS WILL CONTRIBUTE FARTHER TO THE PARAMETERS OF INFLUENCE OF SOCIAL REINFORCEMENT THEORY IN MORAL SOCIALIZATION OF THE CHILD. THE RESULTS WILL ALSO PROVIDE FURTHER CLASSIFICATION OF THE RELATIONSHIPS BETWEEN MORAL JUDGEMENT AND MORAL BEHAVIOR.

GRANT NUMBER:
6W1590064

AWARD AMOUNT:
\$9,335

GRANTEE NAME AND ADDRESS:
WISCONSIN DEPT. OF HEALTH & SOCIAL SER.
1 WEST WILSON STREET
MILWAUKEE WI 53701

SPA NUMBER:

PROJECT TITLE:
ACCURACY OF CLASSIFICATION OF SEX OFFENDERS

PROJECT SUMMARY:

THE PROJECT PROPOSES TO COLLECT AND CLASSIFY DATA ON THE AUTONOMICALLY MEDIATED (PUPILLARY, GSR, HEART RATE AND BLOOD PRESSURE) RESPONSES TO VARIOUS CLASSIFICATIONS OF STIMULI ASSESSED IN RELATION TO THE OFFENDER'S RECORD, PERSONALITY STRUCTURE AND BRAIN DAMAGE. THE DATA COLLECTED WOULD ALLOW FOR A MORE ACCURATE AND EXPEDITIOUS SUBDIVISION OF SEX OFFENDERS INTO MEANINGFULLY DIFFERENT SUBGROUPS WITH VARYING PROGNOSTIC ATTRIBUTES AND TREATMENT NEEDS.

GRANT NUMBER:
70AS170015

AWARD AMOUNT:
\$27,577

GRANTEE NAME AND ADDRESS:
MICHAEL REESE HOSPITAL
MICHAEL REESE HOSPITAL
2959 S. ELLIS AVE.
CHICAGO IL 60616

SPA NUMBER:
070015 OL 98

PROJECT TITLE:
AN INTENSIVE STUDY OF JUVENILE DELINQUENTS

PROJECT SUMMARY:

THE SPECIFIC AIMS OF THE "INTENSIVE STUDY OF JUVENILE DELINQUENTS ARE: (1) TO STUDY THE INDIVIDUAL DELINQUENT AND HIS FAMILY VIA PSYCHIATRIC, PSYCHOLOGICAL AND SOCIOLOGICAL METHODS IN ORDER TO BETTER UNDERSTAND THE PSYCHOLOGY OF DELINQUENCY. (2) TO COMPARE THE DELINQUENT POPULATION WITH A GROUP OF NORMAL ADOLESCENTS PREVIOUSLY STUDIED BY OFFER (1969). (3) TO MEASURE THE DELINQUENT ANTI-SOCIAL BEHAVIOR IN THE HOSPITAL VIA A CAREFULLY CONSTRUCTED BEHAVIOR RATING SCALE. THIS WILL ENABLE US TO CORRELATE THE ADOLESCENT'S BEHAVIOR IN THE HOSPITAL WITH OTHER IMPORTANT FACTORS SUCH AS HIS RELATIONSHIP WITH HIS FAMILY, HIS COMMUNICATION PATTERNS AND HIS DELINQUENCY. (4) TO DEVELOP A MODEL TREATMENT PROGRAM FOR DELINQUENTS AND THEIR FAMILIES, WHICH WILL LEAD TO A BETTER UNDERSTANDING OF THE FACTORS INVOLVED IN RECIDIVISM AND REMISSION. (5) TO OBJECTIVELY STUDY THE ATTITUDE OF THOSE CLOSE TO THE JUVENILE DELINQUENT IN ORDER TO ASSESS HOW EFFECTIVELY THEY HANDLE HIM. SPECIFICALLY, WE SHALL STUDY VIA VIDEO-TAPE INTERVIEWS THE ATTITUDES OF PSYCHOTHERAPISTS, NURSES, POLICEMEN, PROBATION OFFICERS AND TEACHERS. WE HOPE TO ULTIMATELY DEVELOP GUIDELINES FOR THE SELECTION OF THOSE WHO ARE BEST SUITED TO WORK WITH ADOLESCENTS. (6) TO DELINEATE SOME OF THE BASIC CAUSES OF JUVENILE DELINQUENCY AND THROUGH A BETTER UNDERSTANDING OF ETIOLOGY OF DELINQUENCY TO PREVENT IT BEFORE IT EMERGES.

408

401

GRANT NUMBER: AWARD AMOUNT:
70AS170052 \$220,906GRANTEE NAME AND ADDRESS:
INSTITUTE FOR JUVENILE RESEARCH
232 EAST OHIO ST.
CHICAGO IL 60611SPA NUMBER:
070052 01 98PROJECT TITLE:
YOUTH AND SOCIETY IN ILLINOIS

PROJECT SUMMARY:

THIS PROJECT IS DESIGNED TO BE A COMPREHENSIVE AND INTEGRATED RESEARCH EFFORT FOCUSED ON AND RESULTING IN ACTION PROPOSALS DESIGNED TO IMPROVE THE CURRENT SITUATION OF YOUNG PEOPLE IN ILLINOIS WITH REGARD TO LAW ENFORCEMENT. TOO MUCH OF THE PRESENT DISCUSSIONS ABOUT THE BEHAVIORS AND ATTITUDES OF YOUTH TAKES FOR GRANTED CRISIS AND CHANGE WITHOUT SPECIFYING THE NATURE OF EITHER. FURTHER, CURRENT CONCERNS CENTER ON WHAT APPEARS TO BE "NEW" AND "WIDESPREAD" PATTERNS OF BEHAVIOR WITHOUT REAL KNOWLEDGE OF THE DISTRIBUTION OF THE BEHAVIOR OR WHETHER IT IS REALLY NEW OR IF IT IS MERELY OUR AWARENESS THAT IS NEW. CLEARLY, IN ORDER TO EVALUATE EITHER OF THESE OR TO TAKE APPROPRIATE ACTION WITH REGARD TO THESE FACTORS, BASELINE DATA IS NEEDED AGAINST WHICH CHANGE CAN BE EVALUATED, AND ON THE BASIS OF WHICH RATIONAL PLANS CAN BE MADE. IT IS THE PURPOSE OF THIS PROPOSAL TO DESCRIBE A PROGRAM OF RESEARCH WHICH WILL PROVIDE THIS BASELINE AND ENABLE THE DESIGN OF PROGRAMS TAILORED TO THE NEEDS OF THE YOUNG PEOPLE OF ILLINOIS. THE RESEARCH PROGRAM HAS SEVERAL MAJOR PHASES: ...THE COMPILATION AND ANALYSIS OF HISTORICAL MATERIALS ON JUVENILE DELINQUENCY FOR BOTH COOK COUNTY AND THE REST OF THE STATE, TOGETHER WITH CORRELARY MATERIALS THESE MATERIALS WILL ALLOW US TO THINK ABOUT THE PRESENT SITUATION IN THE LIGHT OF HISTORICAL TRENDS, ...A SURVEY OF YOUNG PERSONS IN SELECTED COMMUNITY AREAS THROUGH

GRANT NUMBER: AWARD AMOUNT:
70AS201198 \$19,370GRANTEE NAME AND ADDRESS:
KANSAS STATE DIAGNOSTIC CENTER
3817 EAST 6TH ST BOX 1998
TOPEKA KS 66601SPA NUMBER:
71-A-1198PROJECT TITLE:
PREDICTING AN OFFENDERS PROBABLE PAROLE SUCCESS

PROJECT SUMMARY:

1. GOALS A. WHAT IS IT HOPED THE PROJECT WILL DEMONSTRATE OR ACHIEVE? THE PROJECT IS DIRECTED TOWARD THE GOAL OF ESTABLISHING A BASE EXPECTANCY SCORE (A STATEMENT AS TO THE PROBABILITY OF AN INMATE SUCCESSFULLY COMPLETING HIS TWO YEAR PAROLE PERIOD) AND CROSS VALIDATING THIS SCORE ON ANOTHER GROUP OF OFFENDERS. BOTH STEPS ARE ESSENTIAL IN ORDER TO ASSURE THE ACCURACY OF THE PREDICTION EQUATION. B. INDICATE THE CLASS OF PRIORITY ACCORDING TO THE STATE PLAN UNDER WHICH THE GRANT WOULD BE FUNDED, AN ACTION GRANT. C. LIST TARGET GROUPS OR ORGANIZATIONS BENEFITED OR AFFECTED. TARGET GROUPS WILL BE THE KANSAS STATE RECEPTION & DIAGNOSTIC CENTER STAFF, PERSONS PRESENTLY INCARCERATED WITHIN THE KANSAS PENAL SYSTEM AND THOSE WHO WILL FIND THEMSELVES IN PRISON IN THE FUTURE. SECONDARILY THE DATA GATHERED ON THESE OFFENDERS WILL BE PLACED ON COMPUTER CARDS WHICH MEANS THAT SPECIFIC DATA CAN BE RETRIEVED FOR OTHER DEPARTMENTS INVOLVED IN THE TREATMENT OF OFFENDERS IF REQUESTED.

GRANT NUMBER: AWARD AMOUNT:
70AS270048 \$13,069GRANTEE NAME AND ADDRESS:
BOARD OF COMMISSIONERS
NEW ULM MN 56073SPA NUMBER:
14-01-01-06-009PROJECT TITLE:
REGIONAL TREATMENT & EDUCATION OF DRUG ABUSE

PROJECT SUMMARY:

1. TO PROVIDE A DIVERSE AND BEHAVIORAL TREATMENT APPROACH FOR THE DRUG USER INDICATING A DESIRE TO TERMINATE DRUG USAGE. IT IS ANTICIPATED THAT THE TREATMENT METHODS EMPLOYED WILL SIGNIFICANTLY MODIFY THE DRUG ABUSING BEHAVIOR OF THE USER PARTICIPATING IN THE PROGRAM. 2. TO PROVIDE A COMMUNITY BASED "OPEN DOOR PROGRAM" WHICH WILL PROVIDE THE DRUG USER THE OPPORTUNITY TO DISCUSS URGENT ISSUES AND QUESTIONS REGARDING DRUG USAGE AND THEIR OWN PERSONAL INVOLVEMENT IN THE DRUG SCENE THROUGH REGULARLY SCHEDULED OPEN FORUMS WITH THE STAFF OF THE SIOUX TRAILS MENTAL HEALTH CENTER AND COMMUNITY LEADERS. IT IS ANTICIPATED THAT SUCH AN OPEN FORUM WILL AID THE DRUG USER IN CONSIDERING OTHER ALTERNATIVES TO DRUG USAGE AND THEREBY MOTIVATE HIM TO CHANGE HIS DRUG ORIENTED BEHAVIOR

109

THROUGH TREATMENT. 3. TO PROVIDE AN INNOVATIVE TREATMENT APPROVED WHICH HAS NOT PREVIOUSLY BEEN INITIATED IN THE TREATMENT OF DRUG ABUSE. A CONTINGENCY CONTRACTING FUND WILL BE ESTABLISHED TO PROVIDE MONETARY INCENTIVES TO DRUG ABUSERS AND THEREBY FACILITATING TOTAL PARTICIPATION IN THE TREATMENT PROGRAM. 4. TO PROVIDE AN EXTENSIVE COMMUNITY EDUCATION PROGRAM, THE GOAL OF WHICH WILL BE TO DISSEMINATE VALID RESEARCH FINDINGS ON DRUGS, DRUG USAGE, AND THE DRUG USER THROUGH COMMUNITY WORKSHOPS, SPEAKING ENGAGEMENTS AND SEMINARS. SUCH A PROGRAM WILL PROVIDE TRAINING SERVICES TO GRADUATE STUDENTS, THE LAY PUBLIC

GRANT NUMBER:
70AS360249

AWARD AMOUNT:
\$71,093

GRANTEE NAME AND ADDRESS:
UNIV. OF THE STREETS, INC.
130 EAST 11TH STREET
NEW YORK NY

SPA NUMBER:
00249

PROJECT TITLE:
UNIV. OF THE STREETS COMMUNITY SERVICE & PUBLIC SAFETY CENT.

PROJECT SUMMARY:
THE U.O.T.S. PROGRAM PLANS TO ALLEVIATE THESE DELINQUENCY AND CRIME PROBLEMS BY PROVIDING CONSTRUCTIVE ALTERNATIVES TO NEIGHBORHOOD YOUTHS. U.O.T.S. HAS BEEN AND WILL CONTINUE TO PROVIDE DRUG REFERRAL AND SUPPORTIVE SERVICES TO THE DETOXIFICATION PROGRAM AT BETH ISRAEL HOSPITAL; JOB REFERRAL; EDUCATIONAL COUNSELING AND TUTORIALS; SCHOLARSHIPS TO SCHOOLS AND COLLEGES; TRIPS TO FESTIVALS AND OTHER EVENTS; AND LEGAL COUNSELLING. THE APPLICANT WILL MAKE AVAILABLE NEW PROGRAMS IN HOUSING; COUNSELLING; GROUP COUNSELLING; AN EXPANDED ATHLETICS PROGRAM; AND VOCATIONAL PROGRAMS IN PHOTOGRAPHY AND COMMUNICATIONS. THE APPLICANT WILL EXERT SPECIAL EFFORTS TO RECRUIT YOUTH PAROLEES AND PROBATIONERS WHO LIVE IN THE COMMUNITY. YOUTH WORKERS WILL BE HIRED TO SEEK OUT YOUTHS IN THE STREET ENVIRONS AND INTEREST THEM IN THE ONGOING ACTIVITIES OF THE UNIVERSITY.

GRANT NUMBER:
70AS370029

AWARD AMOUNT:
\$63,705

GRANTEE NAME AND ADDRESS:
CENTRAL REGIONAL PLANNING COMMISSION
80X 1827
ROCK MOUNT NC 27801

SPA NUMBER:
70-A-29

PROJECT TITLE:
YOUTH SERVICES CENTER

PROJECT SUMMARY:
THE CENTRAL REGIONAL PLANNING COMMISSION OF THE GOVERNOR'S COMMITTEE ON LAW AND ORDER PURPOSES THAT A REGIONAL COMMUNITY SERVICES CENTER FOR DELINQUENT YOUTH BE ESTABLISHED IN OUR AREA. WE PROPOSE THAT OUR CENTER BE PATTERNED AFTER THE TYPICAL COMMUNITY SERVICES CENTER CONCEPT DETAILED IN THE PROPOSED STATE-WIDE SERVICES PROGRAM FOR DELINQUENT YOUTH (SEE PARTICULARLY PP. 13-17) AND COORDINATED WITH THAT PROGRAM. (SEE WORKING DRAFT SECOND REVISION APRIL 4, 1969, N. C. BOARD OF JUVENILE CORRECTION, RALEIGH, NORTH CAROLINA). WE ARE IN BASIC AGREEMENT WITH THE DESIGN FEATURES DEPICTED BY THE STATE BOARD OF JUVENILE CORRECTION. WE WOULD LIKE, HOWEVER, TO ESTABLISH AN EXPERIMENTAL COMPONENT IN OUR YOUTH SERVICES CENTER CLOSELY COORDINATED WITH THE EXPERIMENT IN JUVENILE MOTIVATION CURRENTLY FUNDED BY THE JUVENILE DELINQUENCY AND CONTROL ACT OF 1968 AT N. C. WESLEYAN COLLEGE, IN COOPERATION WITH THE RICHARD T. FOUNTAIN TRAINING SCHOOL. A SPECIAL FEATURE OF THIS COORDINATING PROGRAM WILL BE SYSTEMATIC APPLICATION OF BEHAVIOR MODIFICATION TECHNIQUES WITH THE JUVENILES. WE HAVE CONTACTED SPECIALISTS IN THIS RELATIVELY NEW APPROACH TO JUVENILE DELINQUENCY PREVENTION AND CONTROL AND HAVE INITIATED DETAILED PROGRAM DESIGN INCORPORATING SOME OF THE FOLLOWING FEATURES.

100

GRANT NUMBER: 70A5420382
AWARD AMOUNT: \$74,243

GRANTEE NAME AND ADDRESS:
PHILADELPHIA PSYCHIATRIC CENTER
FORD ROAD AND MONUMENT AVENUE

SPA NUMBER:
DA-091-70

PROJECT TITLE:
FACTORS IN GANG BEHAVIOR AND VIOLENT JUVENILE CRIME

PROJECT SUMMARY:
THE MAIN PURPOSE OF THIS PROJECT IS TO CONDUCT A SURVEY AND AN ANALYSIS OF THE INTERRELATIONSHIPS BETWEEN THE MULTIPLE FACTORS, BOTH IN THE INDIVIDUAL AND IN THE SITUATION, ASSOCIATED WITH THE COMMISSION OF VIOLENT CRIMES BY JUVENILES IN THE PHILADELPHIA INNER-CITY "GHETTO" AREAS, AND TO CLARIFY THE RELATIONSHIPS BETWEEN STREET GANG MEMBERSHIP, NARCOTICS USAGE AND THE COMMISSION OF VIOLENT CRIMES. AN AUXILIARY PURPOSE OF THE PROJECT IS TO DEVELOP A PREDICTIVE INDEX FOR THE COMMISSION OF VIOLENT CRIME AND TO CONSIDER ITS APPLICABILITY FOR PROGNOSIS IN THE INDIVIDUAL CASE AND FOR PREVENTIVE INTERVENTION AND CONTROL.

GRANT NUMBER: 70A5420386
AWARD AMOUNT: \$58,596

GRANTEE NAME AND ADDRESS:
COMMUNITY COLLEGE OF ALLEGHENY COUNTY
ALLEGHENY CAMPUS

SPA NUMBER:
DA-008-70

PROJECT TITLE:
THE CONTRIBUTION OF A COLLEGE EDUCATION TO REDUCE RECIDIVISM

PROJECT SUMMARY:
A STUDY OF 60 PRISONERS COMMITTED TO THE STATE CORRECTIONAL INSTITUTION AT PITTSBURGH TO DETERMINE IF EDUCATIONAL PROGRAMS OFFERED DIRECTLY IN THE INSTITUTION WILL REDUCE RECIDIVISM. THE STUDY WILL REQUIRE EDUCATION AND RESEARCH COMPONENTS.

GRANT NUMBER: 70A5480280
AWARD AMOUNT: \$12,600

GRANTEE NAME AND ADDRESS:
SOUTH TEXAS DEVELOPMENT COUNCIL
1102 VICTORIA ST.
P.O. BOX 1365
LAREDO TX 78040

SPA NUMBER:
70J010280

PROJECT TITLE:
DRUG PREVENTION PROPOSAL

PROJECT SUMMARY:
BOTH REGIONALLY AND NATIONALLY, THE CITY OF LAREDO OCCUPIES A CRITICAL POSITION WITH REGARD TO DRUG USE AND DRUG TRAFFIC. IT IS ONE OF THE KEY TRANSFER POINTS FOR DRUGS ENTERING THE U. S. FROM MEXICO. LAREDO IS ALSO RECEIVING NATIONAL ATTENTION IN RESPONSE TO THE MODEL DRUG EDUCATION CURRICULUM DEVELOPED BY EDUCATORS OF THE CITY. THE PROPOSED STUDY WOULD RELATE TO BOTH THE NEW NEEDS AND TRADITIONAL PROBLEMS RESULTING FROM THESE FACTORS. THE PRIME INTENT OF PROPOSED RESEARCH CONTAINED IN THIS PROJECT WILL BE TO PROVIDE AN INFORMATIONAL AND ANALYTICAL MODEL FOR THE DEVELOPMENT OF POLICY AND PROGRAMMING RELATIVE TO DRUG ABUSE PREVENTION IN THE SOUTH TEXAS REGION. TO THE EXTENT THAT THE SEVERAL PARAMETERS OF THE DRUG ABUSE PROBLEM, AS OUTLINED IN THIS APPLICATION ARE AMENABLE TO SPECIFIC DESCRIPTION AND ANALYSIS, THE PROSPECT STUDY WILL PROVIDE THE IDENTIFICATION OF NEEDS AND PROBLEMS REQUIRED BY ALL AGENTS AND GROUPS RESPONSIBLE FOR DRUG ABUSE PREVENTION EFFORTS IN THE AREA. THE INTENT THEN IS TO LAY THE FOUNDATION FOR EFFECTIVE DIRECTIONAL PLANNING AND REGIONAL COORDINATION OF PREVENTIVE EFFORTS. THE STUDY WILL REQUIRE APPROXIMATELY SIX WEEKS, UTILIZING A TEAM OF AT LEAST THREE DRUG SPECIALISTS. THE RESEARCH TEAM WILL UTILIZE ANY LOCALLY AVAILABLE INFORMATION AND RESEARCH, INTEGRATING SUCH WITH THE RESULTS OF THE INQUIRIES OF THE TEAM ITSELF. AT THE COMPLETION OF

477

***** MEDICAL RESEARCH PROJECTS *****

PAGE 8
04/10/74GRANT NUMBER: AWARD AMOUNT:
70A5530331 931,7398GRANTEE NAME AND ADDRESS:
UNIV. OF WASHINGTON
SEATTLE WASPA NUMBER:
331PROJECT TITLE:
MODELING & THE REHABILITATION OF DELINQUENTS

PROJECT SUMMARY:
SUMMARY OF PROJECT: THE PROJECT IS AIMED AT (1) STRENGTHENING JUVENILE REHABILITATION PROGRAMS AND (2) REDUCING RECIDIVISM. THE VEHICLE FOR ACCOMPLISHING THIS IS OBSERVATIONAL LEARNING. THE METHODS EMPLOYED WILL INVOLVE MODELING AND ROLE-PLAYING TECHNIQUES. INSTITUTIONALIZED JUVENILE OFFENDERS, IN GROUPS, WILL OBSERVE THE MODELING OF SOCIALLY DESIRABLE BEHAVIOR BY MODELS. IN THIS CASE TRAINED STAFF MEMBERS AT THE INSTITUTION, FOLLOWING THIS, THE CHILDREN WILL ROLE PLAY THE SAME SITUATION THEMSELVES. THIS WILL BE FOLLOWED BY DISCUSSION AND REVIEW CONCERNING THE SOLUTION TO INTERPERSONAL PROBLEMS THAT OFTEN GIVE RISE TO DELINQUENCY AND RECIDIVISM. THE AIM OF THE PROJECT IS TO HELP INSTITUTIONS SET UP THEIR OWN MODELING PROGRAMS AND, ULTIMATELY, TO RUN THEM WITHOUT THE ASSISTANCE OF THE U OF W TEAM THAT WILL STIMULATE AND DEVELOP THE PROGRAMS. 1. GOALS AND OBJECTIVES: ONE OF THE MAJOR GOALS OF ANY RESIDENTIAL PROGRAM PROVIDED FOR JUVENILE DELINQUENTS IS THE REDUCTION OF RECIDIVISM. IN A FOUR-YEAR RESEARCH PROJECT CONDUCTED AT CASCADIA, BOYS AGED 15-18 WHO RECEIVED A SPECIAL LEARNING PROGRAM SHOWED A RECIDIVISM RATE THAT WAS ONE-HALF OF THE CONTROL GROUP. THIS IS PARTICULARLY SIGNIFICANT SINCE THE RECIDIVISM DATA WERE GATHERED OVER A YEAR AND A HALF AFTER THE BOYS HAD LEFT THE DIVISION OF INSTITUTIONS. THE PURPOSE OF THE PROPOSED PROJECT IS TO BUILD ON THESE RESEARCH

GRANT NUMBER: AWARD AMOUNT:
70A5729224 450,000GRANTEE NAME AND ADDRESS:
MEDICAL SCIENCE DEPT. UNIV. OF P.R.
PUERTA DE TIERRA
SAN JUAN PRSPA NUMBER:
70A19224PROJECT TITLE:
NEUROLOGICAL RESEARCH

PROJECT SUMMARY:
THE PURPOSE OF THIS PROJECT IS TO CONTRIBUTE TO THE CRIME PREVENTION EFFORT BY ATTEMPTING TO CORRELATE CRIMINAL BEHAVIOR WITH ORGANIC CEREBRAL DAMAGE IN THE PENAL POPULATION. IT HAS BEEN ESTABLISHED BY STUDIES IN THE UNITED STATES AND ENGLAND THAT A GREAT PERCENTAGE OF CRIMINALS HAVE ABNORMAL ELECTROENCEPHALOGRAMS. (SEE REFERENCES) ONCE SUITABLE TECHNICAL AND PROFESSIONAL COMPETENCE IS ESTABLISHED, AND SUFFICIENT EXPERIENCE IS GAINED AND ANALYSED IN THE PROJECT'S FIRST PHASE, A PROSPECTIVE COMMUNITY SEARCH CAN BE MADE LOOKING FOR YOUNG INDIVIDUALS WHO MAY SUFFER FROM UNDIAGNOSED CEREBRAL OR NEUROLOGICAL PATHOLOGY WHICH MAY CONTRIBUTE, OR IN SOME MANNER BE SIGNIFICANTLY ASSOCIATED WITH CRIMINAL BEHAVIOR.

GRANT NUMBER: AWARD AMOUNT:
70N1110090 359,000GRANTEE NAME AND ADDRESS:
NATIONAL COMMISSION CAUSES PREV. VIOL.
726 JACKSON PLACE N.W.
WASHINGTON DC 20506

SPA NUMBER:

PROJECT TITLE:
DISSEMINATION OF NATL. COMM. ON CAUSES & PREVENTION VIOLENC

PROJECT SUMMARY:

412

**** MEDICAL RESEARCH PROJECTS ****

PAGE 9
04/10/77

GRANT NUMBER:
70N120038

AWARD AMOUNT:
\$49,885

GRANTEE NAME AND ADDRESS:
CITY OF MI DEPT OF POLICE
P. O. BOX 614
MIAMI FL 33152

SPA NUMBER:

PROJECT TITLE:
MI P.D. STUDY OF THE INFLUENCE OF FATIGUE, STRESS & PEAS.

PROJECT SUMMARY:

THIS RESEARCH EFFORT WILL PINPOINT THOSE PERSONALITY FACTORS WHICH CORRELATE WITH MALADAPTIVE PATROL BEHAVIOR CORRESPONDING TO THE PHENOMENON KNOWN IN THE MILITARY AS "COMBATE FATIGUE." FROM THIS RESEARCH, PRECISE METHODS FOR PATROLMAN SELECTION, TRAINING AND DEPLOYMENT CAN BE DEVELOPED. BY UNDERSTANDING WHICH SITUATIONS ARE MOST STRESSFUL, RATIONALE AND EFFECTIVE RECRUIT TRAINING PROGRAMS CAN BE DEVELOPED AND TESTED IN THE MIAMI POLICE DEPARTMENT. DIFFERENT METHODS OF DEPLOYMENT CAN BE OPERATIONALLY EVALUATED IN TERMS OF INDIVIDUAL PERFORMANCE. DEPARTMENTAL, CITY-WIDE AND LEGAL POLICY WITH REGARD TO THE ROLE OF THE POLICEMAN WILL BE REVIEWED. SPECIFIC CRITERIA FOR PERFORMANCE APPRAISAL WILL BE DEVELOPED.

GRANT NUMBER:
70N1256522

AWARD AMOUNT:
\$8,750

GRANTEE NAME AND ADDRESS:
JAY LIVINGSTON
63 PRENTISS ST.
CAMBRIDGE MA 02140

SPA NUMBER:

PROJECT TITLE:
COMPULSIVE GAMBLERS

PROJECT SUMMARY:

GRANT NUMBER:
70N1396503

AWARD AMOUNT:
\$9,989

GRANTEE NAME AND ADDRESS:
OHIO STATE UNIV. RESEARCH FOUNDATION
1314 KINNEAR ROAD
COLUMBUS OH 43212

SPA NUMBER:

PROJECT TITLE:
GAMBLING BEHAVIOR IN THE UNITED STATES

PROJECT SUMMARY:

THIS GRANT INVOLVES USE OF THE GALLUP ORGANIZATION TO MAKE AN EXPLORATORY NATIONAL SURVEY OF THE CONSUMERS OF GAMBLING SERVICES, GATHERING INFORMATION ON SUCH TOPICS AS THE TYPES OF GAMBLING BEHAVIOR, AVAILABILITY OF GAMBLING, MONEY WAGERED, PERCEIVED GAMBLING SUCCESS AND TYPE OF GAMBLING FACILITY PATRONIZED. RESULTS OF THE SURVEY SHOULD PROVIDE INSIGHTS INTO THE EFFECTS OF DIFFERENTIAL METHODS OF CONTROL OF GAMBLING ON ACTUAL GAMBLING BEHAVIOR.

***** MEDICAL RESEARCH PROJECTS *****

GRANT NUMBER: AWARD AMOUNT:
70N1400056 \$88,657

GRANTEE NAME AND ADDRESS:

THE UNIVERSITY OF TEXAS MEDICAL BRANCH
GALVESTON TX 77550

SPA NUMBER: PROJECT TITLE:
MARIJUANA: THE EFFECTS OF ITS CHRONIC USE

PROJECT SUMMARY:
THIS INTERDISCIPLINARY RESEARCH WILL PROVIDE OBJECTIVE DATA FOR EVALUATING THE EFFECTS OF THE CHRONIC USE OF MARIJUANA ON BRAIN FUNCTIONING AND BEHAVIOR. SOME OF THE MORE SPECIFIC EXPERIMENTS INCLUDE: A STUDY OF THE DOSE-RESPONSE RELATIONSHIP BETWEEN ELECTROENCEPHALOGRAPH PATTERNS AND CONCOMITANT SPONTANEOUS BEHAVIOR IN CATS; THE COMBINED EFFECTS OF MARIJUANA AND OTHER COMMONLY USED DRUGS SUCH AS ALCOHOL, LSD AND AMPHETAMINES ON BRAIN FUNCTIONING AND BEHAVIOR; A COMPARISON OF PERSONALITY, FAMILY AND DEVELOPMENTAL HISTORY AND PSYCHOPHYSIOLOGICAL FACTORS AMONG ADOLESCENT MARIJUANA USERS AND NON-USERS; AND A STUDY OF THE GENETIC EFFECTS, IF ANY, RELATED TO THE CHRONIC USE OF MARIJUANA.

GRANT NUMBER: AWARD AMOUNT:
70N1510084 \$91,376

GRANTEE NAME AND ADDRESS:
HUMAN SCIENCES RESEARCH, INC.
7710 OLD SPRINGHOUSE ROAD
MCLEAN VI 22101

SPA NUMBER: PROJECT TITLE:
STUDY OF BURGLARY

PROJECT SUMMARY:
THIS PROJECT WILL STUDY BURGLARY AS A BEHAVIOR SYSTEM. - I.E. OFFENDER, VICTIM, NON-VICTIM, OUTLETS AND TECHNIQUES OF CONTROL. THE RESEARCH SITE WILL INCLUDE BOTH URBAN (WASHINGTON, D.C.) AND SUBURBAN (FAIRFAX, VA., AND PRINCE GEORGES COUNTY, MARYLAND) COMMUNITIES, AND WILL INVOLVE THE ANALYSIS OF 7,000 - 10,000 ACTS OF BURGLARY SELECTED FROM 1967 AND 1968 POLICE RECORDS; THE PATTERNS OF VICTIMIZATION; THE EXPERIENCES OF VICTIMS AND NON-VICTIMS; THE EXPERIENCES OF THE OFFENDERS AND THEIR MOST RELEVANT ASSOCIATES (THE FENCES); THE IMPACT OF INTERVENTION AND CONTROL TECHNIQUES ON THE CAREERS OF OFFENDERS; AND, FINALLY, THE CURRENT AND POTENTIAL IMPACT OF THIS KNOWLEDGE ON POLICE PRACTICES (THE FOCUS OF THE SUCCESSIVE PHASE OF THE STUDY).

GRANT NUMBER: AWARD AMOUNT:
70N1510907 \$9,820

GRANTEE NAME AND ADDRESS:
RESEARCH ANALYSIS CORP.
MCLEAN VA

SPA NUMBER: PROJECT TITLE:
SURVEY OF TECH. USED TO REDUCE VANDALISM & DELINQ. IN SCHOOL

PROJECT SUMMARY:
THIS STUDY PRESENTS RESULTS OF QUESTIONNAIRES AND INTERVIEWS USED TO SEARCH OUT SOLUTIONS TO THE PROBLEMS OF YOUTHFUL DELINQUENCY AND VANDALISM.

419

GRANT NUMBER:
71AS010750

AWARD AMOUNT:
\$7,717

GRANTEE NAME AND ADDRESS:
BOARD OF CORRECTIONS
101 SOUTH UNION ST.
MONTGOMERY AL 36104

SPA NUMBER:
71-AS-47

PROJECT TITLE:
IN-SERVICE TRAINING EQUIP.

PROJECT SUMMARY:

GOALS: 1. THE BASIC GOAL OF THE IN-SERVICE TRAINING PROGRAM IS TO UPGRADE TRAINING AT ALL LEVELS WITHIN THE BOARD OF CORRECTIONS. TO ACCOMPLISH THIS GOAL AN EFFECTIVE TRAINING PROGRAM THAT WILL UPGRADE THE KNOWLEDGE OF PERSONNEL WORKING WITHIN THE BOARD OF CORRECTIONS WILL ULTIMATELY RESULT IN BETTER REMEDIATION OF INMATES. METHODS: 11. THE INITIAL STEP TOWARD THESE GOALS IS TO SET UP A CENTRAL TRAINING PROGRAM TO GIVE MIDDLE MANAGEMENT PERSONNEL INSTRUCTIONS IN THE PRINCIPLES OF SUPERVISION AND SUPERVISORY MANAGEMENT. THE TRAINING WILL INCLUDE THE FOLLOWING SUBJECTS: THE NATURE OF LEADERSHIP; KNOWING YOUR EMPLOYEES' INDIVIDUAL DIFFERENCES; UNDERSTANDING PERSONALITY AND BEHAVIOR; IMPROVING THREE WAY COMMUNICATIONS; MAINTAINING EFFECTIVE DISCIPLINE; HANDLING COMPLAINTS AND GRIEVANCES; GUIDING AND DEVELOPING EMPLOYEES AND JOB SATISFACTION AND MORALE. THE SECOND STEP IN THE PROGRAM WILL BE ORIENTATION AND TRAINING FOR CORRECTIONAL OFFICERS. THIS WILL INCLUDE A CONTINUATION OF STEP #1 AND ALSO ORIENT LOWER GRADE PERSONNEL ON THE OVERALL OPERATION OF THE CORRECTIONAL FIELD. THIS TRAINING WILL INCLUDE THE FOLLOWING SUBJECTS: INMATE BEHAVIOR; OFFICER/INMATE RELATIONSHIP; THE OFFICER AS A SOURCE OF CHANGE AND SECURITY CUSTODY AND CONTROL. IN THE INITIAL STAGE OF THIS PROGRAM A TRAINING OFFICER COORDINATOR WILL BE HIRED BY THE BOARD OF CORRECTIONS TO INSURE THE TRAINING IS COMPLETED EFFICIENTLY

GRANT NUMBER:
71AS060247

AWARD AMOUNT:
\$13,683

GRANTEE NAME AND ADDRESS:
SACRAMENTO STATE COLLEGE FOUNDATION
BUILDING KK
6000 J ST.
SACRAMENTO CA 95819

SPA NUMBER:
A-247-71

PROJECT TITLE:
ASSAULTIVE TENDENCY TEST INSTRUMENTS

PROJECT SUMMARY:

THE STUDY IS CONFINED TO THREE SPECIFIC DIMENSIONS: PHASE I: THE TESTING OF A RESEARCH INSTRUMENT TO PROVE EFFECTIVENESS IN IDENTIFYING AND DIAGNOSING THE BEHAVIOR PATTERNS OF VIOLENCE-PRONE OFFENDERS; PHASE II: THE ADMINISTRATION OF THE INSTRUMENT WHICH IS COMPOSED OF A SERIES OF STATEMENTS DESIGNED TO ELICIT INMATE RESPONSES CONCERNING SELF-PERCEPTION OF COVERT AND OVERT AGGRESSIVE TENDENCIES; THE CAPACITY TO CONTROL AGGRESSIVITY AND TO SUBJECTIVELY EVALUATE THE MEANING OF PAST OR PRESENT ASSAULTIVE TENDENCIES; PHASE III: WILL INVOLVE THE COLLECTION AND EVALUATION OF DATA TO BE USED IN THE CONSTRUCTION OF A BASE VIOLENCE EXPECTANCY SCALE. SUCH A PREDICTIVE SCALE CAN BE USED IN SELECTING THE TYPE OF CUSTODY THE INMATE CAN BEST USE AS WELL AS SOME OF THE BEHAVIORAL OR CHARACTEROLOGICAL PROBLEMS WITH WHICH CUSTODY AND TREATMENT STAFF MUST DEAL.

GRANT NUMBER:
71AS060354

AWARD AMOUNT:
\$12,919

GRANTEE NAME AND ADDRESS:
COUNTY OF SANTA CLARA PROBATION DEPT.
1995 THE ALAMEDA
SAN JOSE CA 95126

SPA NUMBER:
A-354-71

PROJECT TITLE:
DEMO & TRAINING PROJECT TO REDUCE PROBATIONER RECIDIVISM

PROJECT SUMMARY:

A ONE YEAR, TWO TRACK DEMONSTRATION AND TRAINING PROJECT WHICH IS PROPOSING TO MEET THE FOLLOWING OBJECTIVES: 1) TO COMPARE THE COST EFFECTIVENESS OF TWO DIFFERENT HIGH IMPACT SHORT-TERM MOTIVATIONAL TREATMENT PROGRAMS (THE 22000MM PROGRAM AND HEIMLER METHOD) AND TO COMPARE THE EFFECTIVENESS OF EACH METHOD AGAINST THE MORE TRADITIONAL CLIENT TREATMENT METHODS. 2) TO DECREASE THE INCIDENCE OF ADULT (PELVIS) PROBATIONER RECIDIVISM PARTICULARLY TO REDUCE PROBATIONER RECIDIVISM AMONG THOSE PROBATIONERS WHO COMMIT NEW OFFENSES OR OTHERWISE "FAIL" WITHIN A FIVE-MONTH PERIOD SUBSEQUENT TO THEIR RELEASE FROM CUSTODY. 3) TO DETERMINE WHETHER OR NOT

475

PERSONALITY OR OTHER FACTORS APPEAR TO INFLUENCE THE IMPACT OF THESE TWO TREATMENT METHODS. 4) TO TRAIN A CORE OF PROBATION OFFICERS IN THE HEINLER METHOD IN ORDER THAT THEY MAY, SUBSEQUENT TO THIS PROJECT, TRAIN OTHER CORRECTIONAL PERSONNEL IN THE HEINLER METHOD. THIS PROGRAM WILL BE CONDUCTED BY THE SANTA CLARA COUNTY'S ADULT PROBATION DEPARTMENT'S SEVEN MAN SPECIAL SUPERVISION PROGRAM. THE TWO "NEW" TREATMENT METHODS TO BE EVALUATED WILL EACH BE USED ON AN EXPERIMENTAL POPULATION OF 33 PERSONS (TOTAL 66) IN EVALUATION, AND ASSESSMENT AND COMPARISON WILL BE MADE OF COST EFFECTIVENESS OF THE NEW PROGRAMS VS. PROBATION'S TRADITIONAL CLIENT TREATMENT METHODS. SHORT TERM RECIDIVISM DATA WILL BE EVALUATED AND DIFFERENTIAL EFFECTIVENESS, WITH REGARD TO

GRANT NUMBER: 71AS060385 AWARD AMOUNT: \$86,677 GRANTEE NAME AND ADDRESS:
CO. OF SAN DIEGO PROBATION DEPT.,
PACIFIC HWY.
SAN DIEGO CA

SPA NUMBER: A-385-71 PROJECT TITLE:
SIMPLIFIED ANALYTICAL METHODS OF BEHAVIORAL SYSTEMIZATION

PROJECT SUMMARY:
THE SAHBS PROJECT IS IN ITS SECOND YEAR OF OPERATION. BASICALLY, THE CONCEPT IS THAT PROVIDING PARENTS WITH MATERIAL WHICH WILL ASSIST THEM IN DEALING WITH THEIR CHILD'S BEHAVIOR, THE BEHAVIOR OF THE CHILD WILL BECOME LESS DELINQUENT. THE METHOD OF APPROACH IS TO PROVIDE A SERIES OF TEN LECTURES AND SMALL GROUP REINFORCEMENT, LED BY A QUALIFIED CHILD AND ADOLESCENT PSYCHIATRIST. THESE MATERIALS ARE REINFORCED STILL FURTHER BY WRITTEN MATERIALS AND HOMEWORK ASSIGNMENTS. YOUNGSTERS AND THEIR PARENTS ARE ACCEPTED BY THE ENTRY POINT IN THE PROBATION SYSTEM, AND THE PARENT OF ANY 601 CHILD MAY BE OFFERED PARTICIPATION IN THE PROGRAM IN LIEU OF COURT ACTION OR IN ADDITION TO COURT ACTION. IN THE INSTANCE OF THE PROGRAM AS AN ALTERNATIVE TO COURT ACTION, PROJECT STAFF PROVIDES SUPERVISION FOR THE PERIOD OF PROGRAM ENROLLMENT, AND SHORTLY THEREAFTER, THE CASE IS CLOSED. IN THOSE CASES WHERE COURT ACTION IS NECESSARY, FOLLOWING COMPLETION OF THE PROGRAM, THE PARENT IS OFFERED THE OPPORTUNITY OF A HEARING WHERE TERMINATION OF LEGAL STATUS IS CONSIDERED. RESEARCH IS PROVIDED BY THE SAN DIEGO STATE COLLEGE FOUNDATION WHICH WILL LARGELY CONSIST OF MEASUREMENT OF ATTITUDINAL CHANGES ON A PRE- AND POST-BASIS, AS WELL AS CHANGES IN RECIDIVISM IN A RANDOMLY SELECTED TARGET AND CONTROL GROUPING. THE PROJECT WILL PROVIDE INVOLVEMENT FOR APPROXIMATELY 500 PARENTS DURING THE PROJECT YEAR, AND WILL

GRANT NUMBER: 71AS150024 AWARD AMOUNT: \$14,960 GRANTEE NAME AND ADDRESS:
CITY AND COUNTY OF HONOLULU
1435 SO. BEREYANIAST
HONOLULU HI 96814

SPA NUMBER: 71A-1.3A2 PROJECT TITLE:
RESEARCH PROJECT

PROJECT SUMMARY:
1. TO IMPROVE THE SELECTION OF POLICE OFFICERS BY IDENTIFYING THOSE APPLICANTS WHOSE PERSONALITY TRAITS INDICATE THAT THEY WILL BE HIGH RISKS FOR POLICE WORK. "HIGH RISKS" ENCOMPASS THOSE WHO ARE LIKELY TO DEMONSTRATE UNDESIRABLE PERFORMANCE PATTERNS, DETRIMENTAL TO THE DEPARTMENT AND/OR THE PUBLIC AND ARE LIKELY TO PRESENT GENERAL DISCIPLINARY PROBLEMS OR RECEIVE A HIGH NUMBER OF COMPLAINTS, HAVE POOR ATTENDANCE RECORDS, EXHIBIT UNCONTROLLED IMPULSIVE EMOTIONAL RESPONSES AND POSSESS A LOW TOLERANCE FOR STRESS.
2. OUR PRIMARY GOAL AND OBJECTIVE, THEN, IS TO EXPAND THE VALIDATED DATA OBTAINED OVER THE PAST YEAR TO INCLUDE THE NEIGHBOR COUNTIES OF OUR STATE. TESTING WILL BE CONDUCTED WITH THE ALREADY IDENTIFIED TEST BATTERY AND PROCEDURE. THIS WILL PROVIDE A BASIS FROM WHICH TO IMPROVE THE SELECTION PROCESS; PROVIDE FOR MORE EFFECTIVE PLACEMENT AND UTILIZATION OF SKILLS; ELIMINATE THOSE UNSUITABLE FOR POLICE WORK BY MEANS OTHER THAN ARBITRARY JUDGEMENT. 3. TO PROVIDE THE STANDARD PROFILE FOR RECRUITMENT AND TESTING OF POLICE APPLICANTS ON A STATEWIDE BASIS. IMPLICIT IS THE ULTIMATE LONG RANGE GOAL OF MAXIMIZING HUMAN RESOURCES, HENCE THE UPGRADING OF POLICE PERSONNEL AND WORKING TOWARD HIGHLY QUALIFIED INDIVIDUALS.

116

GRANT NUMBER:
71AS190091

AWARD AMOUNT:
\$105,600

GRANTEE NAME AND ADDRESS:
DEPT OF SOCIAL SERVICES AND HOUSING
1390 HILLER STREET

SPA NUMBER:
71 A-10.1

PROJECT TITLE:
CORRECTIONS RESEARCH AND STATISTICS BUREAU

PROJECT SUMMARY:

A CORRECTIONS RESEARCH AND STATISTICS BUREAU WILL EXERT NECESSARY LEADERSHIP IN UPGRADING CORRECTIONAL DATA COLLECTION, EVALUATION, AND RESEARCH IN THE STATE OF HAWAII. THE BUREAU IS IN THE OFFICE OF THE DIRECTOR OF THE DEPARTMENT OF SOCIAL SERVICES AND HOUSING FOR ADMINISTRATIVE PURPOSES. THE FOLLOWING ARE THE OBJECTIVES OF THE PROJECT: ESTABLISH A CORRECTIONS INFORMATION SYSTEM THAT WOULD: A. ESTABLISH A UNIFORM STATISTICAL REPORTING AND DATA COLLECTION SYSTEM FOR CORRECTIONS AND PAROLE B. PROVIDE PARTICIPATING AND COMMUNITY AGENCIES WITH A DATA BASE FOR RESEARCH, PLANNING, AND MANAGEMENT PURPOSES C. ASSIST AGENCIES IN ADAPTING TO THE PLANNING, PROGRAMMING, AND BUDGETING (PPBS) ORIENTATION OF THE STATE OF HAWAII BY STORING RELEVANT DATA D. DEVELOP THE INPUT FROM CORRECTIONS AND PAROLE FOR AN EVENTUAL STATEWIDE CRIMINAL JUSTICE INFORMATION SYSTEM ESTABLISH A CRIMINAL JUSTICE RESEARCH PROGRAM THAT WOULD: A. ASSIST LAW ENFORCEMENT AND CORRECTIONAL AGENCIES WITH DATA-GATHERING; WITH EVALUATION FUNCTIONS, AND WITH THE APPLICATION OF DEMONSTRATION AND EXPERIMENTAL PROGRAM MODELS; B. EVALUATE AND ASSESS PROGRAM EFFECTIVENESS IN CLOSE COOPERATION WITH EXISTING AGENCIES ADMINISTERING THE ACTION PROGRAMS; C. INITIATE RESEARCH IN BEHAVIORAL SCIENCES RELATED TO CAUSATION OF DELINQUENCY AND CRIME AND IN THE MODIFICATION OF DEVIANT BEHAVIOR. ACTIVELY PARTICIPATE IN THE DEVELOPMENT OF CRIMINAL LAW

GRANT NUMBER:
71AS270007

AWARD AMOUNT:
\$39,200

GRANTEE NAME AND ADDRESS:
CITY OF MINNEAPOLIS
CITY HALL
MINNEAPOLIS MN

SPA NUMBER:
14-17-30-07-006

PROJECT TITLE:
BRYANT V.E.S. CENTER POSITIVE PEER CULTURE PROGRAM

PROJECT SUMMARY:

1. THE PROBLEM: JUVENILE DELINQUENCY, OR WHAT WILLIAM GLASSER, IN HIS BOOK REALITY THERAPY, DESCRIBES SIMPLY AS "IRRESPONSIBLE BEHAVIOR", IS A NATIONAL PROBLEM OF SUFFICIENT SCOPE TO CAUSE JUSTIFIABLE ANGUISH IN ANY THINKING PERSON. IT IS A PROBLEM WHICH MUST BE SOLVED IF THE CITIES OF THE NATION ARE TO BE VIABLE LIVING SPACE IN THE FUTURE. MANY CITIES HAVE ALREADY REALIZED SUCH A SEVERE DEGENERATION IN THE BEHAVIOR OF THEIR YOUTH THAT JUVENILE CRIME IS RAMPANT. IN MINNEAPOLIS, YOUTHFUL, IRRESPONSIBLE BEHAVIOR IS NOT YET AT EPIDEMIC PROPORTIONS, MAKING IT AN IDEAL CITY IN WHICH TO DEVELOP NEW APPROACHES FOR SOLVING THE PROBLEM OF JUVENILE DELINQUENCY. SINCE THE SCOPE OF THE DELINQUENCY IS AT A MANAGEABLE LEVEL, INTERVENTION AND CORRECTION METHODS CAN BE DEVELOPED AND TESTED IN THIS SETTING. 2. RATIONALE: TRADITIONALLY, MOST CORRECTIONS WORK IN MINNESOTA HAS BEEN DONE BY INSTITUTIONS OR CASEWORKERS ATTACHED TO VARIOUS MUNICIPAL DEPARTMENTS. IMPLICIT IN THIS PHILOSOPHY IS THE CONCEPT THAT ADULTS ARE BEST ABLE TO HELP YOUNG PEOPLE SOLVE THEIR PROBLEMS. THIS PROPOSAL CONTESTS THAT AN INTERVENTION DESIGN WHICH USES AN ADULT TO GUIDE YOUNG PEOPLE AS THEY HELP THEMSELVES AND EACH OTHER IS A BETTER STRATEGY. THE PEER CULTURE OF DELINQUENTS IS OF COURSE NEGATIVE AND IN MANY WAYS IT IS REWARDING (AT LEAST MATERIALLY). A NEED IS APPARENT TO REVERSE THE NEGATIVE

GRANT NUMBER:
71AS270033

AWARD AMOUNT:
\$19,000

GRANTEE NAME AND ADDRESS:
UNIV. OF MINN.
MINNEAPOLIS MN 55455

SPA NUMBER:
13-11-01-00-093-1711

PROJECT TITLE:
JUVENILE CRIME PREV.-THE ENHANCEMENT OF MATURITY

PROJECT SUMMARY:

FOLLOWING THE SUGGESTION OF THE STATE PLAN (P.387), THE RESEARCH PROPOSED IN THIS PROJECT IS DESIGNED TO 1) STUDY CHILDREN'S ACQUISITION OF SOCIAL BEHAVIOR IN ORDER TO DETERMINE OPTIMUM PROGRAMS TO DETER DELINQUENT BEHAVIOR, AND 2) TO TRAIN PARENTS TO ADMINISTER SUCH PROGRAMS.

417

GRANT NUMBER: 71A5391095
AWARD AMOUNT: \$60,000

GRANTEE NAME AND ADDRESS:
DEPT. OF MENTAL HYGIENE & CORRECTION
OH DEPT. BLDG.-SUITE 1211
COLUMBUS OH 43215

SPA NUMBER:
1095-00-F4-71

PROJECT TITLE:
A DESIGNED TREATMENT OF SOCIOPATHY BY MEANS OF DRUGS

PROJECT SUMMARY:
THIS PROJECT WILL BE ACCOMPLISHED IN TWO PHASES: PHASE I-A FOUR MONTH STUDY AT THE OHIO PENITENTIARY WILL BE CONDUCTED TO FURTHER SUBSTANTIATE PREVIOUS RESEARCH WHICH IS VITAL TO PHASE II OF THIS PROJECT. THE DRUG TYRAMINE WILL BE TESTED UNDER THE SAME CONTROLS USED IN PREVIOUS RESEARCH WITH OTHER DRUGS. PHASE II-THIS IS THE ACTION PHASE OF THE PROJECT TO BE CONDUCTED OVER AN EIGHT MONTH PERIOD. THE SITE WILL BE THE CHILLICOTHE CORRECTIONAL INSTITUTE WHOSE PROFESSIONAL AND CORRECTIONAL STAFFS WILL BECOME INVOLVED IN CARRYING OUT THE DESIGN OPERATIONALLY. A THERAPEUTIC TEST WILL BE CONDUCTED WHICH CONSISTS OF ADMINISTERING DRUGS, TESTED IN PREVIOUS RESEARCH AND IN PART UNDER PHASE I. THESE DRUGS PRODUCE SENSORY AROUSAL AS THE MOST EXPEDITIOUS METHOD OF REDUCING THE SENSORY DEPRIVATION OF THE SOCIOPATH, I.E., A DRUG TREATMENT PROGRAM FOR SOCIOPATHS. EXPERIMENTS INVOLVING URINALYSIS WILL ALSO BE CONDUCTED TO FURTHER SUBSTANTIATE PREVIOUS AND EXISTING HYPOTHESES REGARDING SYMPATHETIC NERVOUS SYSTEM REACTIONS OF SOCIOPATHS. A THOROUGH CASE MANAGEMENT PROCEDURE WILL BE ESTABLISHED AND MAINTAINED. CONSULTANTS POSSESSING EXPERTISE IN CRIMINOLOGY, PATHOLOGY, PSYCHOLOGY AND PSYCHIATRY WILL ASSIST IN PROGRAM DESIGN. FURTHER, THEY WILL THOROUGHLY EDUCATE OPERATIONAL PERSONNEL AS TO THE EFFECTS AND SIDE-EFFECTS OF THE VARIOUS DRUGS TO BE UTILIZED IN BEHAVIOR CONTROL AND HO

GRANT NUMBER: 71A5391402
AWARD AMOUNT: \$23,750

GRANTEE NAME AND ADDRESS:
CITY OF CLEVELAND
1044 TERMINAL TOWER
CLEVELAND OH 44113

SPA NUMBER:
1402-04-H1-71

PROJECT TITLE:
TRAINING IN RAPID AND FAIR PROCEDURES

PROJECT SUMMARY:
PROGRAM GOAL TO CONTINUE AS PHASE II WITH THE DEVELOPMENT OF A LEGAL TRAINING AND ASSISTANCE PROGRAM WHICH WILL FOCUS ON THE SECONDARY EDUCATIONAL COMMUNITY. THIS WILL INVOLVE STUDENTS, EDUCATORS AND COMMUNITY SERVICE PERSONNEL.

GRANT NUMBER: 71A5470485
AWARD AMOUNT: \$675

GRANTEE NAME AND ADDRESS:
FIRST TENN REGION - LEPA
PO BOX 2779 EAST TENN STATE UNIVERSITY
JOHNSON CITY TENN 37601
6154289421

SPA NUMBER:
496A-71-840-23

PROJECT TITLE:

PROJECT SUMMARY:
IT IS PROPOSED TO ADMINISTER SEPARATE INSTRUMENTS TO ALL CORRECTION & COUNSELORS AND TO ALL PROBATIONERS, ADULT AND JUVENILE, OF 90 DAY'S TERM OR LONGER, IN THE UPPER EAST TENNESSEE REGION. THESE INSTRUMENTS WOULD BE EVALUATED TO DETERMINE THE "PROFILE" OF CORRECTIONS PERSONNEL IN THE REGION, AND TO ESTABLISH WHICH QUALITIES IN THE PROFILE HAVE GREATEST INFLUENCE, POSITIVE AND NEGATIVE, IN DETERMINING EFFECTIVENESS IN WORKING WITH PROBATIONERS.

GRANT NUMBER:
71AS480704AWARD AMOUNT:
\$4,604GRANTEE NAME AND ADDRESS:
ADULT PROBATION DEPARTMENT
ROOM 129 OLD COURTHOUSE
DALLAS TX 75202SPA NUMBER:
71F030704PROJECT TITLE:
RESEARCH PROJECT IN ORIENTATION OF PROBATIONERS

PROJECT SUMMARY:

THE ADULT PROBATION DEPARTMENT IS AN AGENCY OF DALLAS COUNTY. IT WAS CREATED TO PROVIDE SUPERVISION OF INDIVIDUALS PLACED ON PROBATION BY THE COURT IN THE HOPE THAT REHABILITATION COULD BE ACCOMPLISHED WITHOUT THE NECESSITY FOR INCARCERATING THE OFFENDER. THUS THE INDIVIDUAL COULD REMAIN IN THE COMMUNITY, SUSTAIN HIMSELF AND HIS DEPENDENTS AND IN SO DOING, RELIEVE THE TAXPAYERS OF THE RESPONSIBILITY OF SUPPORTING HIM AND HIS FAMILY. ORIGINALLY DESIGNED TO COVER ONLY ONE YEAR AND INCLUDE SIX (6) TOURS OF ONE-DAY DURATION ON A 91-MONTHLY BASIS, THE PROJECT HAS BEEN SO SUCCESSFUL AND THE RESULTS SO GRATIFYING THAT THE WISDOM OF INTENSIFYING THE EFFORT IS CLEARLY INDICATED.

GRANT NUMBER:
71AS910101AWARD AMOUNT:
\$8,803GRANTEE NAME AND ADDRESS:
FIFTH PLANNING DISTRICT COMMISSION
4841 WILLIAMSON ROAD N.W.
ROANOKE VA 24012SPA NUMBER:
71-A858PROJECT TITLE:
DEVELOPMENT OF IN-SERVICE TRAINING PROGRAMS

PROJECT SUMMARY:

SUMMARY STATEMENT: THIS IS AN ACTION GRANT REQUEST FOR FUNDS TO SUPPORT FOUR INSTITUTES OF FOUR DAYS EACH TO BE HELD IN SEPARATE SECTIONS OF THE COMMONWEALTH ON THE TOPIC OF HUMAN BEHAVIOR, SPECIFICALLY DIRECTED TOWARD CORRECTIONAL PERSONNEL. THESE INSTITUTES WERE SPECIFICALLY REQUESTED BY PERSONNEL FROM THE DIVISION OF CORRECTIONS, STATE DEPARTMENT OF WELFARE AND INSTITUTIONS AND ARE DESIGNED ESPECIALLY FOR PERSONNEL FROM LOCAL JAILS, ROAD CAMPS, AND INSTITUTIONS OF THE VIRGINIA DEPARTMENT OF WELFARE AND INSTITUTIONS. RELATED PERSONNEL MAY ATTEND.

GRANT NUMBER:
71AS950118AWARD AMOUNT:
\$60,419GRANTEE NAME AND ADDRESS:
UNIVERSITY OF WI, EXT.
600 W. KILBORN AVE.
MILWAUKEE WISPA NUMBER:
71-03-04-01PROJECT TITLE:
PROJECT SUMMER PREP.

PROJECT SUMMARY:

THE UNIVERSITY OF WISCONSIN EXTENSION SEEMS TO IMPLEMENT A PROGRAM WHICH WOULD PROVIDE A LIVE-IN SUMMER SCHOOL PROGRAM FOR DISADVANTAGED YOUTH FROM THE INNER-CITY WHO HAVE BEEN IN JUVENILE CORRECTIONS INSTITUTIONS, ARE SCHOOL DISRUPTERS, MAY BE EMOTIONALLY DISTURBED, MENTALLY RETARDED, OR ARE LOW ACADEMICALLY FUNCTIONING PUPILS. ALL OF THE PUPILS CHOSEN FOR THIS PROGRAM HAVE EXPERIENCED FAILURE IN THE CUSTOMARY SCHOOL SETTING. GOALS OF THE PROGRAM ARE TO EXPOSE THEM TO THE SUMMER LIVE-IN SCHOOL RECREATION PROGRAM SEEKING TO: 1) IMPROVE THE PUPIL SELF CONCEPT TO BRING ABOUT A REALISTIC APPRAISAL OF THE PUPILS OVERALL ABILITIES; 2) REDIRECT BEHAVIOR TOWARDS SOCIALLY ACCEPTABLE GOALS; 3) DEVELOP PROPER WORK ATTITUDES AND WORK HABITS; 4) DEVELOP PROPER PERSONAL AND SOCIAL ADJUSTMENT AS APPLIED TO SCHOOL AND THE COMMUNITY IN GENERAL.

419

***** MEDICAL RESEARCH PROJECTS *****

PAGE 16
04/10/74

GRANT NUMBER:
71DF121006

AWARD AMOUNT:
\$10,000

GRANTEE NAME AND ADDRESS:
CITY OF MIAMI POLICE DEPT.
1145 N. W. 11TH STREET
MIAMI FL 33192

SPA NUMBER:

PROJECT TITLE:
PSYCHIATRIC CONSULTANT

PROJECT SUMMARY:

THIS AWARD, IN THE AMOUNT OF \$10,000, TO THE SUBGRANTEE, CITY OF MIAMI, FLORIDA, IS FOR THE PURPOSE OF EMPLOYING A PSYCHIATRIC CONSULTANT. THIS CONSULTANT WILL BE EITHER A BOARD-CERTIFIED PSYCHIATRIST ADMITTED TO PRACTICE WITHIN THE STATE OF FLORIDA, OR A CLINICAL PSYCHOLOGIST WITH DOCTORAL TRAINING. THE CONSULTANT WILL NOT BE RESTRICTED TO UTILIZATION IN A SINGLE OR NARROWLY DEFINED FUNCTION. RATHER, HE WILL BE UTILIZED IN A NUMBER OF FUNCTIONS, SUCH AS: SELECTION SCREENING AND TESTING; PROMOTION EVALUATION; BEHAVIORAL TRAINING INSTRUCTION FOR POLICE PERSONNEL; CONSULTATION ON AGENCY POLICIES FOR HANDLING DISTURBED INDIVIDUALS; AND CONSULTATION FOR EMPLOYEES OF THE SUBGRANTEE AGENCY. THIS IS A DISCRETIONARY GRANT PURSUANT TO THE AUTHORITY OF SECTION 30A OF P.L. 90-351, AS AMENDED, AND PROGRAM F-4, POLICE MANPOWER IMPROVEMENT - PROFESSIONAL AIDES, OF THE POLICE IMPROVEMENT PROGRAMS AS SPECIFIED IN THE FY 1971 GUIDE FOR DISCRETIONARY GRANT PROGRAMS.

GRANT NUMBER:
71N1080044

AWARD AMOUNT:
\$17,643

GRANTEE NAME AND ADDRESS:
UNIV. OF DENVER
DENVER CO

SPA NUMBER:

PROJECT TITLE:
PSYCHOPATHY: CAUSES, CORRELATES, AND REHABILITATION

PROJECT SUMMARY:

THIS PROJECT INVOLVES AN INTERDISCIPLINARY INVESTIGATION OF THE FACTORS THAT DISTINGUISH CRIMINAL PSYCHOPATHS FROM BOTH NON-CRIMINAL PSYCHOPATHS AND NON-PSYCHOPATHIC OFFENDERS. THE STUDY WILL UTILIZE SEVERAL WELL-ESTABLISHED PSYCHOLOGICAL MEASURES IN CONJUNCTION WITH THE TECHNIQUES OF ELECTROENCEPHALOGRAPHY, BIOCHEMISTRY, GENETICS, AND GALVANIC SKIN RESPONSE. THE RESULTS OF THIS STUDY SHOULD ASSIST CORRECTIONAL DIAGNOSIS AND REHABILITATION EFFORTS.

GRANT NUMBER:
71N1250128

AWARD AMOUNT:
\$79,900

GRANTEE NAME AND ADDRESS:
BEHAVIORAL SCIENCES FOUNDATION
275 CHARLES STREET
BOSTON MA 02114

SPA NUMBER:

PROJECT TITLE:
DERMATOGLYPHICS AND CRIME

PROJECT SUMMARY:

THE ASSOCIATION BETWEEN VIOLENT BEHAVIOR AND SEX CHROMOSOME ABERRATIONS HAVE BEEN KNOWN SINCE 1969. THIS PROJECT PROPOSES TO EXAMINE THOUSANDS OF FINGERPRINTS IN BOTH THE GENERAL AND THE OFFENDER POPULATIONS IN ORDER TO TEST THE FEASIBILITY OF USING FINGERPRINTS AS A RUGH INDEX TO IDENTIFY INDIVIDUALS WHO ARE MOST LIKELY TO EXHIBIT CHROMOSOMAL ABERRATIONS. IN PREVIOUS STUDIES 90% OF THOSE WITH ABERRANT FINGERPRINTS HAVE EXHIBITED CHROMOSOMAL ANOMALIES. THUS, SCREENING VIA FINGERPRINTS OFFERS AN INEXPENSIVE AND EFFICIENT METHOD TO ESTABLISH THE INCIDENCE OF CHROMOSOMAL ABERRATION. FINGERPRINTS MAY VERY WELL PROVE TO BE A BETTER PREDICTION OF BEHAVIOR THAN A BLOOD SAMPLE CULTURE - THE USUAL METHOD OF DETERMINING CHROMOSOMAL ABERRATIONS.

420

413

GRANT NUMBER: 71N1250131 AWARD AMOUNT: \$108,931 GRANTEE NAME AND ADDRESS:
DR. WILLIAM SWEET NEURO. RESRCH. FOUNDA.
BOSTON MA

SPA NUMBER: PROJECT TITLE:
EPIDEMIOLOGY OF BIOLOGICAL DYSFUNCTION & VIOLENT BEHAVIOR

PROJECT SUMMARY:

GRANT NUMBER: 71N1420140 AWARD AMOUNT: \$194,102 GRANTEE NAME AND ADDRESS:
TEMPLE U.-OF THE COM. SYS. OF HIGH. ED.
BROAD STREET AND MONTGOMERY AVENUE
PHILADELPHIA PA 19122

SPA NUMBER: PROJECT TITLE:
STUDY OF DELINQUENCY AND CRIMINAL CAREERS

PROJECT SUMMARY:
THIS A SECOND YEAR OF A THREE-YEAR PROJECT (NI 70-027) TO STUDY AND ANALYZE THE SOCIAL PROCESSES BY WHICH SOME YOUNG MALES ENTER INTO, MAINTAIN, OR ABANDON A VARIETY OF SOCIALLY RELEVANT FORMS OF BEHAVIOR SUCH AS DELINQUENCY, JUVENILE CRIME, ADULT CRIME, USE OF ALCOHOL OR SOFT AND HARD DRUGS, DROPPING OUT OF SCHOOL, ETC. THE PROJECT IS INTENDED TO DETERMINE WHEN, HOW, AND WHY SOME YOUTHS, BUT NOT OTHERS, BEGIN AND RETAIN OR ABANDON SOME FORMS OF PRESCRIBED AND PROSCRIBED BEHAVIOR.

GRANT NUMBER: 72AS060647 AWARD AMOUNT: \$54,140 GRANTEE NAME AND ADDRESS:
COUNTY OF TULARE
COURTHOUSE

SPA NUMBER: 4848-72 PROJECT TITLE:
OPERATION FUTURE-A TULARE-KINGS DRUG ABUSE CONTROL PROJECT

PROJECT SUMMARY:
THIS PROJECT IS BASED ON THE PREMISE THAT THE BEST ANSWER TO DRUG ABUSE IS PREVENTION. THE BEST ANSWER TO PREVENTION IS TO INFLUENCE THE ROOTS OF THE CAUSE, OR THE DECISION TO TAKE DRUGS IN THE FIRST PLACE. THESE DECISIONS ARE BASED ON THE LIFE VALUES OF THE PERSON. THUS, THE GENERAL GOAL IS TO DETERMINE IF A SYSTEM OF VALUE CLARIFICATION WILL REDUCE DRUG ABUSE AMONG YOUTH AGES 11-17 IN A TWO COUNTY PILOT STUDY. FURTHER, THAT THE PROJECT IS DESIGNED TO DISCOVER WHICH DRUGS ARE MOST FREQUENTLY ABUSED, TO WHAT EXTENT A LACK OF YOUTHFUL VALUES AFFECTS DRUG ABUSE, WHICH CHARACTER TRAITS PREDOMINATE AND TO COMPARE AND TREAT PROBATION CASES WITH THE REST OF THE PILOT YOUTH PARTICIPANTS.

GRANT NUMBER: 72AS090017 AWARD AMOUNT: \$27,500 GRANTEE NAME AND ADDRESS:
DEPARTMENT OF CORRECTION
340 CAPITOL AVENUE

SPA NUMBER: 472-8000-68001 PROJECT TITLE:
EXPERIMENTAL PAROLEE REINTEGRATION PROGRAM

PROJECT SUMMARY:
THE PRINCIPAL OBJECTIVE OF THIS PROGRAM IS TO DEMONSTRATE WHETHER FINANCIAL REWARDS CAN MAKE A SIGNIFICANT REDUCTION IN THE RECIDIVISM RATE FOR RELEASED ADULT MALE FELONS. A PAROLEE WOULD BE REWARDED FINANCIALLY FOR STAYING ON THE STREET WITHOUT FURTHER ARRESTS. THE FUNDS WILL BE GIVEN ON A SLIDING SCALE OVER A PERIOD OF SIX MONTHS. FIFTY EXPERIMENTAL PAROLEES AND A CONTROL GROUP OF FIFTY ADDITIONAL PAROLEES WILL BE INVOLVED IN THIS PROJECT. AN ATTEMPT TO DETERMINE WHETHER MONETARY REWARDS ARE MORE EFFECTIVE

42-1

THAN THE MONEY SPENT IN PERSONAL SERVICES WILL ALSO BE AN OBJECTIVE OF THIS STUDY.

GRANT NUMBER: 72AS181049 AWARD AMOUNT: \$934 GRANTEE NAME AND ADDRESS:
ROCKVILLE TRAINING CENTER
BOX 130

SPA NUMBER: 5-63-73-F-1 PROJECT TITLE:
ATTENDANCE AT BEHAVIOR MODIFICATION WORKSHOP

PROJECT SUMMARY:

#

GRANT NUMBER: 72AS181243 AWARD AMOUNT: \$6,000 GRANTEE NAME AND ADDRESS:
DEPT OF CORRECTION INDIANA BOYS SCHOOL
PLAINFIELD INDIANA 46168

SPA NUMBER: 5-42-72-F-4 PROJECT TITLE:
RESEARCH CONSULTANT

PROJECT SUMMARY:
AT THE PRESENT TIME THERE IS NO STAFF MEMBER AT THE INDIANA BOYS' SCHOOL WHO IS TRAINED OR QUALIFIED TO CONDUCT RESEARCH. MONIES ARE REQUESTED TO SECURE A RESEARCHER ON A CONTRACTUAL BASIS TO START RESEARCH PROJECTS AT THE SCHOOL, DIRECT THESE RESEARCH PROJECTS FOR ONE YEAR, AND TRAIN PERMANENT STAFF AT THE SCHOOL IN RESEARCH METHODS. THE AREA NEEDING IMMEDIATE RESEARCH EFFORTS IS THE QUAY CLASSIFICATION SYSTEM. CONVERSION TABLES FOR CONVERTING THE RAY TEST AND RATING SCALE SCORES NEED TO BE SET AS USING THE PAST TEST SCORES OF 609 BOYS ALREADY CLASSIFIED. AT THE PRESENT TIME THE CONVERSION TABLES ARE NOT BASED ON THE POPULATIONS AT IBS. THIS CLASSIFICATION SYSTEM HAS BEEN IN OPERATION SINCE MAY 1971 AND THE RELIABILITY AND VALIDITY OF THE INSTRUMENTS NEEDS TO BE ESTABLISHED IN ORDER TO DETERMINE THE EFFECTIVENESS OF THE SYSTEM OF CLASSIFICATION. THE PURPOSE OF THE PROPOSED GRANT IS TO PROVIDE A CONSULTANT, TRAINED IN CLINICAL AND EXPERIMENTAL PSYCHOLOGY, WHO CAN INITIATE AND DIRECT RESEARCH PROJECTS AT THE INDIANA BOYS' SCHOOL AND TRAIN INSTITUTION STAFF TO CARRY OUT RESEARCH PROJECTS. THE FIVE BASIC OBJECTIVES OF THE RESEARCH ARE LISTED BELOW. OBJECTIVE I: TO CARRY OUT CONTROLLED EXPERIMENTATION TO EVALUATE THE EFFECTIVENESS OF PROGRAMS. OBJECTIVE II: TO STUDY THE TYPE OF ORGANIZATIONAL STRUCTURE OF THE INSTITUTION; THE EFFECTS AND RELATIONSHIP OF THESE ORGANIZATIONAL VARIABLES.

GRANT NUMBER: 72AS262124 AWARD AMOUNT: \$74,982 GRANTEE NAME AND ADDRESS:
DRUG ABUSE
GEORGE STEWART DEPUTY DIRECTOR

SPA NUMBER: 10542-1 PROJECT TITLE:
STUDY OF VICTIMLESS CRIME

PROJECT SUMMARY:

#

422

***** MEDICAL RESEARCH PROJECTS *****

PAGE 19
04/10/74

GRANT NUMBER: 72A3360902 AWARD AMOUNT: \$25,000 GRANTEE NAME AND ADDRESS:
SYRACUSE POLICE DEPT.
SYRACUSE NY

SPA NUMBER: 59198 PROJECT TITLE:
POLICE LEGAL AND PSYCHIATRIC ADVISORS

PROJECT SUMMARY:
THE CITY OF SYRACUSE HAS RECEIVED TWO DISCRETIONARY GRANTS FOR THE EMPLOYMENT OF A LEGAL AND A PSYCHIATRIC ADVISOR FOR THE POLICE DEPARTMENT, DURING THE PAST YEAR. THE LEGAL ADVISOR HAS DRAWN UP CHARGES AND ACTED AS A PROSECUTOR IN TWO INTER-DEPARTMENTAL HEARINGS; ACTED AS A LIAISON WITH THE DISTRICT ATTORNEY AND THE CORPORATION COUNSEL; ASSISTED IN THE PREPARATION AND REVIEW OF SEVERAL SUB-CONTRACTS; CONDUCTED LEGAL RESEARCH; REVIEWED ALL WARRANTS; AND MADE SEVERAL REVISIONS IN THE DEPARTMENT'S RULES AND REGULATIONS. THE PSYCHIATRIC ADVISOR HAS ASSISTED IN THE IMPLEMENTATION OF A SENSITIVITY TRAINING PROGRAM; BEGUN THE ESTABLISHMENT OF A PERSONNEL EVALUATION PROCEDURE; CONSULTED WITH THE CHIEF OF POLICE ON INVESTIGATORY PROCEDURES AND QUESTIONS OF COMMUNITY RELATIONS; AND CARRIED OUT PSYCHOLOGICAL TESTING AND SCREENING OF 20 CANDIDATES FOR APPOINTMENT TO THE DEPARTMENT. THE APPLICANT HAS BEEN INFORMED BY THE LAW ENFORCEMENT ASSISTANCE ADMINISTRATION THAT THESE POSITIONS CANNOT BE REFUNDED THROUGH THE DISCRETIONARY GRANT PROGRAM BECAUSE OF AN UNAVAILABILITY OF FUNDS. THE CITY OF SYRACUSE IS THEREFORE REQUESTING BLOCK GRANT SUPPORT FOR THE CONTINUATION OF THE PROGRAM. DURING THE COMING YEAR, THE LEGAL ADVISOR WILL UPGRADE THE LEGAL TRAINING OF POLICE PERSONNEL BY CREATING COMPREHENSIVE INSTRUCTIONAL MATERIALS AND BY HOLDING A NUMBER OF TRAINING SESSIONS. HE WILL ALSO CONTINUE TO PERFORM

GRANT NUMBER: 72N1250023 AWARD AMOUNT: \$60,000 GRANTEE NAME AND ADDRESS:
NEJRO RESEARCH FOUNDATION
BOSTON MA

SPA NUMBER: PROJECT TITLE:
FORENSIC EPIDEMIOLOGY

PROJECT SUMMARY:

GRANT NUMBER: 72N1250024 AWARD AMOUNT: \$25,000 GRANTEE NAME AND ADDRESS:
NEJRO-RESEARCH FOUNDATION, INC.
1 HANTHORNE PLACE
BOSTON MA 02114

SPA NUMBER: PROJECT TITLE:
FORENSIC EPIDEMIOLOGY

PROJECT SUMMARY:
THIS AWARD IS BEING GRANTED SO THAT THE NEURO RESEARCH FOUNDATION CAN COMPLETE WORK BEGUN UNDER N171-151-0 AND N172023-0 (SEE GRANT MANAGER'S MEMO OF JANUARY 7, 1972). THE PROJECT WAS INITIALLY FUNDED WITH THE UNDERSTANDING THAT THERE WAS A POSSIBILITY FOR THE GRANTEE TO CONTINUE WORK IN THIS FIELD. THEREFORE, TIME WAS NOT ALLOTTED FOR THE GRANTEE TO PREPARE A COMPREHENSIVE FINAL REPORT. THIS AWARD WILL ALLOW THE NEJRO RESEARCH FOUNDATION ONE FINAL MONTH FOR THE COMPLETION OF THEIR WORK.

423

410

***** MEDICAL RESEARCH PROJECTS *****

GRANT NUMBER:
73A5130405

AWARD AMOUNT:
\$111,000

GRANTEE NAME AND ADDRESS:
DEPT. OF OFFENDER REHABILITATION
ATLANTA, GEORGIA

SPA NUMBER:
73E-0005

PROJECT TITLE:
MOTIVATIONAL RESEARCH

PROJECT SUMMARY:

GRANT NUMBER:
73A5220123

AWARD AMOUNT:
\$300,319

GRANTEE NAME AND ADDRESS:
CITY + PARISH OF EAST BATON ROUGE
MUNICIPAL BLDG.

SPA NUMBER:
5-73-0003

PROJECT TITLE:
COMMUNITY CORRECTIONS + RESEARCH CENTER

PROJECT SUMMARY:

THE COMMUNITY CONNECTION RESEARCH CENTER (CCRC) OPERATES AN EXPERIMENTAL PILOT CENTER FOR CRIMINAL OFFENDERS IN ORDER TO CONTINUE BASIC AND APPLIED RESEARCH IN THE GENERAL AREAS OF PSYCHOLOGICAL COUNSELING STRATEGIES, SMALL GROUP DYNAMICS, OPERATING PROCEDURES AND EVALUATION FOLLOW UP AS THEY RELATE TO DEINSTITUTIONALIZATION, HABILITATION-REHABILITATION, AND REINTEGRATION INTO FREE SOCIETY. CCRC IS, THROUGH THE OPERATION OF THIS MODERN CENTER, DEVELOPING A SERIES OF MANUALS DEALING WITH: 1. THE ORGANIZATION OF MODEL CENTERS, 2. OCCUPATIONAL PLACEMENT PROCEDURES FOR CRIMINAL OFFENDERS, 3. EDUCATIONAL PLACEMENT PROCEDURES FOR CRIMINAL OFFENDERS, 4. COUNSELING AND GUIDANCE PROCEDURES FOR CRIMINAL OFFENDERS. IN ADDITION TO THESE MANUALS, CCRC IN THE COURSE OF THEIR RESEARCH WILL PRODUCE A SERIES OF RESEARCH MONOGRAPHS FOR PROGRAMS DEALING WITH: 1. MORE SOPHISTICATED LONG TERM EVALUATIONAL STRATEGIES FOR RELEASED CRIMINAL OFFENDERS, 2. SMALL GROUP DYNAMICS AND GROUP COUNSELING METHODS AMONG CRIMINAL OFFENDERS, AND 3. MEANINGFUL THERAPEUTIC STRATEGIES APPROPRIATE TO OFFENDERS WITH VARIOUS BACKGROUNDS AND EXPERIENCES. IN SUMMARY, THROUGH THE OPERATION OF A MODEL EXEMPLARY CENTER, CCRC IS DEVELOPING A FULL RANGE OF RESEARCH BASED PROCEDURES AND MATERIALS LAYING THE GROUNDWORK FOR SIMILAR CENTERS OPERATED AS STATE, FEDERAL, OR PRIVATE COMMUNITY BASED REHABILITATION PROGRAMS.

GRANT NUMBER:
73A5301329

AWARD AMOUNT:
\$7,100

GRANTEE NAME AND ADDRESS:
N Y ST ASSEMBLY-SELECT COM CHILD ABUSE
NEW YORK, NEW YORK

SPA NUMBER:
#####

PROJECT TITLE:
CHILD ABUSE STUDY

PROJECT SUMMARY:

THIS PROPOSAL REQUESTS FUNDING FOR THE PREPARATION AND FIELD TESTING OF A RESEARCH METHODOLOGY TO STUDY THE RELATIONSHIP BETWEEN CHILD ABUSE AND SUBSEQUENT DELINQUENT BEHAVIOR ON THE PART OF THE ABUSED CHILD OR ITS SIBLINGS.

424

GRANT NUMBER: 73AS420661
AWARD AMOUNT: \$51,114

GRANTEE NAME AND ADDRESS:
LOWER MERION TOWNSHIP
71 E LANCASTER AVE

SPA NUMBER:
SE-386-73A

PROJECT TITLE:
HUMAN RELATIONS WORKSHOP FOR THE TOWNSHIP OF LOWER MERION

PROJECT SUMMARY:
THE OFFICERS OF THE LOWER MERION POLICE DEPARTMENT WILL ATTEND TEMPLE UNIVERSITY CENTER FOR THE ADMINISTRATION OF JUSTICE. THESE MEN WILL RECEIVE 40 HOURS OF TRAINING CONSISTING OF TEN 4 HOUR CLASSES IN ABNORMAL BEHAVIOR, CONTEMPORARY SOCIAL PROBLEMS, RECOGNITION OF MENTAL DISORDERS, FAMILY CRISIS INTERVENTION, JUVENILE PROBLEMS, DRUG ABUSE AND ADMINISTRATION OF JUSTICE AMONG MINORITY GROUPS.

GRANT NUMBER: 73DF170002
AWARD AMOUNT: \$60,000

GRANTEE NAME AND ADDRESS:
VILLAGE OF HINSDALE
19 E. CHICAGO AVENUE
HEALTH EDUC INST, INC., 901 N. ELM
HINSDALE, ILLINOIS

SPA NUMBER:

PROJECT TITLE:
RESEARCH IN DRUG ABUSE PREVENTIVE EDUCATION

PROJECT SUMMARY:
THIS AWARD OF \$60,000 IS MADE UNDER THE GENERAL SPECIFICATIONS AND REQUIREMENTS OF 1972 GUIDE FOR DISCRETIONARY GRANT PROGRAMS, AS AUTHORIZED BY PUBLIC LAW 90-351. THE MATCH REQUIREMENT SET OUT IN SECTION 301, AS AMENDED, HAS BEEN MET IN THE APPLICATION BY THE SUBGRANTEE. THE GOAL OF THIS PROJECT IS TO RESEARCH AND DEVELOP TESTED COURSES OF INSTRUCTION IN DRUG ABUSE PREVENTIVE EDUCATION TO EFFECTIVELY MOTIVATE YOUNG PEOPLE AGAINST EXPERIMENTING WITH DRUGS. SINCE PROJECT WORK FOR THE ELEMENTARY SCHOOL GRADES WAS COMPLETED UNDER A PREVIOUS GRANT AWARD, THE TARGET POPULATION FOR THIS SECOND AND FINAL YEAR OF THE PROJECT WILL BE HIGH SCHOOL CLASSES, GRADES NINE THROUGH TWELVE. THE FOLLOWING FORMAT WILL BE USED TO ACCOMPLISH THE PROJECT GOAL: (1) BUILD VARIOUS COURSES OF INSTRUCTION UTILIZING DIFFERENT PSYCHOLOGICAL APPROACHES AND DIFFERENT INSTRUCTIONAL MEDIA, (2) TEACH DIFFERENT GROUPS USING THE VARIOUS COURSES AND INSTRUCTIONAL APPROACHES, (3) TEST THE STUDENTS IN ORDER TO EVALUATE WHICH APPROACHES BEST MOTIVATE YOUNG PEOPLE, (4) MODIFY THE COURSES AND THE APPROACHES, AND (5) TEACH THE NEW COURSES AND KEEP THEM IN A CONTINUING GOING-ON PROCESS. FOR THE PURPOSE OF EVALUATION, PRE-TESTS WILL BE GIVEN TO ALL GROUPS PRIOR TO INSTRUCTION, WITH A FOLLOW-UP TEST TO BE ADMINISTERED IMMEDIATELY AFTER INSTRUCTION.

GRANT NUMBER: 73DF390019
AWARD AMOUNT: \$90,000

GRANTEE NAME AND ADDRESS:
CITY OF DAYTON
MUNICIPAL BUILDING
DAYTON, OHIO 45402

SPA NUMBER:

PROJECT TITLE:
PERSONAL CRISIS INTERVENTION

PROJECT SUMMARY:
THIS PROJECT WILL BE A COOPERATIVE EFFORT BETWEEN THE ADULT PSYCHIATRIC CLINIC OF DAYTON AND THE POLICE DEPARTMENT OF THAT CITY. THE GRANT WILL FUND A DEVELOPMENTAL EFFORT OF THE TWO ORGANIZATIONS TO PROVIDE A SUCCESSFUL CRISIS INTERVENTION METHODOLOGY WHICH CAN BE USED FIRST, TO PRE-EMPT CRIMES AGAINST PERSONS RESULTING FROM FAMILIAL OR INTERPERSONAL DISPUTES, OR SECOND, TO PROVIDE MEDICALLY SOUND TREATMENT FOLLOW-UP IN THOSE CASES WHERE THERE HAS BEEN SOME SERIOUS DISTURBANCES BETWEEN PERSONS RESULTING FROM THESE TYPES OF DISPUTES. THE TARGET AREA OF THE PROJECT IS TO PRE-EMPT OR PROVIDE MEDICALLY SOUND TREATMENT FOR DISPUTES ARISING FROM FAMILIAL OR INTERPERSONAL CONFLICTS. POLICE STATISTICS HAVE REVEALED THAT MOST CRIMES AGAINST PERSONS RESULT FROM THESE TYPES OF CONFLICTS. THE PROJECT WILL BE IMPLEMENTED WITHIN THE 2ND DISTRICT OF THE DAYTON POLICE DEPARTMENT WHEREIN RESIDES ABOUT 90,000 PEOPLE. ON A 7 DAY A WEEK, 24 HOUR A DAY BASIS, THE PROJECT ANTICIPATES RESPONDING TO AT LEAST 2,000 CALLS ANNUALLY, OF WHICH 500 PERSONS WILL BE PROCESSED BY THE MENTAL HEALTH "TEAM", WITH 250 REFERRED TO TREATMENT/COUNSELING RESOURCES.

025

***** MEDICAL RESEARCH PROJECTS *****

PAGE 22
04/10/74

GRANT NUMBER:
73ED170009

AWARD AMOUNT:
\$100,000

GRANTEE NAME AND ADDRESS:
ILLINOIS DEPT OF CORRECTIONS
160 N LASALLE STREET
CHICAGO, ILLINOIS 60601

SPA NUMBER:

PROJECT TITLE:
PLANNING FOR THE TREATMENT OF REPETITIVE VIOLENT OFFENDERS

PROJECT SUMMARY:
THIS AWARD OF \$1000,000 IS MADE UNDER THE GENERAL SPECIFICATIONS AND REQUIREMENTS OF THE 1972 GUIDE FOR DISCRETIONARY GRANT PROGRAMS, AS AUTHORIZED BY PUBLIC LAW 90-351. UNDER THE TERMS OF THIS GRANT, A VIABLE PROGRAM FOR THE EFFECTIVE TREATMENT OF THE REPETITIVE VIOLENT OFFENDER WILL BE DEVELOPED. PLANNING AND PROGRAM DEVELOPMENT WILL BE ACCOMPLISHED BY BRINGING TOGETHER A HIGH LEVEL GROUP OF SCHOLARS, RESEARCHERS, PRACTITIONERS AND ADMINISTRATORS TO PRODUCE A COMPREHENSIVE, DETAILED DOCUMENT WHICH WILL DEFINE: 1. THE SELECTION PROCESS; 2. THE TREATMENT PROGRAM; 3. THE EVALUATION PROCEDURES. A FOURTH COMPONENT WILL PROVIDE FOR THE DEVELOPMENT OF A FULLY FUNCTIONING INSTITUTION FOR VIOLENT OFFENDERS, AND THE TRAINING OF ITS STAFF WILL BE PLANNED AND PARTIALLY IMPLEMENTED.

ITEMS RETRIEVED 64

426

[Item III.B.6.]

LAW ENFORCEMENT ASSISTANCE ADMINISTRATION NEWS RELEASE

U.S. DEPARTMENT OF JUSTICE,
Washington, D.C., February 14, 1974.

Administrator Donald E. Santarelli announced today that he has banned the use of Law Enforcement Assistance Administration funds for psychosurgery, medical research, behavior modification—including aversion therapy—and chemotherapy.

Mr. Santarelli said the decision to prohibit support of such programs resulted from the major reorganization of LEAA that he set into motion after becoming Administrator 10 months ago.

"Although no LEAA funds have been used for psychosurgery, to the best of our knowledge, this particular medical technique is so fraught with peril and uncertainty that it would not be appropriate to have even a slight chance LEAA funds could be used in that way," he said.

"I am forbidding the use of LEAA funds for medical research, behavior modification, and chemotherapy because there are no technical and professional skills on the LEAA staff to screen, evaluate, or monitor such projects," he said.

"Any applications that LEAA receives for such projects will be referred to the Department of Health, Education, and Welfare for consideration for funding from HEW resources."

Mr. Santarelli said that decisions on Federal funding for projects which relate to the area of medicine and medical research can be made properly only by those agencies to which the Congress has given oversight responsibility.

Mr. Santarelli said that his Guideline was issued today to the 10 LEAA regional offices and to the criminal justice planning agencies which receive and sub-grant LEAA funds in the 50 states, Washington, D.C., Puerto Rico, Guam, The Virgin Islands, and American Samoa.

While there is no known psychosurgery project involving LEAA funds, Mr. Santarelli said, a staff review has discovered a number of programs funded by states through block grant funds received from LEAA that may involve medical research, medical experimentation, or behavior modification.

"The LEAA program was created by the Congress to help the states and localities reduce crime and improve all aspects of their criminal justice systems," he said. "The fields of activity covered by my directive are so tenuously related to crime control and so beyond this agency's competence to judge that they cannot be supported with LEAA funds."

The directive issued by Mr. Santarelli listed these definitions for psychosurgery and medical research:

"Psychosurgery. Any form of brain operation for the relief of mental and psychological symptoms, usually involving irreversible destructive brain lesions, especially of the frontal lobes of the brain, and performed for the management of intractable psychotic symptoms or unmanageable violent behavior.

"Medical Research. Those medical or surgical procedures on human beings involving: observation; systematic changes in conditions, accompanied by observation before, during, and after these changes are made, and involving some degree of risk, however slight, and which is experimentally applied to the individual subject, not so much in his own interest as in the interest of humanity through the advance of medical science."

The Guideline noted that in recent years "the use of experimental medical procedures on human subjects for purposes of modification and alteration of criminal and other anti-social behavior has come into prominence and been highly publicized."

It said, however, that "the field is still experimental" and added that "LEAA personnel generally do not possess the technical and professional skills required to evaluate and monitor projects employing such procedures."

For those reasons, the directive went on, "it is LEAA policy not to fund grant applications involving the use or research of such procedures, particularly applications that involve any aspect of psychosurgery, behavior modification (e.g., aversion therapy), chemotherapy, except as part of routine clinical care, and physical therapy of mental disorders. Such proposals will be referred to the secretary of the Department of Health, Education and Welfare for ap-

appropriate funding consideration. This policy does not apply to a limited class of programs involving procedures generally recognized and accepted as not subjecting the patient to physical or psychological risk (e.g., methadone maintenance and certain alcoholism treatment programs), as specifically approved in advance by the Office of the (LEAA) Administration, after appropriate consultation with and advice of the Department of Health, Education and Welfare."

(Item III.B.7.)

LAW ENFORCEMENT ASSISTANCE ADMINISTRATION GUIDELINE

U.S. DEPARTMENT OF JUSTICE,
February 14, 1974.

Re: Use of LEAA funds for psychosurgery and medical research.

1. *Purpose.*—This guideline establishes LEAA policy with respect to funding projects involving psychosurgery and "medical research."

2. *Scope.*—The provisions of this guideline apply to all LEAA Central and Regional Offices, State Planning Agencies and applicants for LEAA categorical grants.

3. *Definitions.*

(a) *Psychosurgery.*—Any form of brain operation for the relief of mental and psychological symptoms, usually involving irreversible destructive brain lesions, especially of the frontal lobes of the brain, and performed for the management of intractable psychotic symptoms or unmanageable violent behavior.

(b) *Medical research.*—Those medical or surgical procedures on human beings involving: observation; systematic changes in conditions, accompanied by observation before, during, and after these changes are made, and involving some degree of risk, however slight, and which is experimentally applied to the individual subject, not so much in his own interest as in the interest of humanity through the advance of medical science.

4. *Background.*—For some time the LEAA Financial Guide has required that "medical research conducted by any grantee or subgrantee financed with LEAA funds and not specifically detailed in the State Plan as to type of research; place and persons conducting the research; amount of research funds available; and research methodology, including data on use of chemical agents or medical procedures, use of human volunteers or animal subjects, and a description of any anticipated experiments," must receive prior approval by LEAA.

5. *LEAA policy.*—In recent years, the use of experimental medical procedures on human subjects for purposes of modification and alteration of criminal and other anti-social behavior has come into prominence and been highly publicized. However, because the field is still experimental and because LEAA personnel generally do not possess the technical and professional skills required to evaluate and monitor projects employing such procedures, it is LEAA policy not to fund grant applications involving the use or research of such procedures, particularly applications that involve any aspect of psychosurgery, behavior modification (e.g., aversion therapy), chemotherapy, except as part of routine clinical care, and physical therapy of mental disorders. Such proposals will be referred to the Secretary of the Department of Health, Education and Welfare for appropriate funding consideration. This policy does not apply to a limited class of programs involving procedures generally recognized and accepted as not subjecting the patient to physical or psychological risk (e.g., methadone maintenance and certain alcoholism treatment programs), as specifically approved in advance by the Office of the Administration, after appropriate consultation with and advice of the Department of Health, Education and Welfare.

6. *Actions.*—(a) Categorical grants:

(1) *Psychosurgery.*—Applications for LEAA categorical grants to fund psychosurgery will be denied by LEAA Central and all Regional Offices. Letters of denial will reference this guideline as the reason for denial.

(2) *Other medical research.*—Applications for LEAA categorical grants to fund projects involving the use of "medical research," as defined above, will be denied by LEAA Central and all Regional Offices, except in limited types of

programs generally recognized and accepted as not involving physical or psychological risk to the patient, as specifically approved in advance by the Office of the Administration after consultation with and the advice of the Department of Health, Education and Welfare.

(b) *Block Grants.* Pursuant to the authority authorized by Section 501 of the Omnibus Crime Control and Safe Streets Act of 1968, as amended, LEAA has determined that it is inappropriate for the States under the block grant program to fund:

- (1) projects involving any aspect of psychosurgery, or
- (2) projects involving the use of "medical research," as defined above, except in limited types of programs generally recognized and accepted as not involving physical or psychological risk to the patient, as specifically approved in advance by the Office of the Administration after consultation with and the advice of the Department of Health, Education and Welfare.

IV. VETERANS ADMINISTRATION

A. Correspondence

[Item IV.A.1]

MARCH 28, 1973.

Mr. DONALD E. JOHNSON,
Administrator, Veterans Administration,
Washington, D.C.

DEAR MR. JOHNSON: It has come to my attention that the Veterans Administration has often cooperated with the National Institute of Mental Health in providing human subjects for scientific experimentation. I have also noted that the Administration allows neurosurgery to be performed on its patients.

The Subcommittee on Constitutional Rights has long been interested in psychological testing and its effect on constitutionally guaranteed civil liberties and individual privacy. In conjunction with this interest, the Subcommittee has been surveying the entire spectrum of human experimentation, psychosurgery and behavior modification.

For these reasons I would like to obtain information concerning the programs in the Veterans Administration and the program safeguards that exist. I would appreciate your response to the following questions so that the Subcommittee may better understand your programs.

1. To what extent does the Veterans Administration allow experimentation utilizing patients in its medical facilities? What control mechanism does the Administration maintain to monitor experiments involving its patients? Please send copies of any policy statements. Does the Administration require approval of projects by NIH, NIMH or any other body?

2. The Veterans Administration has conducted studies to determine the effects of drugs on individuals with psychiatric problems. Does the V.A. conform to Public Health Service standards for experiments employing human subjects? If not, what other guidelines are followed? Please send copies. What type of consent form is employed in human experiments? Please send a copy.

3. Does the Administration allow psychosurgery to be performed on its patients? If so, for what medical purposes may this surgery be performed? Does the V.A. allow neurosurgery for behavior disorders? Please send copies of the Administration's guidelines or policy statements concerning psychosurgery in its medical facilities. May a patient refuse psychosurgery?

4. Does the Veterans Administration employ or allow research into behavior modification treatment in its facilities? Please send copies of any such research proposals or treatment programs that presently exist. Does the Administration have guidelines on the use of psychoactive drugs? Please send copies of the guidelines. What controls does the Administration place on behavior therapy experiments? May a patient refuse to participate in behavior modification programs or to receive psychoactive medication?

5. Will a patient's records from a V.A. facility incorporate participation in a behavior therapy program? Who has access to the records of a former patient? May a former patient challenge a psychiatric report and have it modified?

Your cooperation in this matter will be greatly appreciated and will aid in the Subcommittee's efforts to preserve individual liberties.

With kindest wishes,
Sincerely yours,

SAM J. ERVIN, Jr., *Chairman.*

[Item IV.A.2]

VETERANS ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS AFFAIRS,
Washington, D.C., May 10, 1973.

Hon. SAM J. ERVIN, JR.
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This will respond to your letter of March 28, 1973, requesting information about the use of human subjects for scientific experimentation in the Veterans Administration.

The Veterans Administration seeks to provide the best treatment for the patients who come to us for care. In some instances this involves the use of drugs and/or procedures which are investigative in nature. It can, therefore, be stated that, to this extent, the Veterans Administration does allow experimentation using patients in its medical facilities when there is reasonable expectation that the participating patient will benefit from the study.

The following must be considered within the context of the nature of the care of the sick. Many of the procedures and therapeutic agents used in medicine may involve both benefit and hazard to patients since the individual characteristics of sick patients and the range of responses to medicines or therapeutic procedures are fundamentally unpredictable in any given instance. In other words, the risk of treatment may be general (applicable in some degree to all patients) or idiosyncratic (resulting from unpredictable individual variation). Within this broad outline, the VA must make available to its patients new and improved treatments while they are still in an investigational status.

Extensive safeguards have been established to assure that the welfare of patients and the rights of the individual are paramount in any clinical investigation that is conducted in the VA. An opinion of the General Counsel (Op. G. C. 28-58) established the legal basis and safeguards for human investigation. This documented the requirement that human participants in an experimental study must voluntarily consent and anticipated gain must exceed expected risks.

The policy on participation of patients in investigational studies is recorded in VA Manual M-3, Part I, paragraph 1.20 which prescribes that all such studies will be reviewed and approved by a special Subcommittee on Human Studies. This is in addition to the requirement that all research protocols must be approved by the Hospital Research and Education Committee. It is further required that informed consent be obtained from each patient involved in any study. The patient signs VA Form 10-1086 and the physician documents in the patient's clinical record that all requirements of the policy have been accomplished.

On rare occasions, patients may participate in research studies on a voluntary basis, even though the primary goal is not the prospect of gain to the patient. This would only occur if the risk to the patient were negligible and all of the above safeguards were applied.

The policies and safeguards relating to human participation are similar but not identical to those prescribed by the Department of Health, Education and Welfare (USPHS and NIH). The fundamental principles are the same, i.e., the requirement of a specific committee approval of all studies, the requirement of individual informed consent and the endorsement of the principle that potential gains must outweigh potential risks. There are fundamental differences in the actual research mechanisms and monitoring because medical research in the VA is intramural within our hospital system and we do not make research grants for medical research.

Medical research that is conducted entirely under the auspices of the Veterans Administration within the authority of 38 U.S.C. 4101 is not reviewed by the NIH, NIMH, or other agency. However, VA investigators may receive grants from the Public Health Service, administered either through the VA (Public Law 90-31), or through an affiliated non-Federal institution. Such grants would be approved by NIH, NIMH, or other DHEW or NSF granting channels. VA investigators also comply with all FDA regulations relating to investigational drugs and devices. The VA complies with all regulations of the other agencies that issue such grants or authorization to VA investigators. Policy on this is stated in Chief Medical Director Letter II 10-72-12.

A recent report showed that five neurosurgical procedures have been performed in VA hospitals for the modification of uncontrollable abnormal behavior due to psychiatric disorders (psychosurgery) that threatened the well-being of the patients. These procedures were performed prior to the issuance of Circular 10-73-18, dated February 7, 1973 (copy enclosed), which restricts and controls any neurosurgical procedure for modification of behavior to four VA Hospitals (Durham, North Carolina, Long Beach, California, Minneapolis, Minnesota, and Syracuse, New York). This Circular was prepared based on the advice and counsel of a group of nationally known specialists in the field of neurosurgery.

Not to be confused with psychosurgery are those stereotactic neurosurgical procedures that are accepted treatment for a variety of conditions such as: otherwise intractable pain associated with advanced malignancy, otherwise uncontrollable epileptic seizures, otherwise uncontrollable incapacitating movements of severe advanced Parkinsonism.

A number of issues contained in paragraph 4 of your letter relate to research in non-surgical behavioral modification treatment. It is not possible to furnish copies of all of the research proposals since research activities are a decentralized function, and approval for all studies is determined by the local Research and Education Committee at each VA hospital. By far the most prevalent behavior modification research and treatment programs utilize reinforcement techniques involving simulated societies and token economies. Whatever the particular techniques, the patient's records will necessarily incorporate the information about the patient's participation. As a result of a survey conducted in VA hospitals in November-December 1969, a Professional Services Letter was sent to all VA installations in March 1970. In addition to the results of that survey, policies, procedures, and guidelines for the conduct of programs of this type were outlined. These procedures are still in effect. In addition, all of the policies and guidelines relating to research in the VA are followed in behavior therapy investigations.

As to whether a patient might refuse psychotropic or behavioral modification programs or psychosurgery drugs, this must be determined by the same criteria that determines the patient's capacity to give informed consent for any treatment. Good professional practice seeks to find a way to engage the patient in doing those things which are likely to be beneficial to him, recognizing that at times the individual's capacity to form sound judgments for himself is seriously impaired. Under these latter circumstances, a variety of considerations must be reviewed by the physician with the conclusion, at times, that treatment must be insisted upon despite the patient's temporary objections. In many circumstances, it may be that a judgment will have to be made by a responsible person legally entitled to act on behalf of the patient.

The last area in which you have requested information relates to the content of patient's records, who has access to those records, and whether the patient can challenge certain information contained therein. You may be assured that medical records relating to the care and treatment received by a veteran-patient in a VA hospital, contain complete information with respect to all aspects of the medical care and treatment furnished, including, where appropriate, any participation in a behavior therapy program. These medical records are, however, deemed confidential by law (38 U.S.C. 3301), and release of information contained therein is, accordingly, restricted. Enclosed for your information is a copy of the applicable VA regulations relating to the release of information from veterans' records. Since VA Regulation 503 provides that information may be disclosed to a veteran only when it would not be injurious to his physical or mental health, psychiatric reports are normally not made available to the veteran-patient. Accordingly, it would be unusual for a patient to challenge a psychiatric report, or attempt to have it modified.

We appreciate this opportunity to better explain human experimentation programs in the Veterans Administration, and will gladly supply any further information desired by the Committee.

Sincerely,

DONALD E. JOHNSON, *Administrator.*

Enclosures.

List of Attachments.

1. Professional Services Letter II, 11-70-18, "Report of Survey of Token Economy Programs in the Veterans Administration." Item IV, B, 2. below.

2. Circular 10-78-18—"Surgery for Abnormal Behavior (Psychosurgery)" [Item IV. B. 2. below]
3. Research in the Veterans Administration
 - a. General Counsel's Opinion OP G.C. 28-58—"Legal Aspects of Medical Research" [Omitted]
 - b. M-3, Part 1, Change 8, January 2, 1970—"Consent for use of Investigational New Drugs and/or Procedures on Patients for Investigational Purposes" [Omitted]
 - c. CMD Letter IL 10-72-13, March 3, 1972—"Human Experimentation, R&D Committee on Human Studies and Extra-VA Research Funding" [Item IV. B. 3. below]
 - d. Form 10-1223—"Report of Subcommittee on Human Studies" [Omitted]
 - e. Form 10-1086—"Authorization (by Patient) for use of Drugs and/or Procedures for Investigational Purposes" [Omitted]
 - f. Form 522—"Authorization for Administration of Anesthesia and for Performance of Operation and other Procedures" (Informed Consent) [Omitted]
4. Use of Investigational Drugs for Diagnostic or Treatment Purposes
 - a. M-2, Part I, Change 35—"Therapeutic Agents and Pharmacy Reviews" [Omitted]
 - b. Form 10-1221—"Consent for use of Investigational Drugs for Diagnostic or Treatment Purposes" [Omitted]
5. Release of Information
 - a. VA Regulations 500 et seq. [Omitted]

B. Related Materials

[Item IV.B.1]

VETERANS ADMINISTRATION,
DEPARTMENT OF MEDICINE AND SURGERY,
Washington, D.C., March 6, 1970.

PROFESSIONAL SERVICES LETTER IL 11-70-18

To: Directors of VA hospitals, domiciliary and VA outpatient clinics, and managers of regional offices with outpatient clinics.
Subject: Report of survey of token economy programs in the Veterans Administration.

1. Attached is a comprehensive summary of information obtained from the survey of DM&S facilities conducted during November-December 1969. This report should be of benefit to stations considering establishment of token economy wards as well as those with ongoing programs. The applicability of psychological principles of learning within the framework of a simulated economic system for the restoration of the chronic, institutionalized psychiatric patient is conclusively substantiated.

2. On the basis of these survey findings stations are encouraged to establish or further expand this type of treatment program if there is sufficient support and appropriate operational controls and procedures have been established. The following guidelines are provided for this purpose. These should assure maximal benefit to patients while continuing to permit local flexibility and continued development of treatment techniques so that the full potential of this important therapeutic modality can be realized.

a. Token economy programs should be so structured that effective application of the underlying learning principles is assured. This should include authority to control conditions effecting program operations, particularly as these relate to the actual reinforcement process.

b. It is essential that a psychologist or professional person knowledgeable in learning principles and techniques, including operant conditioning, be directly involved in planning and operation of the token economy program. This may be either in the capacity of program director or as a participating member of the treatment team as long as it includes specific responsibility for determining how reinforcement concepts will be applied to the behaviors to be changed in each patient in the program.

c. Prior to the establishment of a token economy program there should be thorough training of ward staff in reinforcement concepts and techniques. Continued in-service training to maintain optimal functioning is also essential.

d. Staff should be permanently assigned to the token ward, selecting those who desire such an assignment and who have demonstrated both a positive attitude toward this treatment approach and the necessary skills. Where evening and night staffing is concerned, every effort should be made to assign only staff with some orientation to and appreciation of the treatment concepts.

e. When patients are selected or assigned to the token program, treatment planning and duration of treatment should be individually determined.

f. There should be adequate procedures for orienting patients to the token economy approach, including just what is expected and why, as well as treatment objectives for the patient involved.

g. Provisions for regularly orienting family members and other concerned individuals and groups about the token reinforcement process and expected benefits should be established.

h. The inclusion of necessities in the reinforcement process is acceptable where it is determined this will be beneficial and there are provisions for fully protecting the health of the patient and his right to be treated with dignity and respect as a human being.

i. Procedures for program evaluation and follow-up, particularly data concerning behavioral changes and treatment outcomes, should be an integral part of all new and current programs.

3. The utilization of token economy concepts for other chronic adjustment problems, as alcoholism, anti-social behavior and other forms of social inadequacy, where reinforcement learning techniques have obvious application, would be appropriate if the above guidelines are followed.

JOHN D. CHASE,

Assistant Chief Medical Director for Professional Services.

TOKEN ECONOMY PROGRAMS IN THE VETERANS ADMINISTRATION (REPORT OF SURVEY CONDUCTED NOV.-DEC. 1969)

The treatment of psychiatric patients by means of reinforcement techniques involving simulated societies and token economies has been steadily increasing. This approach based on learning principles seeks to promote rehabilitation through strengthening self-confidence and through reducing maladaptive behavior, unnecessary dependence, and feelings of helplessness. It attempts to do so by requiring each patient to take greater responsibility for things within his competence and then rewarding him for doing so.

A survey of all VA health care facilities was conducted to identify existing programs and to obtain information as to organizational and operational aspects. This is a report of the findings. A copy of the survey format is appended.

Currently, twenty-seven separate programs are in operation in twenty VA hospitals of which seventeen are predominantly psychiatric. Two are general hospitals with acute psychiatric services, and one is an Outpatient Day Treatment Center for chronic psychiatric patients located in a general hospital. The programs were started at the following times: 1964—1, 1965—0, 1966—1, 1967—4, 1968—8, and 1969—6.

In addition, seven hospitals have token economy programs under active planning while eight others reported programs in the past that were terminated for practical reasons unrelated to the merits of the treatment modality. It is evident that an expansion of token economy programs has occurred in VA and is likely to continue.

A total of 937 patients are involved in the 27 on-going programs. Typically, the patient is male, in his mid-forties, has a longstanding psychotic disorder (usually diagnosed as schizophrenia), has spent many years in institutional settings, and has a background of unproductive functioning in the community. As estimated breakdown by diagnostic categories would be: Schizophrenia, chronic—85%; brain syndrome chronic—5%; character disorders, severe—5%; other psychiatric disorders—2%; alcoholism, chronic—2%; and neuroses, acute—1%.

Thus, token economy programs are addressed almost exclusively to the problem of treating the chronic, institutionalized individual who has been unresponsive to other treatment techniques. The single outpatient program is in-

volved with the same type of patients maintained in the community on a marginal, non-productive basis. There is one program in a GM&S hospital specifically for patients with acute diagnoses who have histories of productive functioning. This station is seeking to systematically evaluate the token economy approach for intensive, short term treatment.

Goals and Objectives

What are the goals of current VA token economy programs? First, reduce or eliminate the occurrences of behaviors most people would react to as bizarre, illogical, frightening, annoying or otherwise unacceptable. Second, develop instead specific behavioral responses consistent with commonly held environmental expectations. These range from behaviors related to personal hygiene, grooming, eating, and other routine social and adaptive responses to establishing effective work habits. The stated objectives are to reduce apathy, inappropriate acting out, dependency (revise the process of institutionalization) and increase self-responsibility for one's own behavior and self-confidence in coping with the environment. By making the consequences of each behavior explicit the patient has the continuing systematic feedback that it is assumed enables him to develop a realistic awareness of environmental demands and an available repertoire of adequate responses for meeting them. These are learned as a result of providing tangible, usually immediate but always certain, rewards for correct responses in the form of tokens or their equivalent. Ultimately, the token economy program is expected to enable the patient to once again live out of the hospital or function at a considerably greater level of independent, self-responsible functioning.

A secondary but very important goal identified in the survey is to provide definitive guidelines for staff functioning that are specifically related to therapeutic change in patients, thereby maximizing work effectiveness and job satisfaction; also, to serve as a basic training experience for staff in psychological principles of learning and their systematic application to effect behavioral changes.

Selection and Duration of Treatment

The majority of programs were established by simply transforming an existing ward for chronic, institutionalized patients into a token economy ward. As a result patients on that ward with few exceptions were automatically in the program. Any patient deemed unable to adapt was transferred to another ward when the staff determined he was not benefiting. This happened only rarely. Subsequent admissions occurred in two ways. First, random admission as a result of hospital policies or as a planned procedure to have comparable groups for later evaluation. Second, by referral from other wards with final screening and concurrence by the token economy treatment team. The remaining programs at the time of initiation used a referral and screening approach. Little similarity in the screening procedure was identified other than the involvement of the total team and their responsibility to make the final decision.

Duration of treatment in 25 of the 27 programs is individually determined on the basis of the general and special target behaviors and the length of time it takes to achieve them. A few programs specified a minimum time in the program, as 90 days. Also where step concepts are utilized minimum times in each step are specified. The two programs with time limits were for 60 and 90 days. The former is unique in that it is the only program aimed at acute rather than psychotic conditions. Invariably individual patient progress is reviewed on a continuing basis by individual staff interactions, quantitative information and logbooks. Full team meetings typically occur weekly for this purpose. Terminations appear to be few in number with many stations indicating no patients have left the program prior to completion. Incidental health problems are the most common cause for termination since intensive medical treatment must take precedence.

Staffing Patterns, Selection and Training

Staffing on token economy wards is usually comparable to similar sized wards in the same hospital. The day-to-day operation of the program is almost exclusively the responsibility of nursing personnel. A nurse is typically identified as administrator or coordinator. In almost every instance a psychologist is the program consultant and is directly involved or available at all times. Social workers actively participate and serve as coordinators of several pro-

grams. Psychology trainees, and, to a lesser degree, other students, are usually present. Physical Medicine and Rehabilitation Staff members are an important factor in all programs. Selected volunteers are commonly present. In all programs a psychiatrist or physician is involved and either on the ward or available to it at any time, particularly as a part of the team decision making process and where medical attention is involved.

In only a few programs were nursing staff specifically selected for the program. However, typically nurses and aides not wishing to participate were able to transfer to other wards. Most survey respondents reported staff involvement in and commitment to the token economy approach gradually increased as they became more experienced. Basic nursing staff was permanently assigned in all programs though on evening and night shifts occasionally staff untrained in the token economy approach might be on duty. The ward physician and social worker actively support the program but the professional leadership in the technical concepts and skills involved stem from psychology staff, consultants, and trainees. The Dietetics Service actively participates in those programs where food is used as a reinforcer. Finance Division, Engineering Division and many other hospital divisions and services are frequently involved in the token economy programs since patients rights to their own funds and therapeutic work activities are important variables.

In every program preparatory training was carried out via films, lectures, basic reading, formal discussion groups, classes, and informal training approaches. In-service training is also acknowledged by all programs. The use of weekly meetings of the treatment team is the most prevalent method, with films, readings, and lectures playing a lesser part. It is clear that both prior training and continuing training vary from carefully designed formal programs to loosely organized, erratic programs. Seemingly most programs reasonably prepared their staffs both in concepts and techniques but have done less well in the continuing training aspect. While the need to do a better job in training was frequently mentioned, more serious concerns were voiced about the limited opportunity to meaningfully orient other professional staff, management level personnel, veterans service organizations, and families.

Orientation of Patients, Relatives, and Other Concerned Groups

In all 27 programs multiple approaches are used to orient patients with various degrees of structuring of these methods. Individually or in small groups of patients (or both) nursing personnel provides an explicit orientation as to what is expected of the patient and what he can expect in return. In essence he is told how to succeed, what the rewards are for doing so, and the consequences for not doing so. Through staff team meetings and/or individual conferences with psychiatrists, social workers, psychologists or trainees the purposes of the approach are explained—that he can learn to succeed and become self-responsible. Patients are regularly used to assist new patients. This may be through informal, unplanned ways or by meeting with a designated patient representative. A few programs use the "Buddy" system to assure prompt followup learning of how to adapt to the ward. In addition to verbal approaches, most programs have booklets or information handouts that are given to each patient. Bulletin boards and notices of various kinds complete the range of initial orientation methods. Subsequent orientation involves continuation of the above plus using the different circumstances in which tokens are required as an opportunity to demonstrate what is expected. All programs report that patients, regardless of severity and chronicity of their condition, rapidly learn how to adapt. However, frequently patients continue to test out previous methods of functioning, such as passive dependency or demanding behaviors, until they learn these no longer work.

Orientation of relatives is somewhat less systematic in the majority of programs. Commonly the occasion of the regular visit is used, with the social worker or nurse individually discussing the program. Several programs send an informative letter to the family and ask them to come in if they have further questions. A few programs require prior approval of the family before the patient is accepted. One station has a weekly orientation meeting for relatives of new patients. The gist of survey replies is that almost all relatives are oriented and react very favorably toward the program.

Many stations have sought to inform veterans service organizations about the token economy program as a part of good public relations and to enlist

their support. This has usually been done informally when the opportunity presented itself or via briefing before the VAVS hospital committee. In several instances letters were sent to the service organizations have given their approval and support. In one program the VAVS Committee underwrites the cost of the program as it relates to the tokens and their assigned value. In another, American Legion and VFW representatives function as consultants to the discharge planning group.

Procedures for Inter-Communication About Patient Progress

In all programs a continuous flow of pertinent information about patient behavior and progress is given high priority. The usual patient progress notes and other nursing records are supplemented by a number of special procedures and informational sources. Records of tokens earned and spent are maintained in the reports of progress, most commonly via a "bank" and/or credit card system; also, progress where steps and levels concepts are employed. Large charts are sometimes utilized both for staff and patient benefits. The staff team meetings, occurring at least weekly in all programs, are the heart of the communication system. Tape recordings of these and other decision making conferences are prepared for evening and night shifts.

The concentration of treatment effort on specified behaviors and tangible rewards results in considerable explicit information to be communicated among staff via the above as well as by direct, informal staff interactions. Similarly, feedback to patients so they will know at all times how they are doing and what else they can do is identified as essential in all programs.

Behaviors to be Reinforced

In all programs any behavior in which self-responsibility could be a component is identified, terminal behaviors specified, and token values for meeting criteria assigned. The patient is informed in precise detail with repetition as often as needed. Staff members directly involved in the reinforcing process are similarly informed. The behaviors delineated for reinforcement are those inherent in meeting standards and values of the ward environment, therapeutic assignments, including work therapy, and those generally accepted by the outside community. While all programs identified these general behaviors, the applications are nevertheless individualized so that they are consistent with the treatment planning for each patient. Individual target behaviors are also programmed for definitive change in a large proportion of the programs. This could vary from specific psychotic behaviors as mutism, hoarding or inappropriate acting out to such problems as obesity, anorexia, incontinence or excessive smoking.

Types of Tokens Utilized

In twenty of the programs tokens such as plastic discs (poker chips), aluminum coins, metal washers, blocks of wood, or script are used. These are largely transferrable as well as negotiable. However, stations using script usually write the name of the recipient on it so it cannot be used by another person and provides a mechanism to identify how each patient spends his tokens. Several programs use specially colored plastic discs for selected patients and to prevent theft. In nine programs some form of "credit card" or individual patient record card is used. This approach records points earned or boxes marked. The point system is described by its advocates as having the additional advantage of providing an accumulative record of points earned, sometimes how they were earned and spent, and points remaining.

Stations appear to be increasingly using a combination of token approaches. Tangible tokens are used for new and/or regressed patients where immediate reinforcement is critical. For patients experienced in the token economy ward of less regressed, tokens are commonly given at prescribed points or specified times. Patients on work assignments off the ward usually have payrolls comparable to regular jobs. In these instances credits on a credit card or in bank books or points are more likely to be used. A banking system is also popular, providing both an expanded learning experience for the patient and a record of token accumulation. While all programs favor accumulative records, (ideally just how tokens were earned and spent as well as the amount) considerable variation exists in the degree to which this is done. Practical problems, primarily lack of staff, are given as the reason for incomplete data. In several programs patients themselves are responsible for collecting the tokens they

have earned by getting their card signed and rated as to the number of points or tokens earned. This amount includes two aspects, simply participating in the activity and the effectiveness of that participation.

How Tokens are Utilized

Within the prescribed limits set for each program patients have considerable freedom of choice as to how and when they will spend their tokens as they have in earning them. This right to decide is an important factor in that it reflects the implicit contract with patients that if you share in responsibilities you also share in those benefits most meaningful to you.

In the 27 on-going programs four categories of benefits are possible, necessities, luxuries, privileges, and charges for choosing to commit infractions of the rules. All programs have the latter three, and slightly more than one-third include necessities such as food and bed. However, all programs indicated directly or indirectly that including basic needs would be advantageous to treatment objectives. This is based on extensive research evidence that meaningful rewards, essential to learning process, are quite restricted in regressed patients and that food and sleep retain high reinforcing properties. Failure of stations to utilize necessities is based on practical rather than therapeutic grounds. These primarily relate to misunderstandings that might arise in family members, veterans service organizations, and other professional and administrative members of the hospital staff who could not be expected to have extensive knowledge in learning concepts and principles. A number of stations reported incidences of this type and delineated the difficulty in effectively communicating information that would be understandable and acceptable when something so completely opposite to usual procedures in patient treatment is involved.

For those stations utilizing basic necessities, the predominant one is food. Patients must have tokens in order to enter the dining room. If they do not, they are frequently urged at that point to quickly earn some tokens, as by grooming themselves or arranging their clothes or through some brief chore. If they choose not to do so the meal will be withheld. Stations universally report that the good majority of patients miss no meals at all and that a patient rarely permits himself to miss more than one or two meals or to have this recur a second time. Precautions are established in each of these programs nevertheless to assure each patient's health will be fully protected. These included precise recording when meals are missed, daily review procedures, and food supplements. It is the strong consensus of these stations that when basic needs are included motivation tends to rapidly increase, is sustained, and generalizes to other categories of benefits. They note that patients quickly accept these requirements, recognize them as reasonable, and express pride in their ability to cope with them successfully.

The "luxuries" for which tokens are required in most programs include both comfort items, as canteen books, coffee, cigarettes, and the right to participate in desired activities, as special events, recreation, TV, or to take a nap during the day. Some stations give the patients options of purchasing with their tokens nicer quarters or a more attractive table for dinner. These options have contingencies attached, as greater responsibility to keep quarters and/or self neat. Several programs require tokens for extra sessions or contacts with the physician or members of other disciplines beyond that deemed essential by the professional persons involved.

Privileges that may be purchased are greater freedom either on the ward, in the hospital, on the grounds, or in the community. Also, the right to have specified amounts of money being held for the patient by the hospital. Stations comment that when patients have worked for the right to greater freedom they value it more as reflected in better control of their behavior and in pride in ability to achieve freedom by their own efforts.

The final category of benefits for which tokens are required in all programs is charging for infractions and failures. These include fines for poor grooming, for undesirable behavior such as swearing, being assaultive, and the like. In one program patients who have in some way been irresponsible while on privileges or on pass must pay for a "baby sitter" to accompany them until they demonstrate greater self-responsibility.

By the range of ways for earning and spending tokens stations are seeking to simulate as realistically as possible the economic conditions that prevail in

the actual society outside of the hospital. This includes in many programs loans, welfare programs, banking, credit cards and the like. While tokens are meaningful rewards, all programs continuously employ recognition, approval, attention and status as vital secondary rewards. They note that these psychological benefits become increasingly important to patients as they progress in the program.

Continuing Methods Being Utilized to Determine Program Effectiveness

The survey indicates program evaluation approaches vary from accumulation of usual professional judgments concerning individual patient progress to carefully designed comprehensive research studies. Most stations fall somewhere between these extremes but approximately *one-third* do have systematic evaluation as an integral part of their operation. The following information is broken down into categories of evaluation information: Demographic data, patient assessment, baseline measures of behavior to be changed, treatment outcome and follow-up.

All stations indicate demographic material and usual records of patient progress are being accumulated. However, only one-third are tabulating or otherwise processing this information.

Psychological assessment procedures are being utilized by only several stations as a part of their selection process and/or repeated to measure patient progress. Approximately 10% of the programs use some type of rating scales or general behavior checklists but these apparently are infrequently seen as important to decision-making or used for program evaluation purposes. Qualitative staff judgments, either individually or collectively, supported by medical records, constitute the majority approach for determining diagnosis, acute or chronic status, symptomatology, and other pertinent psychological information. These judgments are made periodically and are available for use in program evaluation but their value is limited by the fact that prescribed time intervals or specific indices of progress are infrequently involved.

Baseline measures of behaviors to be changed are collected in approximately 50% of the program, with subsequent repetition throughout the treatment. Stations differ considerably in how they record this information. Those with well-developed research designs provide for set times and conditions for observing type and frequency of occurrence of behaviors prior to and during treatment. Most programs are less rigorous in this, requiring simply observations be made with judgmental factors as to type and extent of the behavior having an important weighting.

In regard to treatment outcome, about 50% of the stations keep records of tokens earned by individual patients and this is viewed as program evaluation data. Similarly records of fines for rule infractions or failure to have tokens for necessities are retained by almost all programs and seen as a type of evaluation material. Much of this information is adequate for individual patient evaluation but has limited use in program evaluation because of the inconsistencies resulting from the variations that occur in acquiring it even in a single program. The most common method of assessing treatment outcome or readiness for discharge remains that of the judgment of the responsible professional person or persons, usually supplemented by collective opinion of the treatment team. Follow-up data is collected only incidentally in almost all programs. Even stations with built-in research procedures have inadequate provisions for this.

The importance of program evaluation data for assessing the value of the token economy approach is widely recognized. The problem, according to stations without planned evaluation techniques, is primarily one of manpower to implement such studies. This problem is greatest where post-hospital follow-up is concerned. Unique factors existing in all programs compound the problem of a VA-wide evaluation of the token economy approaches in contrast to evaluating individual program effectiveness. Nevertheless sufficient commonality appears present to develop a worthwhile research design. A serious problem is that of operational stability in the individual programs. Since most programs were started in the last two years this factor may be critical. Despite problems inherent in effective evaluation, the next section provides considerable evidence concerning the value of the token economy program.

Survey Information Concerning Impact and Value of Token Economy Programs

Four types of evaluative information were included in the survey replies—judgmental, anecdotal, outcome data, and research studies. These relate to patient reaction to token economy programs, impact on staff, effect on other treatment modalities and therapeutic value.

The information as to patient acceptance is strongly favorable. "Most patients like the system and comment on its fairness. There is a publicized and attainable standard of behavior that enables patients to clearly recognize what is expected of them and how to proceed. The uncertainty that patients feel on traditional wards about their immediate and long range prospects is replaced with a definite awareness of what they can do and the assured benefits that will accrue. This knowledge is viewed as producing greater optimism about the future, faith in the environment, and confidence in themselves." One research study indicated that patients on a ward in which desired comfort items were automatically provided preferred the token ward where such items were contingent upon responsible achievement of specific objectives.

The impact on staff directly involved on token economy wards, according to anecdotal information and judgment of survey respondents, is similarly positive. "At first the reaction was skeptical, not enthusiastic but they have seen definite observable changes in patients thought to be hopeless. Morale of nursing personnel is greatly improved. They know much more frequently exactly what they are to do and what the results will be. They have learned levers for motivating patients and strengthening good behaviors and are deemphasizing restrictive penalties. Also, patients create few unpleasant ward management problems. Feedback from staff is that they learn to sharpen their observations and enjoy a framework in which there is a definite structure and definite goal for each patient. Staff feels a definite part of the treatment-team and has a clear role in it."

One repeatedly identified result is that the token economy program has a beneficial effect on other treatment modalities. "There has been a noticeable improvement in attendance at and participation in PM&R clinics, work details, and group therapy. Also, prior to the token program attendance at patient council was very sparse. Now two council sessions must be held to accommodate the entire ward and near-perfect attendance is common."

There were a number of reports of reduced need for medication for patients on token economy wards. One station noted that a gross examination of medication orders for a token economy program and three other wards over a three months period indicated the former ran "well behind" the others in amount of medication given for acute upsets or to produce sleep (chloral hydrate, sodium amytol). The use of psychotropic drugs remained about equal. Another station estimated a 50% drop in special sedation drugs and a 10% reduction in thorazine and comparable drugs. Caution was urged in accepting these results as due to the token process itself since other variables had not been controlled.

There is consensus among survey respondents concerning treatment benefits. All indicate that desirable general behaviors develop and occur with consistency, while non-adaptive and bizarre behaviors become less frequent. One study conducted on 60 chronic schizophrenic patients who had been hospitalized a median of 22 years revealed that at the end of one year there was statistically significant increase in those desirable behaviors reinforced by tokens plus general improvement in initiative, responsibility and social interaction. Other studies show dramatic increases in numbers of patients able to function with greater independence. In one report comparing a closed ward before and after it became a token economy ward, it was found that 23 patients were well enough to be given privileges in contrast to 12 before; 22 on off-ward details versus 3 before; 17 taking town passes and 6 before; and 8 receiving weekend passes contrasted with 2 before. One station reported average length of hospitalization dropped from 1,800 days to 250 days. For 28 patients originally starting in this program, after one year 20 had left the hospital with only two returning. An anecdotal account of 8 patients in a different program revealed extensive improvement in not only general behavior but specific target behaviors as assaultiveness, mutism, and compulsive handwashing. Another station reports 34 patients returned to the community with most living in a lodge where they assist each other in maintaining themselves out of the hospital.

One program with the objective of determining how far each of 41 patients can progress toward full independent and productive living reports that after 2½ years, 21 are out of the hospital with 7 more ready for discharge. While none of these 21 have reached the ultimate goal 18 are working 8 hours per day in a sheltered workshop and living together under largely self-responsible conditions. This study identified that immediacy of reinforcement and a combination of tokens and social reinforcements were significant variables in work productivity. Another station reports a great deal of success in placing graduates of the program. Twenty-five were placed in permanent work positions in an 11 months period. The comment is made that the token economy program develops a working attitude and work tolerance level which helps the patient make the transition to living and working in the community.

Caution was typically expressed that while token economy programs were effective in controlling psychotic acting-out behaviors and increasing level and consistency of adaptive behaviors, the basic thinking disturbance was not necessarily eliminated. Most commonly the patient has learned not to respond to pathological stimuli and instead to respond adaptively to environmental stimuli. The importance of symptomatic improvement is nevertheless underscored in that it enables the patient to function much more productively and responsibly either in the hospital or in the community.

Conclusions

The survey indicates that token economy approaches as being used in VA are demonstrating their effectiveness in strengthening behavior necessary for the chronic, institutionalized psychotic patient to function responsibly in the hospital or community. These programs are giving new hope to many veterans who had convinced themselves and others they could never live outside the hospital. With these kinds of patients, treatments based on systematic application of learning principles appear to constitute an effective approach particularly when compared to established techniques. The importance of having a professional person knowledgeable about learning principles, particularly operant conditioning, closely associated with the token economy program was stressed in many survey reports. The complexity of reinforcement processes is such that the rewards may be improperly applied or focus may gradually shift to a disproportionate emphasis on negative reinforcement. In view of the potentialities of the token economy process there is immediate and important need for comprehensive systematic program research and evaluation of the treatment process and treatment results, both short term and long range.

VA STATIONS REPORTING CURRENT TOKEN ECONOMY PROGRAMS (SURVEY CONDUCTED NOV.-DEC. 1969)

- VA Hospital, Birmingham, Alabama (Acute Patients).
- VA Hospital, Brecksville, Ohio.
- VA Hospital, Brockton, Massachusetts.
- VA Hospital, Cleveland, Ohio (Day Treatment Center).
- VA Hospital, Coatesville, Pennsylvania¹
- VA Hospital, Danville, Illinois.
- VA Hospital, Fort Meade, South Dakota.
- VA Hospital, Lebanon, Pennsylvania.¹
- VA Hospital, Memphis, Tennessee.
- VA Hospital, North Little Rock, Arkansas.¹
- VA Hospital, Northampton, Massachusetts.
- VA Hospital, Palo Alto, California.¹
- VA Hospital, Perry Point, Maryland.
- VA Hospital, Roseburg, Oregon.
- VA Hospital, St. Cloud, Minnesota.
- VA Hospital, Salem, Virginia.
- VA Hospital, Salt Lake City, Utah.
- VA Hospital, Sepulveda, California.
- VA Hospital, Tomah, Wisconsin.
- VA Hospital, Topeka, Kansas.

¹ Indicates multiple autonomous programs.

TOKEN ECONOMY SURVEY FORMAT

What are goals and objectives of your token economy program?

Give general statement of what the program seeks to do.

Describe organizational/administrative aspects

Include the following:

1. Size of program (number of patients; number of units or wards).
2. When started (give pertinent information as to how it was developed).
3. Type of operation (i.e. special unit, ward, levels, steps, groups, individuals, relationship to other wards/units)
4. Categories of patients involved (i.e. severely disturbed, psychotics, neurotics, alcoholics, chronic schizophrenics) (if more than one type, estimate percentage of each category).
5. How patients are selected (indicate specific factors involved as voluntary or non-voluntary, etc.)
6. Demographic information on patients if available (i.e. age, number of previous hospitalizations, length of time in hospital, etc.) (please indicate if this is based on data or estimated).
7. Duration of treatment (i.e. time limited or individualized). Explain.
8. Criteria for completion of treatment. How is termination of patients determined? What proportion are dropped?
9. Professional and non-professional staff by type and numbers. Indicate if permanently assigned, how selected.
10. Describe training of staff for functioning in the Token Economy Unit.
11. Indicate participation of multiple hospital services and describe. (as Diets, etc.)
12. How patients are oriented to the Token Economy Program.
13. Describe orientation of relatives/service organizations to token program. How has this been received?
14. How pertinent information concerning patients is communicated to staff on succeeding work shifts (tape recordings, overlap, etc.).
15. Describe other organizational or administrative aspects of your program not covered in previous questions. What problems?

Summarize the functional/operational aspects of the reinforcement processes utilized

1. List behaviors identified for reinforcement and indicate terminal behaviors desired.
2. If individual target behavior problems are dealt with, describe.
3. What type of tokens or medium of transaction is employed?
4. How are tokens earned? When and where are they given?
5. Identify items, services, etc., for which patients must pay tokens (necessities, comfort items, increased privileges, etc.).
6. Are records of tokens accumulated by individual patients maintained? How?
7. Are levels and/or step concepts of grouping patients utilized? Describe.
8. What is procedure when patients have insufficient tokens? (for necessities, for comfort items, etc.)
9. Are such concepts as welfare status, grub stakes, loans, utilized? How?
10. In what way is progress of individual patient monitored? (daily staff meetings, etc.)
11. What reinforcements are utilized in addition to tokens? How? (recognition, social status, etc.)
12. Describe other operational aspects of your token program not covered earlier. (as use of aversive techniques, schedules of reinforcement, etc.)

Are methods used for evaluation of program effectiveness?

Describe.

1. What continuing records are maintained? (i.e. length of stay, numbers of patients, types of discharge, diagnostic categories, drug utilization, etc.) (How is this data collected?)
2. Describe specific assessment measures utilized on individual patients (observations, scales, tests, profiles, symptomatology, etc.)
3. Describe specific baseline measures of behaviors to be reinforced (how taken, frequencies, etc.)

4. Indicate measures of progress and outcome used and describe.
5. What type of follow-up information is utilized? (i.e. days-in-community, employment status, measures of social adjustment, interviews with relatives, etc.)
6. Do you have information on the impact of Token Economy Program on other hospital treatment programs or modalities (i.e. rate of drug utilization, individual therapy, patient government, work therapy, nursing resocialization groups, PM&R, etc.) If so, briefly discuss.

General comments and remarks about the program in the perspective of the station

Current impressions concerning the value and place of the program in your hospital based on experiences to date. Potentialities and limitations.

[Item IV.B.2]

VETERANS ADMINISTRATION,
DEPARTMENT OF MEDICINE AND SURGERY,
Washington, D.C., February 7, 1973.

Circular 10-73-18

Subj: Surgery for abnormal behavior (psychosurgery).

To: Directors, all VA hospitals.

Attn: Chiefs, surgical services.

1. This circular replaces Circular 10-72-246, October 20, 1972, subject: Surgery for Abnormal Behavior (Psychosurgery).
2. Experience in VA hospitals to date demonstrates that surgical techniques for alteration of behavior, or so-called psychosurgery, have application to only a small group of highly selected patients.
3. Current responsible opinion indicates that before such surgery is considered there must be strong evidence of organic brain dysfunction, that all other medical and psychiatric treatments have been found to be ineffective, and that the condition of the patient is sufficiently serious that he is of danger to himself or others. These determinations should be made by an organized group of knowledgeable and experienced psychiatrists, neurologists, psychologists, and neurosurgeons uninvolved in specifics of care for the individual patient under consideration. *As a board they should meet to consider each individual case and record their joint considered opinion for or against surgery, with justification therefor. Since in many instances such patients may be incapable of legally or otherwise controlling their own destiny, the ability to obtain a valid consent and the need to pay appropriate attention to the medical, moral, and social ethics involved must be carefully considered.*
4. The following hospitals have been approved and specifically designated for the performance of any neurosurgical procedure designed for the alteration of behavior: VA Hospital, Durham, North Carolina; VA Hospital, Long Beach, California; VA Hospital, Minneapolis, Minnesota; and VA Hospital, Syracuse, New York.
5. After having been processed in accordance with paragraph three by a nondesignated hospital, the detailed case record of each candidate for whom surgery has been recommended, and the joint opinion of the consultants, will be forwarded to the nearest VA hospital designated in the above list and arrangements made for transfer of the patient to it for additional consideration, as to the appropriateness and feasibility of surgery. If the parent hospital is so inclined, a staff physician familiar with the case may accompany the patient to serve as a resource to the reference hospital board. If surgery is decided upon, the request for surgery (i.e., operative permit) will be obtained by the hospital expecting to perform the surgery. The assistance of the referring station may be requested where permission is required from the next of kin who may reside closer to it.
6. If the designated hospital determines that surgery is indicated, the detailed medical record, with justification for each individual case, will be submitted to Central Office, addressed to the appropriate Regional Medical Director, Region No. — (11), for approval prior to surgery. The requesting hospital will be notified promptly of the results of the Central Office review. If

the designated hospital determines that surgery is not indicated, the patient will be transferred back to the referring hospital for continuing care or disposition.

7. This circular also applies to the stereotactic surgical treatment of epilepsy in any patient in whom there is evidence of abnormal aggressive or violent behavior.

BENJAMIN B. WELLS, M.D.,
Deputy Chief Medical Director:

[Item IV.B.3]

VETERANS ADMINISTRATION,
DEPARTMENT OF MEDICINE AND SURGERY,
Washington, D.C., March 3, 1972.

CHIEF MEDICAL DIRECTOR'S LETTER, II. 10-72-12

To: Directors of VA hospitals, domiciliary, outpatient clinics and regional offices with outpatient clinics.

Subject: Human experimentation, R. & E. Subcommittee on Human Studies, and extra-VA research funding.

1. In research studies in which human subjects may be at risk (physical, psychological, sociological or other) as a consequence of participation, the most important single consideration has always been protection of the human subjects. For this reason many different organizations have drawn up specific rules on procedures to assure proper protection of human subjects. General statements on this matter include the Nuremberg Code, the Helsinki Declaration, and AMA Guidelines for Clinical Investigation, November 30, 1966. Specific statements adopted by agencies of the U.S. Government include:

a. V.A. Manual M-3, Part I, Paragraph 120, Dated January 2, 1970. This manual segment applies to all research conducted in VA facilities. Also OP. G.C. 28-58 Dated June 25, 1958.

b. DHEW Grants Administration Manual, Part I, Chapter 1-40, Protection of Human Subjects, Dated April 15, 1971. The Institutional Guide to DHEW Policy on Protection of Human Subjects revised June 16, 1971, and memorandum Protection of Human Subjects, compliance with DHEW Policy, Dated July 15, 1971.

c. FDA Regulation 21 CFR 310.3 as amended March 17, 1971.

2. These statements emphasize different aspects of protection, but we have not found any conflicts among them. It is a prime obligation of each VA investigator, each ACOS, and each R&E Committee to assure full compliance with all applicable requirements on protection of human subjects. Specifically, VA investigators receiving DHEW funds, whether by direct grant or through an affiliated institution, must comply with both VA and DHEW regulations. Many investigators will also have to comply with FDA regulations on clinical testing of new drugs.

3. The varying requirements of federal agencies have led to some confusion regarding composition of Human Use Committees. Stations which anticipate a need for DHEW or IND approvals should establish a single R&E Subcommittee on Human Studies that meets all VA, DHEW, and FDA requirements simultaneously in order to avoid unnecessary proliferation of committees. An alternative is to use existing committees established by, or in conjunction with, affiliated institutions, provided such committees meet all applicable requirements.

4. Varying requirements for documenting patient consent seem to present no serious problems. VA Form 10-1086 is always necessary. DHEW will often require more specific documentation, particularly with respect to investigative procedures not directly related to therapy for an existing medical condition. Where there is any question check with the other agencies involved.

5. Any field stations with problems relating to assuring the Protection of Human Subjects participating in research studies should contact Research Service (151) through the appropriate RMD.

M. J. MUSSEY, M.D.,
Chief Medical Director.

[Item IV.B.4]

STATEMENT OF M. J. MUSSER, M.D., AT A JOINT HEARING ON "PSYCHOSURGERY IN VETERANS ADMINISTRATION HOSPITALS" BEFORE THE SUBCOMMITTEE ON HEALTH OF THE SENATE COMMITTEE ON LABOR AND PUBLIC WELFARE, AND THE SUBCOMMITTEE ON HEALTH AND HOSPITALS OF THE SENATE COMMITTEE ON VETERANS' AFFAIRS, JUNE 18, 1973

Dr. MUSSER. I was asked to prepare my statement around two basic questions:

One, a brief history of the involvement of the Veterans' Administration in the use of neurosurgical procedures for the treatment of certain psychiatric disorders, and

Two, procedures governing the involvement of human subjects in medical research projects conducted by Veterans' Administration investigators.

The underlying philosophy of the Department of Medicine and Surgery has been—and continues to be—concern for the whole person. Our concept of comprehensive care goes beyond that of providing treatment of the specific medical condition or disease process. It extends to the restoration of the patient to the highest possible level of independent, productive human functioning. To achieve this objective, we utilize a wide range of disciplines and have increasingly done so since the close of World War II.

These services are provided to any veteran undergoing medical treatment as an inherent part of his total treatment program. Beyond this, the VA research program operates to provide new techniques and procedures which improve the quality, range, and effectiveness of the services provided.

In the area of psychiatric treatment we have long been in the forefront in the continuing development of more effective programs and procedures. This effort has, however, been characterized by providing extensive safeguards for the patients and objective evaluation of the efficacy of every new procedure.

The Veterans' Administration has traditionally shown concern for the individual rights, safety, and welfare of veteran patients. This concern is documented in the written policy statements and manual regulations guiding both treatment procedures and research involving human subjects. The policies and safeguards relating to human participation in investigational treatment programs are similar but not identical to those prescribed by the Department of Health, Education, and Welfare. The fundamental principles are the same, that is, the requirement of a specific Peer Review Committee approval of all studies, the requirement of individual informed consent, and the endorsement of the principle that potential gains must outweigh potential risks.

The problem of the severely, chronically disturbed individual who endangers himself or others by extreme impulsive and destructive behavior has historically been a difficult problem for psychiatry—and society. Prior to the dramatic advent of the "tranquillizing or ataractic drugs" in the mid-1950's, the methods of controlling this type of patient were primarily limited to seclusion, sedation, or physical control, when electro-convulsive or insulin shock therapies failed or could not be administered because an existing physical condition made them a risk to life.

Opportunities for individualized therapeutic techniques aimed at personal growth and self-responsible functioning were, of necessity, subordinated to the need to provide the essential controls so lacking in the patient. Realistically, then, this meant a severely restricted life span and a future usually devoid of hope for anything more.

Psychosurgery had its beginning in this atmosphere, growing out of experimental work with animals prior to 1936. Dr. Egas Moniz, a Portuguese neurologist, became the recognized leader in the application of these techniques to human subjects following the publishing of a monograph in 1936. In 1949 he received the Nobel Prize in Medicine for his work.

Shortly after the original Moniz report, Dr. Walter Freeman and Dr. James Watts introduced in this country the procedure that came to be known as leucotomy and/or lobotomy. In the years between 1945-49, there were substantial utilization of these procedures, mainly as treatment for severe, long standing, refractive schizophrenia, both within the VA and in the medical community nationally. In the VA, the therapeutic results of these procedures were closely followed and carefully examined.

Thus in 1948, a review of some 1,500 patients lobotomized in Veterans' Administration hospitals was reported as failing to give clear-cut evidence regarding the value of the therapy. There was a consensus that benefits did accrue to operated patients but there was not clear evidence that the benefits were reflected in the discharge rates or in social or economic independence.

This stimulated the development of a cooperative research study, the Veterans' Administration lobotomy project, to determine which patients, if any, would profit by lobotomy and what operative procedure would most likely benefit a given patient, and also, to evaluate systematically the results of the lobotomies being performed in the VA hospitals at that time.

Of the 373 patients in the study, about one-half were lobotomized, the others serving as controls. All had entered the study over a period of 2½ years (1950 to 1953) and were hospitalized in six hospitals.

When the project began in 1950, VA procedure requires that all patients recommended for lobotomy be reviewed by a board of experts before operation. In some hospitals all candidates were reviewed by the lobotomy board and judged to be suitable for the operation before inclusion in either surgical treated or the control group. In many instances, the patients assigned to the control group were those for whom lobotomy had been considered appropriate, but the family had withheld permission for the operation. Controls were matched as closely as possible with the patients selected for lobotomy.

In general, the discharge rates for the operated patients increased each year after operation and were significantly higher than the discharge rate of the controls by the 4th year. The community adjustment of these discharged patients, although below average to marginal, was rated better for those who had been lobotomized than for the controls. Meanwhile, both within and without the VA, continued attempts were made to find other treatment approaches which would not only increase discharge rates but also show higher adjustment levels than the below average to marginal levels attained by the lobotomized patients. The new and different treatment approaches would also, hopefully, be more conservative, less drastic than surgical intervention.

By 1956, 9 years after the initiation of the VA lobotomy project, interest in this therapeutic procedure had waned considerably. In fact, at the time of the 3d year followup, about one-fifth of the hospitalized patients in this study were receiving ataractic drugs; by the 5th year, almost two-thirds were in this kind of therapy. Many different drugs were used, chlorpromazine being the most usual.

During this 5th year, the difference in post-operative evaluations between the operated and nonoperated groups became much less significant. From that point in 1959, psychosurgery declined rapidly and pharmacologic treatment increased at a remarkable rate.

A new type of psychosurgical procedure utilizing stereotactic guided techniques was reported by Spiegel and Wycis of Temple University School of Medicine in 1949. Since then there has been a revival of sorts in the use of neurosurgical procedures in the treatment of certain psychiatric abnormalities. Psychosurgery as it is practiced at the present time is restricted to the use of neurosurgical techniques for the alteration of abnormal, uncontrollable, violent behavior of psychiatric origin. Similar neurosurgical procedures for reasons other than behavior modification, for example, for relief of intractable pain, convulsive disorders, parkinsonism, or allied involuntary movement disorders— are not considered psychosurgery.

Four VA hospitals have been approved and specifically designated for the performance of psychosurgery. These VA hospitals are located at Durham, N.C.; Long Beach, Calif.; Minneapolis, Minn.; and Syracuse, N.Y.

The Administrator of Veterans' Affairs, Mr. Johnson, has summarized the current regulations governing the performance of psychosurgery in VA hospitals.

A recent formal systemwide survey of all VA hospitals from 1960 to date showed a total of 15 psychosurgical procedures for the alteration of behavior of psychiatric origin. This is in marked contrast to the more than 1,500 lobotomies performed in the 1940's, and even more significant with the knowledge that during the 14-year period upward to 1 million psychiatric patients were treated in VA hospitals.

The difference between the past and the present reflect a number of advances in the management of psychiatric patients; better controls of unproved or experimental procedures, ever-increasing improvement in the quality and

use of psychotropic drugs, the development of new and more effective techniques of psychotherapy, and finally, marked improvement and upgrading of psychiatric education, training, and skills—all of which make it possible to treat effectively most patients with abnormal behavior of psychiatric origin without recourse to psychosurgery.

In my opinion, much of the progress which has been made is a result of the impact of research and research methodology upon medical practice.

The VA medical research program began, for all practical purposes, immediately after World War II as a means of gaining valuable new knowledge through long-range followup studies of the illnesses and disabilities which the war produced. These studies were accomplished through the cooperative efforts of investigators working in varying numbers of Veterans' Administration hospitals. Many outstanding contributions to the improvement of medical care have come from these cooperative studies, the modern treatment of tuberculosis, the involvement of bioengineers in the development of prosthetic devices and sensory aids, the earlier noted study of the effectiveness of prefrontal lobotomy, the pioneer efforts in the determination of the effectiveness of psychotropic drugs, and the treatment of essential hypertension—just to mention a few.

Since 1947, there has been a steady but modest growth in the VA medical research program. Presently, it involves investigators in 180 of the 168 VA hospitals. It is an intramural program, operating in support of the VA's primary mission, the care of sick and disabled veterans. By making it possible for the physician-investigator to take the problems arising at his patient's bedside to the research laboratory for study and elucidation, the research program has made it possible for the VA to recruit and retain physicians of outstanding caliber. It also has enhanced the effectiveness of the affiliation of many VA hospitals with medical and dental schools.

The nature and scope of research activities at a VA hospital are determined and monitored by a research committee made up of nationally recognized scientists from the hospital and the affiliated medical school and university. Besides participating in the VA research program, our investigators may seek and obtain research funding from other sources, including the National Institutes of Health and the National Science Foundation.

All VA research is reviewed at multiple levels within the agency and by periodic in-depth evaluation by visiting peer review teams. Reviews are conducted not only to maintain high levels of scientific merit and relevance to the agency's primary mission of patient care, but also to assure conformity with generally accepted ethical standards, such as the Nuremberg Code and the Helsinki Declaration. When human subjects are involved in research studies, a subcommittee of the hospital research committee, designated the subcommittee on human studies, reviews the protocol of the investigator, and if it is approved, files a written report of approval before the study can proceed. In addition to forwarding this completed report to the investigator, the subcommittee on human studies must instruct him to inform the patient fully concerning the study and the planned use of drugs and/or procedures in the investigation, including possible adverse reactions, secure consent by the patient, by signature on a VA form used for this purpose only, sign the completed form himself, and follow other related procedures as described in the VA manual (m-3, pt. I, par. 1.20, dated Jan. 2, 1970). The manual also states that, "The wisdom and sound professional judgment of the investigator, professional staff members, R. & E. committee, and the subcommittee on human studies collectively will be used in determining what constitutes the rights and welfare of human subjects in research, which constitutes informed consent, and what constitutes risk and potential medical benefit of the use of a particular drug and/or investigational procedure."

Each protocol for research involving human subjects is also reviewed on a national level by experts in the particular field of inquiry, and these reviewers consider the ethics of the proposed studies. These reviews, however, are not necessarily completed before initiation of the studies, since they frequently are accomplished during the periodic peer group evaluation of a hospital's full range of research activities.

Most of the above regulations and procedures are described in the Chief Medical Director's letter of March 3, 1972 (II, 10-72-12) and the eight re-

lated documents mentioned in that letter. I would be happy to submit copies for the record if you so wish.

All of this is not to say that it is impossible for an individual investigator, either through ignorance or ineptitude, or by a conscious attempt to subvert the regulations, to infringe on the rights of a given patient. It is to say that we have, by regulation, required the involvement of many individuals in these decisions and have set up machinery by which the operation of the procedures is continually monitored by still other individuals.

In addition, since we believe a case can be made for the argument that it is unethical not to pursue possible cures for human diseases when these may be feasible, we have attempted to avoid making the regulation so restrictive as to completely stifle research.

In conclusion, VA has selectively utilized psychosurgery techniques for severely disturbed, chronic psychiatric patients refractory to other treatment procedures. It has done so within the framework of carefully defined policies and procedures to protect the patients and evaluate the efficacy of the procedure, all of which are in conformance with the regulations governing the involvement of human subjects in medical research.

Currently, psychosurgery is rarely employed because other effective means of dealing with extremely disturbed and destructive behaviors have since been developed. I would be pleased to elaborate further or answer any questions the committee might have.

[Item IV.B.5]

U.S. SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
Washington, D.C., October 30, 1973.

MARC J. MUSSER, M.D.,
Chief Medical Director,
Veterans Administration,
Washington, D.C.

DEAR DR. MUSSER: Thank you very much for providing the Subcommittee with materials requested during the hearings on Psychosurgery in the Veterans Administration held jointly by the Subcommittee on Health of the Labor and Public Welfare Committee and the Subcommittee on Health and Hospitals of the Veterans Affairs Committee.

Our review of the materials submitted to the Subcommittee raises a number of additional questions.

In case number 2A, I am concerned that the information for items 13, and 14, as well as 22 and 23, does not exist. These cover medical records which, it would seem to me, must form an essential part of the patient's history. Could you explain why these records are not available?

In the case of this same individual who had a second psychosurgical procedure performed, again items 15 and 22 pertinent to the patient's medical history are not in the record. I note this patient "wished to be discharged completely and sever all clinical connections with the VA". This attitude seems to indicate a disillusionment with the care received.

Case number 4, I believe, merits your personal review and a further report. The patient's diagnosis would not appear, to a layman, to require psychosurgery. The record shows there was no change in economic and vocational adjustment following the operation, and tragically ends with the patient's death while on AWOL following subsequent rehospitalization shortly after the psychosurgery procedure.

The response to item 25 on patient No. 9 indicates some mixup in the records. This case may require additional review, since, in addition, the records during the patient's treatment are incomplete.

Patient No. 10 underwent three psychosurgical procedures and is still hospitalized. This case may also warrant your personal review.

I am concerned that out of these thirteen individual cases, there is no record for approximately the last ten years for case No.'s 3, 7, and 9. For each of these cases, I would appreciate being advised of the patient's condition at the time of his last visit to a VA facility and whether, in your judgement, his condition was such that the VA should have made further and effective effort to follow up on his treatment.

In addition, during the joint hearings, I asked a number of questions to which the Subcommittees have not yet received responses.

The VA representatives all testified to the effect that psychosurgery has been utilized only where the patient is severely disturbed, is of a danger to himself or others, and is not responsive to any other form of treatment, as enunciated in paragraph 3 of your February 7, 1973, Circular. At the hearing, I asked that the VA submit for the record, with its detailed summary of the 15 patients on whom psychosurgical procedures were performed, an evaluation of whether this paragraph 3 standard was met in each of those cases. I believe this matter is of sufficient importance that it merits a personal review by you or your deputy, Dr. Wells.

During the hearings, in discussing the informed consent form with you, I suggested, and you agreed, that the VA should attach to this form a written explanation in very simple language spelling out the medical procedure to be followed and any potential side effects or complications to ensure that the patient or his guardian had a full understanding of the procedure and any attendant risk involved. Could you advise me of what steps have been taken to implement this reform?

I would appreciate a report from you on all of the above matters at your earliest convenience.

Thank you for your continued cooperation with the Subcommittee.

Sincerely,

ALAN CRANSTON,

Chairman, Subcommittee on Health and Hospitals.

P.S.—It has just come to my attention that *Drug Research Reports* of September 26 reported that an ad hoc advisory panel at the National Institute of Mental Health has recommended that psychosurgery on children and institutionalized patients be banned for at least two years. The panel, made up of lawyers, judges, professors, and administrators, determined that psychosurgery is a dangerous experimental procedure that might be utilized on the grounds that the procedure might benefit humanity, regardless of the danger to the patient. Your comment on this recommendation would be very useful to the Subcommittee.

V. OTHER DEPARTMENTS AND AGENCIES

A. Correspondence

[V.A. 1]

SURVEY LETTER FROM CHAIRMAN ERVIN

Over the past year I have become increasingly concerned about the many difficult problems raised by biomedical and behavioral research designed to alter the behavior of human subjects. Although forward-thinking researchers must be enthusiastically encouraged to continue their work, strong ethical guidelines must be applied in order to preserve the individual liberties of persons affected by that research. It seems to me that the federal government has a special responsibility to safeguard these liberties in all such experimentation which it conducts.

The Senate Subcommittee on Constitutional Rights is currently engaged in a survey of federally-funded biomedical and behavioral research projects which are designed to alter the behavior of individual subjects. Our purpose is to determine the nature and extent of such research in order that we may better evaluate the need for legislative action in this area.

Various federal agencies are being surveyed on this subject, including _____. By way of providing information for this survey, I would appreciate your providing the following information, both for the agency as a whole, and for all subsidiary _____ organizations, including recipients of grants or those otherwise associated with _____.

For each of the _____ operating organizations which supports or conducts biomedical and/or behavioral research which is designed to alter the behavior of human subjects, please supply the following information.

1. List each research project by:

- (a) Name of grantee and principal researcher (individual and institution);
- (d) A brief description of the project.
- (c) Amounts of money involved (total and FY-74); and
- (b) Dates of _____ involvement;

2. Describe the review procedures which apply to such research projects, both prior to _____ participation and during the course of such research, with particular emphasis on ethical considerations, such as informed consent. Include copies of all relevant guidelines, manuals, regulations and other documents which set forth these procedures.

The subcommittee expects to use the information we have requested in preparing a report on the federal involvement in biomedical and behavioral research aimed at altering human behavior. Since this report is to be published within the very near future, the subcommittee would appreciate your cooperation in making sure that we will receive this information no later than April 30, 1974. Though this request may appear to involve considerable information, I hope that your existing review procedures will enable you to gather this information expeditiously. If you have any questions regarding the subcommittee's questions, please feel free to contact the subcommittee staff: Lawrence M. Baskir, Chief Counsel, or Dorothy Glancy, Counsel.

With kindest wishes.

[Item V.A.2]

U.S. DEPARTMENT OF AGRICULTURE,
 AGRICULTURAL RESEARCH SERVICE,
 Washington, D.C. April 26, 1974.

Hon. SAM J. ERVIN, Jr.,
 Chairman, Subcommittee on Constitutional Rights,
 Committee on the Judiciary,
 U.S. Senate.

DEAR MR. CHAIRMAN: We have now had a chance to review USDA research programs to identify those which are designed to alter the behavior of human subjects, as outlined in your inquiry of April 1, 1974, to Secretary Butz. It was not expected that this search would uncover any biomedical or behavioral research studies designed to produce a lasting change in an individual subject. No such research is being supported by the Department.

Our computer inventory of agricultural research has turned up eighty-four individual research projects dealing with some aspects of "human behavior." The great majority of these are only observational. They use such techniques as interviews, questionnaires, and direct observation to derive information on aspects of human behavior.

There are fourteen projects that involve some types of intervention in order to observe possible effects on the subjects under study. Most of these involve the use of education or communication as a means of encouraging a particular behavioral response. Some utilize a modest change in the physical environment. For example, four of the studies relate to testing various techniques in nutrition education. Another five studies deal with methods of communication or education. One involves research dealing with techniques in comprehension and communication through speaking. Two projects deal with changes in lighting of the room to determine effects on behavior in a classroom setting. Another uses an improved diet to assess improvement in social, mental, and physical development. One project is testing effects on behavior by manipulating winning and losing in a problem-solving contest.

We do not believe that any of these research projects relates to the biomedical or behavioral research in which you expressed interest because of a concern about ethical problems. Accordingly, we have not included some of the details to identify the grantee, the institution involved, the amount of money involved, and other items mentioned in your communication. Should you still wish this, however, it can be furnished to you quite readily.

Sincerely,

T. W. EDMINSTER, Administrator.

[Item V.A.3]

U.S. ATOMIC ENERGY COMMISSION,
 Washington, D.C., April 23, 1974.

Hon. SAM J. ERVIN, Jr.,
 Chairman, Subcommittee on Constitutional Rights,
 Committee on the Judiciary,
 U.S. Senate.

DEAR SENATOR ERVIN: This is in response to your letter of April 2, 1974, regarding the Subcommittee's survey of federally funded biomedical and behavioral research designed to alter the behavior of human subjects.

The Atomic Energy Commission does not support research to alter the behavior of human subjects.

The Commission, through its Division of Biomedical and Environmental Research, does conduct a research program to obtain information to aid in understanding the possible short- and long-term effects on man and his environment of processes related to the production and use of energy.

The program encompasses a broad effort to gain an understanding of the interaction of radiation and manmade pollutants with living organisms and ecosystems. The program also includes studies on use of this knowledge so that AEC activities can be conducted more safely and effectively, possible haz-

ards to individuals and human populations can be evaluated and necessary precautions taken, and overall biological costs of the various energy options can be assessed.

Research also is conducted to provide the bases for new and useful applications of radiation and radioisotopic methodology in clinical, biological and environmental research.

We look forward to seeing a copy of your published report in the near future.

Sincerely,

DIXY LEE RAY, *Chairman.*

[Item V.A.4]

THE SECRETARY OF COMMERCE,
Washington, D.C., April 22, 1974.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights,
Committee on the Judiciary,
U.S. Senate,
Washington, D.C.*

DEAR MR. CHAIRMAN: This is in further reply to your letter, dated April 1, 1974, requesting information for a report by your Subcommittee on federally-funded biomedical and behavioral research designed to alter the behavior of human subjects.

This is to advise that the Department of Commerce is not engaged in the conduct or support of such research projects.

Sincerely,

FREDERICK B. DENT,
Secretary of Commerce.

[Item V.A.5]

DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING,
Washington, D. C. April 12, 1974.

Hon. SAM J. ERVIN, Jr.,
*U.S. Senate,
Washington, D.C.*

DEAR SENATOR ERVIN: I am replying on behalf of Secretary Schlesinger to your letter of 29 March 1974, requesting information about DoD research in the field of behavior modification.

The Department of Defense conducts little, if any, research which could be construed as behavior modification even in the broadest definition of the term. Nevertheless, in order that there is no confusion as to the interpretation of this terminology, my office will be in contact with your staff to insure that common terms of reference and definitions are used in the data you requested. Our detailed response will be provided prior to your 30 April 1974 deadline.

If I can be of further assistance on this matter, please do not hesitate to call.

Sincerely,

MALCOLM R. CURRIE

DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING,
Washington, D. C., May 3, 1974

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights,
U.S. Senate,
Washington, D.C.*

DEAR MR. CHAIRMAN: This is in response to your letter of 29 March 1974 to Secretary Schlesinger requesting information pertaining to DoD biomedical and behavioral research projects which are designed to alter the behavior of individual subjects.

The operating agencies of the Department of Defense which support or conduct biomedical and/or behavioral research have reviewed their research projects to determine if any projects are designed to alter the behavior of human subjects. As a result of discussions with Ms. Dorothy Glancy, Subcommittee Counsel, the following areas of Subcommittee interest were identified:

1. Leadership; 2. Advertising; 3. Bio feedback; 4. Behavior modification (Skinnerian conditioning procedures); 5. Psychosurgical procedures; 6. Brain stimulation; and 7. Psychiatric clinical research.

A single page fact sheet for each in-house and contract research or clinical investigation project ongoing or initiated during FY 1972, FY 1973, and FY 1974 which pertained to the above subjects and was designed to alter the behavior of individual subjects is attached (Atch 1). While we do not believe that these projects fall within the interest of the Subcommittee's investigation, they are submitted in accordance with Ms. Glancy's instruction. Please note that DoD has no clinical research projects designed to alter the behavior of individual subjects. A description of the clinical investigation program is included for your information (Atch 2).

Also forwarded are all relevant guidelines, manuals, regulations and other documents which describe the review and control procedures for such research projects involving the use of volunteers where there is a risk of health damage (Atch 3). In essence, provision is made to review in advance, at levels of command above the performing unit, all such projects. The volunteer must give his informed consent in writing. All necessary preliminary tests with laboratory animals and human simulators must have been conducted and evaluated before a human subject is used. A physician, other than the principal investigator, is designated to be responsible for the professional care and safety of the volunteer during the project. The volunteer, at any time, has the right to revoke his consent and withdraw from the experiment without prejudice.

I trust this information will be useful to your subcommittee.

Sincerely,

MALCOLM R. CURRIE.

Attachments.

a. Project Title: Development of Cold Injury Models and Characterization of Frostbite, Non-Freezing Cold Injuries and Whole Body Heat Loss Common to the Soldier.

b. Contract/In-House: In-House.

c. In-House organization and principal investigator: US Army Research Institute of Environmental Medicine, Natick, MA. CPT Murray P. Hamlet.

d. Initiation of project: 1970.

e. Funding: FY 1974 \$ 400,000.

Total: \$1,600,000 (Approx.).

f. Description of Project: Study factors involved in frostbite and other non-freezing injuries; as well as whole body heat loss in both animals and man, to provide a rational basis for treatment and prevention of those cold injuries sustained by the military. The following areas are being investigated in humans and animals: (1) the suitability of animal model systems to mimic those clinical cold injuries seen during military operations in cold climates; (2) cell destruction following frostbite; (3) physiological ethnic and other factors associated with cold injury; (4) physiologic, anatomic and intracellular changes in man and animals subjected to whole body cooling; (5) evaluation of different methods of resuscitation on accidental hypothermic animals and man; and (6) due to recent knowledge acquired in understanding frostbite, it seems apparent that special emphasis must be placed on the study of the microcirculation following freeze injury. Electron microscopic evidence indicates that as early as 15 minutes following an experimental freeze-thaw model of cold injury, circulation to the affected capillaries becomes sluggish and stops entirely. While some studies have suggested blood platelets and their aggregates as possible sources of the capillary blockade, work is progressing on an *in vivo* microcirculatory model to positively ascertain the cause of the circulatory collapse. This work is being pursued from multiple approaches. The hamster cheek pouch is being utilized to evaluate the effectiveness of substances which prevent platelet aggregation to alter the blood flow pattern in the previously frozen pouch. Electron micrographs have identified very serious organelle damage to muscle cells after freezing injury but supercooling without ice crystal

formation does not structurally alter the cells. Endothelial cell damage in capillaries is severe in the same freeze-thaw model.

One small element of this project has concerned study of physiologic self-control of blood vessels in and near the skin. It is postulated that some persons can control to some degree (by unknown mechanism) the size of these blood vessels. An understanding of this self-control would assist in developing methods to deal with cold exposure. Research on this physiological biofeedback phenomenon was funded at approximately \$15,000 annually in FY 72 and 73. This research has now terminated. It was found that the amount of blood flow control was markedly reduced during cold exposure, thus severely limiting the potential value of this approach.

a. Project Title: Military Performance: Biomedical Aspects

b. Contract/In-House: In-House

c. In-House organization and principal investigator: US Army Medical Research Laboratory, Fort Knox, KY.—MAJ A. J. Lloyd.

d. Initiation of Project: 1956.

e. Funding: FY 1974 \$211,000.

Total \$8,400,000 (approx.).

f. Description of project: The soldier's mode of response to stressful situations affects his efficiency and the accomplishment of the military mission. With the increased complexity of performance demanded of the individual soldier, a research program has been pursued to study fatigue and its influence on performance. The areas considered include acquisition and degradation of basic and complex physical skills through the study of fine motor unit training; the use of electromyographic feedback to increase muscle efficiency and delay the onset of fatigue; and the electroencephalographic correlates of performance variability. A study is being made of the effect of auditory feedback on the efficiency of gross muscle activity. Single motor unit research is concerned with acquisition and maintenance of control of single and multiple units. A research program is being developed to study the relationships between certain electroencephalographic patterns and response readiness in simple motor and sensory-motor tasks. The study of human motor functions has been directed toward the assessment of the central and peripheral electrophysiological components of performance. Preliminary analyses on studies involving the influence of specific EEG patterns on sensorimotor information processing support the concept that these variables influence performance efficiency. Development has continued to relate voluntary motor activity and reflex motor responses to central components as a physiological model for neuromuscular functions.

a. Project Title: Military Performance and Stress; Factors Leading to Decrements of Performance and Disease

b. Contract/In-House: In-House.

c. In-House organization and principal investigator: Walter Reed Army Institute of Research—F. W. Hegge, Ph.D.

d. Initiation of project: 1961.

e. Funding: FY 1974 \$165,000.

Total: 2,000,000 (approx.).

f. Description of project: Stressful environments, physiological conditions and performance demands likely to produce significant deterioration in the accomplishment of a soldier's mission are studied. The behavioral and physiological functions that contribute to deteriorated performance are identified and therapeutic and prophylactic strategies are developed. Using psychophysiological and operant methodology, time series analysis, and computer-based control and analysis techniques, behavioral and physiological events are isolated, analyzed, and controlled. Endogeneous and exogenous factors contributing to behavioral and physiological rhythmicity and performance levels are studied under specified normal and stressful conditions. Progress includes the isolation and characterization of physiological and behavioral power spectra under conditions of extended (48 hr) sleep deprivation. Work on brief changes in stress-related autonomic functions specifically related to different types of information processing is continuing. The relationship between information processing, brief autonomic changes and obesity is being delineated.

a. Project Title: Management of Primary Hypertension and Autonomic Dysfunction Using Operant Conditioning Techniques.

b. Contract/In-House: In-House

c. In-House organization and principal investigator: Walter Reed Army Institute of Research—W.F. Hegge, Ph.D.

d. Initiation of Project: 1970

Termination: 1972

e. Funding: FY 1974 \$0

Total: \$ 150,000

f. Description of project: Development of behavioral techniques for the out-patient management of primary hypertension through appropriate application of existing principles of operant and respondent conditioning and systematic exploration of the role of these principles in the pathogenesis of hypertension, autonomic dysfunction, and psychosomatic disease. Existing knowledge of operant principles is applied to both normal and hypertensive individuals to effect reductions in blood pressure of sufficient duration to warrant development and standardization of an optimal procedure for management of primary hypertension in out-patients. Techniques are extended to include the modification of esophageal, gastric, and colonic motility for the management of psychosomatically based gastrointestinal disorders. Concurrently, studies in non-human primates are conducted to update operant technology, to explore potentially productive methods for treatment of patients, and to facilitate development of required bioinstrumentation. The continued evaluation of pressure cuff based monitoring of blood pressure has demonstrated the unsuitability of this approach. Work is proceeding on the application of tetrapolar impedance techniques to the monitoring of peripheral vascular resistance. The continuous feedback afforded by this technique will be used in conjunction with periodic cuff pressure measurements to provide an adequate measurement system. Preliminary evaluation of solid state motility probes is underway. Significant progress has been made in the study of blood pressure control in non-human primates using chronically implanted catheters.

a. Project Title: Factors which Enable Naval Personnel to Remain Alert

b. Contract/In-House: Contract

c. Contractor and Principal Investigator: Harvard Medical School Boston, Massachusetts; Dr. David Shapiro

d. Initiation Date: November 1960. Termination Date: Continuing.

e. Funding: FY 1974 \$30,000.

Total \$327,743.

f. Description of Project: The work consists of a series of laboratory experiments aimed (1) at demonstrating the feasibility of modifying physiological responses (e.g. heart rate, blood pressure, electrical conductance of the skin, blood flow in extremities) by means of bio-feedbacks and operant conditioning techniques; and (2) if the procedures are successful to determine if they have a facilitative effect on vigilance. Successful modification will permit the individual to achieve a high degree of vigilance during a period of great stress.

All subjects for the experiments are volunteers. Experimental procedures are reviewed and approved by review panels within the institution to insure conformance with National Institutes of Health guidelines as well as American Psychological Association's "Ethical Principles in the Conduct of Research with Human Participants."

a. Project Title: Effects of Combined Pharmacological and Biofeedback Procedures on Performance Enhancement.

b. Contract/In-House: Contract

c. Contractor and Principal Investigator: Institute for Research, State College, Pennsylvania; Dr. Paul M. Hurst

d. Initiation Date: February 1973. Termination Date: December 1977 (estimated).

e. Funding: FY 1974 \$23,000.

Total \$55,058.

f. Description of Project: The work consists of laboratory experiments to explore the effectiveness of combining selected pharmacological agents with biofeedback techniques in teaching people to learn to control bodily responses associated with relaxation and rapid induction of sleep. If successful, trained individuals would be able to rapidly go to sleep after periods of exposure to stress or possibly under adverse environmental conditions and thereby benefit from the recuperative effects of sleep under operational conditions. The onset of sleep would be under the individual's control.

All subjects for the experiments are volunteers. Experimental procedures are reviewed and approved by review panels within the institution to insure conformance with National Institutes of Health guidelines as well as American Psychological Association's "Ethical Principles in the Conduct of Research with Human Participants."

a. Project Title: Design and Implementation of an Advertising Pretesting Facility.

b. Contract.

c. Contractor and Principal Investigator: Human Resources Research Organization, Dr. Thurlow R. Wilson.

d. Initiated 1 July 1972; terminated 31 May 1973.

e. Funding FY 1974 0.

Total \$45,000.

f. Description of project: The objective was to design and develop procedures and methodology for a laboratory facility for pretesting recruiting advertisements prior to mass exposure. A questionnaire and the laboratory procedures were developed. Thirty old recruiting advertisements were evaluated and these evaluations correlated with the observed past successes of the advertisements as measured by coupon responses. Methods were developed for summarizing advertisement evaluation data for feedback to Army advertising decision makers.

a. Project Title: Officer Basic and Non-Commissioned Officer Assessment System.

b. In-House.

c. In-House Organization and Principal Investigator: US Army Research Institute for the Behavioral and Social Sciences, Mr. A. E. Castelnovo.

d. Initiated 1 July 1972; continuing.

e. Funding FY 1974 \$105,000.

Total \$202,000.

f. The objective is to develop an assessment system including appropriate methods and instruments for measurement qualities for use in leadership, development, training and assignment in Officer Basic and NCO courses. Initial research identified the assessment dimensions to be measured and the sources of evaluation data that might be tapped. A diagnostic battery of paper and pencil tests and peer rating techniques were implemented in the Officer Basic Course. Work is continuing on the development of other instruments and techniques to provide additional measures of leadership qualities.

a. Title: Learning of Autonomic Behavior

b. Contract: Yes

c. Contractor and Principal Investigator: Harvard University, Dr. Craig Fields.

d. Initiation and termination dates of project: October 1970-January 1974.

e. Funding: FY 74 \$69.

Total \$264K.

f. Description of Project: The purpose of this study was to develop powerful computer-based methodologies for training subjects to control autonomic nervous system reactivity, particularly heartrate. Specifically, the ultimate goal was to determine whether heartrate regulation can lower heartrate from higher levels induced by real life events (e.g., anxiety, exercise) and whether performance of some military tasks can thereby be enhanced. It should be noted that subjects have been trained to change their own internal behaviors; in no case has any effort been made by one party to manipulate the behavior of another. The results of this training have been to give personnel greater control over their own (and only over their own) behavior and physiology.

a. Title: Self-Regulations as an Aid to Human Effectiveness

b. Contract: Yes

c. Contractor: San Diego State College Foundation

Principal Investigator: Dr. William L. Erickson

Subcontractors: University of Pennsylvania, Langley Porter, Neuropsychiatric Institute, University of Colorado, Institute for Behavioral Research, Johns Hopkins University, University of California, Los Angeles, McGill University, Harvard University Medical School, and University of Louisville.

d. Dates: May 1, 1970—Present.

e. Funding: FY 1974 \$370K.

Total \$2,584K.

f. **Description:** This program of research is aimed at the development of techniques to allow D&D personnel to control, on their own, internal events which presently occur involuntarily. Goals include development of portable, stable, systems, perhaps involving hardware, to be used by individuals for the automodification of internal events.

Objectives have been:

Determine overt behavioral performance-related effects of self-regulation of autonomic processes and central nervous system activity.

Develop techniques for training the self-regulation of vigilance, and of skin temperature (for greater effectiveness in cold environments).

Develop techniques for rapid auto-induction of sleep onset, and test various altered states for relative effectiveness in countering effects of sleep deprivation.

It should be noted that subjects have been trained to change their own internal behaviors; in no case has any effort been made by one party to manipulate the behavior of another. The results of this training have been to give personnel greater control over their own (and *only* over their own) behavior and physiology.

a. **Title:** Self-Regulation as an Aid to Human Effectiveness.

b. **In-house.**

c. **Contractor:** Naval Medical Neuropsychiatric Research Unit. **Principal Investigator:** Dr. Laverne Johnson.

d. **Dates:** May 1, 1970--June 30, 1974.

e. **Funding:** FY 1974 \$85K.

Total \$823K.

f. **Description:** Work at the Navy Medical Neuropsychiatric Research Unit in San Diego has investigated the relative recuperative value of voluntarily altered EEG states, muscle relaxation, and brief periods of sleep for sleep-deprived personnel. Rapid induction of sleep through self-imposition of a specific pattern of heart rate and respiration was also studied. This work (which was supported by direct transfer of funds from ARPA to BUMED) has utilized as subjects Naval personnel in Naval environments engaged in regular military duties.

Specifically, subjects have been trained to emit, voluntarily, ALPHA brain waves, and to relax their muscles, for specified periods following sleep loss. This activity then has been tested for its effect upon decrements in job performance which usually result from sleep loss.

It should be noted that subject has been trained to change their *own* internal behaviors; in no case has any effort been made by one party to manipulate the behavior of another. The results of this training have been to give personnel greater control over their own (and *only* over their own) behavior and physiology.

a. **Project Title:** Evaluation of Incentive Management Techniques for Air Force Technical Training.

b. **Contract.**

c. **Contractor and Principal Investigator:** Purdue Research Foundation, Dr. Robert D. Pritchard.

d. **Initiation and Termination Dates of Project:** June 1971--September 1973.

e. **Funding:** FY 74 \$0.

Total \$60,877.

f. **Description of Project:** The effort was designed to conduct an evaluation of the feasibility and effectiveness of adopting incentive management techniques to Air Force technical training. It was also designed to determine how incentive management training strategies affect trainee morals, attitudes and performance. Incentive management techniques investigated include: excused from work details, choice of uniform, 3-day passes, day off from class, leave class early, walk to class rather than march, letter of commendation to the commanding officer at student's first assignment, letter of commendation to stu-

dent's parents, US Savings Bond, free BX gift certificate, free transportation off base and a free Airman's Club, merchandise certificate.

a. Project Title: Development and Evaluation of Social Incentive Systems for Air Force Technical Training

b. Contract

c. Contractor and Principal Investigator: Ohio State University Research Foundation, Dr. Milton D. Hakel

d. Initiation and Termination Dates of Project: June 1972-September 1973

e. Funding: FY 74 \$0.

Total \$53,283.

f. Description of Project: The effort was designed to explore a social incentive award system for instructional application. It is anticipated that development of such a system designed to enhance student motivation in Air Force training settings would afford a potential means of improving training efficiency and effectiveness at a relatively low operational cost. The fundamental incentive was recognition by peers as the leader in assisting fellow students. Various methods of developing and applying the incentive were investigated.

a. Project Title: Evaluation of the Effect of Various Schedules of Incentive Delivery on Trainee Performance.

b. Contract

c. Contractor and Principal Investigator: Institute for Organizational Behavior Research, Lafayette, Ind., Dr. Robert D. Pritchard.

d. Initiation and Termination Dates of Project: March 1973-December 1973.

e. Funding: FY 74 \$0.

Total \$58,765.

f. Description of Project: The effort is designed to compare effects of several schedules of monetary incentive delivery on student performance in a computer-managed instructional setting. Schedules refer to rate at which the incentive is dispensed which in turn is dependent on how much the student accomplishes.

a. Project Title: Impact of Advertising and Counseling on Enlistment Intentions.

b. In-house.

c. In-house organization and principal investigator: Air Force Human Resources Laboratory, Mr. Bart M. Vitola.

d. Initiation and Termination Dates of Project: June 1973-June 1975.

e. Funding: FY 74 \$28,590.

Total \$30,040.

f. Description of Project: The effort was designed to evaluate the effects of Air Force advertising as a motivator for enlistment. The effects of different geographical area, educational levels, and media will be investigated.

RESEARCH AND DEVELOPMENT

USE OF VOLUNTEERS AS SUBJECTS OF RESEARCH

ARMY REGULATIONS

No. 70-25

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON 25, D.C., 26 March 1962

	Paragraph
Purpose	1
Definition	2
Exemptions	3
Basic principles	4
Additional safeguards	5
Approval to conduct experiment	6
Civilian employees	7
Implementing instructions	8
Appendix. Legal implications

1. Purpose. These regulations prescribe policies and procedures governing the use of volunteers as subjects in Department of the Army research, including research in nuclear, biological, and chemical warfare, wherein human beings are deliberately exposed to unusual or potentially hazardous conditions. These regulations are applicable worldwide, wherever volunteers are used as subjects in Department of the Army research.

2. Definition. For the purpose of these regulations, unusual and potentially hazardous conditions are those which may be reasonably expected to involve the risk, beyond the normal call of duty, of privation, discomfort, distress, pain, damage to health, bodily harm, physical injury, or death.

3. Exemptions. The following categories of activities and investigative programs are exempt from the provisions of these regulations:

a. Research and nonresearch programs, tasks, and tests which may involve inherent occupational hazards to health or exposure of personnel to potentially hazardous situations encountered as part of training or other normal duties, e.g., flight training, jump training, marksmanship training, ranger training, fire drills, gas drills, and handling of explosives.

b. That portion of human factors research which involves normal training or other military duties as part of an experiment, wherein disclosure of experimental conditions to participating personnel would reveal the artificial nature of such conditions and defeat the purpose of the investigation.

c. Ethical medical and clinical investigations involving the basic disease process or new treatment procedures conducted by the Army Medical Service for the benefit of patients.

4. Basic principles. Certain basic principles must be observed to satisfy moral, ethical, and legal concepts. These are—

a. Voluntary consent is absolutely essential.

(1) The volunteer will have legal capacity to give consent, and must give consent freely without being subjected to any force or duress. He must have sufficient understanding of the implications of his participation to enable him to make an informed decision, so far as such knowledge does not compromise the experiment. He will be told as much of the nature, duration, and purpose of the experiment, the method and means by which it is to be conducted, and the inconveniences and hazards to be expected, as will not invalidate the results. He will be fully informed of the effects upon his health or person which may possibly come from his participation in the experiment.

(2) The consent of the volunteer will be in writing. A document setting forth substantially the above requirements will be signed by the volunteer in the presence of at least one witness not involved in the research study who will attest to such signature in writing.

(3) The responsibility for ascertaining the quality of the consent rests upon each person who initiates, directs, or conducts the experiment. It is a personal responsibility which may not be delegated.

b. The number of volunteers used will be kept at a minimum consistent with *c* below.

c. The experiment must be such as to contribute significantly to approved research and have reasonable prospects of yielding militarily important results essential to an Army research program which are not obtainable by other methods or means of study.

d. The experiment will be conducted so as to avoid all unnecessary physical and mental suffering and injury.

e. No experiment will be conducted if there is any reason inherent to the nature of the experiment to believe that death or disabling injury will occur.

f. The degree of risk to be taken will never exceed that determined to be required by the urgency or importance of the Army program for which the experiment is necessary.

g. Proper preparations will be made and adequate facilities provided to protect the volunteer against all foreseeable possibilities of injury, disability, or death.

h. The experiment will be conducted only by scientifically qualified persons. The highest degree of skill and care will be required during all stages of the experiment of persons who conduct or engage in the experiment.

i. The volunteer will be informed that at any time during the course of the experiment he will have the right to revoke his consent and withdraw from the experiment, without prejudice to himself.

j. Volunteers will have no physical or mental diseases which will make the proposed experiment more hazardous for them than for normal healthy persons. This determination will be made by the project leader with, if necessary, competent medical advice.

k. The scientist in charge will be prepared to terminate the experiment at any stage if he has probable cause to believe, in the exercise of the good faith, superior skill, and careful judgment required of him, that continuation is likely to result in injury, disability, or death to the volunteer.

l. Prisoners of war will not be used under any circumstances.

5. Additional safeguards. As added protection for volunteers, the following safeguards will be provided:

a. A physician approved by The Surgeon General will be responsible for the medical care of volunteers. The physician may or may not be the project leader but will have authority to terminate the experiment at any time that he believes death, injury, or bodily harm is likely to result.

b. All apparatus and instruments necessary to deal with likely emergency situations will be available.

c. Required medical treatment and hospitalization will be provided for all casualties.

d. The physician in charge will have consultants available to him on short notice throughout the experiment who are competent to advise or assist with complications which can be anticipated.

6. Approval to conduct experiment. It is the responsibility of the head of each major command and other agency to submit to The Surgeon General a written proposal for studies which come within the purview of this directive. The proposal will include for each study the name of the person to be in charge, name of the proposed attending physician, and the detailed plan of the experiment. The Surgeon General will review the proposal and forward it with his comments and recommendations on medical aspects to the Chief of Research and Development for approval. When a proposal pertains to research with nuclear, biological, or chemical agents, the Chief of Research and Development will submit the proposal, together with The Surgeon General's review, to the Secretary of the Army for approval. No research with nuclear, biological, or chemical agents using volunteers will be undertaken without the consent of the Secretary of the Army.

7. Civilian employees. When civilian employees of the Department of the Army volunteer under this program, the following instructions will be observed:

a. Any duty as a volunteer performed during the employee's regularly scheduled tour of duty will be considered as constructive duty for which straight time rates are payable. Time spent in connection with an experiment outside the employee's regularly scheduled tour will be considered as voluntary overtime for which no payment may be made nor compensatory time granted. The employee will be so informed before acceptance of his volunteer services.

b. Claims submitted to the Bureau of Employees' Compensation, U.S. Department of Labor, because of disability or death resulting from an employee's voluntary participation in experiments, will include a citation to title 10, United States Code, section 4503 as the Department of the Army authority for the use of such volunteer services.

c. All questions concerning hours of duty, pay, leave, compensation claims, or application of other civilian personnel regulations to volunteer employees will be presented through channels to the Deputy Chief of Staff for Personnel, ATTN: Office of Civilian Personnel.

8. Implementing instructions. Heads of major commands and other agencies will issue necessary implementing instructions to subordinate units. Copies of implementing instructions will be furnished to the Chief of Research and Development.

[Item V.A.6]

U.S. DEPARTMENT OF LABOR,
OFFICE OF THE ASSISTANT SECRETARY FOR MANPOWER,
Washington, D.C., May 1, 1974.

HON. SAM J. ERVIN, JR.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Secretary Brennan has asked me to reply to your letter of April 1, 1974, in which you request detailed information of federally funded biomedical and behavioral research projects for a survey you are conducting.

The Department of Labor has never supported, and is not contemplating support of, biomedical research designed to alter the behavior of individual subjects. It has, however, supported a small number of research and demonstration projects which utilize some of the techniques of a concept generally referred to as "behavior modification." Currently, only one such project is operating, and it is now being phased out. In addition, two Job Corps Centers used these techniques, but were funded by the Office of Economic Opportunity. They are included in this report since Job Corps is now part of the Department of Labor.

We have been assured that strong ethical considerations have guided, and will continue to guide, the Labor Department staff and the researchers in undertaking these studies.

Dr. Howard Rosen, Director of the Office of Research and Development, which is the only branch of the Labor Department (other than the early OEO funded projects) to support such studies, has prepared the enclosed report in response to your survey. I believe it provides all the information you desire. However, if you should want further amplification (such as monographs, technical papers, or other reports), we shall be happy to provide this to you. In addition, Mr. Baskir may want to speak directly to Dr. Rosen, whose telephone number is 376-7335.

It is a pleasure to make this information available to you. Rest assured of this Agency's full cooperation in considering any additional ethical guidelines which you may feel are applicable to these studies.

Sincerely,

WILLIAM H. KOLBERG,
Assistant Secretary for Manpower.

Enclosures.

RESEARCH AND DEVELOPMENT PROJECTS USING BEHAVIOR MODIFICATION TECHNIQUES

In general terms, much of the Office of Research and Development (ORD) research and demonstration is devoted to exploring different techniques and intervention strategies for changing, or altering, or modifying the behavior of individuals in the target population affected by the Manpower Development and Training Act (MDTA). We search for innovative methods to help the disadvantaged to become advantaged, the untrained to become trained, the unemployed to become employed, and the jobless offender to become a lawabiding, working citizen.

Specifically, however, ORD has supported several research and development projects through grants and contracts to organizations which utilize some techniques of a concept known in behavioral science as "behavior modification." These techniques used were among the various intervention strategies ORD explored when the Manpower Administration first attempted to test the feasibility

ity of training prisoners in MDTA programs, a subject for research permissible under Title I Research and Development work but not authorized for regular Title II programming. These prisoner training projects (as well as one working with disadvantaged ghetto youth) utilized what are known as generalized conditioned reinforcers; i.e., money, luxury items, praise, attention of others, and peer group admiration, as a means of enhancing the training situation by helping them learn faster, retain more, and in general to learn to enjoy educational growth. No deprivation or punishment reinforcers were ever used. In addition, each subject had access to the same privileges that nonsubjects had; they were never denied routine privileges for nonparticipation, but earned additional privileges for participation.

Participation was completely voluntary, and withdrawal from the experiment was never prejudicial to the participant. All subjects were carefully advised of the nature of the experiment, and no attempt was made to conceal the purposes or outcomes. Quite the opposite, it is incumbent on the researcher as part of the technique to make the participant fully cognizant and aware of the results of his behavior, since this knowledge acts as a reinforcer for change.

Focus of some of the experiments was on staff as well as inmates, since an early study had shown that prison staff could nullify some of the best efforts of trainers. Thus, in one study, we tested the feasibility of training correctional officers in the use of simple behavior modification techniques, using rewards generally at the disposal of the officers in such institutions (free time, talk with the warden, telephone calls, extra privileges). In addition to enhancing the job training of inmates, this training provided the correctional officers with a humane response of non-aversive action (positive reinforcement); whereas, their prior methods consisted mainly of aversive control (punishment).

In another, we explored the use of "social reinforcement" techniques by work supervisors in dealing with newly hired youth releases; and in still another, monetary incentives and verbal rewards were compared to determine whether and how much they could increase remedial English learning by disadvantaged Spanish-speaking youth.

The Job Corps (under OEO funding in 1967) utilized some behavior modification techniques at two of its Centers. In its basic education program at Capital Center in Washington, D.C., researchers used contingency management techniques along with self-instructional materials to enhance the learning situation. This consisted of first determining the task preferences of the participant through observation. Working on a high preference task (such as reading) was then made contingent on successful completion of a low preference task (such as mathematics). And at Parks Center in California, researchers used social reinforcement techniques along with group guided interaction in an attempt to help youth learn job-required behaviors in interpersonal relations.

As can be seen from the above examples, these researchers have been attempting to apply systematically the best and simplest of learning theory principles which have proven effective in other settings—classrooms, mental institutions, and business—which are more humane, efficient, and do not detract from the individual's dignity and responsibility.

The researchers involved are outstanding professionals in their field, extremely open in their work, and share their findings regularly with other colleagues in professional association meetings, as well as with the general public. Two of them, for example, have just completed a chapter for a textbook, edited by the country's leading criminologist, Dr. Daniel Glaser, entitled: "Handbook of Criminology." A copy of this chapter is enclosed with this report.

In addition to the fact that these researchers are members of professional associations and subscribe to the guidelines and creed for preserving individual human rights and dignity which their associations have promulgated, we have accepted their prior work with the National Institutes of Mental Health and their adherence to the Public Health Service's Policy on the Protection of Human Subjects as proof of their ethical integrity. Boards of Directors of

their parent organizations, consisting of non-scientists as well as scientists, also regularly review and scrutinize the work of these researchers, as do R&D staff. In addition, a recent ORD-funded report by the National Academy of Sciences to assess the capability of the experimental manpower laboratories which ORD supports, while not addressing itself to the issue of behavior modification, did not question these methodological techniques in the two laboratories which used them.

Some of our ORD-staff judgments, as well as those of staff in the projects which use prisoners as experimental subjects, have been guided by the thinking of Dr. Gilbert Geis who has, on occasion, provided consultant work for ORD and one of the labs. His article, "Ethical and Legal Issues in Experimentation with Offender Populations," is attached for your information. Project staff generally followed Geis' definition of "informed consent" in all cases.

To summarize, ORD has supported some limited R&D work using some of the techniques of behavior modification, as has the Job Corps. These techniques consisted mainly of testing various positive reinforcements to enhance training or other learning situations on offenders and ex-offenders, as well as with disadvantaged youth. In addition to material reinforcers, social reinforcers were used. The subjects were all volunteers, who understood the nature of the project from careful explanation, who had the same privileges that non-subjects had, and who were free to withdraw at any time from the project without penalty. The researchers conducted these efforts with the highest regard for human rights and dignity, and ORD staff monitored them regularly to assure this continued performance.

In gathering material for this report, we could find no other section in the Department of Labor which is supporting such projects.

Attached is a list of R&D projects which utilized behavior modification techniques in one of more of their studies. It follows the format outlined in Senator Ervin's letter of April 1, 1974.

PROJECT 1

1. Experimental Manpower Laboratory for Corrections

(a) Rehabilitation Research Foundation, Montgomery, Alabama, Dr. John McKee

(b) January 1, 1967, to present (grant completion date, final phase: March 1, 1975)

(c) Total Funding: \$3,564,377 (of which at least 1/2 was for training costs and about 1/3 of balance was for behavior modification projects); FY 74: \$180,000 (final phase)

(d) The early so-called "Draper Project" (from the Draper Correctional center in Elmore, Alabama) attempted to test the feasibility of linking the MDTA program to prisoner training, utilizing some contingency management techniques in the training programs. The Experimental Manpower Laboratory for Corrections (EMLC), formed in 1968 as an outgrowth of these early projects, was funded to (a) design, conduct, and assess research and demonstration projects which will, through measured studies, explore alternative methods of dealing with manpower problems related to the correctional process, including the use of such techniques as contingency management, contingency contracting, and token economy; and (b) present these findings in a manner they can be utilized by the Department of Labor, other manpower training programs, and correctional personnel in general.

2. Normal R&D review procedures were followed in this, as well as the following projects. Before the proposal was funded, experts in the Federal Government, in the correctional field, in academic communities, and in business and industry were consulted; and their comments and suggestions were incorporated into the project, where appropriate. This project has been subject of yearly and 18-month review by ORD and outside experts. Quarterly progress reports, other special reports, and occasional field visits are made by the project officer. In this instance, the Director has also visited the Lab. Ethical considerations were determined by the researcher's past performance in work for NIH, the constant evaluation of their colleagues, and numerous written arti-

cles, speeches, and professional association appearances, indicating the nature and extent of their R&D work in this area. Participants in the project were all advised of the nature of the project; each subject had access to the same routine privileges as non-subjects; and subjects were not denied routine privileges for non-participation or withdrawal from the project.

PROJECT 2

1. MFY Experimental Manpower Laboratory (MFY-EML)

(a) Mobilization for Youth, Inc., New York, New York, Mr. Leonard Granick.

(b) December 16, 1968, to present (contract completion date; final phase: December 16, 1974).

(c) Total Funding: \$3,994,781; FY 74: \$300,000 (final phase) (This represents total money for whole project; only one or two behavior modification projects were supported from this total.)

(d) Mobilization for Youth (MFY) began in 1962 as the nation's first comprehensive experimental anti-poverty community organization. In 1968, MFY was funded the Office of Research and Development (ORD) to develop and operate an Experimental Manpower Laboratory which would develop and evaluate innovative programmatic strategies, guidelines, and operational models of manpower services for disadvantaged youth. In carrying out this mission, the Lab has been primarily concerned with program-development strategies for upgrading the employability of the disadvantaged as they relate to technical innovations and refinement of program planning, operations, and evaluation (e.g., using monetary incentives to increase English skills of Spanish-speaking) and as they relate to improved training employment models for the hard-core unemployed (e.g., training work supervisors in the application of contingency management principles).

2. Normal ORD review procedures were followed in this project. MFY-EML work plans have undergone review by other Government officials and members of the research community within and outside DOL on a yearly basis. Regular progress reports and site visits by the project officer assure continued performance. The ORD Director has visited this Lab, also. An MFY Advisory Committee has regularly reviewed all proposals and completed work of the overall organization, including the Lab's work. In late 1973, a standing Advisory Committee was established to help guide the research activities of the Lab itself. The Committee will provide further policy guidance on the rights of privacy of experimental subjects for any future studies involving behavior modification techniques (none are contemplated at present). Participation in the studies was voluntary, the nature of the study was fully explained to all subjects, and non-participation did not penalize them.

PROJECT 3

1. Operation Pathfinder

(a) Mentec Corporation, Dr. S. Stephen Usian.

(b) June 15, 1969, to April 30, 1972.

(c) Total: \$822,568.

(d) This project explored the feasibility of shaping satisfactory work behavior of released youthful offenders through "social reinforcement." It was designed to determine what happens when transition to the world of work from an institution (California Youth Authority) is facilitated by providing a positively reinforcing social environment, through an appropriately structured work situation, using supervisors principally as agents of change. It also tested the use of indigenous paraprofessionals; i.e., training and hiring released youthful offenders as counselors.

2. Normal ORD review procedures applied to this project also. Although no formal "informed consent" papers were signed by each participant, the project methods, techniques, and goals were fully explained prior to enrollment, which was entirely voluntary. Participation in the project had no effect on either release from the youth authority or return to it, and no penalties were administered as a result of withdrawal from the project. One of the first researchers

in the project (he designed the experiment) had previously conducted a similar study at the Parks Job Corps Center and his professional reputation was well known. Regular reports and site visits by the project officer assured continued professional integrity of project staff. The Director also visited this project.

PROJECT 4

1. Contingency Management in a Job Corps Setting.

(a) Westinghouse Learning Corporation, Albuquerque, New Mexico, Mr. Clifton Chadwick.

(b) June 28, 1966, to June 30, 1968.

(c) Total: \$1,513,278 (for operating all of center).

(d) This project, as an additional study to the operation of the center, had the objective of attempting to use contingency management techniques in a basic education program at a Job Corps Center. Basically, researchers made the performance of high preference tasks contingent upon performance of low preference tasks. For example, if a subject is more frequently seen reading a magazine than working on a math program, it may be assumed that the reading of a magazine has a higher probability than working on the math program. Then, reading the magazine is made contingent upon completion of a certain amount of work in the math program. Thus the reading reinforces or increases the probability of the math program response.

2. Procedures for review and monitoring of projects followed those contained in the "Civilian Conservation Center Administrative Manual," written in 1964. Its most updated version, "Job Corps Policy and Procedures Handbook" (JCPPH), currently in draft form, incorporates these policies in Section 7350.7(b) (13 and 14). In addition to insuring the right to privacy and the Constitutional rights of each Corpsmember, JCPPH procedures require that participation must be voluntary, and that all research project methods, design, hypothesis, and evaluation for validity be cleared through the National office. National office must obtain comments from other offices, and the project may not begin until National office is assured that it does not duplicate other studies and that all requirements under the JCPPH procedures have been and will be fulfilled. This project dealt with an innovative learning technique and did not require, as an ethical consideration, informed consent of the participants.

PROJECT 5

1. A Social Reinforcement Experiment in an Open Social System

(a) Litton Industries, Inc., Educational Systems Division, College Park, Maryland, Dr. Roy E. Buehler.

(b) June 30, 1966, to October 15, 1967.

(c) \$145,000 (for 3 different studies; this was one of them).

(d) The objective of this project was to demonstrate and test an integrated social reinforcement and guided group interaction approach to behavior control and behavior change in a dormitory living situation, specifically, with Corpsmen enrollees living in one resident hall in Parks Job Corps Center. A control group matched sample will be drawn from those living in nonexperimental resident halls throughout the Center.

2. Procedures for review and monitoring of projects followed those contained in the "Civilian Conservation Center Administrative Manual," written in 1964. Its most updated version, "Job Corps Policy and Procedures Handbook" (JCPPH), currently in draft form, incorporates these policies in Section 7350.7(b) (13 and 14). In addition to insuring the right to privacy and the Constitutional rights of each Corpsmember, JCPPH procedures require that participation must be voluntary, and that all research project methods, design, hypothesis, and evaluation for validity be cleared through the National office. National office must obtain comments from other offices, and the project may not begin until National office is assured that it does not duplicate other studies and that all requirements under the JCPPH procedures have been and will be fulfilled. This project dealt with an innovative learning technique and did not require, as an ethical consideration, informed consent of the participants.

Behavior Modification: Principles and Applications in Corrections

— by

Michael A. Milan and John M. McKee

**Experimental Manpower Laboratory for Corrections
operated by the
Rehabilitation Research Foundation
P. O. Box 3587
Montgomery, Alabama 36109**

October, 1973

INTRODUCTION

The criminal justice system is now in the position the mental health profession found itself a half century ago: Both professionals and the informed public alike realize the inadequacies of current practices and are actively engaged in a search for more viable alternatives. The criminal justice system can traverse again the arduous and discouraging paths already explored by the mental health professions, or it can profit by the hard earned experiences of those in the mental health field. By examining the successes and failures of the psychologist and psychiatrist, the criminologist can circumvent the tangle of inadequate approaches to the understanding of human behavior which has characterized mental health's recent history and from which that field is only now beginning to free itself. It is appropriate, then, to begin this introduction to behavior modification and its applications in the criminal justice system with a brief overview of the objectives and conclusions of those performing evaluative research in mental health and its allied professions.

Evaluative research in the mental health field has sought to compare the effectiveness of treatment procedures deduced from two influential models of human behavior, the psychodynamic or "medical" model and the behavioral or "social learning" model. Essentially, adherents to the psychodynamic model interpret deviant behavior as *symptomatic* of some underlying personality disturbance or "mental illness" in much the same manner as aberrant clinical signs, such as irregularities in pulse and temperature, are taken as symptoms of an underlying physical dysfunction. Following the medical analogy, treatment of the deviant, or "presenting," behavior itself is discouraged as superficial; and, if treatment is apparently successful, it is said to result in only a temporary remission of symptoms. It is assumed that a failure to treat the postulated underlying causes will result in the reappearance of the presenting behavior or, alternatively, symptom substitution will occur wherein previously unseen behavior, perhaps even more deviant than the presenting behavior, emerges. Successful therapy, according to the medical model, calls for diagnosis of the exact nature of an underlying disturbance and subsequent prescription of a proven treatment of choice. The primary objective of treatment is remediation of the underlying disturbance, thereby precluding symptom substitution and insuring a permanent cure (e.g., Harrison & Carek, 1966; Greenson, 1967).

Adherents to the behavioral model, on the other hand, view deviant behavior as *learned*. The principles underlying its acquisition and maintenance are viewed as no different from those governing the acquisition and maintenance of any other behavior. Both deviant and non-deviant behavior are conceptualized as "normal," that is, the same basic laws and principles are assumed to underly all forms of human behavior. It is the unique experiences of individuals which determine, in large measure, differing patterns of behavior. The implied dichotomy in the psychodynamic model, between deviant and non-deviant behavior and, by extension, between those who have and have not been labeled "mentally ill," is therefore denied. Diagnosis in the behavioral model requires precise specification of the presenting behavior and the environmental conditions, both social and non-social, which control and maintain it. The objective of treatment is elimination of the presenting behavior and, to preclude the uncontrolled learning of additional undesired behavior, replacement of it with adaptive alternatives through instruction and training in concert with the introduction or rearrangement of appropriate environmental contingencies (e.g., Bandura, 1969; Franks, 1969; Yates, 1970).

Behavior modification, then, is the systematic application of proven principles of conditioning and learning in the remediation of human problems. This, the original and proper definition of behavior modification, establishes the boundary conditions of the discipline. It delineates those strategies and techniques which can and those which cannot be legitimately considered within its working domain. A variety of medical techniques, such as psychosurgery, chemotherapy, and electrode implantation, are frequently attributed to the behavior modifier when, in fact, they do not fall within the scope of this discipline. Although these procedures do indeed result in behavior change, they should not be confused with behavior modification procedures for they are not applications of the principles of conditioning and learning. Techniques such as these involve instead physiological alterations which fall within the domain of the physician, the surgeon, and the psychiatrist—certainly not the behavior modifier.

The results of research comparing outcomes following treatment conducted within the framework of these two different models have been summarized by Brown (1971). Following his review of reviews of the effectiveness of different forms of treatment in a variety of mental health settings, he concludes that intervention procedures deduced from the behavioral or social learning model, when compared to treatment conducted within the framework of the psychodynamic or medical model, appear to offer:

1. Greater *effectiveness* as a treatment method; i.e., at least for some emotionally disturbed behaviors the results are often clearly superior.
2. Greater *efficiency* as a treatment method; i.e., in general it takes less time and fewer sessions to bring about desired changes in the patient's life adjustment.
3. Greater *specificity* in establishing goals and outcome of therapy; i.e., the specific end result of therapy is specified at the beginning of therapeutic work.
4. Greater *applicability* to a wider segment of the population; i.e., it covers a broad spectrum of maladaptive behaviors rather than, for example, being limited more or less to upper-class neurotic patients with above average intelligence, etc.
5. Greater *utilization* as a treatment method by various groups; i.e., they [procedures deduced from the behavioral model] can be used not only by the practitioners of the basic mental health disciplines themselves but by public health and other nurses, caseworkers, counselors, adjunctive therapists, teachers, etc., and even by parents [p.32].

Others have been even more critical of the effectiveness of psychodynamically oriented treatment procedures. Eysenck (1952; 1966), Rachman (1971), and Stuart (1970) document their contention that the traditional forms of psychotherapy have not been demonstrated to be any more effective in the remediation of mental health problems than is the mere passage of time or everyday life experiences. They also present convincing data which indicate that treatment conducted within the framework of the behavioral model regularly results in higher success rates than does the psychodynamic approach.

To date, little evaluative research has been directed toward determining the value of these two models in generating successful intervention programs for corrections. The research which has been reported has dealt primarily with psychodynamically oriented community programs for predelinquent and delinquent youths. The results of this research have been far from encouraging (e.g., Beker & Heyman, 1972; Cross, 1964; Lerman, 1968). The social learning model of human behavior, however, presents an alternative conceptualization of the causes of criminal and delinquent behavior (Akers, 1973). It is offered as a more effective vehicle for the understanding, prediction, control, and modification of human behavior than has heretofore been available.

A major thrust of the social learning model is its emphasis upon overt, measurable behavior as its primary subject matter. Indeed, this aspect of the model is commonly taken as its defining characteristic, and this is unfortunate for at least two reasons. First, the subject matter of the behavioral model encompasses considerably more than just the

behavior of individuals. Secondly, the term "behavior" has gained such popularity among non-behaviorists in both professional and lay circles that its original and appropriate meaning has all but been lost. In many instances, the forced use of "behavior" as an adjective or a suffix appears more a thinly disguised attempt to "update" outmoded formulations and approaches to human behavior than it is the adoption and deployment of a new conceptual system. The term "behavior" refers to that which is publicly observable. Used as such, it allows procedures which have been validated in one setting to be applied in a second. Research which attempts to deal with unobservables is not only logically impossible (Ramp & Hopkins, 1971), but tends to employ vaguely defined criteria and procedures, which lessen the chances for replication.

A major contribution of the behaviorists has been the specification of the manner in which environmental phenomena influence or control behavior, combined with a general reluctance to turn to inferred but unobservable "inner" agents or processes to explain phenomena which may be most parsimoniously understood in terms of identifiable relationships between behavior and its antecedents and consequences (Skinner, 1953; 1971). The acquisition and maintenance of behavior are viewed in terms of two distinct arrangements of environmental events. In one, *respondent conditioning*, behavior is elicited by its antecedents. In the other, *operant conditioning*, behavior is maintained by its consequences.

RESPONDENT CONDITIONING

Respondents are relatively fixed responses to specific stimuli, such as orienting in the direction of a sudden, loud noise, tearing in response to an irritant in the eye, and salivating when food is placed in the mouth. The relationship between this class of stimuli and responses is not dependent upon physical maturation. The respondent is termed the *unconditioned response* and the stimulus which regularly elicits it is termed the *unconditioned stimulus*. Pavlov (1941; 1960) is generally credited with the first systematic investigation of the manner in which reflex-like behavior may be acquired. In the respondent conditioning paradigm (also termed *classical conditioning*), a neutral stimulus (i.e., one which does not elicit the to-be-conditioned response) comes to elicit a response similar to an unconditioned response through its repeated pairing with the unconditioned stimulus which does elicit that response. The neutral stimulus is termed the *conditioned*

stimulus while the response it comes to elicit is termed the *conditioned response*. Close examination of the conditioned and unconditioned responses reveals that they are seldom, if ever, identical despite their usual similarity. Although it is sometimes implied that the respondent conditioning paradigm results in "new" reflexes, this does not appear to be the case. Conditioned responses do not follow the same "laws" as do unconditioned responses, indicating that they are distinctly different phenomena (Prokasy, 1965; Black & Prokasy, 1972).

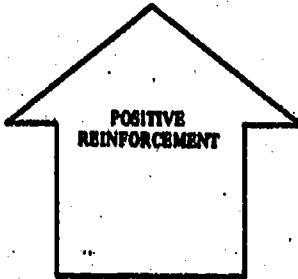
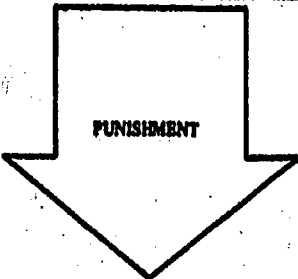
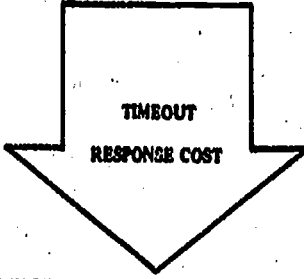
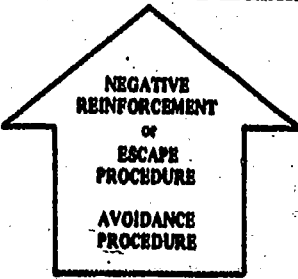
The American criminal justice system has made little systematic use of respondent conditioning procedures. Mental health has, however, employed respondent techniques with a variety of deviancies (Rachman & Teasdale, 1969). Two of these, alcoholism and homosexuality, are also of concern to the criminal justice system. Here, the typical paradigm has involved the pairing of the undesired activity (actually experienced, viewed, or imagined) with some noxious event (e.g., electric shock, vomiting induced by an emetic drug, etc.). The expected outcome is the production of an unpleasant reaction in the individual to alcohol or to homosexual activity. Frequently, some incompatible response is paired with pleasant stimuli in hopes of encouraging more desirable modes of behavior. Behavior therapists now dealing with these problems typically supplement their respondent conditioning procedures with operant procedures by directly teaching skills necessary for the maintenance of these alternatives (Kanfer & Phillips, 1970). The results of these procedures are promising: in one study of the effects of respondent conditioning procedures, approximately 51% of 4,096 patients treated for alcoholism maintained their abstinence for two or more years (Lemere & Voegltin, 1950), while a second study of the effects of traditional psychotherapy indicated that only 5% of the population so treated maintained their abstinence for a comparable period of time (Vallance, 1965).

Although the movement to decriminalize offenses attributed to alcoholism and sexual deviancy is gathering momentum, the criminal justice system continues to bear the responsibility of treating many who, either directly or indirectly, come to its attention as a consequence of their alcoholic or sexual activities. Research indicates that respondent procedures have the potential of aiding corrections in meeting this responsibility so long as it is continued. The nature of these procedures demands, however, that those who would apply them be especially sensitive to the growing number of legal, constitutional, and broad social policy issues which bear upon their use (Schwitzgebel, 1971). As a general rule, coerced participation must be avoided. There is some question,

however, whether a truly "voluntary" program can be conducted within any correctional institution. The voluntary nature of a correctional program can be best guaranteed when participation and progress *per se* in no way influence institutional status and time of release. This is not to say that the hoped-for changes in behavior cannot be considered in the correctional decision-making process. To the contrary, such objective changes should provide the basis for these decisions. However, changes in the behavior of those who have either chosen not to participate in the respondent conditioning program or have selected alternative regimens must be given equal weight when decisions concerning their futures are made.

OPERANT CONDITIONING

The term "operant" is derived from the observation that specifiable groups of classes of responses *operate* upon the environment to produce consequences for the operator. Every operant is defined in terms of an environmental effect. Operants, then, are response classes, each of which is composed of a variety of different behaviors which are grouped together because they have some common effect upon the environment. In the experimental analysis of behavior, an adequate explanation of behavior specifies the environmental conditions which reliably produce the behavior to be explained. This requires an analysis of the conditions which govern the probability that a particular response will occur at a particular time. In this analysis, response probability is typically approximated by the individual subject's rate of responding or, to a lesser degree, by other measures such as the duration, magnitude, latency, etc., of responses. Skinner (1938) is credited with the first systematic formulation of this position. Although there are numerous ways in which the basic principles of operant conditioning may be presented, the most straightforward involves a dichotomy between those procedures which increase the probability of a response (the *positive* and *negative reinforcement paradigms*) and those which decrease the probability of a response (the *timeout* and *punishment paradigms*). The accompanying figure illustrates the procedures which define these paradigms. The arrows in each cell indicate whether the expected outcome of the procedures is an increase or decrease in the probability of responding.

	POSITIVE REINFORCER	NEGATIVE REINFORCER
RESPONSE-CONTINGENT PRESENTATION	 <p>POSITIVE REINFORCEMENT</p>	 <p>PUNISHMENT</p>
RESPONSE-CONTINGENT TERMINATION	 <p>TIMEOUT RESPONSE COST</p>	 <p>NEGATIVE REINFORCEMENT or ESCAPE PROCEDURE AVOIDANCE PROCEDURE</p>

Positive and Negative Reinforcement

The *positive reinforcement paradigm* is the response-contingent presentation of a stimulus or condition which increases the future probability of that response. *Positive reinforcers* are those stimuli or conditions whose response-contingent presentation will increase the future probability of that response. The *negative reinforcement paradigm* is the response-contingent termination of a stimulus or condition which increases the future probability of that response. *Negative reinforcers* are those stimuli or conditions whose response-contingent termination will increase the future probability of that response. The negative reinforcement paradigm is commonly termed the *escape procedure*, implying that an individual may escape from or terminate an undesirable situation by engaging in some

activity. A variant of the negative reinforcement paradigm is the *avoidance* procedure. Here, the consequence of the operant is the postponement of a negative reinforcer, rather than its termination as in the escape procedure.

Unconditioned reinforcers are stimuli or conditions whose reinforcing properties are independent of learning or experience. They are sometimes termed "innate," "primary," or "biological" reinforcers, and they generally hold the same significance for all members of a particular species. *Conditioned reinforcers* are initially neutral stimuli or conditions which acquire their reinforcing properties either by being paired with reinforcers—unconditioned or conditioned—or by being reliable signals that reinforcement is available or forthcoming. Food and sexual contact are typical examples of unconditioned reinforcers, while the smell of cooking and affectionate smiles are common examples of conditioned reinforcers.

Generalized conditioned reinforcers are the most powerful of the conditioned reinforcers. They gain their power because they have been paired with or signal the availability of a wide range of other reinforcers. "Social" reinforcers, such as praise and the attention of others, are examples of generalized conditioned reinforcers. The child who earns the attention of adults is more likely to have favors bestowed upon him than is the ignored child, and, in like manner, the youth who earns the admiration of his peer group will undoubtedly derive more of the benefits available from that group than will the inconspicuous rank-and-file member. Money as a medium of exchange is perhaps the generalized conditioned reinforcer *par excellence*, for its accumulation in significant amounts signals the availability of an infinite variety of desirable commodities and services.

Timeout and Punishment

Both the timeout and punishment procedures employ stimuli or conditions which either have been, or have the potential of being, identified as positive or negative reinforcers in the positive and negative reinforcement paradigms. *Timeout* (sometimes referred to as "negative punishment") is defined as the response-contingent termination of a positive reinforcer which results in a decrease in the future probability of that response. *Response cost* is a special case of the timeout procedure. In response cost, individuals are required to relinquish tangible conditioned reinforcers, such as money, on a response-contingent basis. Imposing fines for minor traffic infractions is a common example of the response cost procedure.

Punishment is the response-contingent presentation of a negative reinforcer which results in a decrease in the future probability of that response. Either conditioned or unconditioned reinforcers may be employed in the timeout and punishment procedures, provided, of course, that care is taken to insure that the conditioned reinforcers are occasionally associated with the unconditioned reinforcers from which they have derived their value.

The punishment and negative reinforcement (avoidance) procedures are commonly confused. This typically results from the understandable tendency to think of these procedures in terms of their common meaning rather than in terms of their technical usage. Although it seems awkward at first, the technical language is to be preferred, for it reduces ambiguity, eliminates uncertainty concerning definitions, and aids communication once it has been mastered. In this instance, the punishment procedure specifies that a negative reinforcer be delivered following a response, while the avoidance procedure specifies that a negative reinforcer be postponed (not delivered) following a response. Although it is tempting to conclude that an individual who experiences the negative reinforcer in an avoidance procedure is punished for *not* responding, it is obvious that such a statement is technically incorrect when the definition of punishment is reexamined. The delivery of the negative reinforcer in the avoidance paradigm is nothing more than the programmed result of the failure to avoid.

Superstitious Behavior

An analysis of these four basic procedures reveals their reciprocal nature. For example, whenever one employs the timeout paradigm to decrease the probability of a response, one also has set the occasion for positive reinforcement, which, if care is not exercised, might instead serve to increase the probability of either the undesired response or some other, perhaps even less desirable, responses. In the timeout procedure, a positive reinforcer is terminated or removed for a period of time following the occurrence of a to-be-eliminated response. If the timeout operation is to be repeated, the positive reinforcer must first be reintroduced. The reintroduction of the positive reinforcer is the necessary ingredient of the positive reinforcement paradigm, and it would be expected to result in an increase in probability of any response which preceded it. This would, in turn, increase the probability that the response would again precede the reintroduction of the reinforcer following the next timeout operation, etc. Care must be taken to insure that the

reintroduction of the positive reinforcer does not follow undesirable behavior. Preferably the reintroduction of the reinforcer is made contingent upon the emission of desirable behavior. If such a procedure is not followed, it is possible that the operation of uncontrolled contingencies will maintain the old, undesired response or result in the accidental conditioning of new forms of undesirable behavior.

Accidental conditioning has been demonstrated by Skinner (1948) and said by him to result in *superstitious behavior*, wherein no contingent relationship exists between the behavior and its maintaining consequences, other than that which is initially arranged by chance and, later, by the effect of this chance relationship. The development of superstitious behavior clearly demonstrates the *automaticity* of these behavioral principles. Simply stated, reinforcers influence the probabilities of those behaviors which they follow, independent of the intent of those who dispense and those who receive the reinforcers. When one reinforces excuses and promises to change by excusing troublesome behavior, the usual effect is to leave the troublesome behavior unchanged and to increase the likelihood that an individual will again offer excuses and promises to change when the opportunity arises. When one insures that reinforcement is contingent upon actual changes in the undesirable behavior, the usual effect is a change in that behavior.

Functional Definitions

Positive and negative reinforcers have been defined as those stimuli which may be effectively employed to influence behavior in the four preceding behavior control paradigms. An important characteristic of these definitions is that they not only specify the behavior under examination and its consequences, as is done in the *operational definition*, but they also specify the effect of the consequences upon behavior. Such *functional definitions* emphasize the relativistic and, in many cases, idiosyncratic quality of reinforcers. The reinforcing properties of stimuli must be validated before they may be truly considered reinforcers and deployed as such. It is often tempting to assume on a personal or commonsense basis that certain stimuli or conditions will serve as reinforcers or that stimuli or conditions which have been identified as reinforcers for some members of a group will serve equally as well for others. If the reinforcement paradigms are to be successful, *reinforcement must be individualized*. Praise from a person in a place of authority, for example, might serve as a potent positive reinforcer for one individual, be of no consequence (a *neutral stimulus* or event) for a second, and be a negative reinforcer

for a third. Of course, common sense, experience, and the individual subjects themselves aid in the identification of potential reinforcers. Whether or not these potential reinforcers are true reinforcers, however, is dependent upon observed changes in behavior which occur as a function of their utilization in the basic reinforcement paradigms.

Extinction

A fifth procedure, *extinction*, is defined as the breaking of a contingent relationship between a response and its regularly occurring consequence which results in a shift of the probability of that response in the direction of its operant (preconditioning) level. The extinction procedure may either increase or decrease response probability, for its effect depends upon the context in which it is employed. When the extinction procedure is applied to behavior maintained by positive reinforcement, the positive reinforcer which was delivered contingent upon a response is no longer presented or, if presented, is presented on a non-contingent basis—that is, independent of the response which previously produced it. The expected effect of this manipulation is a decrease in the probability of that response until, eventually, it occurs with no greater probability than it did before conditioning (i.e., before the positive reinforcer had initially been made contingent upon its occurrence). Similarly, extinction applied to behavior controlled by the punishment procedure prescribes that the negative reinforcer which had regularly followed some response is no longer so programmed, and that this change is followed by an increase in the probability of the response.

Establishing New Behavior

New behavior may be established in a variety of ways, and the procedure selected to do so should be the most efficient for the specific task at hand. *Direct instruction* and explanation, either verbal or written, are probably the easiest and most commonly used techniques of behavior change. When instructions fail, instructors quite often resort to *modeling*: the expected behavior is demonstrated and the client is expected to imitate what he has been shown. Both instruction and modeling have been extensively studied as behavior change procedures (Bandura, 1969), and there is now a clear understanding of the principles and procedures which must be employed if behavior change is to occur. Basically, the degree to which instructions are followed and modeled behavior is imitated is a function of the consequences of following instructions and imitating a model. Similarly,

271

the degree to which the newly acquired behavior is then exhibited in other situations is a function of its consequences in those situations.

When instructions and modeling fail to instill the desired behavior, it is typically because too much is expected of the individual--that is, the disparity between the behavior which he now exhibits or is capable of performing and what is expected of him is so large that it is unreasonable to demand that he produce the complete behavior after instruction or modeling. This problem is routinely overcome by use of *shaping*, or the *method of successive approximation*. This approach requires (1) specification of the desired, or terminal, behavior; (2) identification of some bit of current, or initial, behavior which is a portion or precursor of the terminal behavior; and (3) detailing of a number of sequentially ordered and attainable behavioral "steps" (or approximations) which link the two.

The method of successive approximation may be employed to attack a number of problem behaviors exhibited by "normal" people which are commonly viewed as "attitudinal" or "motivational" problems. A lack of punctuality or conscientiousness in institutional training programs, for example, is usually ignored or dealt with by transferring the troublesome individual. Training programs which tolerate such behavioral deficits or view them as causes for dismissal should instead consider them opportunities to shape and insure behavior which will stand the trainee in good stead when he leaves the training situation for the job. Indeed, the mastery of skills such as these may be of equal or greater value than the vocational skills being taught.

If, for example, the method of successive approximation were applied to a problem in punctuality, the distribution of arrival times which describe the individual's performance would be determined and some arrival time which both approximated the desired arrival time and occurred with some frequency would be identified. Arrivals at this time or earlier would be reinforced in some manner, while arrival at all later times would not be reinforced (i.e., would be subject to the extinction procedure). As a result of this operation, called *differential reinforcement*, the probability of occurrence of the earlier response times would increase, while the probability of later arrivals would decrease. This phenomenon, the result of differential reinforcement, is termed *response differentiation*. This procedure would be repeated until the distribution of arrival times came to overlap the desired arrival time. It would then be a simple matter to reinforce that and all earlier times and, once the

behavior had stabilized at a satisfactory level, to introduce procedures which would insure the maintenance of the newly established behavior.

Maintaining Established Responses

Generally, the most effective method of increasing the probability of a particular response is to change the environmental circumstances so that a reinforcing consequence immediately follows each occurrence of the response. This, however, is neither the most efficient procedure for maintaining a response in the training situation nor of maximizing the probability that a response will be continued once an individual has left the training setting. Reinforcement rarely follows each instance of behavior in the "real world." This involves the scheduling of reinforcement. A schedule of *continuous reinforcement (CRF)* is in effect when each occurrence of a particular response is followed by reinforcement. Between this and the opposite extreme (extinction), where no occurrences are reinforced, there exists a large number of alternative arrangements between responses and consequences, generally referred to as the schedules of *intermittent reinforcement*. The CRF. schedule is commonly employed in the development of a response, while the intermittent schedules are introduced when the objective is to insure the maintenance of an already established response.

When reinforcement is contingent upon the number of responses emitted, a *ratio* schedule of reinforcement is in effect. An employer, for example, might foster productivity on the assembly line by paying his employees \$5 for every tenth unit completed. A not-so-obvious ratio schedule is that which is programmed by the slot machine, the "one-armed bandit." One of these machines might average only one \$25 jackpot for every 100 silver dollars it consumes, but anyone who has visited Las Vegas can attest to the "addictive" properties of this type of ratio schedule.

There is one important procedural difference between the two examples cited above. The relationship between pieces produced and payoff in piece work is perfectly predictable, or fixed, while the relationship between the actual number of silver dollars which must be put into the slot machine and each jackpot, however, is unpredictable, or varied from payoff to payoff. A *fixed ratio (FR) schedule* is in effect when the number of responses required for reinforcement is constant from reinforcement to reinforcement, as in piece work. A *variable ratio (VR) schedule* is in effect when the number of responses required for reinforcement varies from reinforcement to reinforcement, as with a slot machine.

Each schedule produces typical patterns of responding. The FR schedule produces very high rates of responding, with a brief pause following reinforcement. The VR schedule also produces relatively high rates of responding, but without the post-reinforcement pause seen in the FR schedule. The local rate (i.e., when the subject is responding) in the FR schedule is higher by far than for a comparable VR, but when the FR pauses are taken into account they generate about the same overall rates. Of the two, the variable ratio schedule has proven to be more resistant to extinction. Both, of course, are considerably more resistant to extinction than is the continuous reinforcement schedule.

The alternative to the ratio schedule is the interval schedule, wherein reinforcement becomes available after the passage of some specified period of time. The first response emitted after reinforcement becomes available is reinforced. The intervals between one reinforcement and the availability of the next may be constant, or they may vary around some mean value. The *fixed interval (FI) schedule* is analogous to the FR schedule, with the FI value specifying the interval between the delivery of one reinforcement and the availability of the next. This value is constant from reinforcement to reinforcement. The *variable interval (VI) schedule* is analogous to the VR schedule, with the VI value specifying the average interval between the delivery of one reinforcement and the availability of the next. The actual values vary around the mean value.

The interval schedules also produce characteristic patterns of responding. Under the fixed interval schedule there is virtually no responding seen immediately following reinforcement. As the interval approaches its termination the individual responds faster and faster, with the highest rate of responding occurring at the end of the interval. When graphed, this constantly accelerating pattern resembles a scallop and, hence, is generally referred to as the "fixed interval scallop." Unlike the fixed interval schedule, the variable interval schedule produces very regular, almost paced responding of moderate rates which are easily influenced by a wide variety of environmental events.

As was indicated previously, a primary function of the intermittent schedules is to maintain responding after it has been established. By *thinning reinforcement*, that is, by gradually increasing the number of responses which must be emitted before reinforcement is delivered or by gradually increasing the interval between one reinforcement and the availability of the next, it is possible to decrease drastically the actual amount of reinforcement experienced, while at the same time sustaining or increasing the rate of responding. If appropriate behavior (i.e., appropriate with regard to the individual and

the environment in which he will, or does, exist) has been selected for strengthening, the same reinforcers alone or in conjunction with others naturally occurring will be sufficient to maintain the response.

An important product of our knowledge of the effect of the schedules of reinforcement upon behavior is an increased understanding of what are commonly thought of as attributes of *motivation*. "Highly motivated" people are usually identified as those who work diligently for long hours even though reinforcement is either meager, long delayed, or both. Although motivation is commonly thought of as a characteristic of the individual, an alternative explanation of motivated behavior is now possible. This explanation focuses upon the relationship between motivated behavior and its consequences. An analysis of the schedule or schedules of reinforcement operative appears to offer a better understanding of "motivated" behavior than that derived from a trait inferred from the behavior it is then used to explain.

The Token Economy

Early efforts to employ the operant conditioning model as a vehicle for motivating performance and inducing behavior change typically consisted of one or more treatment personnel working with a single individual. More recently, however, the desirability of employing the principles of behavior modification with individuals in various group settings has been recognized, and increasing effort is being expended in this direction. A technology stemming from work with institutionalized psychiatric patients and formalized by Ayllon and Azrin (1968) now exists which retains the principles of behavior modification and permits their systematic application in the group setting. This technology is generally identified by the name of its key concept, the token economy.

The token economy has three defining characteristics (Krasner, 1970a; 1970b). First, there is the designation by institutional authorities of those behaviors in which individuals should engage. In part based upon a clear value judgement, the activities identified here are also heavily dependent upon the goals of the program and represent those which will earn reinforcement once the token economy is instituted. Second is a medium of exchange, objects (tokens) which individuals obtain when they engage in behaviors deemed desirable and which they may exchange for things they desire, the backup reinforcers. The medium of exchange may be tangible or intangible, and has consisted, among other things, of credit cards, metallic coins, poker chips, green stamps, and bank points. Third are the

ways and means utilizing the tokens, the backup reinforcers themselves. These are the things a given individual wants, and can include, among a host of such reinforcers, the opportunity to watch a certain television program, special foods, or a bed to sleep in.

The token, then, like money, is a generalized conditioned reinforcer. It is employed because it is often not feasible to deliver the backup reinforcers immediately following a desirable behavior, and because it is frequently necessary to arrange the relationship between performance and reinforcement on other than a one-to-one basis. When delivered following a behavior the token effectively mediates the time interval between that behavior and, when later exchanged, the utilization of the backup reinforcers. Research examining the effectiveness of token economies in a variety of settings has revealed the potential of arranging contingencies relating actions and their consequences in such a fashion. The value of the token economy has been amply demonstrated as both an aid to psychiatric ward maintenance and as a treatment medium (Atthowe & Krasner, 1968; Lloyd & Abel, 1970), and as a technique to facilitate learning and maintain order in schoolrooms for both retarded (Birnbauer, Wolf, Kidder, & Tague, 1965) and normal (O'Leary, Becker, Evans, & Saudargas, 1969) students.

Behavior Modification and Psychotherapy

Recently, changes in verbal and non-verbal behavior which have been attributed to treatment via psychotherapy have been subjected to an operant analysis, and the results have suggested that the effects of psychotherapy stem from the careful and, in most instances, unwitting application of the principles of behavior modification. Truax (1966), for example, obtained audiotape recordings of a series of Carl Rogers' therapeutic sessions with a long-term patient and categorized the patient's verbal productions on the basis of their content. Nine categories were identified. Truax then examined Rogers' responses to these verbal productions. His analysis revealed that Rogers responded differentially to verbal productions in five of the nine categories, providing responses which communicated understanding, warmth and affirmation to "healthy" statements while withholding this tacit approval if the productions were "unhealthy." In addition, Truax found that the statements which earned approval (the "healthy" statements) increased in frequency, while the statements which were ignored (the "unhealthy" statements) decreased in frequency. Whaley and Malott (1971) in their review of this study, concluded:

The therapy process apparently involves differential reinforcement. The patient is reinforced for saying the right things. He receives reinforcement as long as he stays 'on the right track,' but not when he makes statements which are confused, self-depreciating, pessimistic, or generally unhealthy. As therapy continues, the patient's healthy verbal behavior begins to generalize to areas outside the session. He is more optimistic, relaxed, and clearer than before. Friends and acquaintances see this change and respond to it favorably, thus reinforcing his new personality. Soon it can be maintained by persons other than the therapist, and therapy may be terminated [p.71].

It appears, then, that even the most nondirect of the nondirect therapists exerts considerable, albeit unintentional, control over the behavior of his clients and that therapists in general must come to grips with this possibility and its consequent responsibilities. More important, however, are the implications of these findings for the training of new therapists. If the behavior of successful psychotherapists may be understood as a process involving the careful application of the principles of operant conditioning, it logically follows that the most effective manner for teaching individuals to become effective therapists is to instruct them in these basic principles and how they may be applied to human problems.

Behavioral Assessment

Behavioral assessment refers to an analysis of existent behavior in terms of the interrelationships between four major classes of events: (1) the behavior which is the target of the diagnostic process, (2) the consequences of that behavior, (3) the discriminative stimuli which set the occasion for the behavior, and (4) the setting conditions which further influence the probability of that behavior. The first two classes of events in this fourfold relationship, the behavior and its consequences, as well as some of the possible arrangements between the two, have already been discussed in some detail. We can summarize the value of concentrating upon the relationship between behavior and its consequences by noting that in so doing we avoid the two major pitfalls of a more traditional diagnosis. First, the description of behavior negates the use of vaguely defined psychological labels which, all too often, become self-fulfilling prophecies (Toch, 1970). Second, attention to the consequences of behavior precludes the possibility that morphologically similar but functionally different forms of behavior will be categorized as the same and treated in an identical manner.

Discriminative Stimuli

The third aspect of behavioral assessment involves a specification of the environmental or stimulus conditions under which behavior is likely or expected to occur. If a particular operant has a high probability of occurrence in the presence of one stimulus and a low probability of occurrence in its absence, the operant is considered to be under the control of that stimulus. Stimuli or conditions which control the probability of operant responses are called *discriminative stimuli*. The controlling power of a stimulus in the operant paradigm is not to be confused with the eliciting power of a stimulus in the respondent paradigm. Discriminative stimuli do not elicit a particular response, but instead "signal" that certain behaviors will be followed by certain consequences. It is in this sense that operants are termed *emitted* rather than elicited responses. Whether or not the individual emits a response is more a function of subtle aspects of the past conditioning history of the individual and certain setting conditions (the fourth aspect of behavioral assessment) than of the discriminative stimulus *per se*.

It is oftentimes impossible to identify discriminative stimuli which set the occasion for operants which people routinely emit, for the stimuli which come to control human behavior are highly complex. They may be as subtle as verbal intonation, as fleeting as a facial expression, and as diffuse as a building's architecture. The only defining characteristic of a discriminative stimulus is that it controls a particular behavior, i.e., a behavior is more probable in its presence than in its absence.

Current law enforcement and crime control procedures have focused upon the elimination of discriminative stimuli which set the occasion for crime. The use of high pressure sodium vapor lamps to illuminate streets and parks in the evening hours is an attempt to reduce the incidence of hold-ups, muggings, and rapes through the manipulation of discriminative stimuli. So too is the wide-scale deployment of police officers in high crime areas. Public information campaigns which urge the citizenry to stop the delivery of mail and newspapers when they are away from home for protracted periods of time are also examples of this strategy, as are legal proscriptions against leaving keys in automotive ignitions. Suggesting even further concern for discriminative stimuli by law enforcement personnel, Jeffery (1971) has argued that the police can play a more effective role in crime prevention by emphasizing prevention and control through the environment rather than by apprehension of individual criminals after the fact. According to Jeffery's concept, the police would establish guidelines for urban planning and building construction

and renovation in order to minimize the wide range of environmental opportunities which occasion criminal acts.

Setting Conditions

The fourth component of the behavioral assessment regimen is the identification of *setting conditions* which actuate members of the response class under examination if and when discriminative stimuli signal that the appropriate contingencies of reinforcement are in effect. Kantor (1959) has stressed the importance of these factors in the understanding of both operant and respondent behavior:

Such setting factors as the hungry or satiated condition of the organism, its age, hygienic or toxic condition, as well as the presence or absence of certain environing objects, clearly influence the occurrence or non-occurrence of interbehavior or facilitate the occurrence of activities...[p.95].

The role of environing objects, as mentioned above, would be subsumed, for our purposes, under the more general classification of discriminative stimuli. Setting conditions, like discriminative stimuli, involve environmental factors which influence behavior. Unlike discriminative stimuli, however, setting conditions are more complex than the mere presence, change, or absence of environmental stimuli. They are best conceptualized as salient characteristics of the individual's past history which, because they exist, affect the probability of occurrence of one or more classes of behavior. They may be events which have occurred in either the recent or distant past, and their effects may be or have been either of brief or long duration. For example, an individual might behave in an offensive manner when under the influence of alcohol. Here, the setting condition for the disapproved behavior is alcoholic intoxication or, in more quantifiable terms, the consumption of alcohol.

A second example of the effect of setting conditions upon behavior is described by social scientists when they point to the close association between certain aspects of disadvantaged people and the incidence of criminal activity. As has become obvious, these setting conditions (e.g., poverty, the inner city environment) are neither necessary or sufficient conditions for criminal behavior. Many criminals are neither poor nor do they come from the inner city, and far from all those who are poor or live in the inner city are criminals. For some individuals, under particular stimulus conditions, however, setting conditions (e.g., those associated with poverty and the inner city) apparently do actuate

certain forms of behavior (termed "criminal") which have a higher probability of producing reinforcing than punishing consequences. For these individuals, one avenue of attack upon their criminal behavior is through the medium of the setting conditions. Alternative strategies would involve a concentration upon the stimulus conditions which set the occasion for the act, the consequences of the act, and the act itself. The more of these controlling aspects of behavior which are dealt with in intervention, the more likely intervention strategies are to be effective.

INTERVENTION STRATEGIES

To date, most correctional intervention strategies have dealt with the setting conditions characteristic of disadvantaged persons in general. The current emphasis upon adult basic education and vocational training programs reflects this conceptualization of the causes of criminal behavior. The question is not whether this view is appropriate, but rather, For how many of those who engage in criminal activity is it appropriate? The objective of behavioral assessment is the identification, for each individual, of troublesome behavior, maintaining consequences, controlling stimuli, and setting conditions so that appropriate intervention strategies will be formulated. Behavior change regimens derived from behavioral assessment procedures will involve the application of the same principles of behavior which have been employed in understanding the phenomena under study.

Although the value of these new behavior change regimens has been convincingly demonstrated in a wide variety of applied settings (Ulrich, Stachnik & Mabry, 1966, 1970), we are only now experiencing the beginnings of a concerted effort to determine how the principles and procedures of behavior modification may be best translated and applied to the problems confronting workers in the criminal justice system. The early work of Slack and his associates (Slack, 1960; Schwitzgebel, 1964; Schwitzgebel & Kolb, 1964) explored how procedures deduced from the behavioral model could be employed to encourage "unreachable" delinquents to participate in traditional counseling and psychotherapy. The more recent work of Patterson and his co-workers (Patterson, Cobb, & Ray, 1972) has focused upon the home life of pre-delinquent youths and has resulted in a set of standardized social engineering procedures designed to alter the behavior of highly aggressive youths with the aim of diverting them from a path leading to the juvenile and criminal justice systems. The early research of Staats and Butterfield (1965)

demonstrated the potential of employing token economy procedures in the treatment of nonreading in a culturally deprived juvenile delinquent. More recently, comprehensive token reinforcement systems have been demonstrated to facilitate educational performance, control disruptive behavior, and ease management problems with institutionalized delinquents (Burchard & Tyler, 1965; Tyler & Brown, 1968), youthful offenders (Cohen & Filipczak, 1971; Cohen, Filipczak, & Bis, 1967) and adult felons (Ayllon & Roberts, 1973). The following summaries are representative, then, of a growing number of reports dealing with the application of the principle of behavior modification to the understanding and remediation of problems facing the juvenile and criminal justice systems.

Behavior Modification in the Natural Environment

Most would agree that intervention should be carried out in the individual's natural environment (the job, the home, the school, etc.) whenever such is possible. It is often argued, however, that there are not enough trained and competent professionals available to do this. In response to this personnel shortage, Tharp and Wetzel (1969; Thorne, Tharp, & Wetzel, 1967) have trained paraprofessionals in the Tuscon, Arizona, area to supervise implementation of behavior modification strategies—to function, in effect, as behavior analysts. The authors state that the paraprofessionals were selected specifically for their lack of previous training in any of the helping professions. Their requisite characteristics included only intelligence, energy, flexibility, and qualities of personal attractiveness. These supervisors have included sociology majors, an ex-football player, an ex-stevedore, a carpenter, a returned Peace Corps volunteer, a housewife, a cocktail waitress, and the like. As a consequence of the selection criteria, the supervisors came into the project with little if any personal bias concerning the "treatment of choice" for the problems with which they were to deal. Training for the tasks they were to assume consisted of an intensive three-week course in the principles of behavior modification and their utilization in the applied setting, followed by equally as intense on-the-job training.

All treatment procedures were within the "triadic model," consisting of the supervisor, various mediators, and the target individual. Although the supervisors exercised considerable freedom, they were not completely autonomous with respect to the treatment procedures constructed for the varying problem behaviors dealt with. In addition to the three-week course and the on-the-job training these individuals received during the beginning of the

project, the supervisors met with the professional staff on a regular basis to discuss strategies, explore new approaches, and review data pertinent to the course of treatment.

The mediators consisted of "significant others" in the lives of the target individuals--parents, teachers, neighbors, social workers, etc. They were identified on the basis of two criteria. First, the mediator had to possess high-ranked reinforcers for the target individual. Secondly, the mediator had to be able to dispense those reinforcers on the basis of an established contingency. All other information was considered irrelevant. The use of the mediator concept answers the question of "Who is the client in a treatment program?" In the traditional psychotherapeutic approach, the target individual is depicted as the client, and the therapist works directly with him in an attempt to modify his behavior. Meanwhile, the environmental circumstances which set the occasion for that behavior and reinforce it when it occurs continue unchanged. The mediator, then, was the client of the paraprofessional staff. By working with the mediators, it was possible to establish new contingencies in which the target individuals' old undesirable forms of behavior were no longer reinforced, and the environment came to occasion and reinforce alternative, desirable forms of behavior.

The target individuals in the Thorpe and Wetzel studies were youths referred to treatment. During the course of the program, a total of 77 such persons were seen. Of these, approximately one-third had police records of one sort or another. These records ranged from 1 to 13 offenses, consisting of virtually everything from minor curfew violations to armed assault. The effect of the intervention strategies upon the behavior of the target individuals, as indexed by a six-month follow-up, was to reduce the number of youths who were committing offenses by 81% and the number of offenses committed by 68%. It appears that these procedures have the potential of breaking the chain of activities which eventually lead to incarceration in a juvenile correctional facility and, all too often, to a life of adult crime.

Achievement Place

The behavior modification approach has also been employed with considerable success at Achievement Place in Lawrence, Kansas. Achievement Place is a residential, community-based, home-style living center for pre-delinquent boys who are (or are about to be) suspended from school, who are in trouble in the community, or who are thought to be uncontrollable by their parents (Phillips, 1968; Baily, Wolf, & Phillips, 1970; Phillips,

Phillips, Fixsen, & Wolf, 1971). Its program is designed to modify undesirable and antisocial behavior while developing new and appropriate behavior patterns within the community and its various social institutions. To accomplish this, Achievement Place employs the token economy as the most efficient medium of treatment.

In the Achievement Place token economy, a youth earns tokens for appropriate behavior and loses tokens for inappropriate behavior. In addition, the token system provides the boy immediate and concrete feedback when he first enters the program. As the boy's skills and self-control develop, the boy may earn his way out of the highly structured token system. As this system is gradually withdrawn, it is replaced by more natural (teacher-parent, peer, and academic) feedback conditions. If a youth's behavior indicates that he needs more experience within the structure of the token system, he can lose his new status and return to the token system. Once a boy has demonstrated his ability to exercise self-control, to take responsibility for his own behavior, and to work productively in the home and school he is ready to be returned to his own home or to a foster family. To maintain the gains made at Achievement Place, each family receives training in behavioral management techniques. The boy's progress with his family is closely monitored for several months following his release, and the boy may be returned to Achievement Place if it is deemed beneficial.

Achievement Place differs from the vast majority of other "foster homes" in that its emphasis is upon behavior and upon a technology which enables the practitioner to change behavior. Both desirable and undesirable behaviors are specified, and their frequency of occurrence is determined. Individual and group treatment procedures are implemented, focusing upon the relationship between the behaviors in question and their consequences. Identification of these behaviors and monitoring of the boys' performance allow constant assessment of the effects of treatment and provide the basis for determining treatment success or failure. By so doing, it is possible to develop alternative programs and to progress to further stages of treatment when initial objectives are met. Finally, the extrinsic reinforcers provided by the token economy are gradually faded out, and new behaviors, now occurring at a relatively high frequency, come to be maintained by their natural consequences—those which the individual will encounter in the "real world." The training of individuals in the natural environment (real or foster parents) in behavior modification techniques and the appropriate use of social and other reinforcers maximize the probability that the behaviors will indeed be maintained once the youth leaves the treatment facility.

Outcome research indicates the Achievement Place model is a success. Once the boys enter Achievement Place they have virtually no unpleasant contacts with the law, their public school attendance improves markedly, and their academic grades rise (Phillips, Phillips, Fixsen, & Wolf, 1973).

More recently, research has examined the feasibility of applying these procedures to adult offenders. This work has been conducted primarily with delinquent soldiers at the Walter Reed Army Institute of Research and with adult male felons at the Experimental Manpower Laboratory for Corrections.

The Walter Reed Project

The Walter Reed ward for delinquent soldiers was established at Walter Reed Army Hospital, Washington, D. C., to treat soldiers who had been diagnosed as having character or behavior disorders (Boren & Colman, 1970; Colman & Baker, 1969; Colman & Boren, 1969). Most had records of repeated absences without leave (AWOL); with past histories which often included dropping out of high school, convictions of minor crimes, suicidal features, and difficulty with parents, school officials, police, and Army officers. Homosexuals, drug addicts, and alcoholics were excluded from the program. The design of the treatment program was based on the assumption that these men failed in the military and, previously, in civilian life because of deficiencies in their behavioral repertoire. Specifically, they were viewed as lacking important education or recreation skills, personal habit patterns, such as planning and performing consistently, and interpersonal skills which would make their presence and performance important, in this instance, to other members of their military unit.

The token economy approach was adopted as that best suited to the needs of both treatment staff and soldier. It provided the staff with an extrinsic motivational system which was both capable of overcoming the strong resistance to treatment and change characteristic of these men and amenable to precise control and manipulation. It also allowed individualized treatment and consequent attenuation from the more synthetic tokens to the more natural social reinforcers available for acceptable competent performances in both military and civilian life.

In the token economy itself the soldiers earned points by attending educational classes, dressing neatly, carrying out work projects, and delivering verbal reports (i.e., by engaging in most activities "required" by soldiers in an Army field unit). These points could then

be exchanged for a variety of privileges, such as semiprivate rooms, coffee, access to a television set, poolroom privileges, weekend passes, etc. The men planned day-to-day and week-to-week earning strategies. They made decisions which influenced rewards available to them in the future with the reward interval increasingly delayed as they progressed in treatment.

A follow-up comparison was made between 46 men released from the Walter Reed project and 48 comparable soldiers who received either routine disciplinary action or general psychiatric treatment. Of the soldiers in the Walter Reed group, 7 had completed their tour and 25 were functioning in a unit (69.5% "success"), while 14 had either been administratively discharged from duty, were AWOL, or were in a stockade (30.5% "failure"). Of the comparison group, 1 had completed his tour and 12 were on active duty (28.3% "success"), while 33 were administratively discharged or in a stockade (71.7% "failure").

The Experimental Manpower Laboratory for Corrections (EMLC)

The early work of the EMLC (Rehabilitation Research Foundation, 1968) located at Draper Correctional Center, Elmore, Alabama, consisted mainly of an investigation of the utilization of behavior modification and contingency management techniques in the areas of remedial education and vocational skill training. Draper is a maximum security institution housing approximately 900 adult felons of all custody grades. Adult offenders are, more often than not, the products of the juvenile justice system. They are, in short, its failures, typifying a cross section of the disadvantaged of our land. It is a population group that has been genuinely "turned off" by public education, which has always dealt them constant failure and rebuff, resulting in a mutual hostility and an avoidance of contact. To remedy these deficiencies, the focus of the EMLC was on providing immediate and continuing success in basic education through the use of programmed instruction (PI). In PI the to-be mastered material is broken down into small units and ordered so that that each successive unit is a "natural" extension of the preceding. The student actively participates in the instruction, for he is constantly required to make responses—usually in the form of filling in blanks or choosing from alternative answers—and given immediate feedback concerning the correctness of his responses. Errors are minimal or nonexistent if the material is properly prepared. If errors do occur with some frequency, they are first explored as signals that the material, rather than the student, is in need of correction.

The Self-Instructional School

A self-instructional school was established in which PI material comprised 95% of the curriculum. The operation of the self-instructional school resulted in the development of an Individually Prescribed Instructional (IPI) System, which begins by establishing learning objectives for each student. After the student's learning objectives have been established, the IPI System provides a diagnosis of his educational deficiencies. Based on this diagnosis, the system then allows the teacher or learning manager to prescribe selected PI materials which will remedy the diagnosed deficiencies and move the student in the direction of meeting his learning objectives. As many instructional units are listed on the prescription as are required to bring the student up to a desired grade average in all areas shown on a standardized achievement test.

Each segment of work consists of what a student can be expected to accomplish in a given period of time. This unit of work is put into the form of a "contingency contract" which the student is expected to complete before the end of the week. If he finishes sooner than the estimated number of hours, he can accept another contract. Subjects in such programmed instruction are always required to pass examinations on the material they cover before they are allowed to start new work. The contingency contract requires a progress test for each module, and the student must score 85% or better on all module tests. Scores below 85% necessitate the student being assigned an alternate module and its corresponding test.

For some, the immediate feedback and verification of responses were sufficiently reinforcing to maintain performance. For others, *synthetic reinforcers*, such as money, free time, the opportunity to work on another portion of the curriculum, etc., were employed to supplement the built-in reinforcers and get the individual started. These synthetic reinforcers were then gradually removed, or attenuated, while the *natural reinforcers*—being correct, praise from others, etc.—were systematically employed to maintain the newly developed behavior. The term *contingency management (CM)* has been applied to the technology of arranging reinforcing consequences for *educational behavior*, where the objective is to achieve increased student performance (Homme, C'de Baca, & Cottingham, 1968).

Studies have repeatedly shown that use of programmed instruction with such contingency management can accelerate academic and vocational learning by adult prisoners. In some experiments (Clements & McKee, 1968), reinforcement consisted only

of contracts in which volunteer subjects agreed that their daily output after an initial baseline period of a few weeks would be 20% greater each week than the preceding, for four weeks. This was followed by two weeks in which the subjects each set their own daily work objectives. These experiments achieved approximately the 20% increase per week projected, and a sustainment of the increase when their studying shifted to a self-management basis. There are many variations on this model, including use of daily performance charts and monetary incentives for accomplishment (Enslin, 1969; Jenkins, McKee, Jordan, & Newmark, 1969).

Correctional Officer Training

The more recent work of the EMLC has explored the feasibility of deploying the principles of behavior modification on a broader scale within the correctional institution itself. The EMLC's correctional officer training project (Smith, Hart, & Milan, 1972) sought to assess the correctional officer's potential to serve first as a behavioral technician and then as a behavioral engineer. Within this context, the behavioral technician is viewed as one who grasps the basic principles of this new technology and possesses the requisite skills, such as objectivity, consistency, and reliability, necessary for the performance of the routine tasks required in the day-to-day operation of a systematic behavior modification program. The behavioral engineer is one who not only possesses the knowledge and skills of the behavioral technician, but can also contribute these and his intimate knowledge of the institution as a participating member of a professional team charged with the responsibility of monitoring, troubleshooting, and upgrading such a systematic program.

The training program consisted of classroom instruction in the principles of behavior modification followed by a supervised practicum. The officers were taught how to define, systematically observe, record, and graph behavior. They were also taught the use of positive and negative reinforcement, timeout, punishment and extinction, as well as shaping, the scheduling of reinforcers, and how to thin reinforcement. In the practicum phase, the officers were given the opportunity to demonstrate both their mastery of the skills taught in the classroom as well as their potential as either behavioral technicians or behavioral engineers. The training project staff worked closely with each officer; staff members encouraged the officers to identify problems which they faced in the institution, collect baseline data, devise correctional strategies, and then implement these strategies and determine their effectiveness.

Each officer was provided with the minimal supervision necessary to complete their practicum assignment. The results of the practicum phase reflected the wide range of abilities represented in the correctional officer corps. Some officers could not identify any behavior they deemed in need of remediation. Others defined problem behaviors but could not muster the objectivity and consistency necessary to reliably record baseline data or to manage contingencies in an intervention program. Still others could define and record troublesome behavior and then carry out an intervention program designed by the training project staff, but could not themselves devise an intervention program. Finally, some officers demonstrated that they could, with minimal supervision, implement and evaluate an intervention program of their own design. The latter group demonstrated the skills required of the behavioral engineer and, hopefully, it is officers such as these who would rise to positions of responsibility in an institution which deployed the principles of behavior modification in its day-to-day operation. The third group possessed the skills required of the behavioral technician, and it is officers such as these who would be expected to perform the routine tasks involved in the on-line operation of the institution program. The remaining officers would be placed in positions, such as manning guard towers, which allow little, if any, direct contact with the inmate population.

As has been indicated, the primary purpose of the practicum phase of the training project was as a vehicle by means of which the officers' potentials as behavioral technicians and engineers could be assessed in a real-life situation. In this it was a success. In addition, the practicum phase added credence to the contention that whatever potential the correctional officer does possess as an agent of change will not be fulfilled until the operating procedures of the modern correctional institution are subjected to a drastic restructuring. The projects initiated by the officers reflected their general concerns and employed, of necessity, only those contingencies which they could arrange and manage in the institution with no alterations of general policy. The problems identified by the officers included such things as inmate punctuality, work performance, leaving work without permission, cursing, making requests which could not be fulfilled by officers, etc. None of the procedures developed by the officers were deemed "cruel and unusual" by the project staff. Indeed, they often appeared less so than the ones typically outlined in rule books. Consequently, the training staff did not have to invoke its previous resolve—that projects would be terminated if in the opinion of the training staff the behavior dealt with was contrary to the best interest of targeted inmates and/or the procedures

exerted an undue hardship upon those inmates. As Ayllon and Roberts (1972) have pointed out, the empirical nature of the behavioral approach to the solution of human problems facilitates such decisions. In this, they protect the individual from the capriciousness of those whose job it is to care for, train, or rehabilitate him.

Virtually all the projects designed and implemented by officers in this project employed either negative reinforcement or timeout. None used positive reinforcement, despite a heavy emphasis upon it, its effectiveness, and its desirable aspects during the initial presentation of the material in the classroom and throughout the practicum phase. Although this may reflect the biases of some of the correctional officers, it is more likely the result of the existent operating procedures of the institution. An analysis of institutional management procedures reveals that virtually all the potential positive reinforcers are bestowed upon or scheduled for each inmate when he enters the correctional system, and virtually all formalized behavior control strategies involve their withdrawal or postponement contingent upon evidence of disapproved behavior. The use of these procedures has been labeled the "punishment model," and its continuance will effectively block the deployment of positive reinforcement-oriented procedures in the criminal justice field.

Examination of the Punishment Model

Propagation of a punishment model is the natural outcome of the administrative policies practiced in virtually all American correctional institutions. When each inmate is allowed a specifiable number of telephone calls, mailed letters, visitors, etc., as well as commissary, television, movie, and recreational privileges, as a matter of course, restriction is the only control procedure available for institutional management. Even "good time," which is supposedly earned as a man serves his sentence, is typically computed and awarded early in his stay in the institution. Its loss is then made contingent upon prohibited acts. When systematically applied, as they are in most correctional settings, the tactics of the punishment model permit the efficient management of inmate behavior during confinement. The immediacy with which such procedures take effect, and the cultural endorsement of these procedures when applied to the offender population, have insured their refinement and reification in modern corrections.

There is reason to believe, however, that these procedures have numerous side effects which argue for their elimination in any program emphasizing rehabilitation rather than

custody of offenders. Experimental evidence (Azrin & Holz, 1966) suggests that the institution which relies upon the punishment model diminishes in varying degrees whatever potential its agents (educators, counselors, and correctional officers) possess as rehabilitation agents. These procedures would be predicted to engender in the inmate both the active avoidance of those who carry them out and, in the extreme, aggression directed toward agents of the institution and inmate peers, regardless of their relationship to the punishers. To test these hypotheses, a detailed analysis of the effects of routine institutional control procedures upon inmate behavior was performed.

The EMLC assumed responsibility for the management of one of the dormitory-type cellblocks of Draper Correctional Center. The cellblock, which housed a maximum of 40 inmates, had previously been the site of an inmate training project and had, for that purpose, been subdivided into several rooms of varying size. These rooms were retained and employed variously as dormitories, reinforcing event areas, and office space. Three measures were employed to determine the effects of the punishment model as practiced in corrections upon inmate behavior. The first was the percentage of self-management skills exhibited each day. These skills included making the bed, maintaining the area around the bunk in an orderly condition, and presenting a neat and clean personal appearance. The second measure was the percent of volunteered-for maintenance tasks completed. These tasks were not directly related to the care of the inmates' immediate living area but consisted instead of tasks necessary for the general upkeep of the cellblock (mopping corridors, cleaning commodes, etc.). The third measure, behavioral incidents, indexed acts such as insubordination, fighting, destruction of property, etc., which reflect hostility and aggression. An incident rate (acts/census/hours) was computed on a daily basis to control for variations in population and observation time (e.g., the inmates' job and school assignments precluded their presence on the cellblock for half of each weekday but not on the weekends or holidays).

Initially, a laissez-faire approach was applied to the inmates' performance of the self-management skills and volunteered-for tasks. Under this condition the inmates were reminded of the duties they were expected to perform, but no attempt was made to force compliance. The levels of performance were low. A median of 32% of the self-management skills were exhibited, and 35% of the volunteered-for maintenance tasks were completed during this 17-day baseline phase. Following the baseline period an "Officer Corrects" condition was implemented. During this phase the correctional officer assigned

to the cellblock was permitted to employ whatever institutional control procedures—including disciplinary actions such as the loss of good time and placement in punitive isolation—he deemed necessary and appropriate to insure the performance of the self-management skills. The officer was not, however, allowed to employ these techniques to encourage the completion of the volunteered-for maintenance tasks. Instead, the laissez-faire approach of the baseline condition was continued.

The traditional methods of inmate control were highly effective in motivating the performance of the targeted self-management skills. The median number of skills rose to 62% during the Officer Corrects phase of the study. In addition, the bulk of the days during which performance was lowest were weekends when the correctional officer was off duty and the common practice of sleeping late interfered with meeting the criterion for acceptable performance of the skills. The application of institutional management procedures to the self-management skills had no positive effect upon the completion of the volunteered-for maintenance tasks. Indeed, there appeared to be a slight decrease in the percent of tasks completed during the Officer Corrects condition, but the difference between the levels of performance during the two phases did not reach significance.

To further validate the effect of the Officer Corrects procedure upon the performance of self-management skills, the laissez-faire approach in force during the initial baseline condition was reinstated on the 40th day of the study. There was a general decline in the percent of these skills exhibited during the second baseline condition. The percent of volunteered-for tasks completed was again unaffected by the change in contingency associated with the self-management skills. In this study, the application of correction's traditional punishment-oriented methods of institutional control were shown to be highly effective in managing inmate behavior. The effects of these procedures were, however, highly specific; that is, they motivated the performance of only those behaviors to which they were directly applied with little generalization to even closely related activities. These findings support the previous contention that the all-pervasive deployment of the punishment model in the American correctional system provides a self-reinforcing cycle. Since the consequences of the punishment are specific and since its effects are sudden and dramatic, it continuously provides its own justification for being continued.

It was suggested, however, that corrections reconsider the desirability of the wide-scale utilization of punishment-oriented control procedures, on the grounds that their demonstrated effectiveness is negated because they are expected to induce undesirable

behavioral reactions such as resistance, counteraggression, and inaction, and their emotional or attitudinal components: anger, hostility, and resentment. This contention was also supported by the present study. The daily rate of behavioral incidents (acts of insubordination, fighting, etc., reflecting these general behavioral and emotional reactions) exceeded zero only twice during the 17 days of the first baseline condition. There was a sharp increase in behavioral incidents when punitively oriented procedures were brought to bear upon the inmates of the experimental cellblock. Incidents occurred on nearly half (11) of the 23 days during which the Officer Corrects condition was in effect. Following introduction of the second baseline condition (the reinstatement of the laissez-faire procedure), there was an obvious decrease in the occurrence of behavioral incidents. The incident rate exceeded zero on only 6 of the 21 days of this period, with no incidents recorded during the last 10 days of the study.

The increase and decrease in behavioral incidents coincident with the introduction and termination, respectively, of the full range of traditional control procedures available to correctional personnel lend additional credence to the observation that the philosophies and practices of correctional institutions serve to exacerbate rather than remediate the tension and strife growing there.

The EMLC Token Economies

The EMLC's exploration of the feasibility of developing an alternative correctional management regimen for adult offenders grew from the realization of the serious shortcomings of the existent model of institution management and the demonstrated effectiveness of the proposed alternative in related fields of correctional work. This exploration took the form of two token economies. The first EMLC token economy project (Milan, Hampton, Murphy, Rogers, Williams, & Wood, 1972), which was in operation for approximately 420 days, was limited to the inmates' off hours from work (predominantly agricultural field labor) between 6 and 8 a.m. and between 4:30 and 9:30 p.m. weekdays and between 6 a.m. and 9:30 p.m. weekends and holidays. Activities which earned tokens were restricted to those which occurred on the experimental cellblock, and those activities for which the tokens could be exchanged were only those which could be controlled there. The token economy focused primarily upon those aspects of inmate performance of concern to custody personnel: arising at the appointed hour, making the bed, cleaning the general living area, and maintaining a presentable personal appearance. A secondary

objective was to motivate participation and performance in a voluntary remedial education program in operation evenings and weekends.

Tokens earned were exchangeable for: (1) access to the various reinforcing event areas on the cellblock (the TV room, poolroom, lounge, etc.); (2) time away from the cellblock (and, as a function of this, access to events, such as weekend movies, athletics, etc., which were available in the remainder of the institution); and (3) items, such as soft drinks, snacks, and cigarettes, available from the token economy canteen operated by the project. The token economy itself was modeled after a checkbook banking system. Tokens in the form of "EMLC points" were credited to an inmate's account contingent upon performance of to-be-reinforced activities. In order to obtain a backup reinforcer, he was required to write and relinquish a check in the amount of the point cost of that activity or commodity. At the end of each day a new balance was derived for each participant based upon the balance he carried forward from the previous day and his earnings and expenditures on the current day.

Most outcome data were collected by a correctional officer assigned the cellblock during the morning shift. He toured the cellblock as the inmates arose, recorded for each inmate the performance of the self-management skills and, during the token economy phase, informed the inmates whether or not their performance was acceptable and, if acceptable, told them the number of points he was crediting to their point account. Frequent reliability checks were made between the officer on duty and members of the EMLC staff; they typically agreed upon more than 90% of the joint observations. The effect of the token economy upon the targeted behaviors was dramatic. The percent of volunteered-for maintenance tasks satisfactorily completed each day jumped from approximately 40% prior to the token economy to 90% or better during the token economy. In like manner, the daily percent of self-management skills performed rose from less than 60% to 90% or better. Leisure-time participation in the remedial education program was virtually nonexistent prior to the introduction of the token economy; introduction of the token economy raised this to about 20% of the inmates each day. Further manipulations increased this figure to about 50% each day, with 80% of all inmates spending 10 or more of their free-time hours in the education program each week. Based upon the success of this exploratory project, the scope of the token economy project was expanded during the second EMLC token economy to virtually all activities in which these inmates engaged, 24 hours a day, seven days a week.

The second EMLC token economy project, which lasted for 390 days, differed from the first EMLC token economy in two major ways. The most obvious difference was its expanded scope. The second token economy project called for a comprehensive regimen encompassing all aspects of inmate life, including time spent in the cellblock, as during the first project, plus performance on a half-day institutional work assignment and in a half-day education program. Secondly, the checkbook system of the first token economy was replaced by a punch card system in the second token economy. A new card was issued to each inmate each day. As an inmate performed to-be-reinforced tasks, holes were punched in the card, and as points were expended the area surrounding each punched hole was marked with a pen. Points unexpended at the end of the day were transferred as savings to the next day's card. The punch card system had several advantages. It provided more tangible reinforcement than the checkbook system it replaced; it simplified book and record keeping; and it enabled the immediate determination of each inmate's balance, thereby reducing the likelihood that an inmate's earnings would accidentally exceed his expenditures.

The backup reinforcers were basically the same as those of the first EMLC token economy, with the relationship between the expected behaviors and the backup reinforcers also approximately the same. During the latter stages of the second token economy, a policy of "Performance-Contingent Letters of Recommendation" was instituted wherein inmates' requests for recommendations to various correctional and parole agents produced letters detailing the specifics of the areas under study and the inmates' levels of performance therein. The results of the second EMLC token economy were as promising as those of the first. Inmate performance improved in each of the three areas under study and was maintained at high levels throughout the duration of the token economy. In addition, these changes in performance occurred without the concomitant increase in behavioral incidents witnessed during the examination of the punishment model. It appears, then, that the principles of behavior modification in general, and the token economy in particular, are particularly appropriate for dealing with the management and motivation problems facing corrections. Moreover, they provide an alternative model by means of which correctional institutions unite the traditionally opposed goals of their custody and treatment personnel while avoiding the regressive side effects of the punishment model.

Validating Intervention Strategies

The efficacy of treatment procedures is a continuing concern of adherents to the behavior modification approach. Care is taken to insure that the procedures developed and employed do in fact induce change in the behavior of target individuals. To do this, it must be demonstrated that (1) the expected change in behavior does occur and (2) that the procedures which have been employed are responsible for that change. The first of these two objectives is met by specifying or defining the behavior under study in objective terms to permit public (reliable) verification of its occurrence or nonoccurrence. Its frequency of occurrence is then recorded prior to and throughout the intervention period. This "on line" monitoring provides continuous feedback on the effects of treatment, thereby allowing the professional to determine, at any time, the status of the target individual. If progress is not as has been hoped for, it signals the necessity to intensify, change, or alter in some way the intervention procedures. This continuous monitoring of treatment effects in terms of each target individual's progress toward objectively defined goals is unique to this particular approach to human behavior. Indeed, it may be its single most important advantage over alternative approaches, for it demands accountability *during* intervention as well as *after* intervention, the latter being the characteristic strategy of its alternatives.

If there is a change in behavior *during* the intervention period, it cannot yet be claimed with certainty that the observed change was a result of intervention. Individuals in general, and those who have been earmarked as troublesome in particular, are subject to a multitude of pressures and changes in general life conditions. It is always possible that changes occurring during intervention are a product of these happenings rather than the intervention procedures themselves. If this possibility is not ruled out, it is quite possible that ineffective or perhaps detrimental procedures will be advocated as effective and implemented on a broad scale solely because they have been accidentally associated with a change in behavior which itself was induced by some unobserved change in the target individual's life condition. A variety of research strategies are available to those who wish to rule out this possibility (Sidman, 1960). All stem from the basic behavior modification premise that behavior is *under the control* of its antecedents (setting conditions and discriminative stimuli) and consequences (the presentation or termination of positive and negative reinforcers).

The behavior of the target individual prior to intervention is attributed to the conditions in effect then. Similarly, the change in behavior during intervention is attributed to the change in those conditions which constitute intervention. It follows that a return to the conditions in effect prior to intervention (a discontinuation of the intervention conditions) will result in a return to the behavior seen prior to intervention. This is the rationale of the *ABA* or *reversal design* wherein the first "A" typically connotes the conditions in effect prior to intervention (the baseline period); the "B" connotes the intervention or treatment conditions; and the second "A" signifies a return to the conditions of the baseline period. The *ABA* or reversal design was employed to determine whether or not the improvement in the performance of the self-management skills seen in the first EMLC token economy was a result of the contingent relationship between EMLC points and behavior rather than other variables such as the availability of small items from the token economy canteen or unknown changes in the institution itself. In this study, the EMLC points were first given on a noncontingent basis for a period of time (the first "A" condition); then awarded only when the to-be-reinforced behavior was performed (the "B" condition); and then again given on a noncontingent basis (the second "A" condition). Performance increased during the "B" condition and returned to its original level during the second "A" condition, convincing evidence that it was the contingent relationship between the behavior and the pay-off which controlled the observed increase in performance. The "B" condition was reinstated following this demonstration and, as would be predicted, the high level of performance seen during the original "B" condition was recaptured. Additional alternations of the "A" and "B" conditions and related increases and decreases in levels of performance could be employed to add credence to this conclusion, for it is doubtful that uncontrolled chances in the institution would coincide with each planned change in the variables under study.

The *ABA* design is often undesirable or unfeasible, for one or more of three reasons: (1) the behavior under study is critical (e.g., violent assault), (2) the new behavior will be maintained as is by contingencies in the natural environment, or (3) the objective of the intervention strategy is to insure that the change in behavior will be maintained. When one or more of these conditions is in effect, the *multiple baseline* or *ABB/AAB* procedure is used to validate intervention strategies. This procedure typically indicates that either the same behavior is being monitored in two different settings or two similar behaviors are being monitored in the same setting. The value of the multiple baseline

procedure is that it allows a direct comparison of the effects of intervention on a given behavior without having to return to the initial (baseline) condition at the end of the intervention. The "B" condition at the end of both the ABB and AAB sequences signifies that the conditions of intervention are continued in each following their introduction.

An expanded ABB/AAB or multiple baseline procedure was employed to validate the effects of the second EMLC token economy upon behavior on the institutional farm, in the experimental cellblock, and in the half-day education program. After the initial levels of performance in these three areas were determined, the tokens were awarded on a contingent basis on the institutional farm first, then, after a period time, on the experimental cellblock, and finally, after still another period of time, in the education program. The levels of performance increased first on the farm, coincident with the introduction of the performance contingent payoff there; then on the cellblock, also coincident with the introduction of the contingency there; and finally in the education program, again also coincident with the change in contingency there. This improvement in performance and its subsequent maintenance in the three areas under examination as the intervention procedure was instituted and continued in each constitutes a more-than-adequate demonstration of the effectiveness of the EMLC's token economy procedures.

The programs of the criminal justice system may be subjected to three forms of analysis. The first involves an on-line determination of the effectiveness of operating procedures and their constant refinement, such as the development of more effective vocational training procedures. The second consists of an analysis of the degree to which the operating procedures achieve specified terminal objectives, such as rapid and high quality instruction as indexed by some standardized measure, and how this compares with the accomplishments of other programs. Finally, the enduring contributions of programs may be assessed via long-term follow-up studies such as those which seek to determine rates of recidivism following different types of treatment. The research strategies which have been described in this section are the essence of the first level of analysis, and as such are logical precursors of the second and third levels of analysis. They allow the development of programs which most effectively meet their terminal objectives. The long-term evaluation of programs within this model is appropriate only when programs are meeting these objectives. Indeed, a program which cannot meet its terminal objectives is more appropriately discontinued than subjected to a costly follow-up evaluation. If,

however, a program is meeting its terminal objectives but has failed to influence the long-term indicators of program success, it should not be considered a "failure." It is, after all, meeting those objectives which it was designed to meet. When a program successfully attains its terminal objectives but has no impact upon long-term indicators, such as recidivism, it is more appropriate to question the validity of the philosophy from which those terminal objectives were deduced than to brand the program itself a failure. Indeed, how can these guiding philosophies be better tested?

CONCLUSIONS

The objectives of this chapter have been to provide an introduction to the basic principles of behavior modification and to give an overview of how these principles may be applied in the solution of human problems of general concern to those in the criminal justice fields. The principles of behavior modification have yielded much more than a "bag of tricks," much more than a variety of procedures or strategies which one may call upon when faced with relatively simple problems of motivation and the like. Those who depict and employ behavior modification in such a manner have not yet grasped the significance of its origins in a continuously developing science of human behavior. The applicability of the principles of this science are broad, allowing the study of the full spectrum of human activity. As has been seen in this chapter, the basic principles of this science provide a common basis for analyzing and understanding such diverse phenomena as progress and outcome in psychotherapy and the manner in which current correctional practices contribute to the hostility and aggression of the inmate population. Once phenomena have been so analyzed, it becomes possible to employ our understanding of these principles to more effectively deal with the problems at hand. Additionally, the mastery of the principles and the techniques of their application by those in corrections will not only upgrade the quality of service they provide, but will also contribute to their flexibility, increasing both the variety of strategies interventionists can bring to bear upon a problem and the range of problems with which they may deal.

The principles which have been discussed in this chapter are "neutral"; that is, they can be as effective in instilling and maintaining antisocial tendencies and maladaptive behavior as they can be in instilling and maintaining prosocial tendencies and adaptive behavior. For this reason, every effort must be made to minimize or overcome the chance

or accidental arrangement of environmental contingencies, for unplanned environments appear as likely to generate undesirable behavior as desirable behavior. In this sense, the ghetto environment may be viewed as "well designed," for it effectively instructs, models, shapes, prompts, and reinforces activities which the larger society wishes to discourage and has stigmatized as delinquent or criminal. Equally important, the short-term objectives and long-term effects of planned environments must also be compared, especially in the criminal justice field where the immediate needs of the system often are at odds with the long-range needs of the offender. Too many correctional institutions, with their emphasis upon obedience, passivity, and the punishment model, appear "well designed" to condition dependence, lack of initiative, and resentment, traits all would agree are maladaptive when viewed within the broader context of the offenders' eventual return to a competitive and demanding society. The proper application of the principles of behavior modification can guarantee the "success" of correctional programs. It is those who design such programs who must determine whether the program which has succeeded serves the correctional agency or the offender. For too long correctional programs have served the administrative ends of the system at the expense of the offender's readjustment in the community. Placed in the wrong hands, behavior modification could compound this disservice rather than remediate it.

As has been illustrated in this chapter, the application of the principles of behavior modification to the problems facing the criminal justice system has great potential. It is now clear that institutional programs can be devised which both reduce inmate management problems and motivate performance in academic and vocational programs, while at the same time fostering individuality and encouraging planning and self-control. It is also apparent that community-based residential programs of the "half-way house" variety can be more than the charade which most now are. They can teach the skills necessary for successful and productive living, and they can insure that the skills which are taught are practiced, refined, and reinforced *in vivo*. Finally, it has been demonstrated that changes can be made in the environment in which the offender lives or to which he will eventually return which either directly or indirectly strengthen prosocial behavior at the expense of the old antisocial behavior.

It is unreasonable to expect that the skills taught an inmate in the correctional institution will generalize to the community unless there is a programmed transitional phase to both insure that this will occur and to teach community skills which cannot

be approximated in the institution. Institutions, through intensified training, can remediate deficiencies and expand skill repertoires, thereby providing the offender with additional options, or choices. There is little, if anything, institutions themselves can do to guarantee that the offender will exercise these options once released. Similarly, it is too much to expect that a community program, which can capitalize upon these options, can succeed unless it is backed up by a complementary institutional program which provides the control necessary for intensive, short-duration training. The ideal program would be one which included (1) supervision and training in the home or natural environment of the offender; (2) a community-based residential facility which provided both an alternative to an unacceptable home situation as well as a site in which a more structured behavior change program could be operated and from which the full range of community activities of the offender could be monitored; and (3) an institutional program housed in a regional correctional center which provided intensive, short-term remedial education, vocational instruction, and socialization training. The program would be fluid and dynamic. Offenders could move rapidly from component to component as predetermined criteria were met. Each offender would be under the care of a single supervisor from the time he first encountered the criminal justice system until the time he left it, thereby allowing the development of individualized, comprehensive, and continuous programming. The supervisor, in turn, would be responsible for case management, presiding over the movement of the offender to and from the various components of the system and directing the activities of the specialists within each component. Such a program is, of course, far from becoming a reality. If such an ideal is to become an actuality it will require that the criminal justice system embrace this new science of human behavior as the basis of its program operations and embark upon a restructuring of the correctional bureaucracy so that continuity of treatment is truly feasible. It appears it is now time to begin approximating these ends.

REFERENCES

- Akers, R. L.
1973 *Deviant Behavior: A Social Learning Approach*. Belmont, Calif.: Wadsworth Publishing Company.
- Atthowe, J., and L. Krasner
1968 "Preliminary report on the application of contingent reinforcement procedures (token economy) on a chronic psychiatric ward." *Journal of Abnormal Psychology* 73 (February):37-43.
- Ayllon, T., and N. H. Azrin
1968 *The Token Economy: A Motivational System for Therapy and Rehabilitation*. New York: Appleton-Century-Crofts.
- Ayllon, T., and M. D. Roberts
1972 "The token economy: now." In W. S. Agras (ed.), *Behavior Modification: Principles and Clinical Application*. Boston: Little, Brown and Company.
1973 *The M.O.R.E. Project: First Year of Research and Operation*. Atlanta: Georgia Department of Offender Rehabilitation.
- Azrin, N. H., and W. C. Holz
1966 "Punishment." In W. K. Honig (ed.), *Operant Behavior: Areas of Research and Application*. New York: Appleton-Century-Crofts.
- Baily, J. S., M. M. Wolf, and E. L. Phillips
1970 "Home-based reinforcement and the modification of pre-delinquents' classroom behavior." *Journal of Applied Behavior Analysis* 3 (Fall):223-233.
- Bandura, A.
1969 *Principles of Behavior Modification*. New York: Holt, Rinehart, & Winston.
- Beker, J., and D. S. Heyman
1972 "A critical appraisal of the California differential treatment typology of adolescent offenders." *Criminology* 10 (May):3-59.
- Birnbrauer, J. S., M. M. Wolf, J. D. Kidder, and C. Tague
1965 "Classroom behavior of retarded pupils with token reinforcement." *Journal of Experimental Child Psychology* 2 (June):103-107.
- Black, A. H., and W. F. Prokasy (eds.)
1972 *Classical Conditioning II: Current Theory and Research*. New York: Appleton-Century-Crofts.
- Boren, J. J., and A. D. Colman
1970 "Some experiments on reinforcement principles within a psychiatric ward for delinquent soldiers." *Journal of Applied Behavior Analysis* 3 (Spring):29-38.
- Brown, D. G.
1971 "Behavior analysis and intervention in counseling and psychotherapy." In H. C. Rickard (ed.), *Behavioral Intervention in Human Problems*. New York: Pergamon Press.
- Burchard, J., and V. Tyler
1965 "The modification of delinquent behavior through operant conditioning." *Behavior Research and Therapy* 2 (April):245-250.
- Clements, C. B., and J. M. McKee
1968 "Programmed instruction for institutionalized offenders: contingency management and performance contracts." *Psychological Reports* 22 (June):957-964.

- Cohen, H. L., J. Filipczak, and J. Bis
1967 CASE 1: An Initial Study of Contingencies Applicable to Special Education. Silver Spring, Md.: Educational Facility Press-IBR.
- Cohen, H. L., and J. Filipczak
1971 A New Learning Environment. San Francisco: Jossey-Bass.
- Colman, A. D., and S. L. Baker
1969 "Utilization of an operant conditioning model for the treatment of character and behavior disorders in a military setting." *American Journal of Psychiatry* 125 (April):1395-1403.
- Colman, A. D., and J. J. Boren
1969 "An information system for measuring patient behavior and its use by staff." *Journal of Applied Behavior Analysis* 2 (Fall):207-214.
- Cross, H. J.
1964 "The outcome of psychotherapy: a selected analysis of research findings." *Journal of Consulting Psychology* 28 (October):413-417.
- Enslin, J. E.
1969 Contingency Management: Monetary Rewards for Progress Charts as Motivators for Inmates Using Programmed Instruction (unpublished study report). Elmore, Ala.: Rehabilitation Research Foundation.
- Eysenck, H. J.
1952 "The effects of psychotherapy: an evaluation." *Journal of Consulting Psychology* 16 (February):319-324.
1966 *The Effects of Psychotherapy*. New York: International Science Press.
- Franks, C. M.
1969 *Behavior Therapy: Appraisal and Status*. New York: McGraw-Hill.
- Greenson, R. R.
1967 *The Techniques and Practice of Psychoanalysis*. Vol. 1. New York: International Universities Press.
- Harrison, S. I., and D. J. Carek
1966 *A Guide to Psychotherapy*. Boston: Little, Brown and Company.
- Homme, L., P. C'de Baca, and L. Cottingham
1968 "What behavioral engineering is." *Psychological Record* 18 (Summer):425-434.
- Jeffery, C. R.
1971 *Crime Prevention Through Environmental Design*. Beverly Hills, Calif.: Sage Publications.
- Jenkins, W. O., J. M. McKee, S. Jordan, and Z. M. Newmark
1969 Contingent Monies and Learning Performances (unpublished study report). Elmore, Ala.: Rehabilitation Research Foundation.
- Kanfer, F. H., and J. S. Phillips
1970 *Learning Foundations of Behavior Therapy*. New York: John Wiley & Sons.
- Kantor, J. R.
1959 *Interbehavioral Psychology* (Rev. ed.). Bloomington, Ind.: Principia Press.
- Krasner, L.
1970a "Token economy as an illustration of operant conditioning procedures with the aged, with youth, and with society." In D. J. Lewis (ed.), *Learning Approaches to Therapeutic Behavior Change*. Chicago: Aldine Publishing Company.
1970b "Behavior modification, token economies, and training in clinical psychology." In C. Neuringer and J. L. Michael (eds.), *Behavior Modification in Clinical Psychology*. New York: Appleton-Century-Crofts.

- Lemere, F., and W. Voegtlin
1950 "An evaluation of the aversion treatment of alcoholics." *Quarterly Journal of Studies on Alcohol* 11 (June):199-204.
- Lerman, P.
1968 "Evaluative studies of institutions for delinquents: implications for research and social policy." *Social Work* 13 (July):55-64.
- Lloyd, K. E., and L. Abel
1970 "Performance on a token economy psychiatric ward: a two-year summary." *Behavior Research and Therapy* 8 (February):1-9.
- Milan, M. A., L. R. Hampton, M. C. Murphy, J. G. Rogers, R. L. Williams, L. F. Wood
1972 "The token economy as an alternative to 'traditional' adult correctional institution control procedures." Paper presented at the 18th annual meeting of the Southeastern Psychological Association, Atlanta, Ga.
- O'Leary, K. D., W. C. Becker, M. B. Evans, and R. A. Saudargas
1969 "A token reinforcement program in a public school: a replication and systematic analysis." *Journal of Applied Behavior Analysis* 2 (Spring):2-13.
- Patterson, G. R., J. A. Cobb, and R. S. Ray
1972 "A social engineering technology for retraining the families of aggressive boys." In H. E. Adams and I. P. Unikel (eds.), *Issues and Trends in Behavior Therapy*. Springfield, Ill.: Charles C. Thomas.
- Pavlov, I. P.
1941 *Conditioned Reflexes and Psychiatry: Volume Two of Lectures on Conditioned Reflexes*. (W. H. Gantt trans. and ed.) New York: International Publishers.
1960 *Conditioned Reflexes: An Investigation of the Psychological Activity of the Cerebral Cortex*. (G. V. Anrep trans. and ed.) New York: Dover Publications.
- Phillips, E. L.
1968 "Achievement place: token reinforcement procedures in a home-style rehabilitation setting for pre-delinquent boys." *Journal of Applied Behavior Analysis* 1 (Fall):213-223.
- Phillips, E. L., E. A. Phillips, D. L. Fixsen, and M. M. Wolf
1971 "Achievement place: modification of the behaviors of pre-delinquent boys within a token economy." *Journal of Applied Behavior Analysis* 4 (Spring):45-59.
1973 "Behavior shaping for delinquents." *Psychology Today* 7 (June):74-79.
- Prokasy, W. F. (ed.)
1965 *Classical Conditioning: A Symposium*. New York: Appleton-Century-Crofts.
- Rachman, S.
1971 *The Effects of Psychotherapy*. New York: Pergamon Press.
- Rachman, S., and J. Teasdale
1969 *Aversion Therapy and Behaviour Disorders: An Analysis*. Coral Gables, Fla.: University of Miami Press.
- Ramp, E. A., and B. L. Hopkins
1971 "Foreward." In E. A. Ramp and B. L. Hopkins (eds.), *A New Direction for Education: Behavior Analysis*. Vol. 1. Lawrence, Kan.: Department of Human Development.
- Rehabilitation Research Foundation
1968 *Draper Projects Final Reports*. Elmore, Ala.: Rehabilitation Research Foundation.

- Schwitzgebel, R. K.
 1964 Street Corner Research. Cambridge: Harvard University Press.
 1971 Development and Legal Regulation of Coercive Behavior Modification Techniques with Offenders. Washington, D. C.: Government Printing Office.
- Schwitzgebel, R. L., and D. A. Kolb
 1964 "Inducing behavior change in adolescent delinquents." Behavior Research and Therapy 1 (February):297-304.
- Sidman, M.
 1960 Tactics of Scientific Research. New York: Basic Books.
- Skinner, B. F.
 1938 The Behavior of Organisms: An Experimental Analysis. New York: D. Appleton-Century.
 1948 "Superstition in the pigeon." The Journal of Experimental Psychology 38 (April):168-172.
 1953 Science and Human Behavior. New York: Macmillan.
 1971 Beyond Freedom and Dignity. New York: Alfred A. Knopf.
- Slack, C. W.
 1960 "Experimenter-subject psychotherapy; a new method of introducing intensive office treatment for unreachable cases." Mental Hygiene 44 (April):238-256.
- Smith, R. R., L. A. Hart, and M. A. Milan
 1972 "Correctional officer training in behavior modification: an interim report." Proceedings of the One Hundred and First Annual Congress of Correction of the American Correctional Association.
- Staats, A. W., and W. H. Butterfield
 1965 "Treatment of nonreading in a culturally deprived juvenile delinquent: an application of reinforcement principles." Child Development 36 (December):925-942.
- Stuart, R. B.
 1970 Trick or Treatment: How and When Psychotherapy Fails. Champaign, Ill.: Research Press.
- Tharp, R. G., and R. J. Wetzel
 1969 Behavior Modification in the Natural Environment. New York: Academic Press.
- Thorne, G. H., R. G. Tharp, and R. J. Wetzel
 1967 "Behavior modification techniques: new tools for probation officers." Federal Probation 31 (June):21-27.
- Toch, H.
 1970 "The care and feeding of typologies." Federal Probation 34 (September):15-19.
- Truax, C. B.
 1966 "Reinforcement and non-reinforcement in Rogerian psychotherapy." Journal of Abnormal and Social Psychology 71 (February):1-9.
- Tyler, V. O., and G. D. Brown
 1968 "Token reinforcement of academic performance with institutionalized delinquents." Journal of Educational Psychology 59 (June):164-168.
- Ulrich, R., T. Stachnik, and J. Mabry (eds.)
 1966 Control of Human Behavior. Glenview, Ill.: Scott, Foresman.
 1970 Control of Human Behavior. Vol. 2. Glenview, Ill.: Scott, Foresman.

- Vallance, M.
1965 "Alcoholism: a two-year follow-up study." *British Journal of Psychiatry*
111 (June):348-356.
- Whaley, D. L., and R. W. Malott
1971 *Elementary Principles of Behavior*. New York: Appleton-Century-Crofts.
- Yates, A. J.
1970 *Behavior Therapy*. New York: John Wiley & Sons.

(Item V.A.7)

U.S. ENVIRONMENTAL PROTECTION AGENCY,
Washington, D.C., May 3, 1974.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights,
Committee on the Judiciary,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Thank you for your letter of April 2, 1974 in which you request information on any biomedical and behavioral research designed to alter the behavior of human subjects. I apologize for the delay in answering your questions.

The Environmental Protection Agency neither conducts nor is planning to conduct any biomedical or behavioral research designed to alter the behavior of human subjects. EPA's research is aimed at studying and abating the effects of pollutants on human health and welfare. In that sense, we are studying the biomedical and, sometimes, the behavioral effects of certain pollutants on human health, for example, the effects of noise pollution, non-ionizing radiation, and toxic substances. These research studies are to determine whether behavioral effects exist or are detectable, and at what pollutant exposure levels. The studies are not designed to alter the behavior of human subjects.

I trust that this information is of use to you. Should you desire further information please do not hesitate to call on us.

Sincerely yours,

JOHN QUARLES,
(For Russell E. Train).

(Item V.A.8)

NATIONAL SCIENCE FOUNDATION,
Washington, D.C., April 30, 1974.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR SENATOR ERVIN: Thank you for your letter of April 2 requesting information on biomedical and behavioral research designed to alter the behavior of human subjects. We have assumed that your reference to research designed to alter the behavior of human subjects does not encompass research projects that: (1) involve animals as subjects, even though the principles derived from such research may eventually have application to human beings; (2) involve observation only; or (3) deal with the broad field of improvements in the learning process, even though such improvements may be viewed as alterations of behavior.

Within these assumptions, we can state that the National Science Foundation does not support any biomedical or behavioral research designed to alter the behavior of human subjects. The Foundation does, however, support a substantial amount of research in social sciences, psychobiology and neurobiology directed at understanding human behavior, and this research often requires the participation of human subjects. If you wish, I shall be pleased to provide detailed information regarding research projects we support in any or all of the three categories we have excluded.

With respect to the information requested in your numbered paragraph 2, the Foundation's policy with respect to rights of human research subjects is governed by the following 1967 resolution of the National Science Board:

"The Board unanimously authorized the Foundation to (1) make known to grantees engaged in biomedical, social and behavioral research its concern over the rights of privacy of persons individually or collectively involved in such research, and (2) as necessary, satisfy itself that grantees are taking appropriate measures for securing the subject's informed consent, maintaining the confidentiality of data and otherwise safeguarding his right to privacy."

This policy has been implemented by paragraph 272 of the NSF Grants Administration Manual (NSF 73-26, copy attached) which states that safeguarding the rights and welfare of human subjects involved in activities

supported by NSF grants is the responsibility of the grantee institution, and that pending promulgation of NSF guidelines the Foundation subscribes to the DHEW's publication (NIH 72-102) entitled "The Institutional Guide to DHEW Policy on Protection of Human Subjects". In this connection the Foundation is studying the proposed amended guidelines of HEW entitled "Protection of Human Subjects—Policies and Procedures", which appeared in the Federal Register on October 9 and November 16, 1973, Volume 38, Numbers 194 and 222.

Administration and enforcement of the foregoing policy and regulation are conducted at the divisional and program levels of the Foundation. During the grant review process, ethical questions involving protection of the rights of human research subjects are given careful consideration, and before a grant is made necessary assurances that the rights of human subjects will be safeguarded are obtained from the prospective grantee. However, in accordance with paragraph 270 of the NSF Grants Administration Manual, it is not Foundation policy to police the implementation of these safeguards after the grant is made.

We hope that the foregoing information is responsive to the questions raised in your letter. The Foundation is deeply committed to continuing concern over the ethical and human value implications of science and technology, and I thoroughly concur in your view that the federal government has a special responsibility to protect the rights and safety of subjects of human experimentation involved in federally-supported research projects.

Sincerely yours,

H. GUYFORD STEVER, *Director.*

270 MISCELLANEOUS

271 Data Collection. When an NSF-supported project involves the collection of information from 10 or more persons, the plan or report form(s) to be used in such data collection may be subject, with certain specified exceptions, to the prior clearance requirements prescribed by OMB Circular A-40, revised. If data collection is contemplated, such activity should be clearly set forth in the proposal. This will facilitate the processing of any clearance action required in time to avoid delay in the performance of the grant. Guidance in this area will be provided by the NSF Program Officer, in coordination with the NSF clearance office.

272 Human Subjects. Safeguarding the rights and welfare of human subjects involved in activities supported by NSF grants is the responsibility of the grantee institution. Pending promulgation of NSF guidelines, grantees are referred to DHEW Publication No. (NIH) 72-102, the "Institutional Guide to DHEW Policy on Protection of Human Subjects." NSF grantees shall not conduct or support research on a human fetus which is outside the womb of its mother and which has a beating heart.

273 Life and Losses. NSF assumes no liability with respect to accidents, bodily injury, illness, breach of contract or any other damages or loss, or with respect to any claims arising out of any activities undertaken with the financial support of an NSF grant, whether with respect to persons or property of the grantee or third parties. The grantee is advised to insure or otherwise protect itself or others as it may seem desirable. (See 318.7, "Insurance Costs.")

[Item V.A.9]

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
Washington, D.C., April 10, 1974.

Hon. SAM J. ERVIN, Jr.,
Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Dr. Fletcher has asked me to acknowledge your letter of April 2, 1974, in which you request information from the National Aeronautics and Space Administration regarding the Subcommittee's survey of biomedical and behavioral research projects which are designed to alter the behavior of human subjects.

The data is being collected. A report will be sent to you as soon as possible.
Sincerely,

GERALD D. GRIFFIN,
Assistant Administrator for Legislative Affairs.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
Washington, D.C., April 17, 1974.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights, Committee on the Judiciary,
U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: In response to your inquiry of April 2, 1974, concerning research involving alterations of the behavior of human subjects, NASA is engaged in no such activity.

Our Behavioral Research Program is a very small one covering primarily the areas of small group performance and circadian rhythms (work-rest-sleep cycles). In the neuro-behavioral area our work centers almost exclusively on studies of alertness, sleep, and the special senses with strong emphasis on vestibular function; i.e., space motion sickness. None of our work involves the modification of behavioral states.

If we can be of further assistance to you or the Subcommittee, please do not hesitate to call on us.

Sincerely,

GERALD D. GRIFFIN,
Assistant Administrator for Legislative Affairs.

[Item V.A.10]

EXECUTIVE OFFICE OF THE PRESIDENT,
SPECIAL ACTION OFFICE FOR DRUG ABUSE PREVENTION,
Washington, D.C., May 14, 1974.

Hon. SAM J. ERVIN, Jr.,
*Chairman, Subcommittee on Constitutional Rights,
U.S. Senate, Washington, D.C.*

DEAR SENATOR ERVIN: I am writing in response to your letter of inquiry concerning biomedical and/or behavioral research which is designed to alter the behavior of human subjects.

In the broadest sense, of course, all of the research conducted or supported by the Special Action Office for Drug Abuse Prevention has, as its ultimate goal, the reduction of drug abuse in the United States, and is to that extent designed to alter the behavior of human subjects. I am assuming, however, that you have reference to psychological conditioning techniques as such.

This agency neither conducts nor directly supports any such research. To the extent that any such research related to drug abuse is conducted by the Federal Government, it is through the Department of Health, Education, and Welfare, and I understand that that Department is making a separate report to you on the matter.

If I can supply any further information, please do not hesitate to call on me.

Sincerely yours,

ROBERT L. DUPONT, M.D., *Director.*

VI. ADDITIONAL INFORMATION

A. Nuremburg Code*

[Item VI.A.]

... The protagonists of the practice of human experimentation justify their views on the basis that such experiments yield results for the good of society that are unprocurable by other methods or means of study. All agree, however, that certain basic principles[*] must be observed in order to satisfy moral, ethical, and legal concepts:

1. The voluntary consent of the human subject is absolutely essential.

This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject there should be made known to him the nature, duration, and purpose of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonably to be expected; and the effects upon his health or person which may possibly come from his participation in the experiment.

The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs, or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another with impunity.

2. The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random and unnecessary in nature.

3. The experiment should be so designed and based on the results of animal experimentation and a knowledge of the natural history of the disease or other problem under study that the anticipated results will justify the performance of the experiment.

4. The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury.

5. No experiment should be conducted where there is an *a priori* reason to believe that death or disabling injury will occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects.

6. The degree of risk to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.

7. Proper preparations should be made and adequate facilities provided to protect the experimental subject against even remote possibilities of injury, disability, or death.

8. The experiment should be conducted only by scientifically qualified persons. The highest degree of skill and care should be required through all stages of the experiment of those who conduct or engage in the experiment.

9. During the course of the experiment the human subject should be at liberty to bring the experiment to an end if he has reached the physical or mental state where continuation of the experiment seems to him to be impossible.

10. During the course of the experiment the scientist in charge must be pre-

*Set forth as part of the judgment in *U.S. v. Karl Brandt, Trials of War Criminals Before the Nuremberg Military Tribunal, Volumes I and II, The Medical Case*. Washington, D.C.: U.S. Government Printing Office (1948). For excerpts which indicate the nature of the offenses and the resulting judgments, see Katz, *Experimentation with Human Beings*, pp. 292-306 (Russell Sage Foundation, 1972).

pared to terminate the experiment at any stage, if he has probable cause to believe, in the exercise of the good faith, superior skill, and careful judgment required of him that a continuation of the experiment is likely to result in injury, disability, or death to the experimental subject.

* * * * *

B. Court Cases

[Item VI.B.1]

In the Circuit Court for the County of Wayne, State of Michigan

Civil Action No. 73-19434-AW

GABE KAIMOWITZ, REPRESENTING HIMSELF AND CERTAIN INDIVIDUAL MEMBERS OF THE MEDICAL COMMITTEE FOR HUMAN RIGHTS ON BEHALF OF JOHN DOE AND AT LEAST 23 OTHERS SIMILARLY SITUATED WHO ARE HELD OR COMMITTED INVOLUNTARILY IN PUBLIC INSTITUTIONS IN MICHIGAN, PETITIONERS-PLAINTIFFS, AND JOHN DOE, INTERVENOR-PLAINTIFF

vs.

DEPARTMENT OF MENTAL HEALTH FOR THE STATE OF MICHIGAN, DR. E. G. YUDASHKIN, DIRECTOR, STATE DEPARTMENT OF MENTAL HEALTH; DR. J. S. GOTTLIEB, DIRECTOR LAFAYETTE CLINIC; DR. ERNEST RODIN, ASSOCIATE OF DR. GOTTLIEB AT THE CLINIC, IN THEIR OFFICIAL CAPACITIES, AS WELL AS THEIR AGENTS, ASSIGNEES, EMPLOYEES, AND SUCCESSORS IN OFFICE, RESPONDENTS-DEFENDANTS, AMERICAN ORTHOPSYCHIATRIC ASSOCIATION, AMICUS CURIAE

Opinion

This case came to this Court originally on a complaint for a Writ of Habeas Corpus brought by Plaintiff Kaimowitz on behalf of John Doe and the Medical Committee for Human Rights, alleging that John Doe was being illegally detained in the Lafayette Clinic for the purpose of experimental psychosurgery.¹

John Doe had been committed by the Kalamazoo County Circuit Court on January 11, 1955, to the Ionia State Hospital as a Criminal Sexual Psychopath, without a trial of criminal charges, under the terms of the then existing Criminal Sexual Psychopathic law.² He had been charged with the murder and subsequent rape of a student nurse at the Kalamazoo State Hospital while he was confined there as a mental patient.

In 1972, Drs. Ernst Rodin and Jacques Gottlieb of the Lafayette Clinic, a facility of the Michigan Department of Mental Health, had filed a proposal "For the Study of Treatment of Uncontrollable Aggression."³

This was funded by the Legislature of the State of Michigan for the fiscal year 1972. After more than 17 years at the Ionia State Hospital, John Doe was transferred to the Lafayette Clinic in November of 1972 as a suitable research subject for the Clinic's study of uncontrollable aggression.

Under the terms of the study, 24 criminal sexual psychopaths in the State's mental health system were to be subjects of experiment. The experiment was to compare the effects of surgery on the amygdaloid portion of the limbic system of the brain with the effect of the drug cyproterone acetate on the male

The name John Doe has been used through the proceedings to protect the true identity of the subject involved. After the institution of this action and during proceedings his true identity was revealed. His true name is Louis Smith. For the purpose of the Opinion, however, he will be referred to throughout as John Doe.

¹C.L. 780.501 et seq. The statute under which he was committed was repealed by Public Act 143 of the Public Acts of 1968, effective August 1, 1968. He was detained thereafter under C.L. 330.35(b), which provided for further detention and release of criminal sexual psychopaths under the repealed statute. The Supreme Court also adopted an Administrative Order of October 20, 1969 (382 Mich. xxix) relating to criminal sexual psychopaths. A full discussion of these statutes is found in the Court's earlier Opinion relating to the legality of detention of John Doe, filed in this cause on March 23, 1973.

²See Appendix to Opinion, Item 1.

hormone flow. The comparison was intended to show which, if either, could be used in controlling aggression of males in an institutional setting, and to afford lasting permanent relief from such aggression to the patient.

Substantial difficulties were encountered in locating a suitable patient population for the surgical procedures and a matched controlled group for the treatment by the anti-androgen drug.⁴ As a matter of fact, it was concluded that John Doe was the only known appropriate candidate available within the state mental health system for the surgical experiment.

John Doe signed an "informed consent" form to become an experimental subject prior to his transfer from the Ionia State State Hospital.⁵ He had obtained signatures from his parents giving consent for the experimental and innovative surgical procedures to be performed on his brain,⁶ and two separate three-man review committees were established by Dr. Rodin to review the scientific worthiness of the study and the validity of the consent obtained from Doe.

The Scientific Review Committee, headed by Dr. Elliot Luby, approved of the procedure, and the Human Rights Review Committee, consisting of Ralph Slovenko, a Professor of Law and Psychiatry at Wayne State University, Monsignor Clifford Sawher, and Frank Moran, a Certified Public Accountant, gave their approval to the procedure.

Even though no experimental subjects were found to be available in the state mental health system other than John Doe, Dr. Rodin prepared to proceed with the experiment on Doe, and depth electrodes were to be inserted into his brain on or about January 15, 1973.

Early in January, 1973, Plaintiff Kaimowitz became aware of the work being contemplated on John Doe and made his concern known to the Detroit Free Press. Considerable newspaper publicity ensued and this action was filed shortly thereafter.

With the rush of publicity on the filing of the original suit, funds for the research project were stopped by Dr. Gordon Yudashkin, Director of the Department of Mental Health, and the investigators, Drs. Gottlieb and Rodin, dropped their plans to pursue the research set out in the proposal. They reaf-

⁴For criteria, see Appendix, Item 2.

⁵The complete "Informed Consent" form signed by John Doe is as follows:

"Since conventional treatment efforts over a period of several years have not enabled me to control my outbursts of rage and anti-social behavior, I submit an application to be a subject in a research project which may offer me a form of effective therapy. This therapy is based upon the idea that episodes of anti-social rage and sexuality might be triggered by a disturbance in certain portions of my brain. I understand that in order to be certain that a significant brain disturbance exists, which might relate to my anti-social behavior, an initial operation will have to be performed. This procedure consists of placing fine wires into my brain, which will record the electrical activity from those structures which play a part in anger and sexuality. These electrical waves can then be studied to determine the presence of an abnormality.

"In addition electrical stimulation with weak currents passed through these wires will be done in order to find out if one or several points in the brain can trigger my episodes of violence or unlawful sexuality. In other words this stimulation may cause me to want to commit an aggressive or sexual act, but every effort will be made to have a sufficient number of people present to control me. If the brain disturbance is limited to a small area, I understand that the investigators will destroy this part of my brain with an electrical current. If the abnormality comes from a larger part of my brain, I agree that it should be surgically removed, if the doctors determine that it can be done so, without risk of side effects. Should the electrical activity from the parts of my brain into which the wires have been placed reveal that there is no significant abnormality, the wires will simply be withdrawn.

"I realize that any operation on the brain carries a number of risks which may be slight, but could be potentially serious. These risks include infection, bleeding, temporary or permanent weakness or paralysis of one or more of my legs or arms, difficulties with speech and thinking, as well as the ability to feel, touch, pain and temperature. Under extraordinary circumstances, it is also possible that I might not survive the operation.

"Fully aware of the risks detailed in the paragraphs above, I authorize the physicians of Lafayette Clinic and Providence Hospital to perform the procedures as outlined above.

Date: October 27, 1972
Calvin Vance, Witness.

/S/ LOUIS M SMITH,

Signature.

/S/ EMILY T. SMITH/HARRY L. SMITH,

Signature of responsible relative or guardian.

⁶There is some dispute in the record as to whether his parents gave consent for the innovative surgical procedures. They testified they gave consent only to the insertion of depth electrodes.

firmed at trial, however, their belief in the scientific, medical and ethical soundness of the proposal.

Upon the request of counsel, a Three-Judge Court was empanelled, Judges John D. O'Hair and George E. Bowles joining Judge Horace W. Gilmore. Dean Francis A. Allen and Prof. Robert A. Burt of the University of Michigan Law School were appointed as counsel for John Doe.

Approximately the same time Amicus Curiae, the American Orthopsychiatric Society, sought to enter the case with the right to offer testimony. This was granted by the Court.

Three ultimate issues were framed for consideration by the Court. The first related to the constitutionality of the detention of Doe. The full statement of the second and third questions, to which this Opinion is addressed, are set forth in the text below.

The first issue relating to the constitutionality of the detention of John Doe was considered by the Court, and on March 23, 1973, an Opinion was rendered by the Court holding the detention unconstitutional. Subsequently, after hearing testimony of John Doe's present condition, the Court directed his release.⁷

In the meantime, since it appeared unlikely that no project would go forward because of the withdrawal of approval by Dr. Yudashkin, the Court raised the question as to whether the rest of the case had become moot. All counsel, except counsel representing the Department of Mental Health, stated the matter was not moot, and that the basic issues involved were ripe for *declaratory judgment*. Counsel for the Department of Mental Health contended the matter was moot.

Full argument was had and the Court on March 15, 1973, rendered an oral Opinion, holding that the matter was not moot and that the case should proceed as to the two framed issues for declaratory judgment. The Court held that even though the original experimental program was terminated, there was nothing that would prevent it from being instituted again in the near future, and therefore the matter was ripe for declaratory judgment.⁸

The facts concerning the original experiment and the involvement of John Doe were to be considered by the Court as illustrative in determining whether legally adequate consent could be obtained from adults involuntarily confined in the state mental health system for experimental or innovative procedures on the brain the ameliorate behavior, and, it could be whether the State should allow such experimentation on human subjects to proceed.⁹

The two issues framed for decision in this declaratory judgment action are as follows:

1. After failure of established therapies, may an adult or a legally appointed guardian, if the adult is involuntarily detained, at a facility within the jurisdiction of the State Department of Mental Health give legally adequate consent to an innovative or experimental surgical procedure on the brain, if there is demonstrable physical abnormality of the brain, and the procedure is designed to ameliorate behavior, which is either personally tormenting to the patient, or so profoundly disruptive that the patient cannot safely live, or live with others?

⁷ The release was directed after the testimony of John Doe in open court and the testimony of Dr. Andrew S. Watson, who felt that John Doe could be safely released to society.

⁸ On Thursday, March 15, 1973, after full argument, the Court held in an Opinion rendered from the bench that the matter was not moot, relying upon *United States v. Phosphate Export Association*, 383 U.S. 190. There the United States Supreme Court said: "The test for mootness . . . is a stringent one. Mere voluntary cessation of allegedly illegal conduct does not moot a case; if it did, the courts would be compelled to 'leave the defendant . . . free to return to his old ways.' A case might become moot if subsequent events made it absolutely clear that the allegedly wrongful behavior could not reasonably be expected to recur."

The Court also relied upon *Milford v. People's Community Hospital Authority*, 380 Mich. 49, where the Court said on page 55: "The nature of the case is such that we are unlikely to again receive the question in the near future, and doctors and other people dealing with public hospital corporations cannot hope to have an answer to the questions raised unless we proceed to decision. For these reasons, we conclude the case is of sufficient importance to warrant our decision."

It should also be noted that Defendant Department of Mental Health sought an Order of Superintending Control for a Stay of Proceedings in the Court of Appeals on the ground the case was moot. On March 26, 1973, the Court of Appeals denied the Stay.

⁹ As the trial proceeded, it was learned that John Doe himself withdrew his consent to such experimentation. This still did not render the proceeding moot because of the questions framed for declaratory judgment.

2. If the answer to the above is yes, then is it legal in this State to undertake an innovative or experimental surgical procedure on the brain of an adult who is involuntarily detained at a facility within the jurisdiction of the State Department of Mental Health, if there is demonstrable physical abnormality of the brain, and the procedure is designed to ameliorate behavior, which is either personally tormenting to the patient, or so profoundly disruptive that the patient cannot safely live, or live with others?

Throughout this Opinion, the Court will use the term psychosurgery to describe the proposed innovative or experimental surgical procedure defined in the questions for consideration by the Court.

At least two definitions of psychosurgery have been furnished the Court. Dr. Bertram S. Brown, Director of the National Institute of Mental Health, defined the term as follows in his prepared statement before the United States Senate Subcommittee on Health of the Committee on Labor and Public Welfare on February 23, 1973:

"Psychosurgery can best be defined as a surgical removal or destruction of brain tissue or the cutting of brain tissue to disconnect one part of the brain from another, with the intent of altering the behavior, even though there may be no direct evidence of structural disease or damage to the brain."

Dr. Peter Breggin, a witness at the trial, defined psychosurgery as the destruction of normal brain tissue for the control of emotions or behavior; or the destruction of abnormal brain tissue for the control of emotions or behavior, where the abnormal tissue has not been shown to be the cause of the emotions or behavior in question.

The psychosurgery involved in this litigation is a subclass, narrower than that defined by Dr. Brown. The proposed psychosurgery we are concerned with encompasses only experimental psychosurgery where there are demonstrable physical abnormalities in the brain.¹⁰ Therefore, temporal lobectomy, an established therapy for relief of clearly diagnosed epilepsy is not involved, nor are accepted neurological surgical procedures, for example, operations for Parkinsonism, or operations for the removal of tumors or the relief of stroke.

We start with the indisputable medical fact that no significant activity in the brain occurs in isolation without correlated activity in other parts of the brain. As the level of complexity of human behavior increases so does the degree of interaction and integration. Dr. Ayub Ommaya, a witness in the case, illustrated this through the phenomenon of vision. Pure visual sensation is one of the functions highly localized in the occipital lobe in the back of the brain. However vision in its broader sense, such as the ability to recognize a face, does not depend upon this area of the brain alone. It requires the integration of that small part of the brain with the rest of the brain. Memory mechanisms interact with the visual sensation to permit the recognition of the face. Dr. Ommaya pointed out that the more we know about brain function, the more we realize with certainty that many functions are highly integrated, even for relatively simple activity.

It is clear from the record in this case that the understanding of the limbic system of the brain and its function is very limited. Practically every witness and exhibit established how little is known of the relationship of the limbic system to human behavior, in the absence of some clearly defined clinical disease such as epilepsy. Drs. Mark, Sweet and Ervin have noted repeatedly the primitive state of our understanding of the amygdala, for example, remarking that it is an area made up of nine to fourteen different nuclear structures, with many functions, some of which are competitive with others. They state

¹⁰ On this point, *Amicus Curiae Exhibit 4* is of great interest. This exhibit is a memo to Dr. Gottlieb from Dr. Rodin, dated August 9, 1972, reporting on a visit Dr. Rodin made to Dr. Vernon H. Mark of the Neurological Research Foundation in Boston, one of the country's leading proponents of psychosurgery on noninstitutionalized patients. Dr. Rodin, in his Memo, stated:

"When I informed Dr. Mark of our project, namely, doing amygdalotomies on patients who do not have epilepsy, he became extremely concerned and stated, we had no ethical right in so doing. This, of course, opened Pandora's box, because then I retorted that he was misleading us with his previously cited book and he had no right at all from a scientific point of view to state that in the human, aggression is accompanied by seizure discharges in the amygdala, because he is dealing with only patients who have susceptible brains, namely, temporal lobe epilepsy...."

"He stated categorically that as far as present evidence is concerned, one has no right to make lesions in a 'healthy brain' when the individual suffers from rage attacks only."

that there are not even reliable guesses as to the functional location of some of the nuclei.¹¹

The testimony showed that any physical intervention in the brain must always be approached with extreme caution. Brain surgery is always irreversible in the sense that any intrusion into the brain destroys the brain cells and such cells do not regenerate. Dr. Ommaya testified that in the absence of well defined pathological signs, such as blood clots pressing on the brain due to trauma, or tumor in the brain, brain surgery is viewed as a treatment of last resort.

The record in this case demonstrates that animal experimentation and non-intrusive human experimentation have not been exhausted in determining and studying brain function. Any experimentation on the human brain, especially when it involves an intrusive, irreversible procedure in a none life-threatening situation, should be undertaken with extreme caution, and then only when answers cannot be obtained from animal experimentation and from non-intrusive human experimentation.

Psychosurgery should never be undertaken upon involuntarily committed populations, when there is a high-risk low-benefit ratio as demonstrated in this case. This is because of the impossibility of obtaining truly informed consent from such populations. The reasons such informed consent cannot be obtained are set forth in detail subsequently in this Opinion.

There is widespread concern about violence. Personal violence, whether in a domestic setting or reflected in street violence, tends to increase. Violence in group confrontations appears to have culminated in the late 60's but still invites study and suggested solutions. Violence, personal and group, has engaged the criminal law courts and the correctional systems, and has inspired the appointment of national commissions. The late President Lyndon B. Johnson convened a commission on violence under the chairmanship of Dr. Milton Eisenhower. It was a commission that had fifty consultants representing various fields of law, sociology, criminology, history, government, social psychiatry, and social psychology. Conspicuous by their absence were any professionals concerned with the human brain. It is not surprising, then, that of recent date, there has been theorizing as to violence and the brain, and just over two years ago, Frank Ervin, a psychiatrist, and Vernon H. Mark, a neurosurgeon, wrote *Violence and the Brain*¹² detailing the application of brain surgery to problems of violent behavior.

Problems of violence are not strangers to this Court. Over many years we have studied personal and group violence in a court context. Nor are we unconcerned about the tragedies growing out of personal or group confrontations. Deep-seated public concerns begets an impatient desire for miracle solutions. And necessarily, we deal here not only with legal and medical issues, but with ethical and social issues as well.

Is brain function related to abnormal aggressive behavior? This, fundamentally, is what the case is about. But, one cannot segment or simplify that which is inherently complex. As Vernon H. Mark has written, "Moral values are social concerns, not medical ones, in any presently recognized sense."¹³

Violent behavior not associated with brain disease should not be dealt with surgically. At best, neurosurgery rightfully should concern itself with medical problems and not the behavior problems of a social etiology.

The Court does not in any way desire to impede medical progress. We are much concerned with violence and the possible effect of brain disease on violence. Much research on the brain is necessary and must be carried on, but when it takes the form of psychosurgery, it cannot be undertaken on involuntarily detained populations. Other avenues of research must be utilized and developed.

Although extensive psychosurgery has been performed in the United States and throughout the world in recent years to attempt change of objectionable behavior, there is no medically recognized syndrome for aggression and objectionable behavior associated with nonorganic brain abnormality.

¹¹ Mark, Sweet and Ervin, "The Affect of Amygdalotomy on Violent Behavior in Patients with Temporal Lobe Epilepsy" in Hitchcock, Ed. *Psycho-Surgery: Second International Conference* (Thomas Pub. 1972), 135 at 153.

¹² Mark and Ervin, *Violence and the Brain* (Harper and Row, 1970).

¹³ Mark, "Brain Surgery in Aggressive Epileptics," *The Hastings Center Report*, Vol. 3, No. 1 (February, 1973).

The psychosurgery that has been done has in varying degrees blunted emotions and reduced spontaneous behavior. Dr V. Balasubramaniam, a leading psychosurgeon, has characterized psychosurgery as "sedative neurosurgery," a procedure by which patients are made quiet and manageable.¹⁴ The amygdotomy, for example, has been used to calm hyperactive children, to make retarded children more manageable in institutions, to blunt the emotions of people with depression, and to attempt to make schizophrenics more manageable.¹⁵

As pointed out above, psychosurgery is clearly experimental, poses substantial danger to research subjects, and carries substantial unknown risks. There is no persuasive showing on this record that the type of psychosurgery we are concerned with would necessarily confer any substantial benefit on research subjects or significantly increase the body of scientific knowledge by providing answers to problems of deviant behavior.

The dangers of such surgery are undisputed. Though it may be urged, as did some of the witnesses in this case, that the incidents of morbidity and mortality are low from the procedures, all agree dangers are involved, and the benefits to the patient are uncertain.

Absent a clearly defined medical syndrome, nothing pinpoints the exact location in the brain of the cause of undesirable behavior so as to enable a surgeon to make a lesion, remove that portion of the brain, and thus affect undesirable behavior.

Psychosurgery flattens emotional responses, leads to lack of abstract reasoning ability, leads to a loss of capacity for new learning and causes general sedation and apathy. It can lead to impairment of memory, and in some instances unexpected responses to psychosurgery are observed. It has been found, for example, that heightened rage reaction can follow surgical intervention on the amygdala, just as placidity can.¹⁶

It was unanimously agreed by all witnesses that psychosurgery does not, given the present state of the art, provide any assurance that a dangerously violent person can be restored to the community.¹⁷

Simply stated, on this record there is no scientific basis for establishing that the removal or destruction of an area of the limbic brain would have any direct therapeutic effect in controlling aggressivity or improving tormenting personal behavior, absent the showing of a well defined clinical syndrome such as epilepsy.

To advance scientific knowledge, it is true that doctors may desire to experiment on human beings, but the need for scientific inquiry must be reconciled with the inviolability which our society provides for a person's mind and body. Under a free government, one of a person's greatest rights is the right to inviolability of his person, and it is axiomatic that this right necessarily forbids the physician or surgeon from violating, without permission, the bodily integrity of his patient.¹⁸

¹⁴ See Defendant's Exhibit 38, *Sedative Neurosurgery* by V. Balasubramaniam, T. S. Kanaka, P. V. Ramanuman, and B. Ramaurthi, 53 *Journal of the Indian Medical Association*, No. 8, page 377 (1969). In the conclusion, page 381, the writer said:

"The main purpose of this communication is to show that this new form of surgery called sedative neurosurgery is available for the treatment of certain groups of disorders. These disorders are primarily characterized by restlessness, low threshold for anger and violent or destructive tendencies.

"This operation aims at destruction of certain areas in the brain. These targets include the amygdaloid nuclei, the posteroventral nuclear group of the hypothalamus and the periaqueductal grey substance * * *

"By operating on the areas one can make these patients quiet and manageable."

¹⁵ The classical lobotomy of which thousands were performed in the 1940's and 1950's is very rarely used these days. The development of drug therapy pretty well did away with the classical lobotomy. Follow-up studies show that the lobotomy procedure was overused and caused a great deal of damage to the patients who were subjected to it. A general bleaching of the personality occurred and the operations were associated with loss of drive and concentration. Dr. Brown in his testimony before the *United States Senate*, supra, page 9, stated: "No responsible scientist today would condone a classical lobotomy operation."

¹⁶ Sweet, Mark & Ervin found this to be true in experiments with monkeys. Other evidence indicated it is possible in human beings.

¹⁷ Testimony in the case from Dr. Rodin, Dr. Lowinger, Dr. Breggin, and Dr. Walter, all pointed up that it is very difficult to find the risks, deficits and benefits from psychosurgery because of the failure of the literature to provide adequate research information about research subjects before and after surgery.

¹⁸ See the language of the late Justice Cardozo in *Schloendorff v. Society of New York Hospitals*, 211 N.Y. 125, 105 N.E. 92, 93 (1914) where he said, "Every human being of adult years or sound mind has a right to determine what shall be done with his own body. . . ."

Generally, individuals are allowed free choice about whether to undergo experimental medical procedures. But the State has the power to modify this free choice concerning experimental medical procedures when it cannot be freely given, or when the result would be contrary to public policy. For example, it is obvious that a person may not consent to acts that will constitute murder, manslaughter, or mayhem upon himself.¹⁹ In short, there are times when the State for good reason should withhold a person's ability to consent to certain medical procedures.

It is elementary tort law that consent is the mechanism by which the patient grants the physician the power to act, and which protects the patient against unauthorized invasions of his person. This requirement protects one of society's most fundamental values, the inviolability of the individual. An operation performed upon a patient without his informed consent is the tort of battery, and a doctor and a hospital have no right to impose compulsory medical treatment against the patient's will. These elementary statements of tort law need no citation.

Jay Katz, in his outstanding book "Experimentation with Human Beings" (Russell Sage Foundation, N.Y. (1972)) points out on page 523 that the concept of informed consent has been accepted as a cardinal principle for judging the propriety of research with human beings.

He points out that in the experimental setting, informed consent serves multiple purposes. He states (page 523 and 524) :

"* * * Most clearly, requiring informed consent serves society's desire to respect each individual's autonomy, and his right to make choices concerning his own life.

"Second, providing a subject with information about an experiment will encourage him to be an active partner and the process may also increase the rationality of the experimentation process.

"Third, securing informed consent protects the experimentation process by encouraging the investigator to question the value of the proposed project and the adequacy of the measures he has taken to protect subjects, by reducing civil and criminal liability for nonnegligent injury to the subjects, and by diminishing adverse public reaction to an experiment.

Finally, informed consent may serve the function of increasing society's awareness about human research * * *"

It is obvious that there must be close scrutiny of the adequacy of the consent when an experiment, as in this case, is dangerous, intrusive, irreversible, and of uncertain benefit to the patient and society.²⁰

Counsel for Drs. Rodin and Gottlieb argues that anyone who has ever been treated by a doctor for any relatively serious illness is likely to acknowledge that a competent doctor can get almost any patient to consent to almost anything. Counsel claims this is true because patients do not want to make decisions about complex medical matters and because there is the general problem of avoiding decision making in stress situations, characteristic of all human beings.

He further argues that a patient is always under duress when hospitalized and that in a hospital or institutional setting there is no such thing as a volunteer. Dr. Ingelfinger in Volume 287, page 466, of the New England Journal of Medicine (August 31, 1972) states:

"* * * The process of obtaining 'informed consent' with all its regulations and conditions, is no more than an elaborate ritual, a device that when the subject is uneducated and uncomprehending, confers no more than the semblance of propriety on human experimentation. The subject's only real protection, the public as well as the medical profession must recognize, depends on the conscience and compassion of the investigator and his peers."

¹⁹ See "Experimentation on Human Beings," 22 Stanford Law Review 99 (1967); Kidd, "Limits of the Right of a Person to Consent to Experimentation Upon Himself," 117 Science 211 (1953).

²⁰ The principle is reflected in numerous statements of medical ethics. See the American Medical Association, "Principles of Medical Ethics, 132 JAMA 1090 (1946); American Medical Association, "Ethical Guidelines for Clinical Investigation (1966); National Institute of World Medical Association, "Code of Ethics" (Declaration of Helsinki) reprinted in 2 British Medical Journal, 177 (1964). It is manifested in the code adopted by the United States Military Tribunal at Nuremberg which, at the time, was considered the most carefully developed precepts specifically drawn to meet the problems of human experimentation. See Ladimer, "Ethical and Legal Aspects of Medical Research in Human Beings," 3 J. Pub. L. 467, 487 (1954).

Everything defendants' counsel argues militates against the obtaining of informed consent from involuntarily detained mental patients. If, as he argues, truly informed consent cannot be given for regular surgical procedures by non-institutionalized persons, then certainly an adequate informed consent cannot be given by the involuntarily detained mental patient.

We do not agree that a truly informed consent cannot be given for a regular surgical procedure by a patient, institutionalized or not. The law has long recognized that such valid consent can be given. But we do hold that informed consent cannot be given by an involuntarily detained mental patient for experimental psychosurgery for the reasons set forth below.

The Michigan Supreme Court has considered in a tort case the problems of experimentation with humans. In *Hortner v. Koch*, 272 Mich. 273, 261 N.W. 762 (1935), the issue turned on whether the doctor had taken proper diagnostic steps before prescribing an experimental treatment for cancer. Discussing medical experimentation, the Court said at page 282:

"We recognize the fact that if the general practice of medicine and surgery is to progress, there must be a certain amount of experimentation carried on; but such experiments must be done with the knowledge and consent of the patient or those responsible for him, and must not vary too radically from the accepted method of procedure. (Emphasis added).

This means that the physician cannot experiment without restraint or restriction. He must consider first of all the welfare of his patient. This concept is universally accepted by the medical profession, the legal profession, and responsible persons who have thought and written on the matter.

Furthermore, he must weigh the risk to the patient against the benefit to be obtained by trying something new. The risk-benefit ratio is an important ratio in considering any experimental surgery upon a human being. The risk must always be relatively low, in the non-life threatening situation to justify human experimentation.

Informed consent is a requirement of variable demands. Being certain that a patient has consented adequately to an operation, for example, is much more important when doctors are going to undertake an experimental, dangerous, and intrusive procedure than, for example, when they are going to remove an appendix. When a procedure is experimental, dangerous, and intrusive, procedure than, for example, when they are going to remove an appendix. When a procedure is experimental, dangerous, and intrusive, special safeguards are necessary. The risk-benefit ratio must be carefully considered, and the question of consent thoroughly explored.

To be legally adequate, a subject's informed consent must be competent, knowing and voluntary.

In considering consent for experimentation, the ten principles known as the Nuremberg Code give guidance. They are found in the Judgment of the Court in *United States v. Karl Brandt*.²¹

There the Court said:

"*** Certain basic principles must be observed in order to satisfy moral, ethical and legal concepts:

1. The voluntary consent of the human subject is absolutely essential.

This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject, there should be made known to him the nature, duration and purpose of the experiment; the methods and means by which it is to be conducted; all inconveniences and hazards reasonably to be expected; and the affects upon his health or person which may possibly come from his participation in the experiment.

The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs, or engages in the experiment. It is

²¹ Trial of War Criminals before the Nuremberg Military Tribunals, Volume 1 and 2, "The Medical Case," Washington, D.C.: U.S. Government Printing Office (1948) reprinted in "Experimentation with Human Beings," by Katz (Russell Sage Foundation (1972)) page 305.

a personal duty and responsibility which may not be delegated to another with impunity.

"2. The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random and unnecessary in nature.

"3. The experiment should be so designed and based on the results of animal experimentation and a knowledge of the natural history of the disease or other problem under study that the anticipated results will justify the performance of the experiment.

"4. The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury.

"5. No experiment should be conducted where there is an a priori reason to believe that death or disabling injury will occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects.

"6. The degree of risk to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.

"7. Proper preparations should be made and adequate facilities provided to protect the experimental subject against even remote possibilities of injury, disability, or death.

"8. The experiment should be conducted only by scientifically qualified persons. The highest degree of skill and care should be required through all stages of the experiment of those who conduct or engage in the experiment.

"9. During the course of the experiment the human subject should be at liberty to bring the experiment to an end if he has reached the physical or mental state where continuation of the experiment seems to him to be impossible.

"10. During the course of the experiment the scientist in charge must be prepared to terminate the experiment at any stage, if he has probable cause to believe, in the exercise of the good faith, superior skill, and careful judgment required of him that a continuation of the experiment is likely to result in injury, disability, or death to the experimental subject."

In the Nuremberg Judgment, the elements of what must guide us in decision are found. The involuntarily detained mental patient must have legal capacity to give consent. He must be so situated as to be able to exercise free power of choice without any element of force, fraud, deceit, duress, overreaching, or other ulterior form of restraint or coercion. He must have sufficient knowledge and comprehension of the subject matter to enable him to make an understanding decision. The decision must be a totally voluntary one on his part.

We must first look to the competency of the involuntarily detained mental patient to consent. Competency requires the ability of the subject to understand rationally the nature of the procedure, its risks, and other relevant information. The standard governing required disclosure by a doctor is what a reasonable patient needs to know in order to make an intelligent decision. See Waltz and Scheunerman, "Informed Consent Therapy," 64 *Northwestern Law Review* 628 (1969).²²

Although an involuntarily detained mental patient may have a sufficient I. Q. to intellectually comprehend his circumstances (in Dr. Rodin's experiment, a person was required to have at least an I. Q. of 80), *the very nature of his incarceration diminishes the capacity to consent to psychosurgery*. He is particularly vulnerable as a result of his mental condition, the deprivation stemming from involuntary confinement, and the effects of the phenomenon of "institutionalization."

The very moving testimony of John Doe in the instant case establishes this beyond any doubt. The fact of institutional confinement has special force in undermining the capacity of the mental patient to make a competent decision on this issue, even though he be intellectually competent to do so. In the routine of institutional life, most decisions are made for patients. For example, John Doe testified how extraordinary it was for him to be approached by Dr. Yudashki about the possible submission to psychosurgery, and how unusual it was to be consulted by a physician about his preference.

Institutionalization tends to strip the individual of the support which permit him to maintain his sense of self-worth and the value of his own physical and

²² In *Bullentine's Law Dictionary* (Second Edition) (1948), competency is equated with capacity and capacity is defined as "a person's ability to understand the nature and effect of the act in which he is engaged and the business in which he is transacting."

mental integrity. An involuntarily confined mental patient clearly has diminished capacity for making a decision about irreversible experimental psychosurgery.

Equally great problems are found when the involuntarily detained mental patient is incompetent, and consent is sought from a guardian or parent. Although guardian or parental consent may be legally adequate when arising out of traditional circumstances, it is legally ineffective in the psychosurgery situation. The guardian or parent cannot do that which the patient, absent a guardian, would be legally unable to do.

The second element of an informed consent is knowledge of the risk involved and the procedures to be undertaken. It was obvious from the record made in this case that the facts surrounding experimental brain surgery are profoundly uncertain, and the lack of knowledge on the subject makes a knowledgeable consent to psychosurgery literally impossible.

We turn now to the third element of an informed consent, that of voluntariness. It is obvious that the most important thing to a large number of involuntarily detained mental patients incarcerated for an unknown length of time, is freedom.

The Nuremberg standards require that the experimental subjects be so situated as to exercise free power of choice without the intervention of any element of force, fraud, deceit, duress, overreaching, or other *ulterior form of constraint or coercion*. It is impossible for an involuntarily detained mental patient to be free of ulterior forms of restraint or coercion when his very release from the institution may depend upon his cooperating with the institutional authorities and giving consent to experimental surgery.

The privileges of an involuntarily detained patient and the rights he exercises in the institution are within the control of the institutional authorities. As was pointed out in the testimony of John Doe, such minor things as the right to have a lamp in his room, or the right to have ground privileges to go for a picnic with his family assumed major proportions. For 17 years he lived completely under the control of the hospital. Nearly every important aspect of his life was decided without any opportunity on his part to participate in the decision-making process.

The involuntarily detained mental patient is in an inherently coercive atmosphere even though no direct pressures may be placed upon him. He finds himself stripped of customary amenities and defenses. Free movement is restricted. He becomes a part of communal living subject to the control of the institutional authorities.

As pointed out in the testimony in this case, John Doe consented to this psychosurgery partly because of his effort to show the doctors in the hospital that he was a cooperative patient. Even Dr. Yudashkin, in his testimony, pointed out that involuntarily confined patients tend to tell their doctors what the patient thinks these people want to hear.

The inherently coercive atmosphere to which the involuntarily detained mental patient is subjected has bearing upon the voluntariness of his consent. This was pointed up graphically by Dr. Watson in his testimony (page 67, April 4.) There he was asked if there was any significant difference between the kinds of coercion that exist in an open hospital setting and the kinds of coercion that exist on involuntarily detained patients in a state mental institution.

Dr. Watson answered in this way:

"There is an enormous difference. My perception of the patients at Ionia is that they are willing almost to try anything to somehow or other improve their lot, which is—you know—not bad. It is just plain normal—you know—that kind of desire. Again, that pressure—again—I don't like to use the word 'coercion' because it implies a kind of deliberateness and that is not what we are talking about—the pressure to accede is perhaps the more accurate way, I think—the pressure is perhaps so severe that it probably ought to cause us to not be willing to permit experimentation that has questionable gain and high risk from the standpoint of the patient's posture, which is, you see, the formula that I mentioned we hashed out in our Human Use Committee."

Involuntarily confined mental patients live in an inherently coercive institutional environment. Indirect and subtle psychological coercion has profound effect upon the patient population. Involuntarily confined patients cannot reason as equals with the doctors and administrators over whether they should

undergo psychosurgery. They are not able to voluntarily give informed consent because of the inherent inequality in their position.²³

It has been argued by defendants that because 13 criminal sexual psychopaths in the Ionia State Hospital wrote a letter indicating they did not want to be subjects of psychosurgery, that consent can be obtained and that the arguments about coercive pressure are not valid.

The Court does not feel that this necessarily follows. There is no showing of the circumstances under which the refusal of these thirteen patients was obtained, and there is no showing whatever that any effort was made to obtain the consent of these patients for such experimentation.

The fact that thirteen patients unilaterally wrote a letter saying they did not want to be subjects of psychosurgery is irrelevant to the question of whether they can consent to that which they are legally precluded from doing.

The law has always been meticulous in scrutinizing inequality in bargaining power and the possibility of undue influence in commercial fields and in the law of wills. It also has been most careful in excluding from criminal cases confessions where there was no clear showing of their completely voluntary nature after full understanding of the consequences.²⁴ No lesser standard can apply to involuntarily detained mental patients.

The keynote to any intrusion upon the body of a person must be full, adequate and informed consent. The integrity of the individual must be protected from invasion into his body and personality not voluntarily agreed to. Consent is not an idle or symbolic act; it is a fundamental requirement for the protection of the individual's integrity.

We therefore conclude that involuntarily detained mental patients cannot give informed and adequate consent to experimental psychosurgical procedures on the brain.

The three basic elements of informed consent—competency, knowledge, and voluntariness—cannot be ascertained with a degree of reliability warranting resort to use of such an invasive procedure.²⁵

To this point, the Court's central concern has primarily been the ability of an involuntarily detained mental patient to give a factually informed, legally adequate consent to psychosurgery. However, there are also compelling constitutional considerations that preclude the involuntarily detained mental patient from giving effective consent to this type of surgery.

We deal here with State action in view of the fact the question relates to involuntarily detained mental patients who are confined because of the action of the State.

²³ It should be emphasized that once John Doe was released in this case and returned to the community he withdrew all consent to the performance of the proposed experiment. His withdrawal of consent under these circumstances should be compared with his response on January 12, 1973, to questions placed to him by Prof. Slovenko, one of the members of the Human Rights Committee. These answers are part of exhibit 22 and were given after extensive publicity about this case, and while John Doe was in Lafayette Clinic waiting the implantation of depth electrodes. The significant questions and answers are as follows:

1. Would you seek psychosurgery if you were not confined in an institution?

A. Yes, if after testing this showed it would be of help.

2. Do you believe that psychosurgery is a way to obtain your release from the institution?

A. No, but it would be a step in obtaining my release. It is like any other therapy or program to help persons to function again.

3. Would you seek psychosurgery if there were other ways to obtain your release?

A. Yes. If psychosurgery were the only means of helping my physical problem after a period of testing.

²⁴ See, for example, *Miranda v. Arizona*, 384 U.S. 436 (1966) and *Escobedo v. Illinois*, 378 U.S. 478 (1964).

Prof. Paul Freund of the Harvard Law School has expressed the following opinion:

"I suggest . . . that [prison] experiments should not involve any promise of parole or of commutation of sentence; this would be what is called in the law of confessions undue influence or duress through promise of reward, which can be as effective in overbearing the will as threats of harm. Nor should there be a pressure to conform within the prison generated by the pattern of rejecting parole applications of those who do not participate . . ." P. A. Freund, "Ethical Problems in Human Experimentation," *New England Journal of Medicine*, Volume 273 (1965) pages 687-92.

²⁵ It should be noted that Dr. Vernon H. Mark, a leading psychosurgeon, states that psychosurgery should not be performed on prisoners who are epileptic because of the problem of obtaining adequate consent. He states in "Brain Surgery in Aggressive Epileptics," the *Hastings Center Report*, Vol. 3, No. 1 (February, 1973): "Prison inmates suffering from epilepsy should receive only medical treatment; surgical therapy should not be carried out because of the difficulty in obtaining truly informed consent."

Initially, we consider the application of the First Amendment to the problem before the Court, recognizing that when the State's interest is in conflict with the Federal Constitution, the State's interest, even though declared by statute or court rule, must give way. See *NAACP v. Button*, 371 U. S. 415 (1963) and *United Transportation Workers' Union v. State Bar of Michigan*, 401 U. S. 576 (1971).

A person's mental processes, the communication of ideas, and the generation of ideas, come within the ambit of the First Amendment. To the extent that the First Amendment protects the dissemination of ideas and the expression of thoughts, it equally must protect the individual's right to generate ideas.

As Justice Cardozo pointed out:

"We are free only if we know, and so in proportion to our knowledge. There is no freedom without choice, and there is no choice without knowledge—or none that is illusory. Implicit, therefore, in the very notion of liberty is the liberty of the mind to absorb and to beget . . . The mind is in chains when it is without the opportunity to choose. One may argue, if one please, that opportunity to choose is more an evil than a good. One is guilty of a contradiction if one says that the opportunity can be denied, and liberty subsist. At the root of all liberty is the liberty to know ***"

"Experimentation there may be in many things of deep concern, but not in setting boundaries to thought, for thought freely communicated is the indispensable condition of intelligent experimentation, the one test of its validity. Cardozo, *The Paradoxes of Legal Science*, Columbia University Lectures, reprinted in *Selected Writings of Benjamin Nathan Cardozo*." (Fallon Publications (1947)), pages 317 and 318:

Justice Holmes expressed the basic theory of the First Amendment in *Abrams v. United States*, 250 U. S. 616, 630 (1919) when he said:

"*** The ultimate good desired is better reached by free trade in ideas—that the best test of truth is the power of the thought to get itself accepted in the competition of the market, and that truth is the only ground upon which their wishes safely can be carried out. That at any rate is the theory of our Constitution. *** We should be eternally vigilant against attempts to check expressions of opinions that we loathe and believe to be fraught with death, unless they so imminently threaten immediate interference with the lawful and pressing purposes of the law that an immediate check is required to save the country ***"

Justice Brandeis in *Whitney v. Cal.* 274 U. S. 357, 375 (1927), put it this way:

"Those who won our independence believed that the final end of the State was to make men free to value their faculties; and that in its government the deliberative force should prevail over the arbitrary . . . They believed that freedom to think as you will and to speak as you think are means indispensable to the discovery and spread of political truth; that without free speech and assembly discussion would be futile; that with them, discussion affords ordinarily adequate protection against the dissemination of noxious doctrine; that the greatest menace to freedom is an inert people; that public discussion is a political duty; and that this should be a fundamental principle of the American government ***"

Thomas Emerson, a distinguished writer on the First Amendment, stated this in "Toward a General Theory of the First Amendment," 72 *Yale Law Journal* 877, 895 (1963):

"The function of the legal process is not only to provide a means whereby a society shapes and controls the behavior of its individual members in the interests of the whole. It also supplies one of the principal methods by which a society controls itself, limiting its own powers in the interest of the individual. The role of the law here is to mark the guide and line between the sphere of social power, organized in the form of the state, and the area of private right. The legal problems involved in maintaining a system of free expression fall largely into this realm. In essence legal support for such a society involves the protection of individual rights against interference of unwarranted control by the government. More specifically, the legal structure must provide:

"1. Protection of the individual's right to freedom of expression against interference by the government in its efforts to achieve other social objectives or to advance its own interests ***"

"3. Restriction of the government in so far as the government itself participates in the system of expression.

"All these requirements involve control over the state. The use of law to achieve this kind of control has been one of the central concerns of freedom-seeking societies over the ages. Legal recognition of individual rights, enforced through the legal processes, has become the core of free society."

In *Stanley v. Georgia*, 397 U. S. 557 (1969), the Supreme Court once again addressed the free dissemination of ideas. It said at page 565-66:

"Our whole constitutional heritage rebels at the thought of giving government the power to control men's minds . . . Whatever the power of the state to control dissemination of ideas inimical to public morality, it cannot constitutionally premise legislation on the desirability of controlling a person's private thoughts."

Freedom of speech and expression, and the right of all men to disseminate ideas, popular or unpopular, are fundamental to ordered liberty. Government has no power or right to control men's minds, thoughts, and expressions. This is the command of the First Amendment. And we adhere to it in holding an involuntarily detained mental patient may not consent to experimental psychosurgery.

For, if the First Amendment protects the freedom to express ideas, it necessarily follows that it must protect the freedom to generate ideas. Without the latter protection, the former is meaningless.

Experimental psychosurgery, which is irreversible and intrusive, often leads to the blunting of emotions, the deadening of memory, the reduction of affect, and limits the ability to generate new ideas. Its potential for injury to the creativity of the individual is great and can impinge upon the right of the individual to be free from interference with his mental processes.

The State's interest in performing psychosurgery and the legal ability of the involuntarily detained mental patient to give consent must bow to the First Amendment, which protects the generation and free flow of ideas from unwarranted interference with one's mental processes.

To allow an involuntarily detained mental patient to consent to the type of psychosurgery proposed in this case, and to permit the State to perform it, would be to condone State action in violation of basic First Amendment rights of such patients, because impairing the power to generate ideas inhibits the full dissemination of ideas.

There is no showing in this case that the State has met its burden of demonstrating such a compelling State interest in the use of experimental psychosurgery on involuntarily detained mental patients to overcome its proscription by the First Amendment of the United States Constitution.

In recent years, the Supreme Court of the United States has developed a constitutional concept of right of privacy, relying upon the First, Fifth and Fourteenth Amendments. It was found in the marital bed in *Griswold v. Conn.* 381 U.S. 479 (1962); in the right to view obscenity in the privacy of one's home in *Stanley v. Georgia*, 395 U.S. 557 (1969); and in the right of a woman to control her own body by determining whether she wishes to terminate a pregnancy in *Rowe v. Wade*, 41 L.W. 4213 (1973).

The concept was also recognized in the case of a prison inmate subjected to shock treatment and an experimental drug without his consent in *Muckey v. Procunier*, — F.2d —, 72-3062 (9th Circuit, April 16, 1973).

In that case, the 9th Circuit noted that the District Court had treated the action as a malpractice claim and had dismissed it. The 9th Circuit reversed, saying, *inter alia*:

"It is asserted in memoranda that the staff at Vacaville is engaged in medical and psychiatric experimentation with 'aversion treatment' of criminal offenders, including the use of succinylcholine on fully conscious patients. It is emphasized the plaintiff was subject to experimentation without consent.

"Proof of such matters could, in our judgment, raise serious constitutional questions respecting cruel and unusual punishment of *impermissible tinkering with the mental processes*. (Citing *Stanley* among other cases) In our judgment it was error to dismiss the case without ascertaining at least the extent to which such charges can be substantiated * * *" (Emphasis added).

Much of the rationale for the developing constitutional concept of right to privacy is found in Justice Brandeis' famous dissent in *Olmstead v. United States*, 277 U.S. 436 (1928) at 478, where he said:

"The makers of our Constitution undertook to secure conditions favorable to the pursuit of happiness. They recognized the significance of man's spiritual nature, of his feelings and of his intellect. They knew that only a part of the pain, pleasure, and satisfaction of life are to be found in material things. They sought to protect Americans in their beliefs, their thoughts, their emotions and their sensations. They conferred, as against the Government, the right to be let alone—the most comprehensive of rights and the right most valued by civilized men."

There is no privacy more deserving of constitutional protection than that of one's mind. As pointed out by the Court in *Huguez v. United States*, 406 F. 2d 366 (1968), at page 382, footnote 84:

"* * * Nor are the intimate internal areas of the physical habitation of mind and soul any less deserving of previous preservation from unwarranted and forcible intrusions than are the intimate internal areas of the physical habitation of wife and family. Is not the sanctity of the body even more important and therefore, more to be honored in its protection than the sanctity of the home? * * *"

Intrusion into one's intellect, when one is involuntarily detained and subject to the control of institutional authorities, is an intrusion into one's constitutionally protected right of privacy. If one is not protected in his thoughts, behavior, personality and identity, then the right of privacy becomes meaningless.²⁶

Before a State can violate one's constitutionally protected right of privacy and obtain a valid consent for experimental psychosurgery on involuntarily detained mental patients, a compelling State interest must be shown. None has been shown here.

To hold that the right of privacy prevents laws against dissemination of contraceptive material as in *Griswold v. Conn.* (supra), or the right to view obscenity in the privacy of one's home as in *Stanley v. Georgia* (supra), but that it does not extend to the physical intrusion in an experimental manner upon the brain of an involuntarily detained mental patient is to denigrate the right. In the hierarchy of values, it is more important to protect one's mental processes than to protect even the privacy of the marital bed. To authorize an involuntarily detained mental patient to consent to experimental psychosurgery would be to fail to recognize and follow the mandates of the Supreme Court of the United States, which has constitutionally protected the privacy of body and mind.

Counsel for John Doe has argued persuasively that the use of the psychosurgery proposed in the instant case would constitute cruel and unusual punishment and should be barred under the Eighth Amendment. A determination of this issue is not necessary to decision, because of the many other legal and constitutional reasons for holding that the involuntarily detained mental patient may not give an informed and valid consent to experimental psychosurgery. We therefore do not pass on the issue of whether the psychosurgery proposed in this case constitutes cruel and unusual punishment within the meaning of the Eighth Amendment.

For the reasons given, we conclude that the answer to question number one posed for decision is no.

In reaching this conclusion, we emphasize two things.

First, the conclusion is based upon the state of the knowledge as of the time of the writing of this Opinion. When the state of medical knowledge develops to the extent that the type of psychosurgical intervention proposed here becomes an accepted neurosurgical procedure and is no longer experimental, it is possible, with appropriate review mechanisms,²⁷ that involuntarily detained mental patients could consent to such an operation.

Second, we specifically hold that an involuntarily detained mental patient today can give adequate consent to accepted neurosurgical procedures.

In view of the fact we have answered the first question in the negative, it is not necessary to proceed to a consideration of the second question, although we cannot refrain from noting that had the answer to the first question been yes, serious constitutional problems would have arisen with reference to the second question.

²⁶ See Note: 45 So. Cal. L. R. 616, 663 (1972).

²⁷ For example, see Guidelines of the Department of Health, Education and Welfare, AC Exhibit 17.

One final word. The Court thanks all counsel for the excellent, lawyer-like manner in which they have conducted themselves. Seldom, if ever, has any member of this panel presided over a case where the lawyers were so well-prepared and so helpful to the Court.

The findings in this Opinion shall constitute the findings of fact and conclusions of law upon the issues framed pursuant to the provisions of G.C.R. (1963) 517.1

A judgment embodying the findings of the Court in this Opinion may be presented.

HORACE W. GILMORE,
GEORGE E. BOWLES,
JOHN D. O'HAIR,
Circuit Judges.

JULY 10, 1973, Detroit, Michigan .

[Item VI.B.2]

United States District Court, M.D. Alabama, N.D.

April 13, 1972.

Civ. A. No. 319-N.

RICKY WYATT, BY AND THROUGH HIS AUNT AND LEGAL GUARDIAN, MRS. W. C. RAWLINS, JR., ET AL., FOR THEMSELVES JOINTLY AND SEVERALLY AND FOR ALL OTHERS SIMILARLY SITUATED. PLAINTIFFS

v.

DR. STONEWALL B. STICKNEY, AS COMMISSIONER OF MENTAL HEALTH AND THE STATE OF ALABAMA MENTAL HEALTH OFFICER, ET. AL., DEFENDANTS

United States of America et al., Amici Curiae.

Class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions. The District Court entered an order which, *inter alia*, provided for a further hearing to establish proper standards for treatment, 334 F.Supp. 1 41. Thereafter the District Court, Johnson, C. J., held, *inter alia*, that court would withhold decision on prayer for appointment of a master and professional advisory committee to oversee the implementation of the court-ordered minimum constitutional standards, under rule that federal courts are reluctant to assume control of any organization, especially one operated by a state, combined with defendants' expressed intent that the court order would be implemented forthwith and in good faith, and that unavailability of funds, staff or facilities would not justify a default by defendants.

Order accordingly.

See also D.C., 344 F.Supp. 387.

1. Mental Health

In class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions, initiation of human rights committees would be ordered to function as standing committees of such facilities, and the court would appoint the members of such committees, who would have power to review all research proposals and all rehabilitation programs to ensure that the dignity and human rights of the patients are preserved.

2. Courts

In class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions, court would withhold decision on prayer for appointment of a master and professional advisory committee to oversee the implementation of the court-ordered minimum constitutional standards, under rule that federal courts are reluctant to assume control of any organization, especially one operated by a state, combined with defendants' expressed intent that the court order would be implemented forthwith and in good faith.

3. Mental Health

Unavailability of funds, staff or facilities would not justify a default by defendants, in class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions, in the provision of suitable treatment for the mentally ill.

4. Mental Health

Despite possibility that defendants, in class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions, would encounter financial difficulties in the implementation of court order, which set forth minimum standards of patient treatment, court would reserve ruling on motion by plaintiffs that defendant Mental Health Board be directed to sell or encumber portions of its landholdings in order to raise funds, and similarly would reserve ruling on motion seeking an injunction against treasurer and comptroller of the state authorizing expenditures for non-essential state functions, and on other aspects of plaintiffs' requested relief designed to ameliorate the financial problems incident to implementation of court's order.

5. Courts

Court would not, in class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions, enjoin further commitments to such institutions until such time as adequate treatment was supplied in such institutions, where, because of the alternatives to commitment commonly utilized in Alabama, granting of plaintiffs' request might serve only to punish and further deprive Alabama's mentally ill.

6. Federal Civil Procedure

Reasonable attorney fees should be awarded to counsel for plaintiffs who brought class action on behalf of patients involuntarily confined for mental treatment purposes in Alabama mental institutions.

George W. Dean, Jr., Destin, Fla., Jack Drake (Drake, Knowles & Still), Tuscaloosa, Ala., Reber F. Boulton, Jr., Atlanta, Ga., Morton Birnbaum, Brooklyn, N.Y., for plaintiffs.

William J. Baxley, Atty. Gen., of Alabama, J. Jerry Wood, Asst. Atty. Gen., of Alabama, Montgomery, Ala., John J. Coleman, Special Asst. Atty. Gen., of Alabama, Birmingham, Ala., for defendants.

Ira DeMent, U.S. Atty., Middle District of Alabama, Montgomery, Ala., Robert H. Johnson and David J. W. Vanderhoof, Civil Rights Division, U.S. Dept. of Justice, Washington, D.C., Cleveland Thornton, Special Asst. U.S. Atty., Middle District of Alabama, Montgomery, Ala., for the United States amici curiae.

Charles R. Halpern (Center for Law & Social Policy), James F. Fitzpatrick, Stephen M. Sacks, and Jeffrey D. Bauman (Arnold & Porter) Washington, D.C., Bruce Ennis (American Civil Liberties Union), New York City, Stanley Herr (NLADA National Law Office), Washington, D.C., Shelley Mercer (National Health and Environmental Program, School of Law, UCLA), Los Angeles, Cal., Paul Friedman (Center for Law and Social Policy), Washington, D.C., for other amici curiae.

ORDER AND DECREE

JOHNSON, Chief Judge.

This class action originally was filed on October 23, 1970, in behalf of patients involuntarily confined for mental treatment purposes at Bryce Hospital, Tuscaloosa, Alabama. On March 12, 1971, in a formal opinion and decree, this Court held that these involuntarily committed patients "unquestionably have a constitutional right to receive such individual treatment as will give each of them a realistic opportunity to be cured or to improve his or her mental condition." The Court further held that patients at Bryce were being denied their right to treatment and that defendants, per their request, would be allowed six months in which to raise the level of care at Bryce to the constitutionally required minimum. *Wyatt v. Stickney*, 325 F.Supp. 781 (M.D.Ala. 1971). In this decree the Court ordered defendants to file reports defining the mission and functions of Bryce Hospital, specifying the objective and subjective standards required to furnish adequate care to the treatable mentally ill and detailing the hospital's progress toward the implementation of minimum constitutional standards. Subsequent to this order, plaintiffs, by motion to amend granted

August 12, 1971, enlarged their class to include patients involuntarily confined for mental treatment at Searcy Hospital¹ and at Partlow State School and Hospital for the mentally retarded.²

On September 23, 1971, defendants filed their final report, from which this Court concluded on December 10, 1971, 334 F. Supp. 1341, that defendants had failed to promulgate and implement a treatment program satisfying minimum medical and constitutional requisites. Generally, the Court found that defendants' treatment program was deficient in three fundamental areas. It failed to provide: (1) a humane psychological and physical environment, (2) qualified staff in numbers sufficient to administer adequate treatment and (3) individualized treatment plans. More specifically, the Court found that many conditions, such as nontherapeutic, uncompensated work assignments, and the absence of any semblance of privacy, constituted dehumanizing factors contributing to the degeneration of the patients' self-esteem. The physical facilities at Bryce were overcrowded and plagued by fire and other emergency hazards. The Court found also that most staff members were poorly trained and that staffing ratios were so inadequate as to render the administration of effective treatment impossible. The Court concluded therefore, that whatever treatment was provided at Bryce was grossly deficient and failed to satisfy minimum medical and constitutional standards. Based upon this conclusion, the Court ordered that a formal hearing be held at which the parties and amici³ would have the opportunity to submit proposed standards for constitutionally adequate treatment and to present expert testimony in support of their proposals.

Pursuant to this order, a hearing was held at which the foremost authorities on mental health in the United States appeared and testified as to the minimum medical and constitutional requisites for public institutions, such as Bryce and Searcy, designed to treat the mentally ill. At this hearing, the parties and amici submitted their proposed standards, and now have filed briefs in support of them.⁴ Moreover, the parties and amici have stipulated to a broad spectrum of conditions they feel are mandatory for a constitutionally ac-

¹ Searcy Hospital, located in Mount Vernon, Alabama, is also a State institution designed to treat the mentally ill. On September 2, 1971, defendants answered plaintiffs' amended complaint, as it related to Searcy, with the following language:

"Defendants agree to be bound by the objective and subjective standards ultimately ordered by this Honorable Court in this cause at Bryce and Searcy."

This answer obliterated the necessity for this Court's holding a formal hearing on the conditions currently existing at Searcy. Nevertheless, the evidence in the record relative to Searcy reflects that the conditions at that institution are no better than those at Bryce.

² The aspect of the case relating to Partlow State School and Hospital for the mentally retarded will be considered by the Court in a decree separate from the present one.

³ The amici in this case, including the United States of America, the American Orthopsychiatric Association, the American Psychological Association, the American Civil Liberties Union, and the American Association on Mental Deficiency, have performed exemplary service for which this Court is indeed grateful.

⁴ On March 15, 1972, after the hearing in this case, plaintiffs filed a motion for further relief. This motion served, among other things, to renew an earlier motion, filed by plaintiffs on September 1, 1971, and subsequently denied by the Court, to add additional parties. That earlier motion asked that the Court add:

"Agnes Baggett, as Treasurer of the State of Alabama; Roy W. Sanders, as Comptroller of the State of Alabama; Ruben King, as Commissioner of the Alabama Department of Pensions and Security; George C. Wallace as Chairman of the Alabama State Board of Pensions and Security; and James J. Bailey as a member of the Alabama State Board of Pensions and Security and as representative of all other members of the Alabama State Board of Pensions and Security; J. Stanley Frazer, as Director of the Alabama State Personnel Board and Ralph W. Adams, as a member of the Alabama State Personnel Board and as representative of all other members of the Alabama State Personnel Board."

The motion of September 1, 1971, also sought an injunction against the treasurer and the comptroller of the State paying out State funds for "non-essential functions" of the State until enough funds were available to provide adequately for the financial needs of the Alabama State Mental Health Board.

In their motion of March 15, 1972, plaintiffs asked that, in addition to the above-named State officials and agencies, the Court add as parties to this litigation Dr. LeRoy Brown, State Superintendent of Education and Lt. Governor Jere Bensley, State Senator Pierre Pelham and State Representative Sage Lyons, as representatives of the Alabama Legislature. The motion of March 15, 1972, also requested the Court to appoint a master, to appoint a human rights committee and a professional advisory committee, to order the sale of defendant Mental Health Board's land holdings and other assets to raise funds for the operation of Alabama's mental health institutions, to enjoin the construction of any physical facilities by the Mental Health Board and to enjoin the commitment of any more patients to Bryce and Searcy until such time as adequate treatment is supplied in those hospitals.

ceptable minimum treatment program. This Court, having considered the evidence in the case, as well as the briefs, proposed standards and stipulations of the parties, has concluded that the standards set out in Appendix A to this decree are medical and constitutional minimums. Consequently, the Court will order their implementation.⁵ In so ordering, however, the Court emphasizes that these standards are, indeed, both medical and constitutional minimums and should be viewed as such. The Court urges that once this order is effectuated, defendants not become complacent and self-satisfied. Rather, they should dedicate themselves to providing physical conditions and treatment programs at Alabama's mental institutions that substantially exceed medical and constitutional minimums.

[1] In addition to asking that their proposed standards be effectuated, plaintiffs and amici have requested other relief designed to guarantee the provision of constitutional and humane treatment. Pursuant to one such request for relief, this Court has determined that it is appropriate to order the initiation of human rights committees to function as standing committees of the Bryce and Searcy facilities. The Court will appoint the members of these committees who shall have review of all research proposals and all rehabilitation programs, to ensure that the dignity and the human rights of patients are preserved. The committees also shall advise and assist patients who allege that their legal rights have been infringed or that the Mental Health Board has failed to comply with judicially ordered guidelines. At their discretion, the committees may consult appropriate, independent specialists who shall be compensated by the defendant Board. Seven members shall comprise the human rights committee for each institution, the names and addresses of whom are set forth in Appendix B to this decree. Those who serve on the committees shall be paid on a per diem basis and be reimbursed for travel expenses at the same rate as members of the Alabama Board of Mental Health.

[2] This Court will reserve ruling upon other forms of relief advocated by plaintiffs and amici, including their prayer for the appointment of a master and a professional advisory committee to oversee the implementation of the court-ordered minimum constitutional standards.⁶ Federal courts are reluctant to assume control of any organization, but especially one operated by a state. This reluctance, combined with defendants' expressed intent that this order will be implemented forthwith and in good faith, causes the Court to withhold its decision on these appointments. Nevertheless, defendants, as well as the other parties, and amici in this case, are placed on notice that unless defendants do comply satisfactorily with this order, the Court will be obligated to appoint a master.

[3] Because the availability of financing may bear upon the implementation of this order, the Court is constrained to emphasize at this juncture that a failure by defendants to comply with this decree cannot be justified by a lack of operating funds. As previously established by this Court:

"There can be no legal (or moral) justification for the State of Alabama's failing to afford treatment—and adequate treatment from a medical standpoint—to the several thousand patients who have been civilly committed to Bryce's for treatment purposes. To deprive any citizen of his or her liberty upon the altruistic theory that the confinement is for humane therapeutic reasons and then fail to provide adequate treatment violates the very fundamentals of due process." *Wyatt v. Stickney*, 325 F.Supp. at 785.

From the above, it follows consistently, of course, that the unavailability of neither funds, nor staff and facilities, will justify a default by defendants in the provision of suitable treatment for the mentally ill.

⁵ In addition to the standards detailed in this order, it is appropriate that defendants comply also with the conditions, applicable to mental health institutions, necessary to qualify Alabama's facilities for participation in the various programs, such as Medicare and Medicaid, funded by the United States Government. Because many of these conditions of participation have not yet been finally drafted and published, however, this Court will not at this time order that specific Government standards be implemented.

⁶ The Court's decision to reserve its ruling on the appointment of a master necessitates the reservation also of the Court's appointing a professional advisory committee to aid the master. Nevertheless, the Court notes that the professional mental health community in the United States has responded with enthusiasm to the proposed initiation of such a committee to assist in the upgrading of Alabama's mental health facilities. Consequently, this Court strongly recommends to defendants that they develop a professional advisory committee comprised of amenable professionals from throughout the country who are able to provide the expertise the evidence reflects is important to the successful implementation of this order.

[4] Despite the possibility that defendants will encounter financial difficulties in the implementation of this order, this Court has decided to reserve ruling also upon plaintiffs' motion that defendant Mental Health Board be directed to sell or encumber portions of its land holdings in order to raise funds.⁷ Similarly, this Court will reserve ruling on plaintiffs' motion seeking an injunction against the treasurer and the comptroller of the State authorizing expenditures for nonessential State functions, and on other aspects of plaintiffs' requested relief designed to ameliorate the financial problems incident to the implementation of this order. The Court stresses, however, the extreme importance and the grave immediacy of the need for proper funding of the State's public mental health facilities. The responsibility for appropriate funding ultimately must fall, of course, upon the State Legislature and, to a lesser degree, upon the defendant Mental Health Board of Alabama. For the present time, the Court will defer to those bodies in hopes that they will proceed with the realization and understanding that what is involved in this case is not representative of ordinary governmental functions such as paving roads and maintaining buildings. Rather, what is so inextricably intertwined with how the Legislature and Mental Health Board respond to the revelations of this litigation is the very preservation of human life and dignity. Not only are the lives of the patients currently confined at Bryce and Searcy at stake, but also at issue are the well-being and security of every citizen of Alabama. As is true in the case of any disease, no one is immune from the peril of mental illness. The problem, therefore, cannot be overemphasized and a prompt response from the Legislature, the Mental Health Board and other responsible State officials, is imperative.

In the event, though, that the Legislature fails to satisfy its well-defined constitutional obligation, and the Mental Health Board, because of lack of funding or any other legally insufficient reason, fails to implement fully the standards herein ordered, it will be necessary for the Court to take affirmative steps, including appointing a master, to ensure that proper fundings is realized⁸ and that adequate treatment is available for the mentally ill of Alabama.

[5] This Court now must consider that aspect of plaintiffs' motion of March 15, 1972, seeking an injunction against further commitments to Bryce and Searcy until such time as adequate treatment is supplied in those hospitals. Indisputably, the evidence in this case reflects that no treatment program at the Bryce-Searcy facilities approaches constitutional standards. Nevertheless, because of the alternatives to commitment commonly utilized in Alabama, as well as in other states, the Court is fearful that granting plaintiffs' request at the present time would serve only to punish and further deprive Alabama's mentally ill.

[6] Finally, the Court has determined that this case requires the awarding of a reasonable attorneys' fee to plaintiffs' counsel. The basis for the award and the amount thereof will be considered and treated in a separate order. The fee will be charged against the defendants as a part of the court costs in this case.

To assist the Court in its determination of how to proceed henceforth, defendants will be directed to prepare and file a report within six months from the date of this decree detailing the implementation of each standard herein ordered. This report shall be comprehensive and shall include a statement of the progress made on each standard not yet completely implemented, specifying the reasons for incomplete performance. The report shall include also a statement of the financing secured since the issuance of this decree and of defendants' plans for procuring whatever additional financing might be required. Upon the basis of this report and other available information, the Court will evaluate defendants' work and, in due course, determine the appropriateness of appointing a master and of granting other requested relief.

Accordingly, it is the order, judgment and decree of this Court:

⁷ See n. 4, supra. The evidence presented in this case reflects that the land holdings and other assets of the defendant Board are extensive.

⁸ The Court understands and appreciates that the Legislature is not due back in regular session until May, 1973. Nevertheless, special sessions of the Legislature are frequent occurrences in Alabama, and there has never been a time when such a session was more urgently required. If the Legislature does not act promptly to appropriate the necessary funding for mental health, the Court will be compelled to grant plaintiffs' motion to add various State officials and agencies as additional parties to this litigation, and to utilize other avenues of fund raising.

1. That defendants be and they are hereby enjoined from failing to implement fully and with dispatch each of the standards set forth in Appendix A attached hereto and incorporated as a part of this decree;

2. That human rights committees be and are hereby designated and appointed. The members thereof are listed in Appendix B attached hereto and incorporated herein. These committees shall have the purposes, functions, and spheres of operation previously set forth in this order. The members of the committees shall be paid on a per diem basis and be reimbursed for travel expenses at the same rate as members of the Alabama Board of Mental Health;

3. That defendants, within six months from this date, prepare and file with this Court a report reflecting in detail the progress on the implementation of this order. This report shall be comprehensive and precise, and shall explain the reasons for incomplete performance in the event the defendants have not met a standard in its entirety. The report also shall include a financial statement and an up-to-date timetable for full compliance.

4. That the court costs incurred in this proceeding, including a reasonable attorneys' fee for plaintiffs' lawyers, be and they are hereby taxed against the defendants;

5. That jurisdiction of this cause be and the same is hereby specifically retained.

It is further ordered that ruling on plaintiffs' motion for further relief, including the appointment of a master, filed March 15, 1972, be and the same is hereby reserved.

[Appendix A]

MINIMUM CONSTITUTIONAL STANDARDS FOR ADEQUATE TREATMENT OF THE MENTALLY ILL

I. DEFINITIONS

- a. "Hospital"—Bryce and Searcy Hospitals.
- b. "Patients"—all persons who are now confined and all persons who may in the future be confined at Bryce and Searcy Hospitals pursuant to an involuntary civil commitment procedure.
- c. "Qualified Mental Health Professional"—
 - (1) a psychiatrist with three years of residency training in psychiatry;
 - (2) a psychologist with a doctoral degree from an accredited program;
 - (3) a social worker with a master's degree from an accredited program and two years of clinical experience under the supervision of a Qualified Mental Health Professional;
 - (4) a registered nurse with a graduate degree in psychiatric nursing and two years of clinical experience under the supervision of a Qualified Mental Health Professional.
- d. "Non-Professional Staff Member" an employee of the hospital, other than a Qualified Mental Health Professional, whose duties require contact with or supervision of patients.

II. HUMANE PSYCHOLOGICAL AND PHYSICAL ENVIRONMENT

1. Patients have a right to privacy and dignity.
2. Patients have a right to the least restrictive conditions necessary to achieve the purposes of commitment.
3. No person shall be deemed incompetent to manage his affairs, to contract, to hold professional or occupational or vehicle operator's licenses, to marry and obtain a divorce, to register and vote, or to make a will *solely* by reason of his admission or commitment to the hospital.
4. Patients shall have the same rights to visitation and telephone communications as patients at other public hospitals, except to the extent that the Qualified Mental Health Professional responsible for formulation of a particular patient's treatment plan writes an order imposing special restrictions. The written order must be renewed after each periodic review of the treatment plan if any restrictions are to be continued. Patients shall have an unrestricted right to visitation with attorneys and with private physicians and other health professionals.
5. Patients shall have an unrestricted right to send sealed mail. Patients shall have an unrestricted right to receive sealed mail from their attorneys, private physicians, and other mental health professionals, from courts, and government officials. Patients shall have a right to receive sealed mail from

others, except to the extent that the Qualified Mental Health Professional responsible for formulation of a particular patient's treatment plan writes an order imposing special restrictions on receipt of sealed mail. The written order must be renewed after each periodic review of the treatment plan if any restrictions are to be continued.

6. Patients have a right to be free from unnecessary or excessive medication. No medication shall be administered unless at the written order of a physician. The superintendent of the hospital and the attending physician shall be responsible for all medication given or administered to a patient. The use of medication shall not exceed standards of use that are advocated by the United States Food and Drug Administration. Notation of each individual's medication shall be kept in his medical records. At least weekly the attending physician shall review the drug regimen of each patient under his care. All prescriptions shall be written with a termination date, which shall not exceed 30 days. Medication shall not be used as punishment, for the convenience of staff, as a substitute for program, or in quantities that interfere with the patient's treatment program.

7. Patients have a right to be free from physical restraint and isolation. Except for emergency situations, in which it is likely that patients could harm themselves or others and in which less restrictive means of restraint are not feasible, patients may be physically restrained or placed in isolation only on a Qualified Mental Health Professional's written order which explains the rationale for such action. The written order may be entered only after the Qualified Mental Health Professional has personally seen the patient concerned and evaluated whatever episode or situation is said to call for restraint or isolation. Emergency use of restraints or isolation shall be for no more than one hour, by which time a Qualified Mental Health Professional shall have been consulted and shall have entered an appropriate order in writing. Such written order shall be effective for no more than 24 hours and must be renewed if restraint and isolation are to be continued. While in restraint or isolation the patient must be seen by qualified ward personnel who will chart the patient's physical condition (if it is compromised) and psychiatric condition every hour. The patient must have bathroom privileges every hour and must be bathed every 12 hours.

8. Patients shall have a right not to be subjected to experimental research without the express and informed consent of the patient, if the patient is able to give such consent, and of his guardian or next of kin, after opportunities for consultation with independent specialists and with legal counsel. Such proposed research shall first have been reviewed and approved by the institution's Human Rights Committee before such consent shall be sought. Prior to such approval the Committee shall determine that such research complies with the principles of the Statement on the Use of Human Subjects for Research of the American Association on Mental Deficiency and with the principles for research involving human subjects required by the United States Department of Health, Education and Welfare for projects supported by that agency.

9. Patients have a right not to be subjected to treatment procedures such as lobotomy, electro-convulsive treatment, aversive reinforcement conditioning or other unusual or hazardous treatment procedures without their express and informed consent after consultation with counsel or interested party of the patient's choice.

10. Patients have a right to receive prompt and adequate medical treatment for any physical ailments.

11. Patients have a right to wear their own clothes and to keep and use their own personal possessions except insofar as such clothes or personal possessions may be determined by a Qualified Mental Health Professional to be dangerous or otherwise inappropriate to the treatment regimen.

12. The hospital has an obligation to supply an adequate allowance of clothing to any patients who do not have suitable clothing of their own. Patients shall have the opportunity to select from various types of neat, clean, and seasonable clothing. Such clothing shall be considered the patient's throughout his stay in the hospital.

13. The hospital shall make provision for the laundering of patient clothing.

14. Patients have a right to regular physical exercise several times a week. Moreover, it shall be the duty of the hospital to provide facilities and equipment for such exercise.

15. Patients have a right to be outdoors at regular and frequent intervals, in the absence of medical considerations.

16. The right to religious worship shall be accorded to each patient who desires such opportunities. Provisions for such worship shall be made available to all patients on a nondiscriminatory basis. No individual shall be coerced into engaging in any religious activities.

17. The institution shall provide, with adequate supervision, suitable opportunities for the patient's interaction with members of the opposite sex.

18. The following rules shall govern patient labor:

A. Hospital Maintenance

No patient shall be required to perform labor which involves the operation and maintenance of the hospital or for which the hospital is under contract with an outside organization. Privileges or release from the hospital shall not be conditioned upon the performance of labor covered by this provision. Patients may voluntarily engage in such labor if the labor is compensated in accordance with the minimum wage laws of the Fair Labor Standards Act, 29 U.S.C. § 206 as amended, 1966.

B. Therapeutic Tasks and Therapeutic Labor

(1) Patients may be required to perform therapeutic tasks which do not involve the operation and maintenance of the hospital, provided the specific task or any change in assignment is:

a. An integrated part of the patient's treatment plan and approved as a therapeutic activity by a Qualified Mental Health Professional responsible for supervising the patient's treatment; and

b. Supervised by a staff member to oversee the therapeutic aspects of the activity.

(2) Patients may voluntarily engage in therapeutic labor for which the hospital would otherwise have to pay an employee, provided the specific labor or any change in labor assignment is:

a. An integrated part of the patient's treatment plan and approved as a therapeutic activity by a Qualified Mental Health Professional responsible for supervising the patient's treatment; and

b. Supervised by a staff member to oversee the therapeutic aspects of the activity; and

c. Compensated in accordance with the minimum wage laws of the Fair Labor Standards Act, 29 U.S.C. § 206 as amended, 1966.

C. Personal Housekeeping

Patients may be required to perform tasks of a personal housekeeping nature such as the making of one's own bed.

D. Payment to patients pursuant to these paragraphs shall not be applied to the costs of hospitalization.

19. Physical Facilities

A patient has a right to a humane psychological and physical environment within the hospital facilities. These facilities shall be designed to afford patients with comfort and safety, promote dignity, and ensure privacy. The facilities shall be designed to make a positive contribution to the efficient attainment of the treatment goals of the hospital.

A. Resident Unit

The number of patients in a multi-patient room shall not exceed six persons. There shall be allocated a minimum of 80 square feet of floor space per patient in a multi-patient room. Screens or curtains shall be provided to ensure privacy within the resident unit. Single rooms shall have a minimum of 100 square feet of floor space. Each patient will be furnished with a comfortable bed with adequate changes of linen, a closet or locker for his personal belongings, a chair, and a bedside table.

B. Toilets and Lavatories

There will be one toilet provided for each eight patients and one lavatory for each six patients. A lavatory will be provided with each toilet facility. The toilets will be installed in separate stalls to ensure privacy, will be clean and free of odor, and will be equipped with appropriate safety devices for the physically handicapped.

C. Showers

There will be one tub or shower for each 15 patients. If a central bathing area is provided, each shower area will be divided by curtains to ensure privacy. Showers and tubs will be equipped with adequate safety accessories.

D. Day Room

The minimum day room area shall be 40 square feet per patient. Day rooms will be attractive and adequately furnished with reading lamps, tables, chairs, television and other recreational facilities. They will be conveniently located to patients' bedrooms and shall have outside windows. There shall be at least one day room area on each bedroom floor in a multi-story hospital. Areas used for corridor traffic cannot be counted as day room space; nor can a chapel with fixed pews be counted as a day room area.

E. Dining Facilities

The minimum dining room area shall be ten square feet per patient. The dining room shall be separate from the kitchen and will be furnished with comfortable chairs and tables with hard, washable surfaces.

F. Linen Servicing and Handling

The hospital shall provide adequate facilities and equipment for handling clean and soiled bedding and other linen. There must be frequent changes of bedding and other linen, no less than every seven days to assure patient comfort.

G. Housekeeping

Regular housekeeping and maintenance procedures which will ensure that the hospital is maintained in a safe, clean, and attractive condition will be developed and implemented.

H. Geriatric and Other Nonambulatory Mental Patients

There must be special facilities for geriatric and other nonambulatory patients to assure their safety and comfort, including special fittings on toilets and wheelchairs. Appropriate provision shall be made to permit nonambulatory patients to communicate their needs to staff.

I. Physical Plant

(1) Pursuant to an established routine maintenance and repair program, the physical plant shall be kept in a continuous state of good repair and operation in accordance with the needs of the health, comfort, safety and well-being of the patients.

(2) Adequate heating, air conditioning and ventilation systems and equipment shall be afforded to maintain temperatures and air changes which are required for the comfort of patients at all times and the removal of undesired heat, steam and offensive odors. Such facilities shall ensure that the temperature in the hospital shall not exceed 83°F nor fall below 68°F.

(3) Thermostatically controlled hot water shall be provided in adequate quantities and maintained at the required temperature for patients or resident use (110°F at the fixture) and for mechanical dishwashing and laundry use (180°F at the equipment).

(4) Adequate refuse facilities will be provided so that solid waste, rubbish and other refuse will be collected and disposed of in a manner which will prohibit transmission of disease and not create a nuisance or fire hazard or provide a breeding place for rodents and insects.

(5) The physical facilities must meet all fire and safety standards established by the state and locality. In addition, the hospital shall meet such provisions of the Life Safety Code of the National Fire Protection Association (21st edition, 1967) as are applicable to hospitals.

19A. The hospital shall meet all standards established by the state for general hospitals, insofar as they are relevant to psychiatric facilities.

20. Nutritional Standards

Patients, except for the non-mobile, shall eat or be fed in dining rooms. The diet for patients will provide at a minimum the Recommended Daily Dietary Allowances as developed by the National Academy of Sciences. Menus shall be satisfying and nutritionally adequate to provide the Recommended Daily Dietary Allowances. In developing such menus, the hospital will utilize the Low Cost Food Plan of the Department of Agriculture. The hospital will not spend less per patient for raw food, including the value of donated food, than the most recent per person costs of the Low Cost Food Plan for the Southern Region of the United States, as compiled by the United States Department of Agriculture, for appropriate groupings of patients, discounted for any savings

which might result from institutional procurement of such food. Provisions shall be made for special therapeutic diets and for substitutes at the request of the patient, or his guardian or next of kin, in accordance with the religious requirements of any patient's faith. Denial of a nutritionally adequate diet shall not be used as punishment.

III. QUALIFIED STAFF IN NUMBERS SUFFICIENT TO ADMINISTER ADEQUATE TREATMENT

21. Each Qualified Mental Health Professional shall meet all licensing and certification requirements promulgated by the State of Alabama for persons engaged in private practice of the same profession elsewhere in Alabama. Other staff members shall meet the same licensing and certification requirements as persons who engage in private practice of their specialty elsewhere in Alabama.

22. a. All Non-Professional Staff Members who have not had prior clinical experience in a mental institution shall have a substantial orientation training.

b. Staff members on all levels shall have regularly scheduled in-service training.

23. Each Non-Professional Staff Member shall be under the direct supervision of a Qualified Mental Health Professional.

24. Staffing Ratios

The hospital shall have the following minimum numbers of treatment personnel per 250 patients. Qualified Mental Health Professionals trained in particular disciplines may in appropriate situations perform services or functions traditionally performed by members of other disciplines. Changes in staff deployment may be made with prior approval of this Court upon a clear and convincing demonstration that the proposed deviation from this staffing structure will enhance the treatment of the patients.

Classification:	<i>Number of Employees</i>
Unit director.....	1
Psychiatrist (3 years' residency training in psychiatry).....	2
MD (registered physicians).....	4
Nurses (RN).....	12
Licensed practical nurses.....	6
Aide III.....	6
Aid II.....	16
Aide I.....	70
Hospital orderly.....	10
Clerk stenographer II.....	3
Clerk typist II.....	3
Unit administrator.....	1
Administrative clerk.....	1
Psychologist (Ph.D.) (doctoral degree from accredited program).....	1
Psychologist (M.A.).....	1
Psychologist (B.S.).....	2
Social worker (MSW) (from accredited program).....	2
Social worker (B.A.).....	5
Patient activity therapist (M.S.).....	1
Patient activity aide.....	10
Mental health technician.....	10
Dental hygienist.....	1
Chaplain.....	5
Vocational rehabilitation counselor.....	1
Volunteer services worker.....	1
Mental health field representative.....	1
Dietitian.....	1
Food service supervisor.....	1
Cook II.....	2
Cook I.....	3
Food service worker.....	15
Vehicle driver.....	1
Housekeeper.....	10
Messenger.....	1
Maintenance repairman.....	2

IV. INDIVIDUALIZED TREATMENT PLANS

25. Each patient shall have a comprehensive physical and mental examination and review of behavioral status within 48 hours after admission to the hospital.

26. Each patient shall have an individualized treatment plan. This plan shall be developed by appropriate Qualified Mental Health Professionals, including a psychiatrist, and implemented as soon as possible—in any event no later than five days after the patient's admission. Each individualized treatment plan shall contain:

a. a statement of the nature of the specific problems and specific needs of the patient;

b. a statement of the least restrictive treatment conditions necessary to achieve the purposes of commitment;

c. a description of intermediate and long-range treatment goals, with a projected timetable for their attainment;

d. a statement and rationale for the plan of treatment for achieving these intermediate and long-range goals;

e. a specification of staff responsibility and a description of proposed staff involvement with the patient in order to attain these treatment goals;

f. criteria for release to less restrictive treatment conditions, and criteria for discharge;

g. a notation of any therapeutic tasks and labor to be performed by the patient in accordance with Standard 18.

27. As part of his treatment plan, each patient shall have an individualized post-hospitalization plan. This plan shall be developed by a Qualified Mental Health Professional as soon as practicable after the patient's admission to the hospital.

28. In the interests of continuity of care, whenever possible, one Qualified Mental Health Professional (who need not have been involved with the development of the treatment plan) shall be responsible for supervising the implementation of the treatment plan, integrating the various aspects of the treatment program and recording the patient's progress. This Qualified Mental Health Professional shall also be responsible for ensuring that the patient is released, where appropriate, into a less restrictive form of treatment.

29. The treatment plan shall be continuously reviewed by the Qualified Mental Health Professional responsible for supervising the implementation of the plan and shall be modified if necessary. Moreover, at least every 90 days, each patient shall receive a mental examination from, and his treatment plan shall be reviewed by, a Qualified Mental Health Professional other than the professional responsible for supervising the implementation of the plan.

30. In addition to treatment for mental disorders, patients confined at mental health institutions also are entitled to and shall receive appropriate treatment for physical illnesses such as tuberculosis.¹ In providing medical care, the State Board of Mental Health shall take advantage of whatever community-based facilities are appropriate and available and shall coordinate the patient's treatment for mental illness with his medical treatment.

31. Complete patient records shall be kept on the ward in which the patient is placed and shall be available to anyone properly authorized in writing by the patient. These records shall include:

a. Identification data, including the patient's legal status;

b. A patient history, including but not limited to: (1) family data, educational background, and employment record; (2) prior medical history, both physical and mental, including prior hospitalization;

c. The chief complaints of the patient and the chief complaints of others regarding the patient;

d. An evaluation which notes the onset of illness, the circumstances leading to admission, attitudes, behavior, estimate of intellectual functioning, memory functioning, orientation, and an inventory of the patient's assets in descriptive, not interpretative, fashion;

e. A summary of each physical examination which described the results of the examination;

f. A copy of the individual treatment plan and any modifications thereto;

¹ Approximately 50 patients at Bryce-Searcy are tubercular as also are approximately four residents at Partlow.

g. A detailed summary of the findings made by the reviewing Qualified Mental Health Professional after each periodic review of the treatment plan which analyzes the successes and failures of the treatment program and directs whatever modifications are necessary;

h. A copy of the individualized post-hospitalization plan and any modifications thereto, and a summary of the steps that have been taken to implement that plan;

i. A medication history and status, which includes the signed orders of the prescribing physician. Nurses shall indicate by signature that orders have been carried out;

j. A detailed summary of each significant contact by a Qualified Mental Health Professional with the patient;

k. A detailed summary on at least a weekly basis by a Qualified Mental Health Professional involved in the patient's treatment of the patient's progress along the treatment plan;

l. A weekly summary of the extent and nature of the patient's work activities described in Standard 18, *supra*, and the effect of such activity upon the patient's progress along the treatment plan;

m. A signed order by a Qualified Mental Health Professional for any restrictions on visitations and communication, as provided in Standards 4 and 5, *supra*;

n. A signed order by a Qualified Mental Health Professional for any physical restraints and isolation as provided in Standard 7, *supra*;

o. A detailed summary of any extraordinary incident in the hospital involving the patient to be entered by a staff member noting that he has personal knowledge of the incident or specifying his other source of information, and initiated within 24 hours by a Qualified Mental Health Professional;

p. A summary by the superintendent of the hospital or his appointed agent of his findings after the 15-day review provided for in Standard 33 *infra*.

32. In addition to complying with all the other standards herein, a hospital shall make special provisions for the treatment of patients who are children and young adults. These provisions shall include but are not limited to:

a. Opportunities for publicly supported education suitable to the educational needs of the patient. This program of education must, in the opinion of the attending Qualified Mental Health Professional, be compatible with the patient's mental condition and his treatment program, and otherwise be in the patient's best interest.

b. A treatment plan which considers the chronological, maturational, and developmental level of the patient;

c. Sufficient Qualified Mental Health Professionals, teachers, and staff members with specialized skills in the care and treatment of children and young adults;

d. Recreation and play opportunities in the open air where possible and appropriate residential facilities;

e. Arrangements for contact between the hospital and the family of the patient.

33. No later than 15 days after a patient is committed to the hospital, the superintendent of the hospital or his appointed, professionally qualified agent shall examine the committed patient and shall determine whether the patient continues to require hospitalization and whether a treatment plan complying with Standard 26 has been implemented. If the patient no longer requires hospitalization in accordance with the standards for commitment, or if a treatment plan has not been implemented, he must be released immediately unless he agrees to continue with treatment on a voluntary basis.

34. The Mental Health Board and its agents have an affirmative duty to provide adequate transitional treatment and care for all patients released after a period of involuntary confinement. Transitional care and treatment possibilities include, but are not limited to, psychiatric day care, treatment in the home by a visiting therapist, nursing home or extended care, out-patient treatment, and treatment in the psychiatric ward of a general hospital.

V. MISCELLANEOUS

35. Each patient and his family, guardian, or next friend shall promptly upon the patient's admission receive written notice, in language he under-

stands. of all the above standards for adequate treatment. In addition a copy of all the above standards shall be posted in each ward.

[Appendix B]

BRYCE HUMAN RIGHTS COMMITTEE

1. Mr. Bert Bank—Chairman—P.O. Box 2149, Tuscaloosa, Alabama 35401.
2. Ms. Ruth Cummings Bolden—1414 9th Street, Tuscaloosa, Alabama 35401.
3. Ms. Babs Klein Hellpern—2526 Jasmine Road, Montgomery, Alabama 36111.
4. Mr. Joseph Mallisham—3028 20th Street, Tuscaloosa, Alabama 35401.
5. Ms. Alberta Murphy—13 Hillcrest, Tuscaloosa, Alabama 35401.
6. Mr. Junior Richardson—17 CW Bryce Hospital, Tuscaloosa, Alabama 35401.
7. Mr. John T. Wagon, Jr.—822 Felder Avenue, Montgomery, Alabama 36106.

SEARCY HUMAN RIGHTS COMMITTEE

1. Dr. E. I. McCafferty, Jr.—Chairman—1653 Spring Hill Avenue, Mobile, Alabama 36604.
2. Hon. James U. Blacksher—304 South Monterey, Mobile, Alabama.
3. Hon. Thomas B. Gilmore—P. O. Box 109, Eutaw, Alabama 35462.
4. Ms. Consuello J. Harper—3441 Caffey Drive, Montgomery, Alabama 36108.
5. Hon. Horace McCloud—Mount Vernon, Alabama.
6. Sister Eileen McLoughlin—404 Government Street, Mobile, Alabama 36601.
7. Ms. Joyce Nickels—c/o Searcy Hospital, Mount Vernon, Alabama.

Civ. A. No. 3195-N.

United States District Court,
M. D. Alabama, N. D.
April 13, 1972.

RICKY WYATT BY AND THROUGH HIS AUNT AND LEGAL GUARDIAN, MRS. W. C. RAWLINS, JR., ET AL., FOR THEMSELVES JOINTLY AND SEVERALLY AND FOR ALL OTHERS SIMILARLY SITUATED, PLAINTIFFS

v.

DR. STONEWALL B. STICKNEY, AS COMMISSIONER OF MENTAL HEALTH AND THE STATE OF ALABAMA MENTAL HEALTH OFFICER, ET AL., DEFENDANTS

United States of America et al.,
Amici Curiae.

Attorneys' Fees Taxed June 2, 1972.

Class action alleging that Alabama state school designed to habilitate the mentally retarded was being operated in a constitutionally impermissible fashion. The District Court, Johnson, C. J., held, inter alia, that conclusion was required that plaintiff had been denied the right to habilitation and that minimum standards for constitutional care and training must be effectuated at the institution, and that prompt institution of minimum standards to ensure provision of essential care and training for Alabama's mental retardates is mandatory, and no default can be justified by reason of a lack of operating funds.

Order accordingly.

Supplementing opinion, D.C., 334 F.Supp. 1341.

See also D.C., 344 F.Supp. 373.

1. Mental Health

No viable distinction can be made between the mentally ill and the mentally retarded, and because the only constitutional justification for civilly committing a mental retardate is habilitation, it follows that once committed such a person is possessed of an inviolable constitutional right to habilitation.

2. Mental Health

Conclusion was required that plaintiffs, who brought class action alleging that state school and hospital designed to habilitate the mentally retarded was

being operated in a constitutionally impermissible fashion, and that, as a result, its residents were denied the right to adequate habilitation, had been denied the right to habilitation, and that minimum standards for constitutional care and training must be effectuated at the institution.

3. *Mental Health*

Prompt institution of minimum standards to ensure provision of essential care and training for Alabama's mental retardates is mandatory, and no default can be justified by reason of a lack of operating funds.

4. *Mental Health*

Defendants would be directed, in class action alleging that state school and hospital designed to habilitate the mentally retarded was being operated in a constitutionally impermissible fashion, to establish a standing human rights committee to guarantee that residents are afforded a constitutional and humane habilitation; such committee shall have power to review all research proposals and all habilitation programs to ensure that the dignity and human rights of the residents are preserved, and it shall also advise and assist residents who allege that their legal rights have been infringed or that the Medical Health Board of Alabama has failed to comply with judicially ordered guidelines.

5. *Courts*

Court would reserve ruling, in class action alleging that state school and hospital designed to habilitate the mentally retarded was being operated in a constitutionally impermissible fashion, on the appointment of a master and a professional advisory committee, under rule that federal courts are reluctant to assume control of any organization, especially one operated by a state.

6. *Courts*

Court would reserve ruling upon motion by plaintiffs, who brought class action alleging that Alabama state school and hospital designed to habilitate the mentally retarded was being operated in a constitutionally impermissible fashion, that defendant Mental Health Board be directed to sell or encumber portions of its extensive landholdings in order to raise funds and that injunction be granted against expenditure of state funds for nonessential state functions.

On Request for Attorney Fees

7. *Federal Civil Procedure*

Nonfeasance on part of defendants, who had knowledge of many of the inadequacies known to exist in Alabama's mental health institutions after study was made, and who made little if any progress toward upgrading conditions in such institutions, constituted bad faith which necessitated the expense of litigation, and such bad faith formed a valid basis for granting of attorney fees in action challenging constitutionality of conditions at Alabama mental institutions.

8. *Federal Civil Procedure*

In order to eliminate the impediments to pro bono publico litigation, and to carry out congressional policy, an award of attorney fees is not only essential but also legally required.

9. *Federal Civil Procedure*

Where plaintiffs in suit challenging constitutionality of standards at Alabama mental institutions benefitted many people, but neither sought nor recovered any damages, to burden plaintiffs, who incurred considerable expenses in vindicating the public good, with such costs would not only be unfair but also legally impermissible, and in such a case the most logical way to spread the burden among those benefitted would be to grant attorney fees.

10. *Federal Civil Procedure*

Factors relevant to determination as to what is a reasonable attorney fee in a public interest case generally are the same as those covering grants of attorney fees in commercial cases, and include the intricacy of the case, difficulty of proof, time reasonably expended in preparation and trial of the case, degree of competence displayed by attorneys seeking compensation, and the measure of success achieved by those attorneys.

11. Federal Civil Procedure

Courts should consider, in determining a reasonable attorney fee in a public interest case, the benefit inuring to the public, the personal hardships that bringing such type of litigation causes plaintiffs and their lawyers, and the added responsibility of representing a class rather than only individual plaintiffs.

12. Federal Civil Procedure

Reasonable fee for attorneys for plaintiffs, who successfully attacked constitutionality of standards at Alabama mental institutions, would be set at \$30 per in-court hour and \$20 per out-of-court hour, and using such standard an attorney fee would be set for three attorneys involved at \$36,764.62.

George W. Dean, Jr., Destin, Fla., Jack Drake (Drake, Knowles & Still), Tuscaloosa, Ala., Reber F. Boulton, Jr., Atlanta, Ga., Morton Birnbaum, Brooklyn, N. Y., for plaintiffs.

William J. Baxley, Atty. Gen. of Alabama, J. Jerry Wood, Asst. Atty. Gen. of Alabama, Montgomery, Ala., John J. Coleman, Special Asst. Atty. Gen. of Alabama, Birmingham, Ala. for defendants.

Ira DeMent, U. S. Atty., Middle District of Alabama, Montgomery, Ala., Robert H. Johnson and David J. W. Vanderhoof, Civil Rights Division, U.S. Dept. of Justice, Washington, D.C., Cleveland Thornton, Special Asst. U. S. Atty., Middle District of Alabama, Montgomery, Ala., for United States amici curiae.

Charles R. Halpern (Center for Law & Social Policy), James F. Fitzpatrick, Stephen M. Sacks, and Jeffrey D. Bauman (Arnold & Porter), Washington, D. C., Bruce Eunis (American Civil Liberties Union), New York City, Stanley Herr (NLADA National Law Office), Washington, D. C., Shelley Mercer (National Health and Environmental Program, School of Law, UCLA), Los Angeles, Cal., Paul Freidman (Center for Law and Social Policy), Washington, D. C., for other amici curiae.

Order and decree

Johnson, Chief Judge.

This litigation originally pertained only to Alabama's mentally ill¹ but by motion to amend granted August 12, 1971, plaintiffs have expanded their class to include residents of Partlow State School and Hospital, a public institution located in Tuscaloosa, Alabama, designed to habilitate the mentally retarded.² In their amended complaint, plaintiffs have alleged that Partlow is being operated in a constitutionally impermissible fashion and that, as a result, its residents are denied the right to adequate habilitation. Relying on these allegations, plaintiffs have asked that the Court promulgate and order the

¹ On March 12, 1971, in a formal opinion and decree, this Court held that patients involuntarily committed to Bryce Hospital because of mental illness were being deprived of the constitutional right, which they unquestionably possess, "to receive such individual treatment as [would] give each of them a realistic opportunity to be cured or to improve his or her mental condition." *Wyatt v. Stickney*, 325 F.Supp. 781 (M.D.Ala.1971). On August 12, 1971, the Court granted plaintiffs motion to add to the lawsuit patients confined at Searcy Hospital, Mount Vernon, Alabama, another institution which, although designed to treat the mentally ill, failed to do so in accordance with constitutional standards. The Court having unavailingly afforded defendants an opportunity to promulgate and effectuate minimum standards for adequate treatment of the mentally ill, determined on December 10, 1971, that such standards had to be judicially formulated and ordered implemented. *Wyatt v. Stickney*, 334 F.Supp. 1341 (M.D.Ala.1971). To that end, the Court conducted a hearing on February 3-4, 1972, at which the parties and amici submitted proposed standards for constitutionally adequate treatment, and presented expert testimony in support of the proposals. The aspect of the case relating to the Bryce-Searcy facilities will be considered by the Court in a decree separate from the present one.

² As expressed by amici in their briefs and substantiated by the evidence in this case, *mental retardation* refers generally to subaverage intellectual functioning which is associated with impairment in adaptive behavior. This definitional approach to mental retardation is based upon dual criteria: reduced intellectual functioning and impairment in adaptation to the requirements of social living. The evidence presented reflects scientific advances in understanding the developmental processes of the mental retardate. The historic view of mental retardation as an immutable defect of intelligence has been supplanted by the recognition that a person may be mentally retarded at one age level and not at another; that he may change status as a result of changes in the level of his intellectual functioning; or that he may move from retarded to nonretarded as a result of a training program which has increased his level of adaptive behavior to a point where his behavior is no longer of concern to society. See United States President's Panel on Mental Retardation, Report of the Task Force on Law, 1963. (Judge David L. Bazelon, Chairman.)

implementation at Partlow of minimum medical and constitutional standards appropriate for the functioning of such an institution. Plaintiffs have asked also that the Court appoint a master and a professional advisory committee to oversee the implementation of judicially ordered guidelines and appoint a human rights committee to safeguard the personal rights and dignity of the residents. Finally plaintiffs have requested the Court to grant various forms of relief intended to ameliorate the financial difficulties certain to arise in connection with the upgrading of Alabama's public mental health institutions.³

On February 28-29, 1972, the Court conducted a hearing on the issues formulated by the pleadings in this case. Evidence was taken on the adequacy of conditions currently existing at Partlow as well as on the standards requisite for a constitutionally acceptable minimum habilitation program. The parties and amici⁴ stipulated to a broad array of these standards and proposed additional ones for the Court's evaluation. The case now is submitted upon the pleadings, the evidence, the stipulations, and the proposed standards and briefs of the parties.

[1] Initially, this Court has considered plaintiffs' position, not actively contested by defendants, that people involuntarily committed⁵ through noncriminal procedures to institutions for the mentally retarded have a constitutional right to receive such individual habilitation as will give each of them a realistic opportunity to lead a more useful and meaningful life and to return to society. That this position is in accord with the applicable legal principles is clear beyond cavil. In an analogous situation involving the mentally ill at Bryce Hospital, this Court said:

"Adequate and effective treatment is constitutionally required because, absent treatment, the hospital is transformed 'into a penitentiary where one could be held indefinitely for no convicted offense,' *Ragsdale v. Overholser*, [108 U.S.App.D.C. 308] 281 F. 2d 943, 950 (1960). The purpose of involuntary hospitalization for treatment purposes is *treatment* and not mere custodial care or punishment. This is the only justification, from a constitutional standpoint, that allows civil commitments to mental institutions such as Bryce." *Wyatt v. Stickney*, 325 F. Supp. at 784.

In the context of the right to appropriate care for people civilly confined to public mental institutions, no viable distinction can be made between the mentally ill and the mentally retarded. Because the only constitutional justification for civilly committing a mental retardate, therefore, is habilitation, it follows ineluctably that once committed such a person is possessed of an inviolable constitutional right to habilitation.⁶

Having recognized the existence of this right, the Court now must determine whether prevailing conditions at Partlow conform to minimum standards constitutionally required for mental retardation institution. The Court's conclu-

³ More specifically, in a motion filed September 1, 1971, and renewed March 15, 1972, plaintiffs have asked that they be permitted to join various state officials as defendants in this case. Plaintiffs maintain that these officials, including, among others, the members of the State Legislature and the treasurer and the comptroller of Alabama, are necessary parties for the attainment of complete relief. Among the relief plaintiffs seek in connection with the state officials is an injunction against the expenditure of state funds for nonessential functions of the state until enough money is available to provide adequately for the financial needs of the Alabama Mental Health Board. In addition, plaintiffs have asked the Court to order the sale of a portion of defendant Mental Health Board's land holdings and other assets and to enjoin the Board from the construction of any physical facilities, including any planned for regional centers.

⁴ The amici in this case, including the United States of America, the American Orthopsychiatric Association, the American Psychological Association, the American Civil Liberties Union, and the American Association on Mental Deficiency, have performed invaluable service for which this Court is indeed appreciative.

⁵ The Court will deal in this decree only with residents involuntarily committed to Partlow because no evidence has been adduced tending to demonstrate that any resident is voluntarily confined in that institution. The Court will presume, therefore, that every resident of Partlow is entitled to constitutionally minimum habilitation. The burden falls squarely upon the institution to prove that a particular resident has not been involuntarily committed, and only if defendants satisfy this difficult burden of proof will the Court be confronted with whether the voluntarily committed resident has a right to habilitation.

⁶ It is interesting to note that the Court's decision with regard to the right of the mentally retarded to habilitation is supported not only by applicable legal authority, but also by a resolution adopted on December 27, 1971, by the General Assembly of the United Nations. That resolution, entitled "Declaration on the Rights of the Mentally Retarded", reads in pertinent part: " * * * The mentally retarded person has a right to proper medical care and physical therapy and to such education, training, rehabilitation and guidance as will enable him to develop his ability and maximum potential."

sion, compelled by the evidence, is unmistakably clear. Put simply, conditions at Partlow are grossly substandard. Testimony presented by plaintiffs and amici has depicted hazardous and deplorable inadequacies in the institution's operation.⁷ Commendably, defendants have offered no rebuttal.⁸ At the close of the testimony, the Court, having been impressed by the urgency of the situation, issued an interim emergency order "to protect the lives and well-being of the residents of Partlow." In that order, the Court found that:

"The evidence . . . has vividly and undisputedly portrayed Partlow State School and Hospital as a warehousing institution which, because of its atmosphere of psychological and physical deprivation, is wholly incapable of furnishing [habilitation] to the mentally retarded and is conducive only to the deterioration and the debilitation of the residents. The evidence has reflected further that safety and sanitary conditions at Partlow are substandard to the point of endangering the health and lives of those residing there, that the wards are grossly understaffed, rendering even simple custodial care impossible, and that overcrowding remains a dangerous problem often leading to serious accidents, some of which have resulted in deaths of residents." *Wyatt v. Stickney*, March 2, 1972. (Unreported Interim Emergency Order.)

[2] Based upon these findings, the Court has concluded that plaintiffs have been denied their right to habilitation and that, pursuant to plaintiffs' request, minimum standards for constitutional care and training must be effectuated at Partlow. Consequently, having determined from a careful study of the evidence that the standards set out in Appendix A to this decree are medical and constitutional minimums, this Court will order their implementation.⁹ In so ordering, the Court emphasizes that these standards are, indeed, minimums only peripherally approaching the ideal to which defendants should aspire. It is hoped that the revelations of this case will furnish impetus to defendants to provide physical facilities and habilitation programs at Partlow substantially exceeding medical and constitutional minimums.

[3] For the present, however, defendants must realize that the prompt institution of minimum standards to ensure the provision of essential care and training for Alabama's mental retardates is mandatory and that no default can be justified by a want of operating funds. In this regard, the principles applicable to the mentally ill apply with equal force to the mentally retarded. See *Wyatt v. Stickney*, 325 F.Supp. at 784-785.

[4] In addition to requesting that minimum standards be implemented, plaintiffs have asked that defendants be directed to establish a standing human rights committee to guarantee that residents are afforded constitutional and humane habilitation. The evidence reflects that such a committee is needed at

⁷ The most comprehensive testimony on the conditions currently prevailing at Partlow was elicited from Dr. Phillip Roos, the Executive Director for the National Association for Retarded Children. Dr. Roos inspected Partlow over a two-day period and testified as to his subjective evaluation of the institution. In concluding his testimony, Dr. Roos summarized as follows:

" . . . I feel that the institution and its programs as now conceived are incapable of providing habilitation of the residents. Incarceration, certainly for most of the residents, would I feel have adverse consequences; would tend to develop behaviors which would interfere with successful community functioning. I would anticipate to find stagnation or deterioration in physical, intellectual, and social spheres. The conditions at Partlow today are generally dehumanizing, fostering deviancy, generating self-fulfilling prophecy of parasitism and helplessness. The conditions I would say are hazardous to psychological integrity, to health, and in some cases even to life. The administration, the physical plants, the programs, and the institution's articulation with the community and with the consumers reflect destructive models of mental retardation. They hark back to decades ago when the retarded were misperceived as being sick, as being threats to society, or as being subhuman organisms. The new concepts in the field of mental retardation are unfortunately not reflected in Partlow as we see it today—concepts such as normalization, developmental model in orientation toward mental retardation, the thrust of consumer involvement, the trend toward community orientation and decentralization of services; none of these are clearly in evidence in the facility today."

⁸ Indeed, on February 22, 1972, defendants filed with the Court a statement of position providing in relevant part that:

"Assuming that such a federal constitutional obligation exists . . . defendants will not contest the factual accuracy of an ultimate finding . . . that defendants have not met the constitutional obligation to provide adequate care at [Partlow]. . . ."

At the hearing, defendants adopted the testimony of Dr. Roos in its entirety.

⁹ In addition to the standards detailed in this order, it is appropriate that defendants comply also with the conditions, applicable to mental health institutions, necessary to qualify Partlow for participation in the various programs, such as Medicare and Medicaid, funded by the United States Government. Because many of these conditions of participation have not yet been finally drafted and published, however, this Court will not at this time order that specific Government standards be implemented.

Partlow, and this Court will order its initiation. This committee shall have review of all research proposals and all habilitation programs to ensure that the dignity and human rights of residents are preserved. The committee also shall advise and assist residents who allege that their legal rights have been infringed or that the Mental Health Board has failed to comply with judicially ordered guidelines. At reasonable times the committee may inspect the records of the institution and interview residents and staff. At its discretion the committee may consult appropriate, independent specialists who shall be compensated by the defendant Board.¹⁰ The Court will appoint seven members to comprise Partlow's human rights committee, the names and addresses of whom are set forth in Appendix B to this decree. Those who serve on the committee shall be paid on a per diem basis and be reimbursed for travel expenses at the same rate as members of the Alabama Board of Mental Health.

[5] Plaintiffs, as well as amici, also have advocated the appointment of a federal master and a professional advisory committee to oversee the implementation of minimum constitutional standards. These parties maintain that conditions at Partlow largely are the product of shameful neglect by the state officials charged with responsibility for that institution. Consequently, plaintiffs and amici insist, these state officials have proved themselves incapable of instituting a constitutional habilitation program. Although this Court acknowledges the intolerable conditions at Partlow and recognizes defendants' past nonfeasances, it, nevertheless, reserves ruling on the appointment of a master and a professional advisory committee.¹¹ Federal courts are reluctant to assume control of any organization, but especially one operated by a state. This Court, always having shared that reluctance, has adhered to a policy of allowing state officials one final opportunity to perform the duties imposed upon them by law. See *e.g.*, *Sims v. Amos*, 336 F.Supp. 924 (M.D.Ala.1972); *Nixon v. Wallace*, C.A. No. 3479-N, M.D.Ala., January 22, 1972. Additionally, since the entry of the interim emergency order of March 2, 1972, defendants have worked diligently to upgrade conditions at Partlow in conformity with court-established deadlines. These factors, combined with defendants' expressed intent that the present order will be implemented forthwith and in good faith, cause the Court to withhold its decision on the appointments. Nevertheless, this Court notes, and the evidence demonstrates convincingly, that the operation of Partlow suffers from a complete absence of administrative and managerial organization. This long-enduring organizational deficiency has been intensified by the lack of dynamic, permanent leadership. Regrettably, the problem has remained unresolved over the span of this litigation and, indeed, has been compounded by the appointment of acting and interim superintendents. The massive program of reform and reorganization to be launched at Partlow requires the guidance of a professionally qualified and experienced administrator. Consequently, this Court will order that defendants employ such an individual on a permanent basis. Should defendants fail to do so, or otherwise fail to comply timely with the provisions of this decree, the Court will be obligated to appoint a master.

[6] The Court also reserves ruling upon plaintiffs' motion that defendant Mental Health Board be directed to sell or encumber portions of its extensive land holdings. Similarly, this Court reserves ruling on plaintiffs' motion seeking an injunction against the expenditure of state funds for nonessential functions of the state, and on other aspects of plaintiffs' requested relief designed to ameliorate the financial problems incident to the effectuation of minimum medical and constitutional standards. The Court reserves these rulings despite the fact that the primitive conditions, as well as the atmosphere of futility

¹⁰ The recitation of the licenses of this committee, and similarly, of the committees to be inaugurated at the Bryce and Searcy facilities, is not intended to be inclusive. The human rights committee of each mental health institution shall be authorized, within the limits of reasonableness, to pursue whatever action is necessary to accomplish its function.

¹¹ The Court's decision to reserve ruling on the appointment of a master causes it to reserve ruling also on the appointment of a professional advisory committee to aid the master. Nevertheless, the Court notes that the professional mental health community in the United States has responded with enthusiasm to the proposed initiation of such a committee to assist in the upgrading of Alabama's mental retardation services. Consequently, this Court strongly recommends to defendants that they develop a professional advisory committee comprised of amenable professionals from throughout the country who are able to provide the expertise the evidence reflects is important to the successful implementation of this order.

and despair which envelops both staff and residents at Partlow, can be attributed largely to dire shortages of operating funds. By withholding its decisions, the Court continues to observe its longstanding policy of deferring to state organizations and officials charged by law with specified responsibilities. The responsibility for appropriate funding ultimately must fall, of course, upon the State Legislature and, only to a lesser degree, upon the defendant Mental Health Board. Unfortunately, never, since the founding of Partlow in 1923, has the Legislature adequately provided for that institution.¹² The result of almost fifty years of legislative neglect has been catastrophic; atrocities occur daily.¹³ Although, in fairness, the present State Legislature can be faulted relatively little for the crisis situation at Partlow, only that body can rectify the gross omissions of past Legislatures. To shrink from its constitutional obligation at this critical juncture would be to sanction the inhumane conditions which plague the mentally retarded of Alabama. The gravity and immediacy of the situation cannot be overemphasized. At stake is the very preservation of human life and dignity. Consequently, a prompt response from the State Legislature, as well as from the Mental Health Board and other responsible state officials, is imperative.

In the event, though, that the Legislature fails to satisfy its well-defined constitutional obligation and the Mental Health Board, because of lack of funding or any other legally insufficient reason, fails to implement fully the standards herein ordered, it will be necessary for the Court to take affirmative steps, including appointing a master, to ensure that proper funding is realized¹⁴ and that adequate habilitation is available for the mentally retarded of Alabama.

Finally, the Court has determined that this case requires the awarding of a reasonable attorneys' fee to plaintiffs' counsel. The basis for the award and the amount thereof will be considered and treated in a separate order. The fee will be charged against the defendants as a part of the court costs in this case.

To assist the Court in its determination of how to proceed henceforth, defendants will be directed to prepare and file a report within six months from the date of this decree detailing the implementation of each standard herein ordered. This report shall be comprehensive and shall include a statement of the progress made on each standard not yet completely implemented, specifying the reasons for incomplete performance. The report shall include also a statement of the financing secured since the issuance of this decree and of defendants' plans for procuring whatever additional financing might be required. Upon the basis of this report and other information available, the Court will evaluate defendants' work and, in due course, determine the appropriateness of appointing a master and of granting other requested relief.

Accordingly, it is the order, judgment, and decree of this Court:

1. That defendants be and they are hereby enjoined from failing to implement fully and with dispatch each of the standards set forth in Appendix A attached hereto and incorporated as a part of this decree;

2. That a human rights committee for Partlow State School and Hospital be and is hereby designated and appointed. The members thereof are listed in Appendix B attached hereto and incorporated herein. This committee shall have the purposes, functions, and spheres of operation previously set forth in this order. The members of the committee shall be paid on a per diem basis and be

¹² By defendants' admission, Partlow State School and Hospital always has been a "step-child" of the state—never having received the public support it so desperately required. Not until the short term in office of Governor Lurleen Wallace was any emphasis placed upon securing adequate care for Alabama's mentally retarded. Beginning with Mrs. Wallace's tenure in 1966, the budget for mental health has increased but remains woefully short of the minimum required for constitutional care.

¹³ A few of the atrocious incidents cited at the hearing in this case include the following: (a) a resident was scalded to death by hydrant water; (b) a resident was restrained in a strait jacket for nine years in order to prevent hand and finger sucking; (c) a resident was inappropriately confined in seclusion for a period of years, and (d) a resident died from the insertion by another resident of a running water hose into his rectum. Each of these incidents could have been avoided had adequate staff and facilities been available.

¹⁴ The Court realizes that the Legislature is not due back in regular session until May, 1973. Nevertheless, special sessions of the Legislature are frequent occurrences in Alabama, and there has never been a time when such a session was more urgently required. If the Legislature does not act promptly to appropriate the necessary funding for mental health the Court will be compelled to grant plaintiffs' motion to add various state officials and agencies as additional parties to this litigation and to utilize other avenues of fund raising.

reimbursed for travel expenses at the same rate as members of the Alabama Board of Mental Health;

3. That defendants, within 60 days from this date, employ a professionally qualified and experienced administrator to serve Partlow State School and Hospital on a permanent basis;

4. That defendants, within six months from this date, prepare and file with this Court a report reflecting in detail the progress on the implementation of this order. This report shall be comprehensive and precise and shall explain the reasons for incomplete performance in the event the defendants have not met a standard in its entirety. The report also shall include a financial statement and an up-to-date timetable for full compliance;

5. That the court costs incurred in this proceeding, including a reasonable attorneys' fee for plaintiffs' lawyers be and they are hereby taxed against the defendants;

6. That jurisdiction of this cause be and the same is hereby specifically retained.

It is further ordered that a ruling on plaintiffs' motion for further relief, including the appointment of a master, filed March 15, 1972, be and the same is hereby reserved.

[Appendix A]

MINIMUM CONSTITUTIONAL STANDARDS FOR ADEQUATE HABILITATION OF THE MENTALLY RETARDED

I. DEFINITIONS

The terms used herein below are defined as follows:

- a. "Institution"—Partlow State School and Hospital.
- b. "Residents"—All persons who are now confined and all persons who may in the future be confined at Partlow State School and Hospital.
- c. "Qualified Mental Retardation Professional"—(1) a psychologist with a doctoral or master's degree from an accredited program and with specialized training or one year's experience in treating the mentally retarded; (2) a physician licensed to practice in the State of Alabama, with specialized training or one year's experience in treating the mentally retarded;
 - (1) a psychologist with a doctoral or master's degree from an accredited program and with specialized training or one year's experience in treating the mentally retarded;
 - (2) a physician licensed to practice in the State of Alabama, with specialized training or one's year's experience in treating the mentally retarded;
 - (3) an educator with a master's degree in special education from an accredited program;
 - (4) a social worker with a master's degree from an accredited program and with specialized training or one year's experience in working with the mentally retarded;
 - (5) a physical, vocational or occupational therapist licensed to practice in the State of Alabama who is a graduate of an accredited program in physical, vocational or occupational therapy, with specialized training or one year's experience in treating the mentally retarded;
 - (6) a registered nurse with specialized training or one year of experience treating the mentally retarded under the supervision of a Qualified Mental Retardation Professional.
- d. "Resident Care Worker"—an employee of the institution, other than a Qualified Mental Retardation Professional, whose duties require regular contact with or supervision of residents.
- e. "Habilitation"—the process by which the staff of the institution assists the resident to acquire and maintain those life skills which enable him to cope more effectively with the demands of his own person and of his environment and to raise the level of his physical, mental, and social efficiency. Habilitation includes but is not limited to programs of formal structured education and treatment.
- f. "Education"—the process of formal training and instruction to facilitate the intellectual and emotional development of residents.
- g. "Treatment"—the prevention, amelioration and/or cure of a resident's physical disabilities or illnesses.
- h. "Guardian"—a general guardian of a resident, unless the general guardian is missing, indifferent to the welfare of the resident or has an interest ad-

verse to the resident. In such a case, *guardian* shall be defined as an individual appointed by an appropriate court on the motion of the superintendent, such guardian not to be in the control or in the employ of the Alabama Board of Mental Health.

i. "Express and Informed Consent"—the uncoerced decision of a resident who has comprehension and can signify assent or dissent.

II. ADEQUATE HABILITATION OF RESIDENTS

1. Resident shall have a right to habilitation, including medical treatment, education and care, suited to their needs, regardless of age, degree of retardation or handicapping condition.

2. Each resident has a right to a habilitation program which will maximize his human abilities and enhance his ability to cope with his environment. The institution shall recognize that each resident, regardless of ability or status, is entitled to develop and realize his fullest potential. The institution shall implement the principle of normalization so that each resident may live as normally as possible.

3. a. No person shall be admitted to the institution unless a prior determination shall have been made¹ that residence in the institution is the least restrictive habilitation setting feasible for that person.

b. No mentally retarded person shall be admitted to the institution if services and programs in the community can afford adequate habilitation to such person.

c. Residents shall have a right to the least restrictive conditions necessary to achieve the purposes of habilitation. To this end, the institution shall make every attempt to move residents from (1) more to less structured living; (2) larger to smaller facilities; (3) larger to smaller living units; (4) group to individual residence; (5) segregated from the community to integrated into the community living; (6) dependent to independent living.

4. No borderline or mildly mentally retarded person shall be a resident of the institution. For purposes of this standard, a borderline retarded person is defined as an individual who is functioning between one and two standard deviations below the mean on a standardized intelligence test such as the Stanford Binet Scale and on measures of adaptive behavior such as the American Association on Mental Deficiency Adaptive Behavior Scale. A mildly retarded person is defined as an individual who is functioning between two and three standard deviations below the mean on a standardized intelligence test such as the Stanford Binet Scale and on a measure of adaptive behavior such as the American Association on Mental Deficiency Adaptive Behavior Scale.

5. Residents shall have a right to receive suitable educational services regardless of chronological age, degree of retardation or accompanying disabilities or handicaps.

a. The institution shall formulate a written statement of educational objectives that is consistent with the institution's mission as set forth in Standard 2, *supra*, and the other standards proposed herein.

b. School-age residents shall be provided a full and suitable educational program. Such educational program shall meet the following minimum standards.

	Mild ¹	Moderate	Severe/ profound
(1) Class size.....	12	9	6
(2) Length of school year (in months).....	9-10	9-10	11-12
(3) Minimum length of school day (in hours).....	6	6	6

¹ As is reflected in Standard 4, *supra*, it is contemplated that no mildly retarded persons be residents of the institution. However, until those mildly retarded who are presently residents are removed to more suitable locations and/or facilities, some provision must be made for their educational program.

6. Residents shall have a right to receive prompt and adequate medical treatment for any physical ailments and for the prevention of any illness or disability. Such medical treatment shall meet standards of medical practice in the community.

¹ See Standard 7, *infra*.

500

III. INDIVIDUALIZED HABILITATION PLANS

7. Prior to his admission to the institution each resident shall have a comprehensive social, psychological, educational and medical diagnosis and evaluation by appropriate specialists to determine if admission is appropriate.

a. Unless such preadmission evaluation has been conducted within three months prior to the admission, each resident shall have a new evaluation at the institution to determine if admission is appropriate.

b. When undertaken at the institution, preadmission diagnosis and evaluation shall be completed within five days.

8. Within 14 days of his admission to the institution, each resident shall have an evaluation by appropriate specialists for programming purposes.

9. Each resident shall have an individualized habilitation plan formulated by the institution. This plan shall be developed by appropriate Qualified Mental Retardation Professionals and implemented as soon as possible but no later than 14 days after the resident's admission to the institution. An interim program of habilitation, based on the preadmission evaluation conducted pursuant to Standard 7, *supra*, shall commence promptly upon the resident's admission. Each individualized habilitation plan shall contain:

a. a statement of the nature of the specific limitations and specific needs of the resident;

b. a description of intermediate and long-range habilitation goals with a projected timetable for their attainment;

c. a statement of, and an explanation for, the plan of habilitation for achieving these intermediate and long-range goals;

d. a statement of the least restrictive setting for habilitation necessary to achieve the habilitation goals of the resident;

e. a specification of the professionals and other staff members who are responsible for the particular resident's attaining these habilitation goals;

f. criteria for release to less restrictive settings for habilitation, including criteria for discharge and a projected date for discharge.

10. As part of his habilitation plan, each resident shall have an individualized post-institutionalization plan. This plan shall be developed by a Qualified Mental Retardation Professional who shall begin preparation of such plan prior to the resident's admission to the institution and shall complete such plan as soon as practicable. The guardian or next of kin of the resident and the resident, if able to give informed consent, shall be consulted in the development of such plan and shall be informed of the content of such plan.

11. In the interests of continuity of care, one Qualified Mental Retardation Professional shall be responsible for supervising the implementation of the habilitation plan, integrating the various aspects of the habilitation program, and recording the resident's progress as measured by objective indicators. This Qualified Mental Retardation Professional shall also be responsible for ensuring that the resident is released when appropriate to a less restrictive habilitation setting.

12. The habilitation plan shall be continuously reviewed by the Qualified Mental Retardation Professional responsible for supervising the implementation of the plan and shall be modified if necessary. In addition, six months after admission and at least annually thereafter, each resident shall receive a comprehensive psychological, social, educational and medical diagnosis and evaluation, and his habilitation plan shall be reviewed by an interdisciplinary team of no less than two Qualified Mental Retardation Professionals and such resident care workers as are directly involved in his habilitation and care.

13. In addition to habilitation for mental disorders, people confined at mental health institutions also are entitled to and shall receive appropriate treatment for physical illnesses such as tuberculosis.² In providing medical care, the State Board of Mental Health shall take advantage of whatever community-based facilities are appropriate and available and shall coordinate the resident's habilitation for mental retardation with his medical treatment.

14. Complete records for each resident shall be maintained and shall be readily available to Qualified Mental Retardation Professionals and to the resident care workers who are directly involved with the particular resident. All

² Approximately 60 patients at Bryce-Searcy are tubercular as also are approximately four residents at Partlow.

information contained in a resident's records shall be considered privileged and confidential. The guardian, next of kin, and any person properly authorized in writing by the resident, if such resident is capable of giving informed consent, or by his guardian or next of kin, shall be permitted access to the resident's records. These records shall include:

- a. Identification data, including the resident's legal status;
- b. The resident's history, including but not limited to:
 - (1) family data, educational background, and employment record;
 - (2) prior medical history, both physical and mental, including prior institutionalization;
- c. The resident's grievances if any;
- d. An inventory of the resident's life skills;
- e. A record of each physical examination which describes the results of the examination;
- f. A copy of the individual habilitation plan and any modifications thereto and an appropriate summary which will guide and assist the resident care workers in implementing the resident's program;
- g. The findings made in periodic reviews of the habilitation plan (see Standard 12, *supra*), which findings shall include an analysis of the successes and failures of the habilitation program and shall direct whatever modifications are necessary;
- h. A copy of the post-institutionalization plan and any modifications thereto, and a summary of the steps that have been taken to implement that plan;
- i. A medication history and status, pursuant to Standard 22, *infra*;
- j. A summary of each significant contact by a Qualified Mental Retardation Professional with the resident;
- k. A summary of the resident's response to his program, prepared by a Qualified Mental Retardation Professional involved in the resident's habilitation and recorded at least monthly. Such response, wherever possible, shall be scientifically documented.
- l. A monthly summary of the extent and nature of the resident's work activities described in the Standard 33(b), *infra* and the effect of such activity upon the resident's progress along the habilitation plan;
- m. A signed order by a Qualified Mental Retardation Professional for any physical restraints, as provided in Standard 26(a)(1), *infra*;
- n. A description of any extraordinary incident or accident in the institution involving the resident, to be entered by a staff member noting personal knowledge of the incident or accident or other source of information, including any reports of investigations of resident mistreatment, as required by Standard 28, *infra*;
- o. A summary of family visits and contacts;
- p. A summary of attendance and leaves from the institution;
- q. A record of any seizures, illnesses treatments thereof, and immunizations.

IV. HUMANE PHYSICAL AND PSYCHOLOGICAL ENVIRONMENT

15. Residents shall have a right to dignity, privacy and humane care.
16. Residents shall lose none of the rights enjoyed by citizens of Alabama and of the United States solely by reason of their admission or commitment to the institution, except as expressly determined by an appropriate court.
17. No person shall be presumed mentally incompetent solely by reason of his admission or commitment to the institution.
18. The opportunity for religious worship shall be accorded to each resident who desires such worship. Provisions for religious worship shall be made available to all residents on a nondiscriminatory basis. No individual shall be coerced into engaging in any religious activities.
19. Residents shall have the same rights to telephone communication as patients at Alabama public hospitals, except to the extent that a Qualified Mental Retardation Professional responsible for formulation of a particular resident's habilitation plan (see Standard 9, *supra*) writes an order imposing special restrictions and explains the reasons for any such restrictions. The written order must be renewed semiannually if any restrictions are to be continued. Residents shall have an unrestricted right to visitation, except to the extent that a Qualified Mental Retardation Professional responsible for formulation of a particular resident's habilitation plan (see Standard 9, *supra*)

writes an order imposing special restrictions and explains the reasons for any such restrictions. The written order must be renewed semiannually if any restrictions are to be continued.

20. Residents shall be entitled to send and receive sealed mail. Moreover, it shall be the duty of the institution to facilitate the exercise of this right by furnishing the necessary materials and assistance.

21. The institution shall provide, under appropriate supervision, suitable opportunities for the resident's interaction with members of the opposite sex, except where a Qualified Mental Retardation Professional responsible for the formulation of a particular resident's habilitation plan writes an order to the contrary and explains the reasons therefor.

22. *Medication:*

a. No medication shall be administered unless at the written order of a physician.

b. Notation of each resident's medication shall be kept in his medical records (Standard 14(1) *supra*). At least weekly the attending physician shall review the drug regimen of each resident under his care. All prescriptions shall be written with a termination date, which shall not exceed 30 days.

c. Residents shall have a right to be free from unnecessary or excessive medication. The resident's records shall state the effects of psychoactive medication on the resident. When dosages of such are changed or other psychoactive medications are prescribed, a notation shall be made in the resident's record concerning the effect of the new medication or new dosages and the behavior changes, if any, which occur.

d. Medication shall not be used as punishment, for the convenience of staff, as a substitute for a habilitation program, or in quantities that interfere with the resident's habilitation program.

e. Pharmacy services at the institution shall be directed by a professionally competent pharmacist licensed to practice in the State of Alabama. Such pharmacist shall be a graduate of a school of pharmacy accredited by the American Council on Pharmaceutical Education. Appropriate officials of the institution, at their option, may hire such a pharmacist or pharmacists fulltime or, in lieu thereof, contract with outside pharmacists.

f. Whether employed fulltime or on a contract basis, the pharmacist shall perform duties which include but are not limited to the following:

(1) Receiving the original, or direct copy, of the physician's drug treatment order;

(2) Reviewing the drug regimen, and any changes, for potentially adverse reactions, allergies, interactions, contraindications, rationality, and laboratory test modifications and advising the physician of any recommended changes, with reasons and with an alternate drug regimen;

(3) Maintaining for each resident an individual record of all medications (prescription and nonprescription) dispensed, including quantities and frequency of refills;

(4) Participating, as appropriate, in the continuing interdisciplinary evaluation of individual residents for the purposes of initiation, monitoring, and follow-up of individualized habilitation programs.

g. Only appropriately trained staff shall be allowed to administer drugs.

23. Seclusion, defined as the placement of a resident alone in a locked room, shall not be employed. Legitimate "time out" procedures may be utilized under close and direct professional supervision as a technique in behavior-shaping programs.

24. Behavior modification programs involving the use of noxious or aversive stimuli shall be reviewed and approved by the institution's Human Rights Committee and shall be conducted only with the express and informed consent of the affected resident, if the resident is able to give such consent, and of his guardian or next of kin, after opportunities for consultation with independent specialists and with legal counsel. Such behavior modification programs shall be conducted only under the supervision of and in the presence of a Qualified Mental Retardation Professional who has had proper training in such techniques.

25. Electric shock devices shall be considered a research technique for the purpose of these standards. Such devices shall only be used in extraordinary circumstances to prevent self-mutilation leading to repeated and possibly permanent physical damage to the resident and only after alternative techniques

have failed. The use of such devices shall be subject to the conditions prescribed in Standard 24, *supra*, and Standard 29, *infra*, and shall be used only under the direct and specific order of the superintendent.

26. Physical restraint shall be employed only when absolutely necessary to protect the resident from injury to himself or to prevent injury to others. Restraint shall not be employed as punishment, for the convenience of staff, or as a substitute for a habilitation program. Restraint shall be applied only if alternative techniques have failed and only if such restraint imposes the least possible restriction consistent with its purpose.

a. Only Qualified Mental Retardation Professionals may authorize the use of restraints.

(1) Orders for restraints by the Qualified Mental Retardation Professionals shall be in writing and shall not be in force for longer than 12 hours.

(2) A resident placed in restraint shall be checked at least every 30 minutes by staff trained in the use of restraints, and a record of such checks shall be kept.

(3) Mechanical restraints shall be designed and used so as not to cause physical injury to the resident and so as to cause the least possible discomfort.

(4) Opportunity for motion and exercise shall be provided for a period of not less than ten minutes during each two hours in which restraint is employed.

(5) Daily reports shall be made to the superintendent by those Qualified Mental Retardation Professionals ordering the use of restraints, summarizing all such uses of restraint, the types used, the duration, and the reasons therefor.

b. The institution shall cause a written statement of this policy to be posted in each living unit and circulated to all staff members.

27. Corporal punishment shall not be permitted.

28. The institution shall prohibit mistreatment, neglect or abuse in any form of any resident.

a. Alleged violations shall be reported immediately to the superintendent and there shall be a written record that:

(1) Each alleged violation has been thoroughly investigated and findings stated;

(2) The results of such investigation are reported to the superintendent and to the commissioner within 24 hours of the report of the incident. Such reports shall also be made to the institution's Human Rights Committee monthly and to the Alabama Board of Mental Health at its next scheduled public meeting.

b. The institution shall cause a written statement of this policy to be posted in each cottage and building and circulated to all staff members.

29. Residents shall have a right not to be subject to experimental research without the express and informed consent of the resident, if the resident is able to give such consent, and of his guardian or next of kin, after opportunities for consultation with independent specialists and with legal counsel. Such proposed research shall first have been reviewed and approved by the institution's Human Rights Committee before such consent shall be sought. Prior to such approval the institution's Human Rights Committee shall determine that such research complies with the principles of the Statement on the Use of Human Subjects for Research of the American Association on Mental Deficiency and with the principles for research involving human subjects required by the United States Department of Health, Education and Welfare for projects supported by that agency.

30. Residents shall have a right not to be subjected to any unusual or hazardous treatment procedures without the express and informed consent of the resident, if the resident is able to give such consent, and of his guardian or next of kin, after opportunities for consultation with independent specialists and legal counsel. Such proposed procedures shall first have been reviewed and approved by the institution's Human Rights Committee before such consent shall be sought.

31. Residents shall have a right to regular physical exercise several times a week. It shall be the duty of the institution to provide both indoor and outdoor facilities and equipment for such exercise.

32. Residents shall have a right to be outdoors daily in the absence of contrary medical considerations.

33. The following rules shall govern resident labor:

a. *Institution Maintenance*

(1) No resident shall be required to perform labor which involves the operation and maintenance of the institution or for which the institution is under contract with an outside organization. Privileges or release from the institution shall not be conditioned upon the performance of labor covered by this provision. Residents may voluntarily engage in such labor if the labor is compensated in accordance with the minimum wage laws of the Fair Labor Standards Act, 29 U.S.C. 206 as amended, 1966.

(2) No resident shall be involved in the care (feeding, clothing, bathing), training, or supervision of other residents unless he:

- (a) has volunteered;
- (b) has been specifically trained in the necessary skills;
- (c) has the humane judgment required for such activities;
- (d) is adequately supervised; and
- (e) is reimbursed in accordance with the minimum wage laws of the Fair Labor Standards Act, 29 U.S.C. 206 as amended, 1966.

b. *Training Tasks and Labor*

(1) Residents may be required to perform vocational training tasks which do not involve the operation and maintenance of the institution, subject to a presumption that an assignment of longer than three months to any task is not a training task, provided the specific task or any change in task assignment is:

(a) An integrated part of the resident's habilitation plan and approved as a habilitation activity by a Qualified Mental Retardation Professional responsible for supervising the resident's habilitation;

(b) Supervised by a staff member to oversee the habilitation aspects of the activity.

(2) Residents may voluntarily engage in habilitative labor at non-program hours for which the institution would otherwise have to pay an employee provided the specific labor or any change in labor is:

(a) An integrated part of the resident's habilitation plan and approved as a habilitation activity by a Qualified Mental Retardation Professional responsible for supervising the resident's habilitation;

(b) Supervised by a staff member to oversee the habilitation aspects of the activity; and

(c) Compensated in accordance with the minimum wage laws of the Fair Labor Standards Act, 29 U.S.C. 206 as amended, 1966.

c. *Personal Housekeeping.* Residents may be required to perform tasks of a personal housekeeping nature such as the making of one's own bed.

d. Payment to residents pursuant to this paragraph shall not be applied to the costs of institutionalization.

e. Staffing shall be sufficient so that the institution is not dependent upon the use of residents or volunteers for the care, maintenance or habilitation of other residents or for income-producing services. The institution shall formulate a written policy to protect the residents from exploitation when they are engaged in productive work.

34. A nourishing, well-balanced diet shall be provided each resident.

a. The diet for residents shall provide at a minimum the Recommended Daily Dietary Allowance as developed by the National Academy of Sciences. Menus shall be satisfying and shall provide the Recommended Daily Dietary Allowances. In developing such menus, the institution shall utilize the Moderate Cost Food Plan of the United States Department of Agriculture. The institution shall not spend less per patient for raw food, including the value of donated food, than the most recent per person costs of the Moderate Cost Food Plan for the Southern Region of the United States, as compiled by the United States Department of Agriculture, for appropriate groupings of residents, discounted for any savings which might result from institutional procurement of such food.

b. Provision shall be made for special therapeutic diets and for substitutes at the request of the resident, or his guardian or next of kin, in accordance with the religious requirements of any resident's faith.

c. Denial of a nutritionally adequate diet shall not be used as punishment.

d. Residents, except for the non-mobile, shall eat or be fed in dining rooms.

35. Each resident shall have an adequate allowance of neat, clean, suitably fitting and seasonable clothing.

a. Each resident shall have his own clothing, which is properly and inconspicuously marked with his name, and he shall be kept dressed in this clothing. The institution has an obligation to supply an adequate allowance of clothing to any residents who do not have suitable clothing of their own. Residents shall have the opportunity to select from various types of neat, clean, and reasonable clothing. Such clothing shall be considered the resident's throughout his stay in the institution.

b. Clothing both in amount and type shall make it possible for residents to go out of doors in inclement weather, to go for trips or visits appropriately dressed, and to make a normal appearance in the community.

c. Nonambulatory residents shall be dressed daily in their own clothing, including shoes, unless contraindicated in written medical orders.

d. Washable clothing shall be designed for multiply handicapped residents being trained in self-help skills, in accordance with individual needs.

e. Clothing for incontinent residents shall be designed to foster comfortable sitting, crawling and/or walking, and toilet training.

f. A current inventory shall be kept of each resident's personal and clothing items.

g. The institution shall make provision for the adequate and regular laundering of the residents' clothing.

36. Each resident shall have the right to keep and use his own personal possessions except insofar as such clothes or personal possessions may be determined to be dangerous, either to himself or to others, by a Qualified Mental Retardation Professional.

37. a. Each resident shall be assisted in learning normal grooming practices with individual toilet articles, including soap and toothpaste, that are available to each resident.

b. Teeth shall be brushed daily with an effective dentifrice. Individual brushes shall be properly marked, used, and stored.

c. Each resident shall have a shower or tub bath, at least daily, unless medically contraindicated.

d. Residents shall be regularly scheduled for hair cutting and styling, in an individualized manner, by trained personnel.

e. For residents who require such assistance, cutting of toe nails and fingernails shall be scheduled at regular intervals.

38. *Physical Facilities* A resident has a right to a humane physical environment within the institutional facilities. These facilities shall be designed to make a positive contribution to the efficient attainment of the habilitation goals of the institution.

a. *Resident Unit* All ambulatory residents shall sleep in single rooms or in multi-resident rooms of no more than six persons. The number of nonambulatory residents in a multiresident room shall not exceed ten persons. There shall be allocated a minimum of 80 square feet of floor space per resident in a multi-resident room. Screens or curtains shall be provided to ensure privacy. Single rooms shall have a minimum of 100 square feet of floor space. Each resident shall be furnished with a comfortable bed with adequate changes of linen, a closet or locker for his personal belongings, and appropriate furniture such as a chair and a bedroom table, unless contraindicated by a Qualified Mental Retardation Professional who shall state the reasons for any such restriction.

b. *Toilets and Lavatories* There shall be one toilet and one lavatory for each six residents. A lavatory shall be provided with each toilet facility. The toilets shall be installed in separate stalls for ambulatory residents, or in curtained areas for nonambulatory residents, to ensure privacy, shall be clean and free of odor, and shall be equipped with appropriate safety devices for the physically handicapped. Soap and towels and/or drying mechanisms shall be available in each lavatory. Toilet paper shall be available in each toilet facility.

c. *Showers* There shall be one tub or shower for each eight residents. If a central bathing area is provided, each tub or shower shall be divided by curtains to ensure privacy. Showers and tubs shall be equipped with adequate safety accessories.

d. *Day Room* The minimum day room area shall be 40 square feet per resident. Day rooms shall be attractive and adequately furnished with reading

lamps, tables, chairs, television, radio and other recreational facilities. They shall be conveniently located to residents' bedrooms and shall have outside windows. There shall be at least one day room area on each bedroom floor in a multi-story facility. Areas used for corridor traffic shall not be counted as day room space; nor shall a chapel with fixed pews be counted as a day room area.

e. *Dining Facilities* The minimum dining room area shall be ten square feet per resident. The dining room shall be separate from the kitchen and shall be furnished with comfortable chairs and tables with hard, washable surfaces.

f. *Linon Servicing and Handling* The institution shall provide adequate facilities and equipment for the expeditious handling of clean and soiled bedding and other linen. There must be frequent changes of bedding and other linen, but in any event no less than every seven days, to assure sanitation and resident comfort. After soiling by an incontinent resident, bedding and linen must be immediately changed and removed from the living unit. Soiled linen and laundry shall be removed from the living unit daily.

g. *Housekeeping* Regular housekeeping and maintenance procedures which will ensure that the institution is maintained in a safe, clean, and attractive condition shall be developed and implemented.

h. *Nonambulatory Residents* There must be special facilities for nonambulatory residents to assure their safety and comfort, including special fittings on toilets and wheelchairs. Appropriate provision shall be made to permit nonambulatory residents to communicate their needs to staff.

i. *Physical Plant*

(1) Pursuant to an established routine maintenance and repair program, the physical plant shall be kept in a continuous state of good repair and operation so as to ensure the health, comfort, safety and well-being of the residents and so as not to impede in any manner the habilitation programs of the residents.

(2) Adequate heating, air conditioning and ventilation systems and equipment shall be afforded to maintain temperatures and air changes which are required for the comfort of residents at all times. Ventilation systems shall be adequate to remove steam and offensive odors or to mask such odors. The temperature in the institution shall not exceed 83°F nor fall below 68°F.

(3) Thermostatically controlled hot water shall be provided in adequate quantities and maintained at the required temperature for resident use (110°F at the fixture) and for mechanical dishwashing and laundry use (180°F at the equipment). Thermostatically controlled hot water valves shall be equipped with a double valve system that provides both auditory and visual signals of valve failures.

(4) Adequate refuse facilities shall be provided so that solid waste, rubbish and other refuse will be collected and disposed of in a manner which will prohibit transmission of disease and not create a nuisance or fire hazard or provide a breeding place for rodents and insects.

(5) The physical facilities must meet all fire and safety standards established by the state and locality. In addition, the institution shall meet such provisions of the Life Safety Code of the National Fire Protection Association (21st edition, 1967) as are applicable to it.

V. QUALIFIED STAFF IN NUMBERS SUFFICIENT TO PROVIDE ADEQUATE HABILITATION

39. Each Qualified Mental Retardation Professional and each physician shall meet all licensing and certification requirements promulgated by the State of Alabama for persons engaged in private practice of the same profession elsewhere in Alabama. Other staff members shall meet the same licensing and certification requirements as persons who engage in private practice of their specialty elsewhere in Alabama.

n. All resident care workers who have not had prior clinical experience in a mental retardation institution shall have suitable orientation training.

b. Staff members on all levels shall have suitable, regularly scheduled in-service training.

40. Each resident care worker shall be under the direct professional supervision of a qualified Mental Retardation Professional.

557

41. Staffing Ratios

a. Qualified staff in numbers sufficient to administer adequate habilitation shall be provided. Such staffing shall include but not be limited to the following fulltime professional and special services. Qualified Mental Retardation Professionals trained in particular disciplines may in appropriate situations perform services or functions traditionally performed by members of other disciplines. Substantial changes in staff deployment may be made with the prior approval of this Court upon a clear and convincing demonstration that the proposed deviation from this staffing structure would enhance the habilitation of the residents. Professional staff shall possess the qualifications of Qualified Mental Retardation Professionals as defined herein unless expressly stated otherwise.

	Mild ¹	Moderate	Severe/ profound ²
Unit.....	60	60	60
(1) Psychologists.....	1:60	1:60	1:60
(2) Social workers.....	1:60	1:60	1:60
(3) Special Educators (shall include an equal number of master's degree and bachelor's degree holders in special education).....	1:15	1:10	1:30
(4) Vocational therapists.....	1:60	1:60
(5) Recreational therapists (shall be master's degree graduates from an accredited program).....	1:60	1:60	1:60
(6) Occupational therapists.....	1:60	1:60	1:60
(7) Registered nurses.....	1:60	1:60	1:12
(8) Resident care workers.....	1:2.5	1:1.25	1:1

¹ See N. 2, supra.

The following professional staff shall be fulltime employees of the institution, who shall not be assigned to a single unit but who shall be available to meet the needs of any resident of the institution:

Physicians	1:200
Physical therapists.....	1:100
Speech and hearing therapists.....	1:100
Dentists ¹	1:200
Social workers (shall be principally involved in the placement of residents in the community and shall include bachelor's degree graduates from an accredited program in social work).....	1:80
Chaplains ²	1:200

¹ Defendants may, in lieu of employing full-time dentists, contract outside the institution for dental care. In this event the dental services provided the residents must include (a) complete dental examinations and appropriate corrective dental work for each resident each 6 months and (b) a dentist on call 24 hours per day for emergency work.

² Defendants may, in lieu of employing full-time chaplains, recruit, upon the ratio shown above, interfaith volunteer chaplains.

c. Qualified medical specialists of recognized professional ability shall be available for specialized care and consultation. Such specialist services shall include a psychiatrist on a one-day per week basis, a psychiatrist on a two-day per week basis, and any other medical or health-related specialty available in the community.

VI. MISCELLANEOUS

42. The guardian or next of kin of each resident shall promptly, upon resident's admission, receive a written copy of all the above standards for adequate habilitation. Each resident, if the resident is able to comprehend, shall promptly upon his admission be orally informed in clear language of the above standards and, where appropriate, be provided with a written copy.

43. The superintendent shall report in writing to the next of kin or guardian of the resident at least every six months on the resident's educational, vocational and living skills progress and medical condition. Such report shall also state any appropriate habilitation program which has not been afforded to the resident because of inadequate habilitation resources.

44. a. No resident shall be subjected to a behavior modification program designed to eliminate a particular pattern of behavior without prior certification by a physician that he has examined the resident in regard to behavior to be

extinguished and finds that such behavior is not caused by a physical condition which could be corrected by appropriate medical procedures.

b. No resident shall be subjected to a behavior modification program which attempts to extinguish socially appropriate behavior or to develop new behavior patterns when such behavior modifications serve only institutional convenience.

45. No resident shall have any of his organs removed for the purpose of transplantation without compliance with the procedures set forth in Standard 30, *supra*, and after a court hearing on such transplantation in which the resident is represented by a guardian *ad litem*. This standard shall apply to any other surgical procedure which is undertaken for reasons other than therapeutic benefit to the resident.

46. Within 90 days of the date of this order, each resident of the institution shall be evaluated as to his mental, emotional, social, and physical condition. Such evaluation or reevaluation shall be conducted by an interdisciplinary team of Qualified Mental Retardation Professionals who shall use professionally recognized tests and examination procedures. Each resident's guardian, next of kin or legal representative shall be contacted and his readiness to make provisions for the resident's care in the community shall be ascertained. Each resident shall be returned to his family, if adequately habilitated, or assigned to the least restrictive habilitation setting.

47. Each resident discharged to the community shall have a program of transitional habilitation assistance.

48. The institution shall continue to suspend any new admissions of residents until all of the above standards of adequate habilitation have been met.

49. No person shall be admitted to any publicly supported residential institution caring for mentally retarded persons unless such institution meets the above standards.

[Appendix B]

PARTLOW HUMAN RIGHTS COMMITTEE

1. Ms. Harriet S. Tillman—Chairman—3544 Brookwood Road, Birmingham, Alabama.
2. Dr. J. W. Benton—3008 Brook Hollow Lane, Birmingham, Alabama.
3. Mr. Paul R. Davis—Tuscaloosa News, Tuscaloosa, Alabama 35401.
4. Reverend Robert Keever—University Presbyterian Church, Tuscaloosa, Alabama 35401.
5. Ms. Nancy Poole—1836 Dorchester, Birmingham, Alabama.
6. Mr. Eugene Ward—c/o Partlow State School and Hospital, Tuscaloosa, Alabama 35401.
7. Ms. Estelle Witherspoon—Alberta, Alabama 36720.

In the United States District Court for the Middle District of Alabama,
Northern Division

Civil Action No. 3105-N

RICKY WYATT, BY AND THROUGH HIS AUNT AND LEGAL GUARDIAN, MRS. W. C. RAWLINS, JR., ET AL., FOR THEMSELVES JOINTLY AND SEVERALLY AND FOR ALL OTHERS SIMILARLY SITUATED, PLAINTIFFS

v.

DR. STONEWALL B. STICKNEY, AS COMMISSIONER OF MENTAL HEALTH AND THE STATE OF ALABAMA MENTAL HEALTH OFFICER ET AL., DEFENDANTS

United States of America et al., Amici Curiae

On Request for Attorneys' Fees.

[7] Once again this Court is confronted with a request for attorneys' fees made by plaintiffs involved in *pro bono publico* litigation, and the request is well taken.¹ In 1967, over three years prior to the initiation of this suit, the American Association on Mental Deficiency [hereinafter referred to as AAMD]

¹ Other such cases in which this Court has found a valid basis for the awarding of a reasonable attorneys' fee include *Sims v. Amos*, 336 F. Supp. 924 (M.D. Ala. 1972) (three judges) and *NAACP v. Allen*, 340 F. Supp. 703 (M.D. Ala. 1972).

conducted a study of Partlow State School and Hospital.² That study, which was made available to Partlow's Director and to the State Mental Health Board, portrayed the institution as one enveloped by an atmosphere of despair, hopelessness and depression. The AAMD found Partlow grossly deficient virtually in every respect, including habilitation programming, staffing, staff training, community relations and residential facilities. At the time of the study, Partlow's administration and organization were found to be chaotic. The institution had promulgated no statement of its philosophy and objections, and what emergency and safety procedures existed were evaluated as primitive and ineffective. Evidence offered at trial demonstrated that defendants also had knowledge prior to the initiation of this suit of the unconstitutionally substandard conditions at Bryce and Searcy Hospitals. Nevertheless, although many of the inadequacies known by defendants to exist in Alabama's mental health institutions could have been corrected without large expenditures, little, if any, progress toward upgrading conditions was realized until this case was initiated. From a legal standpoint, such nonfeasance on the part of defendants constitutes bad faith which necessitated the expense of litigation. This bad faith forms a valid basis for the granting of attorneys' fees. See e. g., *Vaughan v. Atkinson*, 369 U.S. 527, 530-531, 82 S.Ct. 997, 8 L.Ed.2d 88 (1961).

[8] A second, and more appropriate, justification for the Court's award, however, evolves from a kind of benefit theory. See *Mills v. Electro Auto-Lite Co.*, 390 U.S. 375, 90 S.Ct. 616, 24 L.Ed.2d 593 (1970). Plaintiffs bringing suits to enforce a strong national policy often benefit a class of people far broader than those actually involved in the litigation. Such plaintiffs, who are said to act as "private attorneys general," *Newman v. Piggie Park Enterprises, Inc.*, 390 U.S. 400, 88 S.Ct. 964, 19 L.Ed.2d 1263 (1968), rarely recover significant damage awards. Moreover, if a violation of civil rights is alleged or if some other challenge to constituted authority is involved, these plaintiffs and their attorneys may confront other, more personal obstacles to the maintenance of their public-minded suits. See *NAACP v. Allen*, 340 F.Supp. 703 (M.D.Ala.1972). Consequently, in order to eliminate the impediments to *pro bono publico* litigation and to carry out congressional policy, an award of attorneys' fees not only is essential but also is legally required. See *Lee v. Southern Home Sites*, 444 F.2d 143 (5th Cir. 1971); *Sims v. Amos*, 336 F.Supp. 924 (M.D.Ala.1972); *NAACP v. Allen*, supra; *Bradley v. School Bd. of Richmond*, 53 F.R.D. 28 (E.D.Va.1971).

The present action clearly is one intended to be encouraged by the benefit rule. By successfully prosecuting this suit, plaintiffs have benefitted not only the present residents of Bryce, Partlow and Searcy but also everyone who will be confined to those institutions in the future. Veritably, it is no overstatement to assert that all of Alabama's citizens have profited and will continue to profit from this litigation. So prevalent are mental disorders in our society that no family is immune from their perilous incursion. Consequently, the availability of institutions capable of dealing successfully with such disorders is essential and, of course, in the best interest of all Alabamians.

[9] Despite plaintiffs' having benefitted so many people, however, they neither sought nor recovered any damages. Nevertheless, the expenses they incurred in vindicating the public good were considerable. To burden only plaintiffs with these costs not only is unfair but also is legally impermissible. See e. g., *Mills v. Electro Auto-Lite Co.*, supra; *Lee v. Southern Home Sites*, supra. Considerations of equity require that those who profit share the expense. In this case, the most logical way to spread the burden among those benefitted is to grant attorneys' fees. Plaintiffs clearly are entitled to a reasonable award.

[10, 11] This Court must consider, therefore, what is reasonable under the circumstances. Factors relevant to the Court's determination generally are the same as those covering grants of attorneys' fees in commercial cases. See *Bradley v. School Bd. of Richmond*, supra. They include the intricacy of the case and the difficulty of proof, the time reasonably expended in the preparation and trial of the case, the degree of competence displayed by the attorneys seeking compensation and the measure of success achieved by these attorneys. In public interest cases, courts also should consider the benefit inuring to the public, the personal hardships that bringing this kind of litigation causes

² American Ass'n on Mental Deficiency Institutional Evaluation Project, Final Report For Partlow State School & Hospital (1967).

plaintiffs and their lawyers, and the added responsibility of representing a class rather than only individual plaintiffs.

Having considered these factors, the Court notes that the several aspects of the present litigation have synthesized to compose a very complex case. Plaintiffs' attorneys have navigated through a heretofore uncharted course and, in the process, have helped establish minimum constitutional standards for mental health institutions. These attorneys have exhibited professional conscientiousness throughout the litigation, and their toil, along with that of others, has culminated in an incalculable benefit to the people of Alabama.³

The above considerations, and others, militate in favor of the Court's granting plaintiffs' attorneys full compensation. Nevertheless, the weight of these factors must be balanced against and tempered by the nature of this lawsuit. It is the duty of members of the legal profession to represent clients who are unable to pay for counsel and also to bring suits in the public interest. While lawyers who satisfy this ethical responsibility should be remunerated, their fees should not be exorbitant. This Court must bear in mind that the very goals plaintiffs' attorneys seek to achieve through litigation require great monetary outlays, most of which presently are unavailable. Some compromise, therefore, is essential.

In attempting to determine what is a reasonable fee under the circumstances, this Court is impressed with the philosophy underlying the Criminal Justice Act. That Act provides for compensation to attorneys appointed to represent indigent criminal defendants. The Act's legislative history makes clear that although the amount provided, \$30 per in-court hour and \$20 per out-of-court hour, is below normal levels of compensation in legal practice, it nevertheless is considered a reasonable basis upon which lawyers can carry out their professional responsibility without either personal profiteering or undue financial sacrifice. 1964 U.S. Code Cong. & Admin. News, p. 2997.

The Court is convinced that this philosophy applies with equal force to the present case. As already emphasized, lawyers participating in the case *sub judice*, as well as those participating in a Criminal Justice Act case, perform ethical and professional responsibilities. In both cases they embark upon their participation with knowledge that their named clients are unable to pay them. Generally, however, these lawyers are not motivated by desire for profit but by public spirit and sense of duty. Moreover, in both cases the rights involved, those dealing with restrictions on physical freedom, are of the most profound significance to the public. These similarities justify referral to the Criminal Justice Act.

[12] On the basis of the fee schedule set forth in the Act, therefore, this Court has determined that a reasonable fee in this case is \$30 per in-court hour and \$20 per out-of-court hour.⁴ In establishing this fee, however, the Court is careful to note that the Criminal Justice Act furnishes only a very flexible standard. In a particular case, a reasonable fee may vary either way from that provided by the Act.

In addition to determining an hourly fee, the Court is obliged to decide what time is reasonable for an attorney or attorneys to have spent in connection with the lawsuit. Plaintiffs' lawyers, Jack Drake and Reber Boulton, have filed statements setting forth in detail their time expended in preparation of the case. The hours they have claimed are reasonable and uncontested. Plaintiffs' other lawyer, George Dean, however, has neglected to file a similar statement. Instead, he has testified only that he has spent almost all of 18 months working on the case. Under such circumstances, the Court must decide the amount of time an attorney should reasonably have spent to accomplish the work produced. From the evidence adduced at the hearing on this matter, the Court has made that determination.

Accordingly, it is the order, judgment and decree of this Court:

³ The able and invaluable assistance which plaintiffs' attorneys received from amici in this case in no way detracts from the quality of their effort. The Court is constrained, however, to comment generally on the number of lawyers for whom plaintiffs seek attorneys' fees. Because this case is so complex and the time required to meet various deadlines so great, the Court feels that the number of lawyers utilized by plaintiffs was necessary. In another case in which attorneys' fees are appropriate, the same may not be true. The Court must decide on an ad hoc basis whether the number of attorneys employed and the time expended by them were reasonable.

⁴ In addition to regularly employed legal staff, defendants retained special counsel in this case at a rate of \$30 per hour.

1. That attorney's fees and expenses of the Honorable George Dean in the amount of \$23,600.00 be and the same are hereby taxed against defendant Alabama Mental Health Board;

2. That attorney's fees and expenses of the Honorable Jack Drake in the amount of \$7,595.91 be and the same are hereby taxed against defendant Alabama Mental Health Board; and

3. That attorney's fees and expenses of the Honorable Reber Boulton in the amount of \$5,558.71 be and the same are hereby taxed against defendant Alabama Mental Health Board.

It is further ordered that defendant Alabama Mental Health Board pay said expenses and attorneys' fees to the Clerk of this Court within 30 days from this date. Upon receipt of these funds, the Clerk of this Court will deposit them in an interest bearing account. The Clerk of this Court is ordered and directed to hold said funds in said interest bearing account pending further order of this Court.

[Item VI.B.3]

KNECHT v. GILLMAN, 488 F. 2d 1136 (8th Cir. 1973)—ROSS, CIRCUIT JUDGE

This is an action by Gary Knecht and Ronald Stevenson, both in the custody of the State of Iowa, against officials of that state, under 42 U.S.C. § 1983. Their complaint alleged that they had been subjected to injections of the drug apomorphine at the Iowa Security Medical Facility (ISMF) without their consent and that the use of said drug by the defendants constituted cruel and unusual punishment in violation of the eighth amendment. The trial court dismissed their complaint for injunctive relief. We reverse with directions to enjoin the defendants from further use of the drug except pursuant to specific guidelines hereinafter set forth.

After this case was filed in the district court, an order was entered assigning the case to the United States Magistrate for an evidentiary hearing pursuant to Rule 53 of the Federal Rules of Civil Procedure. This hearing was conducted by the magistrate who later filed his "Report and Recommendation" which included a summary of all of the evidence, findings and recommendations to the trial court. He recommended that the complaint be dismissed but that, if the drug was to be used in the future at ISMF, certain precautionary steps be taken in administering the drug and in employing the help of inmate aides. The trial court then gave the parties ten days within which to file objections to the report and recommendations pursuant to Rule 53(e)(2) of Federal Rules of Civil Procedure. Knecht and Stevenson filed their objections seeking clarification of two factual findings of fact. They objected to the recommendations of the magistrate and again requested that the trial court enjoin the injections of apomorphine into nonconsenting inmates. They also requested that the court incorporate the magistrate's recommendation, regarding the future use of inmate aides, into the court's order. The trial court dismissed the complaint and did not adopt the recommendations of the magistrate concerning the administration of apomorphine in the future.

On this appeal neither party challenges the use of the magistrate as a master pursuant to Rule 53 of the Federal Rules of Civil Procedure, and neither party makes any serious challenge to the factual findings of the magistrate. There is no indication that the reference to the magistrate, as master, was done pursuant to local rule, and we assume it was done because of "some exceptional condition" pursuant to Rule 53(b) Federal Rules of Civil Procedure. Under these circumstances we do not reach the question nor express any opinion on the propriety of referring § 1983 cases to a magistrate pursuant to local rule.¹

¹Several courts, tacitly or expressly, condone reference of civil matters to magistrates. *Deurell v. Weinberger*, 73-1058 (5th Cir., May 2, 1973); *Remington Arms Co. v. United States*, 461 F.2d 1268 (2d Cir. 1972); *Given v. W. T. Grant Co.*, 457 F.2d 612 (2d Cir. 1972). Other courts have seriously questioned or disapproved of the power of a court to refer matters to magistrates. *Ingram v. Richardson*, 471 F.2d 1268 (6th Cir. 1972); *TPO, Inc. v. McMillen*, 460 F.2d 348 (7th Cir. 1972). A split of authority also exists on reference of habeas petitions to magistrates. Some courts approve of the procedure. *United States ex rel. Gonzalez v. Zeller*, 477 F.2d 797 (2d Cir. 1973); *Johnson v. Wainwright*, 456 F.2d 1200 (5th Cir. 1972); *Parnell v. Wainwright*, 464 F.2d 735 (5th Cir. 1972), while others have disapproved of the practice. *Wedding v. Wingo*, 72-2160 (6th Cir., Aug. 31, 1973); *Dye v. Cowan*, 472 F.2d 1206 (6th Cir. 1972); *Rutina v. Cassidy*, 454 F.2d 207 (1st Cir. 1972).

The summary of the evidence contained in the report of the magistrate showed that apomorphine had been administered at ISMF for some time prior to the hearing as "aversive stimuli" in the treatment of inmates with behavior problems. The drug was administered by intra-muscular injection by a nurse after an inmate had violated the behavior protocol established for him by the staff. Dr. Loeffelholz testified that the drug could be injected for such pieces of behavior as not getting up, for giving cigarettes against orders, for talking, for swearing, or for lying. Other inmates or members of the staff would report on these violations of the protocol and the injection would be given by the nurse without the nurse or any doctor having personally observed the violation and without specific authorization of the doctor.

When it was determined to administer the drug, the inmate was taken to a room near the nurses' station which contained only a water closet and there given the injection. He was then exercised and within about fifteen minutes he began vomiting. The vomiting lasted from fifteen minutes to an hour. There is also a temporary cardiovascular effect which involves some change in blood pressure and "in the heart." This aversion type "therapy" is based on "Pavlovian conditioning."²

The record is not clear as to whether or not the drug was always used with the initial consent of the inmate. It has apparently been administered in a few instances in the past without obtaining written consent of the inmate and once the consent is given, withdrawal thereof was not permitted. Apparently, at the time of trial apomorphine was not being used unless the inmate signed an initial consent, but there is no indication that the authorities now permit an inmate to withdraw his consent once it is given. Neither is there any indication in the record that the procedure has been changed to require the prior approval of a physician each time the drug is administered. Likewise there is no indication that there has been any change in the procedure which permits the administration of the drug upon reports of fellow inmates despite a recommendation by the magistrate that this practice should be avoided.

The testimony relating to the medical acceptability of this treatment is not conclusive. Dr. Steven Fox of the University of Iowa testified that behavior modification by aversive stimuli is "highly questionable technique" and that only a 20% to 50% success is claimed. He stated that it is not being used elsewhere to his knowledge and that its use is really punishment worse than a controlled beating since the one administering the drug can't control it after it is administered.

On the other hand, Dr. Loeffelholz of the ISMF staff testified that there had been a 50% to 60% effect in modifying behavior by the use of apomorphine at ISMF. There is no evidence that the drug is used at any other inmate medical facility in any other state.

The Iowa Security Medical Facility is established by Section 223.1, Code of Iowa, 1973. It is an institution for persons displaying evidence of mental illness or psychological disorders and requiring diagnostic services and treatment in a security setting. The patients admitted to the facility may originate from the following sources:

- (1) Residents of any institution under the jurisdiction of the department of social services,
- (2) Commitments by the courts as mentally incompetent to stand trial under Chapter 783 of the Iowa Code.
- (3) Referrals by the court for psychological diagnosis and recommendations as part of the pretrial or presentence procedure or determination of mental competency to stand trial.
- (4) Mentally ill prisoners from county and city jails for diagnosis, evaluation, or treatment.

Section 223.4, Code of Iowa, 1973.

Those transferred from institutions where they were committed pursuant to civil statutes or those who were committed by order of the court prior to conviction, suffer a compromise of their procedural rights in the process of the

² Pavlovian conditioning is based on the theory that when environmental stimuli or the kinetic stimuli produced by the incipient movements of the punished act are made contiguous with punishment, they take on some of the aversive properties of the punishment itself. The next time the organism begins the act, particularly in the same environment, it produces stimuli which through classical conditioning have become aversive. It is these aversive stimuli which then prevent the act from occurring. Singer, *Psychological Studies of Punishment*, 58 Calif. L. Rev. 405, 423 (1970).

transfer to ISMF. The constitutional justification of this compromise of procedure is that the purpose of commitment is treatment, not punishment. *Of McKeliver v. Pennsylvania*, 403 U.S. 528, 552 (White, J., concurring) (1971); *Sas v. Maryland*, 334 F.2d 506, 509 (4th Cir. 1964). Beyond this justification for treatment is the clear command of the statutes that the purpose of confinement at ISMF is not penal in nature, but rather one of examination, diagnosis and treatment. Naturally, examination and diagnosis, by their very definition, do not encompass the administration of drugs. Thus, when that course of conduct is taken with respect to any particular patient, he is the recipient of treatment.

The use of apomorphine, then, can be justified, only if it can be said to be treatment. Based upon the testimony adduced at the hearing and the findings made by the magistrate and adopted by the trial court, it is not possible to say that the use of apomorphine is a recognized and acceptable medical practice in institutions such as ISMF. Neither can we say, however, that its use on inmates who knowingly and intelligently consent to the treatment, should be prohibited on a medical or a legal basis. The authorities who testified at the evidentiary hearing indicate that some form of consent is now obtained prior to this treatment. The only question then is whether, under the eighth amendment, its use should be prohibited absent such consent; and if so what procedure must be followed to prevent abuses in the treatment procedures and to make certain the consent is knowingly and intelligently made.

At the outset we note that the mere characterization of an act as "treatment" does not insulate it from eighth amendment scrutiny. In *Trop v. Dulles*, 356 U.S. 86, 95 (1958), the Supreme Court stated that the legislative classification of a statute is not conclusive in determining whether there had been a violation of the eighth amendment. Instead, the Court examined the statute by an "inquiry directed to substance," reasoning that "even a clear legislative classification of a statute as 'nonpenal' would not alter the fundamental nature of a plainly penal statute." *Trop v. Dulles*, supra, 356 U.S. at 95.

Other courts have examined nonpenal statutes in the manner suggested by the Supreme Court in *Trop*. The contention that a state's incarceration of runaway juveniles could not violate the eighth amendment because the statute did not authorize any punishment of juveniles was struck down in *Vann v. Scott*, 467 F.2d 1235, 1240 (7th Cir. 1972):

"Whatever the State does with the child is done in the name of rehabilitation. Since—the argument runs—by definition the treatment is not 'punishment,' it obviously cannot be 'cruel and unusual punishment.' But neither the label which a State places on its own conduct, or even the legitimacy of its motivation, can avoid the applicability of the Federal Constitution. We have no doubt that well intentioned attempts to rehabilitate a child could, in extreme circumstances, constitute cruel and unusual punishment proscribed by the Eighth Amendment."

The absence of criminal incarceration did not prohibit a federal court from entertaining an eighth amendment claim to test the conditions of confinement in a boys training school:

"The fact that juveniles are *in theory* not punished, but merely confined for rehabilitative purposes, does not preclude operation of the Eighth Amendment.

"The reality of confinement in Annex B is that it is punishment."

Inmates of the Boys' Training School v. Affleck, 346 F.Supp. 1354, 1366 (D.R.I. 1972).

Such findings of cruel and unusual punishment have been sustained with respect to the death penalty,³ penal incarceration for status,⁴ civil commitment for status without treatment,⁵ strip-rooms and solitary confinements,⁶ tranquilizing drugs,⁷ and corporal punishment for prisoners.⁸ However, any such determination rests on the facts of a particular case.

³ *Furman v. Georgia*, 408 U.S. 238 (1972).

⁴ *Robinson v. California*, 370 U.S. 660 (1962).

⁵ *Rouse v. Cameron*, 373 F.2d 451 (D.C. Cir. 1966); *New York State Ass'n for Retarded Children v. Rockefeller*, 357 F.Supp. 752 (E.D.N.Y. 1973); *Martarella v. Kelley*, 349 F.Supp. 575 (S.D.N.Y. 1972).

⁶ *Lakeau v. MacDougall*, 473 F.2d 974 (2d Cir. 1972), cert. denied, 42 U.S.L.W. 3199 (1973); *Gates v. Collier*, 349 F.Supp. 881 (N.D. Miss. 1972); *Landman v. Royster*, 333 F.Supp. 621 (E.D. Va. 1971); *Inmates of Boys' Training School v. Affleck*, 346 F.Supp. 1354 (D. R.I. 1972).

⁷ *Nelson v. Hume*, 355 F.Supp. 451 (N.D. Ind. 1972).

⁸ *Jackson v. Bishop*, 404 F.2d 571 (8th Cir. 1968); *Nelson v. Hume*, 355 F.Supp. 451 (N.D. Ind. 1972); *Landman v. Royster*, 333 F.Supp. 575 (S.D.N.Y. 1972).

Here we have a situation in which an inmate may be subjected to a morphine base drug which induces vomiting for an extended period of time. Whether it is called "aversive stimuli" or punishment, the act of forcing someone to vomit for a fifteen minute period for committing some minor breach of the rules can only be regarded as cruel and unusual unless the treatment is being administered to a patient who knowingly and intelligently has consented to it. To hold otherwise would be to ignore what each of us has learned from sad experience—that vomiting (especially in the presence of others) is a painful and debilitating experience. The use of this unproven drug for this purpose on an involuntary basis, is, in our opinion, cruel and unusual punishment prohibited by the eighth amendment.

We turn then to the question of how best to prevent abuse in the treatment procedures of consenting participants and how to make certain that the consent is knowingly and intelligently given, 42 U.S.C. § 1983 does not specify the scope of judicial relief available in an action successfully sustained under its terms. Yet this fact does not limit the courts in framing appropriate relief. Its counterpart, 42 U.S.C. § 1982, is likewise framed only in declaratory terms, but the Supreme Court has held that a federal court is not thereby precluded from fashioning an effective equitable remedy. *Jones v. Alfred H. Mayer Co.*, 392 U.S. 409, 414 n.13 (1968). The substantive scope of relief available is a matter of the equitable powers of the federal courts. Accordingly, courts have exercised broad remedial power in civil rights actions. See *United States v. Ironworkers Local 86*, 443 F.2d 544, 553 (9th Cir.), cert. denied, 404 U.S. 984 (1971); *Parham v. Southwestern Bell Telephone Co.*, 433 F.2d 421, 428 (8th Cir. 1970) and cases cited therein.

Yet although it is generally true that:

"[w]here all relevant circumstances have properly been evaluated the action of the trial court, whether granting or denying an injunction, ordinarily will be sustained."

Hodgson v. American Can Co., 440 F.2d 916, 920 (8th Cir. 1971), it is not unknown for a federal appellate court to change the scope of an equitable order on appeal. *United States v. St. Louis-San Francisco Ry.*, 464 F.2d 301 (8th Cir. 1972), cert. denied, 409 U.S. 1107 (1973) [employment discrimination under Title VII]; *Carter v. Gallagher*, 452 F.2d 315, 324 (8th Cir. 1971), modified en banc, 452 F.2d 327 (8th Cir.), cert. denied, 406 U.S. 950 (1972) [employment discrimination under 42 U.S.C. §§ 1981 and 1983]; *Action v. Gammon*, 450 F.2d 1227, 1237-1238 (8th Cir. 1971) civil rights action under 42 U.S.C. § 1981, 1982, 1983, 1985].

In this case the trial court should enjoin the use of apomorphine in the treatment of inmates at the ISMF except when the following conditions are complied with:

1. A written consent must be obtained from the inmate specifying the nature of the treatment, a written description of the purpose, risks and effects of treatment, and advising the inmate of his right to terminate the consent at any time. This consent must include a certification by a physician that the patient has read and understands all of the terms of the consent and that the inmate is mentally competent to understand fully all of the provisions thereof and give his consent thereto.

2. The consent may be revoked at any time after it is given and if an inmate orally expresses an intention to revoke it to any member of the staff, a revocation form shall be provided for this signature at once.

3. Each apomorphine injection shall be individually authorized by a doctor and be administered by a doctor, or by a nurse. It shall be authorized in each instance only upon information based on the personal observation of a member of the professional staff. Information from inmates or inmate aides of the observation of behavior in violation of an inmate's protocol shall not be sufficient to warrant such authorization.

The judgment of the district court is reversed with directions to grant the injunction under the terms heretofore set forth.

Stephenson, Circuit Judge.

I concur with the result.

A true copy.

Attest:

Clerk, U.S. Court of Appeals, Eighth Circuit.

[Item VI.B.4]

CLONCE V. RICHARDSON, No. 73 CV 373-S (W.D. Mo. July 31, 1974)

Memorandum and Order

I.

The above cases are those remaining from a larger number of cases filed to challenge each prisoner's transfer and retention in the S.T.A.R.T. program at the Medical Center for Federal Prisoners at Springfield, Missouri. Habeas corpus, federal question, and declaratory judgment jurisdiction are invoked in various of the cases which, by agreement of the parties, were processed on a consolidated basis. Although some of the cases were originally commenced *pro se*, all of the prisoners were eventually represented by either the Federal Public Defender for this district or by attorneys for The National Prison Project of the American Civil Liberties Union.

This Court has received throughout this litigation exemplary cooperation from all counsel representing the prisoners and from the Bureau of Prisons and counsel representing the Bureau. We therefore express our appreciation to all concerned and commend them for their cooperation with each other and with this Court for their assistance in devising procedures under which these cases were determined.

Pursuant to those procedures, the parties entered into a stipulation of numerous facts and agreed upon particular legal questions which would be presented by motions for partial summary judgment to be filed pursuant to Rule 56 of the Rules of Civil Procedure. It was contemplated that the Court would be able to consider the stipulated factual data, including the voluminous documentary evidence and the expert opinions of court appointed experts, rule all questions of law which did not involve any disputed question of fact, and then enter an order pursuant to Rule 56(d) which would identify what material facts were actually and in good faith controverted so that further proceedings could be directed under which the factual disputes and remaining legal questions could be expeditiously resolved.

As a part of the agreed pretrial procedures, counsel agreed to confer and jointly to recommend to the Court for appointment as expert witnesses the most knowledgeable and qualified persons available to examine the S.T.A.R.T. program, interview Medical Center staff and prisoners, and make appropriate reports of their expert opinions to counsel and to the Court. The experts recommended and appointed were Harold L. Cohen, Institute of Behavior Research, Silver Spring, Maryland; Dr. William DeRisi, Camarillo-Neuropsychiatric Institute Research Program, Camarillo, California; and Dr. Nathan Azrin, Anna State Hospital, Anna, Illinois. We are grateful for the services rendered by these experts which we now outline.

The parties agreed on the descriptive materials and data concerning the program and the prisoners involved to be furnished the experts in preparation of their later physical examination of the S.T.A.R.T. facilities and their interviews with Medical Center Staff and prisoners. On November 14, 1973, a further pretrial conference was held in Springfield, Missouri, with counsel and the three court appointed experts in attendance. The experts were explained their duties, furnished an agreed list of questions in writing, and immediately left for the Medical Center to begin their examination of the S.T.A.R.T. facilities and interviews of Staff and prisoners.

The experts' written reports were filed in the form of answers to the questions which had been submitted to the experts by the parties. In light of developments to be presently stated, it is unnecessary to summarize the reports of the three experts other than to say that one report was generally favorable to the techniques and results of the S.T.A.R.T. program; one was generally unfavorable; and one was generally favorable to the design of behavior modification programs similar to that of S.T.A.R.T. but expressed the firm opinion that all such programs should be voluntary rather than involuntary.

Pursuant to the pretrial procedures outlined, the parties were thus able to have before the Court a great deal of factual data, including the opinions of the three experts whom both sides agreed were competent, qualified, and impartial. Cross motions for summary judgment were filed in accordance with the agreed procedures and briefs were being submitted on an agreed schedule

when, on February 11, 1974, the Court was formally advised by Norman A. Carlson, Director of the Bureau of Prisons, that S.T.A.R.T. was to be terminated by March 1, 1974. In that letter, Mr. Carlson stated in part:

"As you know, the START program was an attempt to provide a more effective approach for dealing with a small, but highly destructive, group of inmates that are found in any correctional system . . . federal, state or local. For a number of years, we have been aware that the usual approaches in handling such individuals have been totally unsuccessful. In most instances, this group of offenders are housed in long term segregated status, isolated from the remainder of the institution and with no opportunity to participate in the various academic, vocational and recreational programs available.

* * * * *

"The primary objective of START was an attempt to work with these offenders to control their behavior so that they could participate in regular institution programs designed to help them make a successful community adjustment when they are eventually released from custody.

* * * * *

"At the time the program was initiated, it was anticipated that the population would build up to 30-35 individuals and be maintained at that level. We over estimated the number of individuals meeting the strict criteria of START. When the number of referrals declined to 3 in a 6 month period, it became necessary to reconsider the need for START. This review indicated that there was a disproportionately large investment of manpower and facilities in the program by the Springfield staff.

"As we have mentioned, START was a demonstration project during which we were able to try new techniques in working with an extremely difficult group of aggressive offenders. We undoubtedly made mistakes in the program but we also profited from the experience. Taking what we have learned, we are confident that we will be able to improve programs in existing facilities, thereby eliminating the need for the continuation of the unit at Springfield. Based on the insufficient number of inmates now assigned to the START unit and the costs involved, the program will be terminated on or before March 1, 1974."

We promptly called upon counsel for suggestions as to what procedural steps should be taken in light of the Bureau's announcement that S.T.A.R.T. would be terminated and also asked the Bureau to advise the Court as to what it intended to do with the S.T.A.R.T. participants upon the termination of the program. The problem of what should be done with the S.T.A.R.T. participants was solved by the parties' further agreement that each would be transferred back to his original institution "without prejudice to any suggestion that either side may have in regard to the ultimate disposition of the litigation." Such action was promptly taken.

The parties were and are in disagreement in regard to what further proceedings should be had in the pending cases. Petitioners contend generally that all questions presented are justiciable and that, in effect, all the procedures originally contemplated should go forward, including, but not limited to, the eventual examination and cross-examination of the expert witnesses in regard to their respective views of behavior modification programs in general and in regard to S.T.A.R.T. in particular. Respondents, on the other hand, contend that the Bureau's voluntary termination of S.T.A.R.T., under the circumstances above outlined, effectively mooted all questions of law presented by the pending motions for summary judgment and that the case should simply be dismissed.

We do not agree with the position of either side. We believe that while some of the questions presented were mooted by the Bureau's termination of S.T.A.R.T., all important questions were not mooted and that those questions should and must be decided.

II.

Experience in other prison litigation establishes that it is not unusual for cases involving prisons and jails to take the turn this case has taken. The basic factual circumstances concerning prison conditions and prison procedures are rarely in substantial controversy and if, but only if, the prisoners and the institution are both represented by competent and informed counsel, the prob-

lem of establishing the undisputed factual circumstances is no more complicated than that presented in ordinary litigation. Once the factual circumstances are established, experience establishes that it is not infrequent that institutional changes are voluntarily made by the institutional administrators which have the practical effect of mootng many, but not all, of the legal questions presented by the old conditions and procedures.

Glenn v. Wilkinson, (W.D. Mo. 1970) 309 F. Supp. 411, involving the conditions of confinement of prisoners held under death sentence, is a good example of how changes voluntarily made during the course of litigation mooted many of the questions presented in that litigation. But that case illustrates that changes do not always moot all of the questions involved in a particular case. See also and compare *Goldsby v. Carnes*, (W.D. Mo. 1973) 305 F. Supp. 395, in which all parties agreed to a consent decree providing for administrative guidelines and for state court judicial review of administrative decisions for the Jackson County Jail at Kansas City.

When we learned that certiorari had been granted in regard to *McDonnell v. Wolff*, (8th Cir. 1973) 483 F. 2d 1059, we concluded, . . . in light of the fact all S.T.A.R.T. participants had been returned to their original institutions, to defer final determination of the justiciable questions presented by the pending motions until such questions could be decided in light of the Supreme Court's opinion in *Wolff*. The Supreme Court decided that case on June 26, 1974, see *Wolff v. McDonnell*, — U.S. — (1974), 42 L.W. 4190.

Wolff v. McDonnell is peripherally helpful in regard to the mootness question. That case recognized that "the demarcation line between civil rights actions and habeas petitions is not always clear," directing comparison to the recent cases of *Preciser v. Rodriguez*, 411 U.S. 475 (1973); *Haines v. Kerner*, 404 U.S. 519 (1972); and *Wilwording v. Swenson*, 404 U.S. 249 (1971), and concluded that "both actions serve to protect basic constitutional rights."

While there are quite fundamental differences between civil rights actions and habeas actions by state prisoners, and actions for declaratory judgment and injunction and habeas actions by federal prisoners, we believe that any demarcation line between the two types of cases in regard to the applicability of constitutional standards to particular circumstances is equally dim. Again, the actions maintained by either a state prisoner or a federal prisoner against administrators of a correctional institution both serve to protect basic constitutional rights and principles applicable to any other form of action which raises similar questions of law should be equally applicable to both state and federal prisoner cases.

Questions of mootness raised by the Bureau of Prisons should therefore be determined by the familiar general standard of whether the problem is "capable of repetition, yet evading review," *Southern Pacific Terminal Co. v. Interstate Commerce Commission*, 219 U.S. 498, 515 (1911), most recently quoted and applied in *Moore v. Ogilvie*, 394 U.S. 814, 816 (1969). The gloss of *Carafus v. LaVallee*, 391 U.S. 234 (1968), and *Sibron v. New York*, 392 U.S. 40 (1968), which re-examined and redefined standards of mootness in regard to habeas corpus, teaches that the principles applicable to ordinary civil litigation are particularly applicable in habeas cases, independent of declaratory judgment or injunction jurisdiction. *Sibron*, for example, concluded that "we do not believe that the Constitution contemplates that people deprived of constitutional rights at this level should be left utterly remediless and defenseless against repetitions of unconstitutional conduct." We are convinced that the mootness standard articulated in a state prisoner habeas case is also applicable to the pending federal prisoner cases.

Application of mootness standards requires consideration of the factual circumstances on a case by case basis. The Director of the Bureau of Prisons stated in his letter of February 11, 1974, that the Bureau intended to profit from the mistakes made in the S.T.A.R.T. program and that the Bureau was "confident that we will be able to improve programs in existing facilities." Any doubt about the Bureau's intention to continue various forms of behavior modification programs was eliminated by Mr. Carlson's statement of February 27, 1974 before the House Committee on the Judiciary, Subcommittee on Courts, Civil Liberties and the Administration of Justice.

Mr. Carlson's February 27, 1974 statement shows that the Subcommittee had specifically asked him "to comment on the use of 'behavior modification' techniques such as the START program at the Medical Center for Federal Prison-

ers, Springfield, Missouri." In responding to that request, Mr. Carlson felt that it was necessary to state emphatically and unequivocally that "the Federal Bureau of Prisons never uses and does not countenance the use of psychosurgery, electro-shock, massive use of tranquilizing drugs or any other form of aversive treatment to change behavior, no matter how aggressive or resistive an offender may be."

Mr. Carlson appropriately pointed out that "the problem in discussing 'behavior modification' is that the term is defined in a number of different ways." He explained that "In its broadest sense, virtually every program in the Bureau of Prisons is designed to change or modify behavior." With respect to the S.T.A.R.T. program, Mr. Carlson advised the Committee that "The most recent attempt to use 'behavior modification' techniques was the START program developed at the Medical Center for Federal Prisoners, Springfield, Missouri, during October, 1972, as a demonstration project. He explained that "Simply stated, START (Special Treatment and Rehabilitative Training) was an attempt to provide a more effective approach for dealing with those few, but highly aggressive and assaultive, inmates who are found in any correctional institution—federal, state, or local." Consistent with the advice given this Court, Mr. Carlson stated to the Committee that "While mistakes were undoubtedly made in developing the START program, we believe that the Bureau of Prisons profited from the experience."

With particular regard to the Bureau of Prisons' intention to use behavior modification programs similar to S.T.A.R.T., Mr. Carlson advised the Committee that:

"We recognize that behavior modification does not represent a panacea or cure all for the deficiencies in correctional programming. It is, however, a valuable treatment technique which can be effectively used to motivate some groups of offenders. For this reason, behavior modification using positive rewards is an integral part of many of our correctional programs and the Bureau of Prisons will continue to use this technique whenever appropriate." [Emphasis ours.]

Under the circumstances of this particular case, we therefore find and conclude that there is a substantial likelihood that some of the questions presented will recur and that a justiciable issue capable of repetition, yet evading review, does exist which requires a definitive declaratory judgment of this Court under the circumstances. As we will indicate later, we do not believe that all of the questions initially presented need be decided because such questions have been rendered moot by the Bureau's termination of the S.T.A.R.T. program.

iii.

This part of this opinion will state the factual circumstances which exist without substantial controversy within the meaning of Rule 56 (d) of the Rules of Civil Procedure and set forth particular material facts stipulated to by the parties.

The S.T.A.R.T. program was developed by the United States Bureau of Prisons to deal with offenders who have not, in the Bureau's view, adjusted satisfactorily to life in correctional institutions. It was designed by the Bureau after a study of programs at the State Reformatory for Boys, Yardville, New Jersey, and the Kennedy Youth Center, Morgantown, West Virginia. The Bureau adopted what it considered to be the more successful aspects of those programs in formulating S.T.A.R.T. which was specifically designed for adult offenders who had demonstrated an inability to conform to institutional standards.

Dr. Albert F. Scheckenback, S.T.A.R.T. program Professional Consultant, described the program as follows in his report of August 17, 1973 [Exhibit #6]:

"Project START has been developed for prisoners who have failed to adjust in normal institutional environments. While in this program, they will be confined to an isolated area until they have demonstrated consistently a potential to respond appropriately in a regular institution. Some inmates may never leave the program. Hence, a unit has been developed that will provide for their needs on the unit with movement to other areas of the institution prohibited except in dire emergencies.

"A status system is assigned as the initial treatment program for START. The status system involves a number of levels which differ as to their respon-

sibilities and privileges and allow an inmate to work his way through the different levels dependent on the appropriateness of his behavior. As an inmate consistently demonstrates his ability to get along at the current level to which he is assigned, he is rewarded by promotion to a more privileged level. The progressive levels not only reward appropriate behavior but are also an incentive for the inmate to do better. The privileges have been reduced so that a high level of privileges can be attained only if the inmate is returned to population of a regular institution. The START program is based on the theory that appropriate behavior can be strengthened by reward and inappropriate behavior extinguished. Moreover, the use of the team approach in setting goals for each inmate allows for individual programming and increased flexibility of treatment within the rigid status system."

Generally speaking, persons transferred to S.T.A.R.T. were individuals whose repeated aggressive acts within prison had resulted in their continual placement in segregation status. Often the aggressive and destructive behavior of the selected individuals had continued in segregation. In some cases, their behavior resulted in referral to the psychiatric unit at the Medical Center where investigation revealed that the individual was not psychotic. The goal of S.T.A.R.T. was not to develop behavior of an individual so that he would be able to conform his behavior to standards of society at large, but to develop behavior appropriate to confinement in open population of regular penal institutions.

The S.T.A.R.T. program was initiated on September 11, 1972 and continued until its termination by the Bureau of Prisons on March 1, 1974, under the circumstances above stated. During that period 99 individuals were considered for possible placement in the program. Of that number, 26 were determined to be appropriate referrals. Of that number, 19 individuals actually participated in the S.T.A.R.T. program. Seven of the participants had successfully completed the program and had been sent back to the regular institution population. Of the remaining group three were reported to be progressing well, four were resisting the program, three were showing little progress, and one was awaiting trial on charges of taking a correctional officer as hostage.

The functioning of the S.T.A.R.T. program is adequately described in the facts which were stipulated by the parties:

1. S.T.A.R.T. is an involuntary program. Prisoners who are selected for placement in the S.T.A.R.T. program are not notified that they are being considered for placement, not granted an opportunity for a hearing at the time of their selection for such placement, and not provided a forum or procedure to object or express an opposing view to their selection and placement.

2. A prisoner is selected for placement in the S.T.A.R.T. program after a referral by the warden of a federal institution wherein the prisoner is confined in segregation status, to the Office of the Coordinator of Mental Health Services of the Bureau of Prisons. The Coordinator of Mental Health reviews the prisoner's past history along with other factors as provided under the Policy of Bureau of Prisons, Operations Memo # 7300.128. Since May 14, 1973, the Coordinator of Mental Health submits the inmate's name and history to the professional consultant and manager of the S.T.A.R.T. program for their comments or recommendations, and he then either rejects or accepts the inmate as a S.T.A.R.T. candidate in accordance with the criteria and facts relevant to said inmate. On his acceptance the inmate is informed and transferred to the S.T.A.R.T. program.

3. The S.T.A.R.T. program's purpose is to provide a coherent plan to assist an inmate to acquire and maintain responsible and productive behavior in caring for himself and his personal needs, and in association with others in order to adjust to the requirements demanded in an environment of a prison.

4. S.T.A.R.T. inmates are placed in a ward separated from the regular and segregated prison population. "Movement to other areas of the institution [is] prohibited except in emergencies."

5. Immediately prior to their transfer to S.T.A.R.T. each of the petitioners as well as all other S.T.A.R.T. subjects had been in a segregation unit for reported violation of prison rules for various lengths of time.

6. An inmate in the S.T.A.R.T. program who refuses to participate in the program, or one who consistently demonstrates inability to participate in the program and does not progress above the Orientation Level (previously designated as Level I) for a period of one year is recommended to the Coordinator of Mental Health of the Bureau for removal from the program. Further, each

inmate within the program is constantly observed and monitored by the institutional staff, and similar recommendation may be made to the Coordinator of Mental Health for an inmate's removal prior to a period of one year for reasons which reflect the inmate's inability to achieve the goals of the program.

7. No prisoner is permitted to leave the S.T.A.R.T. unit for the purpose of attending religious services. Prisoners' ability to practice their religion is limited to the allowance of individual services provided by the institutionally employed Catholic and Protestant chaplains on request. However, a prisoner can individually practice his own religious belief except where same interferes with the security or orderly operation or rules of the institution in accordance with Policy # H-7300.38, September 8, 1972. The S.T.A.R.T. program does not provide Muslim petitioners with any opportunity to consult with or to seek guidance from the Muslim spiritual leaders. S.T.A.R.T. does not allow these petitioners on the Orientation Level to decorate their cells with the flag of Islam, or free association with members of Muslim faith who are also in the S.T.A.R.T. program.

8. A prison inmate on the Orientation Level is prohibited from possessing, reading, or otherwise using political and educational literature, for example, *Ebony* and *Jet*; religious materials, such as *Muhammed Speaks*; educational materials, including those kept by the Medical Center Education Department for prisoners' use; and political publications, such as books on the rights of Chicanos, and Marxists writings. However, a prisoner in the S.T.A.R.T. program at the Orientation Level is entitled to a subscription to his home town newspaper and a Bible of a recognized religion, except petitioner Ruiz states he was denied a Bible on entry to the program. As a prisoner progresses from the Orientation Level he is entitled to participate in educational programs and entitled to possess, read, and utilize educational, political, and other material.

9. A prisoner in the S.T.A.R.T. program may freely express his opinions, except where staff determines that same interferes with the orderly operation of the program, and is entitled to correspond by mail as other inmates in open population subject to the same regulations of inspection as provided by Respondent's Policy # 7300.23B and Bureau of Prisons Policy # 7300.1A.

10. A prisoner in the S.T.A.R.T. program has the opportunity to view television and possess and utilize a radio on progression from the Orientation Level. Inmates in regular segregation status do not have the opportunity to view television.

11. A prisoner in the S.T.A.R.T. program has the same rights to visitation from others as an inmate in open population with the visitation to take place in a room within the S.T.A.R.T. unit.

12. A prisoner's actions, including his communication with others in the S.T.A.R.T. program, are under continual surveillance for the purpose of determining the inmate's rate of progress.

13. The ratio of correctional officers to prisoners is one to two, and higher than the ratio of correctional officers to prisoners in other segregation units.

14. Prisoners in the S.T.A.R.T. program are subject to searches of their cells to include personal property and legal material; however, Medical Center policy requires the legal material to be inspected for contraband only and not read; and also their bodies, including body cavities on the demand of the S.T.A.R.T. and other institutional correctional staff, as any other inmate in open population for purposes of security and respondent's policy. Body searches are not made by or supervised by a physician or a physician's assistant.

15. The facilities provided in the present ward consist of an open interior, 72 feet in length north and south by 26 feet east and west with two tiers of cells on the east and west sides for a total of 37 cells. The interior is illuminated by natural and electric light.

16. The ward and cell air circulation, temperature, and humidity are designed to be controlled by air conditioning and heat.

17. Each cell in the ward has a tiled interior and measures 10 feet in width by 8 feet, 4 inches in height.

18. Each cell on the ward has a solid metal door with a window, 12 inches by 8 inches, permitting the prisoner in the cell observation of the unit, and one window measuring 24 inches by 36 inches to the rear, opening to the exterior building, allowing sunlight and exterior observation of the yard area. The door windows of the cells of selected prisoners were covered with opaque ma-

terial for a period of time up to and including six weeks in duration for the purpose of preventing disturbance of other inmates participating in the program, resulting in isolation of those prisoners.

19. Each cell in the ward is provided with a toilet as well as a lavatory for the prisoner's use.

20. Cells in the S.T.A.R.T. unit are equipped with a 60 watt light bulb and a 15 watt light bulb. Cells in the segregation unit at the Medical Center are equipped with a 75 watt bulb and a red 15 watt night bulb. Cells in open population at the Medical Center are equipped with one 75 watt bulb.

21. The Medical Center's kitchen is the source for food for all Medical Center prisoners, including S.T.A.R.T. prisoners.

22. A prisoner in the S.T.A.R.T. program is required to clean his cell and the ward area, and is provided an opportunity to earn pay and extra meritorious good time credits on his sentence by being required to work in the Federal Prisons Industry, after being promoted from the Orientation Level. Prisoners in the S.T.A.R.T. program who were sentenced in states that do not recognize good time allowances are also required to work in the Federal Prison Industries. Inmates in regular segregation status and not all prisoners in open population have the opportunity, nor are they required to work in Federal Prison Industries.

23. A prisoner, under the revised program, has the opportunity to be promoted from the Orientation Level within a one week period and to be graduated from the program within approximately nine months from his entrance.

24. Statutory good time cannot be returned to subjects on the Orientation Level of the S.T.A.R.T. unit. However, statutory good time has been on occasion returned to segregation prisoners and may be returned to open population prisoners in all Federal Bureau of Prisons institutions. All of an inmate's statutory good time is recommended by the S.T.A.R.T. staff to be returned to him on his successful graduation from the unit.

25. Commissary privileges are denied to inmates on the Orientation Level of the program. Commissary privileges are increased with the inmate's progression within the levels to the point as allowed an inmate in open population.

26. Each inmate on the Orientation Level of the program is provided the opportunity to shower a maximum of twice weekly with a clothing change, except petitioner Sanchez states these opportunities were not provided him originally for a period of time, which respondent denies. This is the minimum bathing and clothing exchange required of those in segregation in accordance with the Policy of the Bureau of Prisons. [See Policy Statement # H 7400.5B.] As an inmate progresses from Orientation Level within the program, he is granted increasing privileges of bathing and changing of clothing to the point of an inmate in open population.

27. An inmate within the program at the Orientation Level is provided a maximum of recreation for a one hour period twice weekly, except certain petitioners, Sanchez, Ruiz, McDonnell, and Wilson state that their full two hour exercise was not provided them, which respondent denies. This is the minimum exercise required of those in segregation in accordance with the Policy of the Bureau of Prisons [See Policy Statement # H. 7400.5B]. As an inmate progresses from the Orientation Level within the program, he is granted increasing privileges of recreation to the point of an inmate in open population.

28. Each prisoner in the unit is provided a bed, a mattress, a pillow, two blankets, and a personal locker, except where the locker has been previously destroyed or for other security reasons. All prisoners, including those on the Orientation Level are provided the following personal items: a tooth brush, tooth powder, institution tobacco, cigarette paper, match books, a Bible of a recognized religion, pencil and paper, and their own legal material, except named petitioners state that they were not provided with all or some of these items for a period of time, which respondent denies. Prisoners are granted the right to possess greater amounts of personal property as they progress from the Orientation Level, the amount granted at the Orientation Level is the same as the minimum granted a prisoner under the Policy of the Bureau of Prisons. [See Policy Statement # H 7400.5B].

29. S.T.A.R.T. subjects are prohibited from visiting the prison library, including the law library. They may request law books from the staff and the assistance of the Federal Public Defender.

IV.

The first question of law stipulated by the parties is:

"Whether, in the absence of notice, charges, and hearings, the selection and forceable transfer of a prisoner into the S.T.A.R.T. program violates the constitutional rights of the prisoner in denying him due process and equal protection of law."

Petitioners argue that due process required a hearing before their transfer into S.T.A.R.T. in the first place because the program involves substantial losses of privileges to the petitioner.¹

Respondents argue, on the other hand, that no deprivation of due process is involved because all petitioners were in segregation in other federal correctional institutions before their transfer to S.T.A.R.T. at the Medical Center. They further argue that the Bureau of Prisons has broad discretion in the transfer and placement of prisoners within the federal prison system under 18 United States Code § 4081, and that the exercise of that discretion is not subject to judicial review. Respondents attempt to distinguish petitioners' cases on their facts but do not discuss the substantial constitutional questions raised by those cases.

We find and conclude that this question of law relating to transfer without any sort of a hearing is not mooted by the termination of the S.T.A.R.T. program under the particular factual circumstances and the principles of law stated in part II above. On the merits, we find and conclude that a prisoner transferred into S.T.A.R.T. or into a behavior modification program like S.T.A.R.T., which, on the facts, involves a major change in the conditions of confinement is entitled, at a minimum, to the type of hearing required by the Supreme Court's opinion in *Wolff v. McDonnell*.

Even before the Supreme Court decided *Wolff v. McDonnell*, it was reasonably clear that the transfer of a prisoner without any sort of a hearing to another institution or to a different status within the same institution presented a substantial constitutional question when, on the facts, the transfer was accompanied by deleterious consequences to the prisoner. Prior to *Wolff v. McDonnell*, several courts held that prisoners must be given some form of hearing when they are disciplined, e.g., *Miller v. Twomey*, 479 F. 2d 701 (7th Cir. 1973); *McDonnell v. Wolff*, 483 F. 2d 1059 (8th Cir. 1973); cert. granted 42 L.W. 3422 (Jan. 21, 1974); *Sastre v. McGinnis*, 442 F. 2d 178 (2nd Cir. 1971); cert. denied 404 U.S. 1049 (1972); *Landman v. Royster*, 333 F. Supp. 621 (E.D. Va. 1971). Other courts specifically concluded that hearings were required in connection with prisoner transfers; e.g., *Holt v. Vitek*, 381 F. Supp. 1238 (D. N.H. 1973); *White v. Gillman*, 360 F. Supp. 64 (S.D.D. Iowa (1973); *Capitan v. Cupp*, 356 F. Supp. 302 (D. Ore. 1972); *Park v. Thompson*, 356 F. Supp. 783 (Dr. Hawaii 1973); *Gomes v. Travisono*, 353 F. Supp. 457 (D. R.I. 1973). Cf. *Bryant v. Hardy*, 488 F. 2d 72 (4th Cir. 1973). Still other courts, prior to *Wolff v. McDonnell*, required that a hearing be held in connection with administrative changes in status. *Urbano v. McCorkle*, 334 F. Supp. 161 (D. N.J. 1971). See also *Landman v. Royster*, *supra*, at 645.

This development in the law, as illustrated by the cited cases, has, of course, been recent. Most of the cases cited above were decided after and upon the authority of *Morrissey v. Brewer*, 408 U.S. 471 (1972); and *Guymon v. Scarpelli*, 411 U.S. 778 (1973).

The Eighth Circuit in *McDonnell v. Wolff*, 483 F. 2d 1059 (8th Cir. 1973), consistent with the Seventh Circuit's earlier opinion in *Miller v. Twomey*, 479 F. 2d 701 (7th Cir. 1973) concluded that the procedural requirements outlined in *Morrissey* as supplemented in *Scarpelli*, *supra*, should be applied in connection with prison disciplinary proceedings. While the Supreme Court concluded in *Wolff v. McDonnell* that "the *Morrissey-Scarpelli* procedures need not in all respects be followed in disciplinary cases," that case also concluded that particular portions of those procedures must be satisfied in order to meet the minimum requirements of procedural due process in regard to disciplinary confinement of state prisoners.

¹We shall describe all prisoners as "petitioners" and the persons sued as "respondents" for convenience's sake, although technically, because of the form of a particular action, particular prisoners may be properly called "plaintiffs" and the opposing parties "defendants."

The fact that state prisoner disciplinary confinement was involved in *Wolff v. McDonnell* does not make the principles stated in that case inapplicable to transfers of federal prisoners to S.T.A.R.T., even though S.T.A.R.T. may be labeled a "treatment" program. For, as the majority opinion in *Wolff v. McDonnell* recognized in footnote 19 on page 30 of the slip opinion, a "realistic approach" must be adopted in the determination of cases of this type, and that "it would be difficult for purposes of procedural due process to distinguish between the procedures that are required where good time is forfeited and those which must be extended when solitary confinement is at issue." Solitary confinement was there recognized as a factual circumstance which "represents a major change in the conditions of confinement," which called into play "minimum procedural safeguards as a hedge against arbitrary determination of the factual predicate for imposition of the sanction."²

The fact that the Bureau of Prisons may view or label a transfer to a behavioral modification program such as S.T.A.R.T. as a "treatment program" for a prisoner's benefit rather than as a sanction or as some form of punishment is not a relevant factor in the determination of the due process question involved. The relevant consideration under the Supreme Court's standards articulated in *Wolff v. McDonnell* is whether, on the facts, the transfer to a behavioral modification program involves a major change in the conditions of the prisoner's confinement.

Under the factual circumstances of this case, which are virtually undisputed, we find and conclude that the transfer of the petitioner to S.T.A.R.T. did involve a major change in the conditions of confinement of each petitioner, even though he may have been in segregation in the institution from whence he was transferred and that each transfer, made without any sort of hearing, violated the minimum requirements of due process to which he was entitled under the Constitution.

Bureau of Prisons Policy Statement #H 7400.5B provides that reading materials are available to prisoners in regular segregation on a circulating basis. When S.T.A.R.T. prisoners were placed at the Orientation Level of S.T.A.R.T., they were permitted to have only a Bible and a hometown newspaper. Religious services are available to most inmates in segregation. In S.T.A.R.T. no inmate could leave the S.T.A.R.T. section of the institution to attend religious services. The S.T.A.R.T. program, contrary to rights of a prisoner in segregation, did not provide Muslim participants with any opportunity to consult with or seek guidance from Muslim spiritual leaders.

Participants in S.T.A.R.T. as other inmates are subject to cell and body searches at any time deemed appropriate by the staff. Unlike ordinary segregation inmates, however, S.T.A.R.T. participants are subjected to having all their activities and speech continuously monitored. The fact that such monitoring serves the purpose of determining a participant's rate of progress within the program does not make it any less a difference in the conditions of his confinement.

When a prisoner was transferred to S.T.A.R.T. from segregation he was immediately faced with the prospect of not having open population privileges until he had, in effect, successfully completed the program. In S.T.A.R.T., contrary to the situation of a prisoner in segregation, open population privileges were granted piecemeal, provided, of course, that a particular S.T.A.R.T. participant would be able successfully to move to the upper Levels of the program. To successfully move through S.T.A.R.T., he must, to the satisfaction of the Staff, participate in a "full, highly-structured and intense program in areas of work, treatment, education, and recreation." (Court Exhibit #6, S.T.A.R.T. Program as of August 17, 1973, page 31). An inmate in segregation, on the other hand, was not and could not be subject to such conditions and could not lawfully be required to so participate in order to regain the privileges of inmates in open population. Forced participation in a behavioral modification program such as S.T.A.R.T. to obtain privileges given to prisoners in open population,

² The significance of footnote 19 is underlined by footnote 1 on page 2 (slip opinion) of Mr. Justice Marshall's dissent, in which Mr. Justice Brennan joined, stated agreement with the apparent majority holding that "inmates' liberty is protected by due process whenever a major change in the conditions of confinement is imposed as punishment for misconduct." We read the majority opinion as it was read by Mr. Justice Marshall.

we conclude, constitutes a major change in the conditions of a prisoner formerly held in segregation.³

Forced participation in S.T.A.R.T. was obviously designed to accomplish a modification of the participant's behavior and his general motivation. He was forced to submit to procedures designed to change his mental attitudes, reactions and processes. A prisoner may not have a constitutional right to prevent such experimentation but procedures specifically designed and implemented to change a man's mind and therefore his behavior in a manner substantially different from the conditions to which a prisoner is subjected in segregation reflects a major change in the conditions of confinement.

We believe that it is equally clear from the facts that behavior modification programs patterned upon the theories upon which S.T.A.R.T. was based must, when viewed realistically, involve major changes in the conditions of confinement of a particular federal prisoner. While it may be difficult for anyone who has never seen a segregation unit in a prison to imagine that any other sort of confinement could be more restrictive, the undisputed factual circumstances establish that the conditions under which the S.T.A.R.T. petitioners were confined, particularly when they were held at the Orientation Level (or Level I, as originally designated) reflected a major change from the manner they were held in a regular segregation unit at their former institution. Certainly similar major changes in confinement must be contemplated in regard to the future behavioral modification programs anticipated by the Bureau of Prisons, also there would be no occasion to transfer prisoners already held in a segregation unit at Atlanta, for example, to another and different type of closed unit located in the Medical Center at Springfield, Missouri, or to be located at the new Federal Center for Correctional Research at Butner, North Carolina, when that institution will finally be opened later this year.

v.

Wolff v. McDonnell recognized that "as the problems of penal institutions change and correctional goals are reshaped, the balance of interests involved" may change (p. 26 of slip opinion). The Supreme Court's suggestion that "the better course at this time, in a period where prison practices are diverse and somewhat experimental, is to leave these matters to the sound discretion of the officials of state prisons," (p. 27-28 of slip opinion) may not properly be read as an admonition that courts return to the now almost forgotten "hands off" policy which characterized prison litigation in the past. For *Wolff v. McDonnell* explicitly stated that the judicial discretion "to leave the continuing development of measures to review adverse actions affecting inmates to the sound discretion of corrections officials" was expressly limited by the minimum due process standards set forth in that opinion (p. 27 of slip opinion).

Wolff v. McDonnell took notice of the concern of the Federal Government "to avoid situations that may trigger deep emotions and that may scuttle the disciplinary process as a rehabilitative vehicle" (p. 26 of the slip opinion).

Consistent with the observations of the Supreme Court in *Wolff v. McDonnell*, we believe it appropriate to state that in spite of the careful criteria established for S.T.A.R.T. and the obvious care exercised by the Bureau of Prisons in its selection of S.T.A.R.T. participants, and the obvious good faith motivations which called S.T.A.R.T. into being, the establishment of S.T.A.R.T. did trigger deep emotions which were fanned by a great deal of uninformed and inaccurate publicity. The Director of the Bureau of Prisons believed it necessary to counter the current inaccuracies concerning the rehabilitative programs of the Bureau, including, but not limited to S.T.A.R.T., by stating emphatically that "the Bureau of Prisons never uses and does not countenance

³The National Advisory Committee on Criminal Justice Standards and Goals, even prior to *Wolff v. McDonnell*, recommended that hearings be held in the case of nondisciplinary changes of status involving "substantially adverse changes in degree, type, location, or level of custody." They discuss the purpose of such procedures as follows:

"The area of nondisciplinary classification and status determination long has been considered a proper subject for the diagnostic, evaluation, and decisional expertise of correctional administrators and specialists. Yet decisions of this kind can have a critical effect on the offender's degree of liberty, access to correctional services, basic conditions of existence within a correctional system, and eligibility for release." (National Advisory Committee on Criminal Justice Standards and Goals, Corrections, Standard 2.13, pp. 54-55 (1973)).

the use of psychosurgery, electro-shock, massive use of tranquilizing drugs or any other form of aversive treatment to change behavior, no matter how aggressive or resistive an offender may be." This Court has received more mail in connection with these cases than the combined mail received in connection with all of the other cases it has handled over the past twelve years. Much of that mail was obviously prompted by organizational appeals. Most of it reflected a conviction, perhaps honestly maintained, that the writers of the letters simply did not and would not accept Mr. Carlson's statement of simple fact.

Because of the obvious and highly commendable concern of the Federal Bureau of Prisons to develop innovative, humane, and effective correctional programs for offenders committed to its custody, we are confident that appropriate consideration will be given to whether procedures under which transfers to programs which will correct the mistakes of S.T.A.R.T. and which will reflect the benefit of the experience gained before the Bureau's voluntary termination of that program, should include much more than the minimal due process requirements mandated by *Wolff v. McDonnell*. We are confident that the Bureau will give appropriate consideration to whether it will not only comply with *Wolff v. McDonnell's* requirement that written records of the proceedings be maintained (p. 23 of the slip opinion) but that it will also give appropriate consideration to designing new procedures and appropriate Policy Statement guidelines which will insure that those written records will include accurate factual information concerning the nature of the program and the reasons why and the manner in which participants are selected which will tend to establish at the outset that there is no legitimate reasonable basis for the emotional reaction prompted by S.T.A.R.T.

For the reasons we have stated, an appropriate order will be entered granting a declaratory judgment in regard to the first stipulated question.

VI.

The second question of law stipulated by the parties is:

Whether a prisoner selected to participate in the S.T.A.R.T. program has a right to freely withdraw at any time without penalty of any kind and to be transferred from the program.

Petitioners generally contend that involuntary programs such as S.T.A.R.T. and other involuntary programs designed on the same general theory cannot be operated by the Bureau of Prisons consistent with constitutional principles embodied in the First, Fourth, and Ninth Amendments, among others, and that the stipulated question must be answered in the affirmative. Petitioners properly state that material issues of fact are controverted in regard to the question presented and that, therefore further proceedings are required and should accordingly be directed.

We refuse to direct further proceedings in regard to the second stipulated question because that question was mooted by the voluntary termination of the S.T.A.R.T. program. All petitioners have been returned to their respective institutions. No relief in the form of voluntary withdrawal is possible to grant. We have declared that in connection with the first stipulated question that an appropriate hearing is required before transfer into any new program generally comparable to S.T.A.R.T. The question of whether S.T.A.R.T., as it was actually operated, violated the Eighth Amendment is not a recurring controversy. For the resolution of that question in regard to some new program will involve a very precise examination of the specific factual circumstances involved in the new program, when and if challenged. Cf. *Jackson v. Bishop*, 404 F. 2d 571 (8th Cir. 1968).

A program patterned on the experience of S.T.A.R.T. may be instituted by the Bureau of Prisons at some future time but that a program exactly like S.T.A.R.T. will be instituted is highly unlikely. An examination of a possible program to determine its susceptibility to an Eighth Amendment challenge is impossible. Specific facts are not available under the circumstances. We find and conclude, therefore, that the second stipulated question is moot.

VII.

The third question stipulated by the parties is:

Does the S.T.A.R.T. program as designed and applied violate any of the following federally protected constitutional rights of an inmate placed there?

- A. Freedom of Religion.
- B. Freedom of Speech and Association.
- C. Right to be Free from Unwarranted Search and Seizure.
- D. Right of Privacy.
- E. Cruel and Unusual Punishment.

We find and conclude for reasons generally stated in part VI above in connection with the second stipulated question that all of the various questions presented by the third stipulated question are moot.

VIII.

Accordingly, and for the reasons stated, it is

Ordered, (1) that petitioners' motion for partial summary judgment should be and is hereby granted with respect to the first stipulated question of whether, in the absence of notice, charges, and hearing, the selection and forceable transfer of a prisoner into the S.T.A.R.T. program violates the constitutional rights of the prisoner in denying him due process. It is further

Ordered, (2) that with respect to all other issues presented in the various cases in this litigation, the above styled cases should be and are hereby dismissed as moot. It is further

Ordered, (3) that the selection and forceable transfer of a prisoner into a future behavior modification type program patterned on the experience of S.T.A.R.T., in the absence of the minimal due process procedures mandated by the Supreme Court's recent decision in *Wolff v. McDonnell*, *supra*, should be and is hereby declared a violation of a prisoner's right to due process of the law as guaranteed by the Fifth Amendment to the Constitution.

C. Catalogue No. F-72, Farrall Instruments Company, Grand Island, Nebr.

PRESENTING: THE FARRALL INSTRUMENT COLLECTION OF THE WORLD'S MOST ADVANCED BEHAVIOR MODIFICATION EQUIPMENT FOR TREATMENT OF COMPULSIONS, ADDICTIONS, PHOBIAS AND LEARNING DIFFICULTIES

We at Farrall Instruments do not agree with those who feel that conditioning has all the answers and that behavior modification alone can permanently change any type of behavior. Rather, we look upon behavior modification conditioning as a superb tool to be used in conjunction with other types of more traditional therapy. The literature which reports follow-ups after a period of time contains comprehensive programs of supportive therapy used in behavior modification.

It is our feeling that unless these traditional supportive techniques are also used extinction of the conditioning will take place and the patient may return to the old problem. One of the major advantages of the behavior modification technique is that it usually provides an immediate reduction of the unwanted behavior. This gives the patient confidence that he is being helped and thus increases his motivation.

Since many of the conditioning and desensitization techniques are repetitive they lend themselves to automatic instruments. By using our automated apparatus the professional can eliminate the need for his direct supervision of the patient during most of the conditioning period.

AVERSIVE CONDITIONING

Some in the mental health field feel aversive conditioning is cruel and look upon it as a punishment. We agree that aversive techniques which use a more aversive level than that required to stop or prevent an undesirable act are cruel. An example of this is the use of a cattle prod which has such a high voltage that it produces skin destruction. In the cattle prod no voltage control is present; thus this device is not really a controlled aversive unit for behavior conditioning but rather is a punishment apparatus. Severe punishment works against the conditioning principles and produces hostility.

Those who feel it is morally wrong to give electric shocks must forget the emotional content of the question and address themselves to the issue of the alternatives. Is it more humane for a self-destructive child to receive a few controlled shocks or to go through life in a straight jacket? Is it better to lock a sex deviant away as a criminal or treat him with aversive therapy so that

he can become a productive member of society? It is true in both examples cited above that some cases would respond to prolonged conventional therapy; but in most institutions this is not possible because of the shortage of professional personnel. Probably the most valuable contribution aversion therapy can make is the reduction of treatment time.

FOR IMPROVING ANTISOCIAL BEHAVIOR, AGGRESSIVE BEHAVIOR, PSYCHOSOMATIC PROBLEMS, SELF-DESTRUCTIVE BEHAVIOR

The Aversive Stimulator, AR-7, gives therapists aversive control over situations without the encumbrance of wires. The wireless feature of the aversive stimulator allows the client to move freely yet still be under the therapist's control. Because there is no visible link between the stimulator and the therapist, the client associates the aversive shock with the undesired behavior rather than with the therapist.

NEW WIRELESS STIMULATOR

A new feature of the AR-7-T is the presentation of a tone with the aversive stimulus. Repeated pairings of the tone with the aversive stimulus will come to make the tone secondarily aversive to the client. After conditioning the therapist can present either the tone or the aversive stimulus and tone on a random schedule. This procedure will allow for maintenance of the desired behavior with a minimum presentation of the aversive stimulus.

With this system of equipment, the therapist is able to much more effectively control clients' behavior. Paraprofessionals can be trained to utilize the auxiliary equipment cutting both the therapist's time and the length of conditioning.

The Model AR-5 is an improved version of our Model AR-2 which has been in production for over five years. An automatic gain control has been added to the receiver. This greatly increases the reliability by decreasing overload problems at close range. The new model also has an increased shock output.

The shocker has a range of around 75 feet indoors and 300 feet outdoors. The long outdoor range makes the unit useful on the playground and in similar situations. The control unit is a small hand-held device. The receiver-shocker is a small unit housed in a leather case and is usually attached to the patient by a belt around the waist. Both units are sufficiently small to permit unobtrusive use in a variety of field or group situations. Thus, behavior modified in the laboratory or office situation may be subject to generalization and discrimination training more closely approximating the situations to which the behavior must be transferred.

THE WIRELESS SHOCKER

The Wireless Shocker gives clinicians and researchers aversive control over situations without the encumbrance of wires. Unhampered by control wires, the patient can now move with unrestrained freedom and yet be under control. Another great advantage of this physical isolation of the patient from the therapist is the diminished link between the therapist and the aversive shock. The patient thinks less of the therapist, as a punisher, and associates the shock with the undesired act he is doing.

SELF-DESTRUCTIVE BEHAVIOR

The effectiveness of this apparatus has been well established in the behavior modification field. It is an effective tool in breaking up the behavior pattern of the autistic child. Head banging, hair pulling and many other self-destructive behaviors have been stopped. Many problems associated with mentally retarded people can be eliminated using operant conditioning with this apparatus.

AGGRESSIVE BEHAVIOR

Aggressive behavior has been controlled using the Wireless Shocker. The portable nature of the equipment makes behavior shaping possible in schools, play-ground and downtown store settings. The ease with which this equipment

fits into the real life situation makes the Wireless Shocker ideal for treating aggressives.

PSYCHOSOMATIC PROBLEMS

Conditioning programs have been used successfully to stop psychosomatic vomiting. In this case shock is applied the instant the patient gives signs of an impending attack. In some cases this has been used to maintain the patient's life until other types of therapy could become effective.

UNIQUE FEATURES

Adjustable shock; immune to interference, non-blocking at close range, robust metal case, long battery life.

AVERSIVE SHOCK

Shock is adjustable from 0 to 800 volts. The shock is a narrow 1 to 2 milli-second width at a 10 to 20 Hz. rate. Maximum current is 5 milliamperes. This aversive stimulus can be applied to an arm or leg. An accessory belt (B-AR-3) which has electrodes in the belt can be supplied on special order. This belt, when used with care, can shock the patient's waist and eliminate the need of electrode wires. Use of the belt reduces the effective range of the apparatus.

The transmitter uses one of five special medical frequencies in the 27 MHz band. A tuning fork oscillator codes the radio carrier when the shock button is pressed. When a matching tuning fork in the receiver responds to the transmitter fork, a pulse-type shock generator is turned on. The tuning forks are extremely selective and prevent false shocks from radio or noise interference.

AR-5 SPECIFICATIONS

Model AR-5 Receiver-Shocker and Transmitter for remote wireless shocking of humans. Consisting of the following: 1 ea. crystal controlled transmitter operating in 27 MHz. band, with audio tuning fork encoder, solid state, 1 ea. crystal controlled superhetrodyne receiver for transmitter, tuning fork decoder with adjustable shock generator, solid state, 1 ea. leather case for receiver, 1 set of batteries for each unit, with electrodes. Transmitter (1 $\frac{1}{4}$ " x 2 $\frac{3}{4}$ " x 5 $\frac{3}{4}$ "') with 15" antenna, weight 18 oz. Receiver-Shocker (1 $\frac{1}{4}$ " x 2 $\frac{3}{4}$ " x 5 $\frac{3}{4}$ "') weight 20 oz.

TWO PATIENT MODEL

The Model AR-6 is a Wireless Shocker that is identical to the AR-5 except it contains two encoders so that two different shock receivers can be controlled. With this unit and two receiver-shockers, it is possible to work with two patients in the same area at the same time. NOTE: Both patients can not be shocked at the same instant.

AR-6 SPECIFICATIONS

Model AR-6 Receiver-Shocker and Transmitter for remote wireless shocking of humans. Consisting of the following: 1 ea. crystal controlled transmitter operating in 27 MHz. band, with dual audio tuning fork encoders, solid state, 2 ea. crystal controlled superhetrodyne receivers for transmitter, tuning fork decoder with adjustable shock generator, solid state, 1 ea. leather case for receiver, 1 set of batteries for each unit, with electrodes. Transmitter (1 $\frac{1}{4}$ " x 2 $\frac{3}{4}$ " x 5 $\frac{3}{4}$ "') with 15" antenna, weight 19 oz., Receiver-Shocker (1 $\frac{1}{4}$ " x 2 $\frac{3}{4}$ " x 5"') weight 20 oz.

The literature contains many examples of successful conditioning "cures" which relapsed after leaving the office. The Personal Shocker provides a direct link between the clinician's office and the patient's normal life. Light and portable, it can be easily concealed and unobtrusively operated by the patient so that he can administer shock to himself whenever he encounters, in real life, stimuli associated with his disorder. Thus, the office treatment may be continued throughout the day.

This series of Personal Shockers is designed around a unique four-transistor pulse circuit. Use of a pulse circuit gives extremely low battery drain and, thus, long battery life which is essential for reliable patient use. Shock poten-

tial is adjustable from zero to 800 volts. The pulse is 1 to 2 milliseconds in duration with a 10 to 20 Hz rate. This extremely short duration contributes greatly to patient safety. The patient's lack of knowledge regarding safety techniques dictates the necessity of using a battery operated device with a wave form least likely to produce cardiac problems if misused.

PATIENT SELF-REINFORCEMENT

The "Take-Me-Along" is effective in reinforcing the patient's conditioning when he is away from the protective confines of the office or institution. It has been used to reinforce conditioning for patients on therapy programs for alcohol, drugs, sexual preference and sexual deviations. Many patients are quite willing to assist in their therapy program and they welcome the "security" of having such a device with them.

DOCTORS BAG

The light weight small size of the Personal Shocker makes it ideal for the doctor to carry with him. It will fit into a coat pocket and, thus, is conveniently ready whenever or wherever the doctor or the therapist may need it. The shock level is adjustable from zero to the maximum voltage. The compact size and noninstrument appearance of this shocker makes it less frightening to the patient. Despite this appearance the apparatus has a very aversive shock. The AP-10 and the AP-11 can be used in this service.

CONDITIONING ON THE WARD

The "Take-Me-Along" Personal Shockers are ideal for carrying in the pocket or medical bag. Since they are so compact, they are ideal for personnel to carry on the wards. The small size makes the shocker appear less threatening to the patient. The Model AP-11 with concentric ring electrodes is most convenient for this purpose.

POSTURAL CONTROL

Postural and tic control can be achieved by behavior modification techniques. The patient is well aware of his problem but usually is not at the time of the occurrence. "Take-Me-Along" can thus be used in two ways; first, to alert the patient and second as an operant conditioning apparatus.

A switch or series of switches is attached to the patient's body in a manner which will detect the tic, slouch or undesired posture. Depending on your choice of apparatus, closing of the switch circuit will give the patient an aversive electric shock or present an aversive audio tone. The patient will respond to either of these aversive signals by correcting the posture. Thus, the patient is automatically conditioned using escape and avoidance techniques. The Model PA-12 "Take-Me-Along" is used where aversive shock is to be used. The Model AP-14 or AP-15 is used when an aversive tone is desired. The AP-14 delivers the tone to a loudspeaker and provides considerable aversion due to embarrassment in social group settings. The AP-15 delivers the tone to a small earpiece.

Farral Instruments does not sell to patients. We do not send catalogs to patients and wish that doctors would not give our catalogs to them. We sell only to doctors and want payment made directly by the doctor's check or money order.

From time to time, we have problems with patients calling us to talk about their problems or the instrument. We refuse to discuss problems with patients. The doctor must show the patient how to use the equipment and adjust shock level. Therefore, we do not ship a Personal Shocker to the patient. We will make exception to this when a patient already has a unit and he needs a replacement or fast repair.

ORDERING SPECIFICATIONS

AP-10 "Take-Me-Along" Personal Shocker with 4' electrode cable. Shock adjustable 0 to 800 volts, 4 transistor circuit, powered by 3 (E91) batteries, in sturdy plastic covered metal case (2 $\frac{3}{4}$ " x 1 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ "), weight approximately 8 oz., with electrodes and instructions.

AP-11 "Take-Me-Along" Personal Shocker with concentric ring electrodes. Shock adjustable 0 to 800 volts, 4 transistor circuit, powered by 3 (E91) bat-

terles, in sturdy plastic covered metal case (2 $\frac{3}{4}$ " x 1 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ "), weight approximately 8 oz., with electrodes and instructions. This model is pictured in the lower right-hand corner of the other side of this sheet. The white circles are the concentric electrodes.

AP-12 "Take-Me-Along" Personal Shocker with 4' electrode cable and jack for remote control switch. Note: No switch is included and no switch is on the unit. Shock adjustable 0 to 800 volts, 4 transistor circuit, powered by 3 (E91) batteries, in sturdy plastic covered metal case (2 $\frac{3}{4}$ " x 1 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ "), weight approximately 8 oz., with electrodes and instructions.

AP-15 "Take-Me-Along." A hearing aid type ear phone receives a tone when the switch is closed. Intensity is adjustable. Solid state. Powered by 3 (E91) batteries, in sturdy plastic covered metal case (2 $\frac{3}{4}$ " x 1 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ "), weight approximately 8 oz., with instructions.

This fully automated system uses standard 35MM slides for stimulus and neutral cues. The patient can be conditioned or desensitized without the attendance of a professional. In many cases the patient can give himself the therapy; thus, saving the time of the professional staff for less routine aspects of therapy.

The new family of automatic visual stimulus devices described here is the result of four years of evolutionary developments. Since we introduced the world's first commercial Visually Keyed Shocker we have been continually improving on the instrument and its software. This research makes it possible to now provide a combination instrument useful for both Aversive Conditioning and Systematic Desensitization.

SYSTEMATIC DESENSITIZATION

Systematic desensitization is a highly successful method of relieving anxiety associated with phobias; such as, fear of sexual activity, death, flying, elevators, crossing bridges, going to the doctor and the like. There has been considerable work done in this field but mostly with simple equipment requiring constant attention of the therapists or with highly sophisticated costly automated apparatus. This equipment makes available, for the first time, an automated apparatus with a price practical for private practice and non-research patient treatment centers.

AVERSIVE CONDITIONING

Aversive conditioning has proven an effective aid in the treatment of child molesters, transvestites, exhibitionists, alcoholics, shop lifters and other people with similar problems. Stimulus slides are shown to the patient intermixed with neutral slides. Shock is delivered with stimulus scenes but not with neutral scenes. In reinforcing heterosexual preference in latent male homosexuals, male slides give a shock while the stimulus relief slides of females do not give shock. The patient is given a "Slide Change" handbutton which enables him to escape or avoid a shock by rejecting a shock cue scene.

REFERENCES

1. Feldman, M. P.: Aversion Therapy for Sexual Deviations: A Critical Review." *Psychol. Bull.*, 65, 65-79, 1966.
2. Fookes, B. H.: Some Experiences in The Use of Aversion Therapy in Male Homosexuality, Exhibitionism and Fetishism-transvestism, *BJOP*, 115, 339-441, 1969.
3. Levin, S. M., Hirsch, I. S., Shugar, G. & Kapche, R.: Treatment of Homosexuality and Heterosexual Anxiety with Avoidance Conditioning and Systematic Desensitization: Data and Case Report." *Psychotherapy: Theory, Research and Practice*, 5, 160-168, 1968.
4. MacCulloch, M. J. & Birtles, C. J.: "Anticipatory Avoidance Learning for the Treatment of Homosexuality: Recent Developments and an Automatic Aversion Therapy System." *Behavior Therapy*, 2, 151-169, 1971.
5. Marks, I., Gelder, M. & Bancroft, J.: "Sexual Deviants Two Years after Electric Aversion." *BJOP*, 117, 173-185, 1970.
6. Rachman, S. & Teasdale, J.J.: "Aversion Therapy and Behavior Disorders: An Analysis." University Miami Press, 1969.
7. Solyom, L. & Miller, S.: "A Differential Conditioning Procedure as The Initial Phase of The Behavior Therapy of Homosexuality." *BRAT*, 3, 47-60, 1965.

8. Wolpe, Joseph: *Systematic Desensitization Based on Relaxation*, Chapter 9, "Psychotherapy by Reciprocal Inhibition." Stanford University Press, 130-165, 1968.

The Visually Keyed Shocker is a fully automated conditioning device. Now the doctor can be freed of the time consuming part of reinforcement of behavior conditioning. Once the patient has received supportive therapy and a successful conditioning technique is established, most patients can reinforce themselves with little or no supervision. Thus the outpatient can come to the hospital or office as needed. The doctor's time is required only for the usual counseling session and not needed to continue the conditioning therapy.

EFFECTIVENESS

The effectiveness of the paired visual stimulus and shock in converting homosexuals to heterosexual activity and in behavior modification of sex deviates is well documented in the bibliography on the front of this page. Basic psychological research and theory indicates the technique should be effective in many types of behavior modification. Promising results have been obtained in treating alcoholism, addictions and compulsions but much further research is needed in these areas. The major application problem remaining thus seems to be in developing the most effective treatment paradigm.

HOW IT WORKS

A slide projector is attached to a special aversive shock generator. The edges of the shock slides are marked with ink. Neutral slides do not have marked edges. The slides are automatically advanced. When a shock slide is shown a phototransistor reads the mark and triggers the shock. The patient is automatically conditioned by the visual stimulus paired with the aversive shock. In the case of some problems it is possible to use escape and or avoidance conditioning. Conditioning here is done by giving the patient a hand button with which he can escape or avoid shock by a proper response.

AUTOMATED CONDITIONING

Both the projector and the shock unit are complete units and can be used either in combination or separately. Shock time can be variable or infinite. Delay between slide exposure and shock is adjustable. The shock intensity is variable and is indicated by a meter. Push buttons allow the clinician to override the shock program. Slides can be presented manually or automatically at preselected recycle intervals.

A special dual isolation circuit is used to connect the apparatus to the power line. This provides the necessary safety required in any line operated shocker.

You can make your own slides or purchase slides from Farrall Instruments. Any 2 x 2 or 35 mm slide in a paper mount can be used. To key a slide so that it will give a shock it is only necessary to work with black ink the vertical margin of the slide.

PROGRAMS OF THE AV 5

1. Marked slide gives shock after adjustable delay. Duration is adjustable or infinite. Operator can prevent shock but patient can't.
2. Marked slide gives shock after adjustable delay. Duration is adjustable. Patient can terminate shock by pressing button.
3. Marked slide gives shock after adjustable delay. Duration is adjustable. Patient can prevent shock by pressing button before a pre-shock delay period lapses.
4. Marked slide gives shock after adjustable delay. Duration is adjustable. Patient can terminate shock by pressing button or can also prevent shock by pressing before pre-shock delay has completed.
5. Systematic Desensitization with or without shock. Slide timer runs forward for increasing fear hierarchy. Patients hand press backs up projector to relax slide.

AV-5 SPECIFICATIONS

Model AV-5 Visually Keyed shocker for automated behavior conditioning and systematic desensitization. Complete with 35MM E2 Ektagraphic slide

projector f:3.5, 3" lens, shock generator-control, patient response hand button, one slide magazine, silver electrode set and all connecting cables for operation from 117 volt 50-60 Hz power. Shock generator-control has the following features: Attractive solid birch wood case 8¼" x 13¼" x 9¼" with high power shock source adjustable 0 to approximately 1000 volts peak to peak with maximum short circuit current approximately 10 milliamperes, wave form essentially square wave, with pulser which can be switched in to interrupt the shock at approximately a 15 Hz rate, shock timer with 12 steps, .25 through 15 seconds, with shock delay timer variable .25 through 15 seconds in 12 steps, with automatic slide advance timer which changes slides at a selected cycle of 5, 10, 15, 20 or 30 seconds. Standard slides can be marked with ink to key the control for shock. With patient response program selector to allow patient to avoid or escape, or avoid and escape shock with proper response, with one step or repeat response selector with forward or reverse patient selector so machine can work forward with fear slides while patient works backward to relax (systematic desensitization) and with manual shock and slide controls. Recorder output jack for on-line computer monitoring or chart recorder plotting of stimulus and response. Auxillary input jack for input control from other apparatus; such as, a computer or the AK-3 Acoustic Keyer. Shocker and projector each capable of independent operation. Power supply and all line voltage components isolated physically from patient and control circuits, with special square leg transformer core with metal shield between separate primary and secondary coils located on opposite sides of the square core, with transparent Woodhead three-wire safety plug (fits standard three-connection wall receptacle). Solid state with 26 transistors, 11 IC's, 12 diodes and 2 transient surge protectors.

RANDOM PROGRAMS

The AV-6 can be set for any program of the AV-5. In addition, it has several random programs. Therapists have recently proven that conditioning is more effective when random schedules are used. The following intermittent schedules are possible with the AV-6,

The delay before shock is controlled by one of three adjustable timers. One of the three timers is selected by the random generator. Statistically each timer is sampled one third of the time. A random shock control is also built into the AV-6. When this mode is used a shock slide can produce one of the following; no shock, a weak (adjustable) shock, or a strong (adjustable) shock. Again a one third sampling is used. A random function can also be applied to the patient's ability to change the slide with a button press. Here on a one third probability the patient's press of a handbutton which was done in the length of time allotted to effectively avoid shock will result in: (1) Immediate slide change thus avoiding shock, (2) No slide change thus receiving shock, or (3) Delayed slide change but no shock.

Our standard AV-5 and AV-6 instruments were made to be used with a regular screen which is not supplied. We can provide these models built into a box as pictured on the front page. The box uses a back projection screen and is quite compact. It contains an additional blower to insure slides will not be damaged. The projector can be easily removed. To order these models in the box add the letter B to the model, thus AV-5B or AV-6B.

AV-6 SPECIFICATIONS

Model AV-6 Visually Keyed Shocker for automated behavior conditioning and systematic desensitization. Complete with 35MM E2 Ektagraphic slide projector f:3.5, 3" lens, shock generator-control, patient response hand button, one slide magazine, silver electrode set and all connecting cables for operation from 117 volt 50-60 Hz power. Shock generator-control has the following features: Attractive solid birch wood case 8¼" x 13¼" x 9¼" with high power shock source adjustable 0 to approximately 1000 volts peak to peak with maximum short circuit current approximately 10 milliamperes, two independent pre-set shock level controls can be sampled on a random basis with sampling evenly distributed between the two levels and no shock, wave form essentially square wave, with pulser which can be switched in to interrupt the shock at approximately a 15 Hz rate, shock timer with 12 steps, .25 through 15 seconds, with periodic timer function to delivery recurrent shocks, with three shock delay timers variable .25 through 15 seconds in 12 steps, and random sampling

device which can select on an evenly distributed basis between the three pre-set delay times, with automatic slide advance timer which changes slides at a selected cycle of 5, 10, 15, 20, or 30 seconds. Standard slides can be marked with ink to key the control for shock. With patient response program selector to allow patient to avoid or escape, or avoid and escape shock with proper response, with one step or repeat response selector with forward or reverse patient selector so machine can work forward with fear slides while patient works backward to relax (systematic desensitization) and with manual shock and slide controls, with random sampler which can inhibit operation of the patient hand button or delay slide change after button press. Recorder output jack for on-line computer monitoring or chart recorder plotting of stimulus and response. Auxiliary input jack for input control from other apparatus; such as, a computer or the AK-3 Acoustic Keyer. Shocker and projector each capable of independent operation. Power supply and all line voltage components isolated physically from patient and control circuits, with special square leg transformer core with metal shield between separate primary and secondary coils located on opposite sides of the square core, with transparent Wood-head three-wire safety plug (fits standard three-connection wall receptacle). Solid state with 38 transistors, 31 IC's, 22 diodes and 2 transient surge protectors.

Farrall Instruments has developed a comprehensive set of 35MM slides to be used to help patients visualize. Our library includes slide sets of heterosexual acts, male and female homosexual acts; dating scenes and nudes. These are useful for reinforcing sexual preference, reduction of anxiety associated with sexual frigidity and in treating some types of sex offenders. Also available are a wide range of slides depicting aggression, conflict, drinking, gambling and taking drugs.

Considerable literature exists proving the value of behavior modification techniques in treating sex variants using the patient's phantasy as a stimulus. Researchers and therapists report the main cause of failure to treat some patients effectively is that the patients have difficulty in visualization of the phantasy image. Different techniques have been advanced to help the patient image a situation. They all require considerable cooperation and concentration on the part of the patient. In addition some people have a limited imagination. Enhancement of the visualization of the desired images can be done by photographic material. Colored slides used with a projector have proven effective in providing stimuli.

Slide sets marked "Key Set" are provided with a list of models' names. These sets are useful in selecting the slide set most interesting to a particular patient. A wide variety of individuals are included in the Key Sets. The patient is asked to rate the slides. Slides of the particular model or models of maximum interest can be ordered. The degree of erotic stimuli level is as uniform as possible within a given Key Set. Each slide is individually numbered. In some cases we can supply a complete range of erotic stimuli slides for a given model. In other cases we can only supply slides with the models fully clothed.

D. Articles

[Item VI.D.1]

PRIVACY AND BEHAVIORAL RESEARCH †

Oscar M. Ruebhausen* and Orville G. Brim, Jr.**—65 *Colum. L. Rev.* 1184 (1965)

A successful society is marked by an ability to maintain a productive equilibrium between numerous competing forces. The goal of our own federal political system is to assure for the individual an ample range of freedom, and an ample opportunity for diversity. By tradition and conviction our form of democracy jealously seeks to protect the individual from accumulations of power. This protection finds its expression, for example, in the separation of powers in government, the divorce of church and state, the civilian control over the

† This article is based on a paper presented at the Rockefeller Institute Conference on Law and the Social Role of Science, April 8, 1965.

* Member of the New York Bar; Chairman, Special Committee on Science and Law of the Association of the Bar of the City of New York. With the support of the Carnegie Corporation of New York, the Special Committee is engaged in a study of the impact of modern science and technology upon privacy. This article is one product of that study.

** President of the Russell Sage Foundation.

military, and in the working of both the labor and antitrust laws against the concentration of economic power.

The familiar and constructive tension which exists between science, with its need to be free and open, and society, with its need for restrictions on individual freedom, is thus only one of many examples of conflicting forces that must be held in balance to assure individual dignity, creativity and well-being in our society. This tension between society and science extends to all the disciplines in the social, physical and life sciences. It affects the practitioner as well as the research investigator.

Examples of this tension are many, and one of the most familiar is the conflict of secrecy for purposes of national security with the free dissemination of knowledge. This conflict is especially complex since dissemination of knowledge is essential to the very developments in science, in industry, and in government upon which the security of the nation ultimately rests. Additionally, there is the equally familiar conflict between proprietary interests and the disclosure of scientific knowledge. The private property interest at odds with disclosure may be personal or institutional, commercial or nonprofit, but the conflict is essentially the same. In each of these two illustrative areas of conflict, tension still exists, but accommodations, imperfect as they may be, have been worked out to balance the competing needs and to serve the public interest.

There is, however, another area of tension involving the freedom of science which is not nearly so well recognized. This is the conflict of science and scientific research with the right, not of private property, but of private personality.¹ And it is to this particular conflict in values that this article is addressed.

I. THE MORAL CLAIM TO PRIVATE PERSONALITY

Although scholars may trace its origins into antiquity, the recognition of a moral claim to private personality is relatively modern. For most of our recorded history, privacy was not physically possible in either the home, or the place of work or of public accommodation. Furthermore, privacy of belief or opinion clearly was not respected until the last few centuries. The record of autocratic government, both temporal and spiritual, is long and disheartening. Robert Bolt, in his moving drama, *A Man for All Seasons*, had the doomed Sir Thomas More say to his inquisitors: "What you have hunted me for is not my actions, but the thoughts of my heart. It is a long road you have opened. For first men will disclaim their hearts and presently they will have no hearts. God help the people whose statesmen walk your road."²

Three of the great forces that have nourished the modern claim to privacy are science, the secularization of government, and political democracy. It was, for example, science that brought about the industrial revolution and made privacy physically possible. Consider, as a small sample, what steam heat and plumbing have done to the design of our homes and to the manner of our living in them. Further, the separation of church and state encouraged pluralism as well as diversity in religious belief. And it was political democracy that in the last analysis truly elevated the concept of the essential worth and dignity of the individual to the place it now holds in the western world.

It is therefore only in the last few centuries that the primacy of the individual has emerged, has been articulated by philosophers, reflected in political institutions, and implemented in law. Although the moral claim to a private personality has developed along with the claim to individual freedom and dignity, such development has proceeded at a slower rate, perhaps because the western preoccupation with private property as the tangible expression of the dignity of the individual has tended, for more than a century, to obscure the claim to private personality on which the claim to private property was based. Not only did the interest in private property obscure the human claim to privacy but, over the years, it tended to define the claim itself.

Thus, in the absence of trespass, bodily injury, theft, or tangible damage measurable in money, as in the case of defamation of reputation, our law has often failed to perceive injury to the private personality. This has led to such legal anomalies as now exist with electronic eavesdropping devices. Thus, if an eavesdropping device is placed next to a wall by a police officer, or brought into one's room concealed on the persons of an invitee, then, under present federal law, there has been no affront to an individual's constitutional rights. Yet,

¹ See generally Shils, *Social Inquiry and the Autonomy of the Individual in The Human Meaning of the Social Sciences* 114 (Lerner ed. 1959).

² Bolt, *A MAN FOR ALL SEASONS*, ACT II, at 157 (Random House 1962).

should the device be a spike microphone and penetrate an apartment wall by only a few inches, then a trespass has been committed and the fourth amendment violated.³

Just fifty years ago Dean Roscoe Pound published a paper in the *Harvard Law Review* on "Interests of Personality."⁴ There he identified the claim to private personality as "the demand which the individual may make that his private personal affairs shall not be laid bare to the world."⁵ But though he thought the interest was clear, the law, he found, had been slow to recognize such an interest and raise it to the dignity of a legal right.⁶

Even had society's developing awareness of the claim to privacy not been blunted by the then dominant commercial concern for tangible property as evidence of personal worth, the establishment of a right of private personality was destined to be slow. For this there are a number of reasons. The right of privacy is largely a subjective, incorporeal right, difficult to identify and incapable of measurement. Other more definable values—such as freedom of speech—loomed larger a century and less ago. Until recently, furthermore, science had not provided the devices which, circumventing the old concepts of property, make surveillance possible without an actual trespass. In addition, the modest range of governmental activities of a half century and more ago made the threat to the individual from government seem negligible. The formidable attributes of concentrated economic power were, also, only beginning to be appreciated. Indeed, the aggressive spirit of individual self reliance which prevailed in America would have made society's concern for the private personality seem incongruous.

It is reasonable, moreover, that the claim to privacy should evolve slowly, for privacy is in conflict with other valued social interests, such as informed and effective government, law enforcement, and free dissemination of the news. Whenever competing rights and values confront each other, it is always a slow and arduous process to evaluate the claim and counterclaim in real life situations. This process, however, is a classic function of the law. In time, therefore, the boundaries between the permissible and unreasonable interferences with privacy will be delineated just as hosts of similar conflicts have been resolved in the past.

Although the claim to private personality has yet to reach its destined stature in our law,⁷ it has become a moral imperative of our times. Reflecting the ethical values of our civilization, it flows, as do most of our values, from our concept of the essential dignity and worth of the individual. In discussing this concept in 1958, Pope Pius XII made the following perceptive observations:

"There is a large portion of his inner world which the person discloses to a few confidential friends and shields against the intrusion of others. Certain [other] matters are kept secret at any price and in regard to anyone. Finally, there are other matters which the person is unable to consider."⁸

Pope Pius then concluded:

"And just as it is illicit to appropriate another's goods or to make an attempt on his bodily integrity, without his consent, so it is not permissible to enter into his inner domain against his will, whatever is the technique or method used."⁹

³ Lack of trespass was cited by the Supreme Court in refusing to invalidate the use of a detectaphone on the outer wall of a hotel room. *Goldman v. United States*, 316 U.S. 129 (1942); see *United States v. Pardo-Bolland*, 348 F.2d 316 (2d Cir. 1965), petition for cert. filed, 34 U.S.L. WEEK 3081 (U.S. Sept. 2, 1965) (No. 521); in allowing the use of a concealed transmitter by a government undercover agent in a suspect's laundry, *On Lee v. United States*, 348 U.S. 747 (1952); and in upholding the use of a concealed recorder by a tax agent in a suspect's place of business, *Lopez v. United States*, 373 U.S. 427 (1963). In *Silverman v. United States*, 365 U.S. 505 (1961), the decision excluding evidence was based on the actual penetration of an apartment wall by a spike microphone which, by making contact with a heating conduit, enabled the police to overhear every word spoken within the house.

⁴ Pound, *Interests of Personality*, 28 HARV. L. REV. 343 (1915).

⁵ *Id.* at 362.

⁶ To the extent that the claim to privacy has not yet been recognized or protected by law it cannot, at least in a technical legal sense, be called a "right."

⁷ By contrast with American legal development, it has been said that "... the trend in the foreign legislation is towards an outspoken protection of the rights of personality. We find the expression of this common concern in the Civil Code of Liechtenstein (1924), in the Italian (1942) and Greek (1946) codes, in the reformed Japanese code (1943) and the recent Egyptian and Philippine codes, and in a project of law in the German Federal Republic. Janssens, *European Law Includes Rights of Personality*, Va. L. Weekly, April 29, 1965, p. 1. See also Krause, *The Right to Privacy in Germany—Pointers for American Legislation*, 1965 DUKE L.J. 481.

⁸ Address to the Congress of the International Association of Applied Psychology, April 10, 1958.

⁹ *Ibid.*

While Pope Plus' ethics and logic seem persuasive, it is nonetheless a fact that the protections afforded private personality are not yet comparable to those granted private property.

The rules for the protection of private property—whether in ideas, creative works, goods or real estate—have over many decades received extensive legislative and judicial attention. These rules are imbedded in the common law and they have often been elaborately developed, as in our systems of copyright and patent law. Moreover, the manner of the taking of private property for a paramount public purpose has been a matter of intense and continuing national concern. Early evidence of the reverence with which private property has been viewed is found in the constitutional provisions against "unreasonable searches and seizures,"¹⁰ against the quartering of soldiers "in any house without the consent of the Owner,"¹¹ against the deprivation of property without due process of law, and against the taking of "private property . . . for public use, without just compensation."¹² These constitutional protections have been judicially elaborated over decades of concentrated attention to the proper equilibrium between an identified public need and the claim to private property.

There has been no comparable abundance of legislative or judicial attention to the balance between the public need and the claim to private personality. The application of the first, fourth and fifth amendments of the federal constitution to the claim to private personality is in a very early stage of evolution.¹³ More than thirty states have now recognized some form of a common law right of privacy: four have created at least a limited right by statute.¹⁴ Yet, another four states have rejected the existence of a right of privacy at common law,¹⁵ although the rejection may be more verbal than substantive.¹⁶ Thus, in terms of a sophisticated system of protections for the claim to private personality—protections discriminatingly balanced to permit reasonable interference with privacy in appropriate circumstances—it is clear that our law has not yet matured.

II. THE NATURE OF PRIVACY

What then is this emerging claim to private personality?

Private personality is as complex and many-faceted as human beings themselves, but two principal aspects of the claim to privacy are clear. The one most frequently expressed is the "right to be let alone." This facet of the claim to privacy, first formulated by scholars¹⁷ and repeated by judges,¹⁸ was given widest currency by Justice Brandeis in his magnificent dissent in the *Olmstead case*.¹⁹ But there is another, and obverse facet of the claim to privacy which has yet to receive equal attention: it is the right to share and to communicate.²⁰

Each and every one of us is well aware of this complicated, ambivalent personal need to communicate and, the correlative need, even while communicat-

¹⁰ U.S. CONST. amend. IV.

¹¹ U.S. CONST. amend. III.

¹² U.S. CONST. amend. V.

¹³ The law on this issue appears, however, to be in an active phase of transition. See e.g., Judge Sobel's opinion in *People v. Grossman*, 45 Misc. 2d 557, 257 N.Y.S.2d 266 (1965) and Justice Brennan's dissent in *Lopez v. United States*, 373 U.S. 427, 446 (1963). See also the new constitutional right of privacy announced by Justice Douglas in *Griswold v. Connecticut*, 381 U.S. 479 (1965), and *Massiah v. United States*, 377 U.S. 201 (1964) (sixth amendment held to have been violated when an eavesdropping device was used to elicit information from a defendant in the absence of counsel).

¹⁴ See e.g. the listing in Prosser, *Privacy*, 48 CALIF. L. REV. 383, 386-89. (1960). For a better analysis, see Blonstein, *Privacy as an Aspect of Human Dignity: An Answer to Dean Prosser*, 39 N.Y.U.L. REV. 902 (1964). See also *Hamberger v. Eastman*, 206 A.2d 230 (N.H. 1964); *Truxes v. Kenco Enterprises, Inc.*, 119 N.W.2d 914 (S.D. 1963).

¹⁵ See Prosser, *supra* note 14.

¹⁶ In New York, for example, where the common law right to privacy is thought not to exist, the same result may be reached by more tortious routes—e.g., actions for libel, slander, trespass, or unfair labor practice, or the common-law remedy to safeguard mental tranquility from the intentional infliction of distress. See *Battalla v. State*, 10 N.Y.2d 237, 176 N.E.2d 729, 219 N.Y.S.2d 34 (1961); *Scheman v. Schlein*, 35 Misc. 2d 581, 231 N.Y.S.2d 548 (Sup. Ct. N.Y. Co. 1962). See also RESTATEMENT (SECOND) TORTS § 46 (1965), and especially the caveat and comment thereon. Consider also the possibility of basing civil remedies on criminal statutes such as N.Y. PEN. LAW § 738 (eavesdropping) or § 834 (holding a person up to ridicule). See RESTATEMENT (SECOND) TORTS § 289; see also *Reitmaster v. Reitmaster*, 162 F.2d 691 (2d Cir. 1947).

¹⁷ See Cooley, *Torts* 29 (2d ed. 1888).

¹⁸ See, e.g., *Roberson v. Rochester Folding Box Co.*, 171 N.Y. 538, 544, 64 N.E. 442, 443 (1902).

¹⁹ *Olmstead v. United States*, 277 U.S. 438, 478 (1927). See also Warren & Brandeis, *The Right to Privacy*, 4 HARV L. REV. 103 (1900).

²⁰ See Shils, *supra* note 1, at 156.

ing, to hold back some area, at least for the moment, for ourselves. Our personal experience is supported by the behavioral scientists. They have documented our need both to share and to withhold.²¹

We need to share in order to feel a useful part of the world in which we live; we need to share in order to test what we truly believe, to obtain the feedback from others which will shape our thoughts, support our egos, and reduce our anxiety. Communication is a form of nourishment, essential to growth and, indeed, to survival. In fact, we are told that if an individual is deprived of all sensory intake and thus isolated from all meaningful association with his environment, he promptly becomes thoroughly disoriented as a person.

Yet, as human beings we also need to withhold—and this for a variety of reasons. There are some things we cannot face and therefore suppress. There are other facts or fears that, although not suppressed, we neither prefer to know nor wish to discuss. Then, too, there are ideas or beliefs or behavior that we are not sure we understand or, even if we do, fear that the world may not. So to protect ourselves, or our processes of creativity, or our minority views, or our self-respect, all of us seek to withhold at least certain things from certain people at certain times.

Psychologically, then, privacy is a two-way street consisting not only of what we need to exclude from or admit into our own thoughts or behavior, but also of what we need to communicate to, or keep from, others. Both of these conflicting needs, in mutually supportive interaction are essential to the well-being of individuals and institutions, and any definition of privacy, or of private personality, must reflect this plastic duality: sharing and concealment.

It follows that the right of privacy does not deal with some fixed area of personal life that has been immutably ordained by either law, or divinity, or science, or culture, to be off-limits and private.²² The essence of privacy is no more, and certainly no less, than the freedom of the individual to pick and choose for himself the time and circumstances under which, and most importantly, the extent to which, his attitudes, beliefs, behavior and opinions are to be shared with or withheld from others. The right to privacy is, therefore, a positive claim to a status of personal dignity—a claim for freedom, if you will, but freedom of a very special kind.

The way in which the choice between disclosure and non-disclosure is exercised, and the extent to which it is exercised, will vary with each individual, and with each institution. Indeed, the choice will vary in the same individual from day to day, and even on the same day, in differing circumstances. Thus, flexibility and variety are faithful companions of the concept of privacy.

III. THE SCIENTIFIC CHALLENGE

The claim to privacy will always be embattled—its collision with the community's need to know is classic and continuous. Man has always lived in a community, and the community has always required some forfeiture of freedom, including that of privacy. It is, indeed, a fact of life that there has never been a condition of complete privacy for the individual insofar as he is a normal man living with other men. At one time or another, privacy has yielded—as it must—to the positive group needs for security, for order, for sustenance, for survival. The degree of privacy granted throughout history to an individual by one or another community has varied markedly with the nature of the political system, the economic level, the population density, and the characteristics of the environment.

It should also be recognized that not every threat to private personality is a matter of sufficient concern to warrant social protection. Similarly, not every technical trespass is serious enough to warrant social redress. The test is always this: is the threat or the invasion unreasonable, or intolerable?

Today, there are those who point an accusing finger at science and argue that science now poses an unprecedented and grievous threat to the privacy of personality.²³ The argument, while clearly exaggerated, is not implausible. Modern acoustics, optics, medicine and electronics have exploded most of our normal assumptions as to the circumstances under which our speech, beliefs

²¹ On the importance of individual (and collective) secrecy in social relationships, see *THE SOCIOLOGY OF GEORGE SIMMEL* 307-44 (Wolf ed. 1950).

²² Yet, it is to be expected that particular cultures will, from time to time, reach a consensus on definable areas that are deemed to be private. Such a consensus is likely, however, to be both temporary and limited.

²³ See, e.g., PACKARD, *THE NAKED SOCIETY* 5 (1964).

and behavior are safe from disclosure, and these developments seem to have outflanked the concepts of property and physical intrusion, and presumed consent—concepts which have been relied on by the law to maintain the balance between the private personality and the public need. The miniaturized microphone and tape recorder, the one-way mirror, the sophisticated personality test, the computer with its enormous capacity for the storage and retrieval of information about individuals and groups, the behavior-controlling drugs, the miniature camera, the polygraph, the directional microphone (the "big ear"), hypnosis, infra-red photography—all of these, and more, exist today.

All of these significant advances are capable of use in ways that can frustrate an individual's freedom to choose not only what shall be disclosed or withheld about himself, but also his choice as to when, to whom and the extent to which such disclosure shall be made. Notwithstanding the large contribution made by each of these scientific developments to the well-being of man, each is, quite clearly, capable of abuse in its application. And such abuse can occur in industry,²⁴ in commerce,²⁵ in the law and by law enforcement agencies,²⁶ in medicine,²⁷ in government,²⁸ and in a myriad of other fields.²⁹

²⁴ (a) For example in personnel selection or retention, compare *Town & Country Food Co.*, 39 Lab. Arb. 332 (1962), with *McCain v. Sheridan*, 100 Cal. App. 2d 174, 324 P.2d 923 (1958) (refusal of employees to take "lie detector" tests). Several state statutes prohibit employers from making certain uses of lie detector tests. See, e.g., ALASKA STAT. § 23.10.037 (Supp. 1965); CAL. LABOR CODE § 432.2; MASS. ANN. LAWS ch. 149, § 19B (Supp. 1963); ORE. REV. STAT. § 659.225 (1963); R.I. GEN. LAWS ANN. § 28-6.1-1 (Supp. 1964). In New York, bills to preclude the use of lie detectors as a condition of initial or continued employment are introduced in the Legislature with regularity. In the 1965 session, seven such bills were introduced, see 1965 N.Y. LEG. RECORD & INDEX 1337, and two, after reaching the Governor, were vetoed for "technical defects." See N.Y. Assembly Bill Print No. 4439, passed June 7, 1965, vetoed June 28, 1965 (1965 N.Y. LEG. RECORD & INDEX 865; N.Y. SEN. BILL PRINT NO. 279, passed April 27, 1965, vetoed May 24, 1965 (1965 N.Y. LEG. RECORD & INDEX 29)). See also 111 CONG. REC. 15378 (daily ed. July 8, 1965) (a resolution of the Communications Workers of America on invasions of privacy).

(b) For examples, in labor relations, compare *Chesapeake & Potomac Tel. Co.*, 98 N.L.R.B. 1122 (1962) (monitoring an employee's home telephone), with *Elico Inc.*, 44 Lab. Arb. 563 (1965) (television surveillance of production floor) and *Thomas v. General Elec. Co.*, 207 F. Supp. 702 (W.D. Ky. 1962) (in-plant movies for time, motion and safety studies). See also N.Y. LAB. LAW § 704.

²⁵ See *McDaniel v. Atlanta Coca-Cola Bottling Co.*, 60 Ga. App. 92, 2 S.E.2d 810 (1930) (use of eavesdropping device to obtain evidence for defense of civil action); *Schmukler v. Ohio-Bell Tel. Co.*, 66 Ohio L. Abs. 213, 116 N.E.2d 819 (Ohio C.P. 1953) (use of telephone monitoring to ascertain breach of contract). For the statutes of those states making at least some form of eavesdropping a crime, see note 65 *infra*. For a discussion of some of the ethical issues in personality testing in business, see CRONBACH, *ESSENTIALS OF PSYCHOLOGICAL TESTING* 450-62 (2d ed. 1960).

²⁶ (a) For examples in the practice of law, see *Matter of Wittner*, 264 App. Div. 576, 35 N.Y.S.2d 773 (1st Dep't 1942), *aff'd per curiam*, 201 N.Y. 574, 50 N.E.2d 660 (1943) (lawyer suspended from practice for surreptitious use of recording device). The Committee on Professional Ethics of the Association of the Bar of the City of New York has concluded that the use of recording devices by lawyers, without the consent of the person whose conversation is being recorded, violates the Canon of Ethics. See, e.g., *Opinions Nos. 832, 836, 13 N.Y.C.B.A. Record* 36, 568 (1958); No. 813, 11 N.Y.C.B.A. Record 207 (1956).

(b) In law enforcement: see *DASH, THE EAVESDROPPERS*: (1959); *Symposium*, 44 *Minn. L. Rev.* 811 (1960). See also *N.Y. Times*, July 14, 1965, p. 1, col. 3 (use of two-way mirrors and other eavesdropping devices by Internal Revenue Service).

²⁷ (a) In medical research: see Lewis, *Restrictions on the Use of Drugs, Animals and Persons in Research* (paper delivered at the Rockefeller Institute Conference on Law and the Social Role of Science, April 8, 1965).

(b) In medical practice: see Rheingold, *Products Liability—The Ethical Drug Manufacturer's Liability*, 18 *Ketovans L. Rev.* 947, 957, 1009 (1964).

²⁸ See STAFF OF HOUSE COMM. ON GOV'T OPERATIONS USE OF POLYGRAPHS BY THE FEDERAL GOVERNMENT (Preliminary Study 1964), 88TH CONG., 2D SESS. (Comm. Print 1964); House Comm. on Post Office and Civil Service, *Use of Electronic Data Processing Equipment in the Federal Government*, H.R. REP. NO. 858, 88TH CONG., 1ST SESS. (1963); *Hearings Before the House Comm. on Post Office and Civil Service, Confidentiality of Census Reports*, 87th Cong., 2d Sess. (1962); cf. *United States v. Rickenbacker*, 309 F.2d 462 (2d Cir. 1962), *cert. denied*, 371 U.S. 962 (1963).

²⁹ (a) In newsgathering: see the charge of Alex Rose that a *New York Herald Tribune* reporter had rented an adjoining hotel room to eavesdrop on a political meeting. *N.Y. Times*, June 20, 1965, § 1, p. 46, col. 1.

(b) In public safety: consider the number of apartments, office buildings, hospitals, laboratories, jails, and other public buildings that have electronic systems to cover entrances, elevators, reception rooms, conference rooms, corridors and tellers' windows with television cameras or sound monitoring and recording systems; also the FAA rule on the installation of voice recorders in the cockpits of large airplanes as proposed, 28 *Fed. Reg.* 13756 (1963). For the regulation as enacted, see 29 *Fed. Reg.* 19209 (1964).

(c) In education: see authorities cited in notes 31, 37 *infra*, for some aspects of the use of personality tests in schools; consider also the two-way communication system that enables a school principal to speak directly to a class or, at his choice, to monitor, unobserved and unannounced, the classroom proceedings.

(d) In social welfare: see Reich, *Individual Rights and Social Welfare: The Emerg-*

So may abuse be found in the area with which we are primarily concerned—scientific research. The one-way mirror is a common fixture in facilities designed for bio-medical and behavioral research. Personality and ability tests are as familiar to researchers in these fields as a stethoscope is to the family doctor. The computer and electronic data storage and retrieval have become crucial to the intelligent and efficient use of research data. Socio-active and psycho-active drugs are ever more tempting research tools, as are the concealed camera and the hidden microphone. When these and other scientific and technological advances are used by scientists, they are used by highly trained, well-motivated, professional people for a social purpose on which the community places a high value. But this fact by itself, obviously, does not warrant the invasion of private personality any more than it would warrant the taking of private property or the administration of live cancer cells to a non-consenting patient.³⁰

The recent advances in science have made it clear that society must now work out some reasonable rules for the protection of private personality. It is, perhaps, becoming imperative now to define how the interests of the community—whether in scientific research or law enforcement or economic growth—can be accommodated with the need for privacy. The necessity for such an accommodation poses no idle problem. The consequences of the failure to resolve it are predictable: they begin with the recoil and revulsion of the community;³¹ they conclude with arbitrary legislation.

There is no doubt as to the community reaction to the administration, even in the name of research, of live cancer cells to unwitting patients. Nor should we expect that the community will be any more tolerant of behavioral research that subjects non-consenting persons to the risk of injurious, though non-fatal, after-effects. Indeed, community sensitivity as to what is reasonable, or tolerable, is not limited to situations where physical or psychic injury may be involved.

While neither the most representative nor serious intrusion, a well known example of privacy invasion in the field of behavioral research is the so-called "jury bugging" experiment conducted by the University of Chicago. Financed by the Ford Foundation, this was a scientific inquiry conceived and carried out with the best of professional motivation and skill. Although the consent, in advance, of the court and of opposing counsel was obtained, the surreptitious probing of the individual and institutional³² privacy of the members of the

ing Legal Issues, 74 *YALE L.J.* 1245, 1254 (1965); Sokol, *Due Process in the Protection of Adults and Children* (paper presented Sept. 11, 1964, at the Northeast Regional Conference of the American Public Welfare Association).

(e) In entertainment: consider the television programs which have used hidden cameras to photograph unsuspecting subjects; see *N.Y. PEN. LAW* § 834 dealing with exhibitions, and particularly the prohibition of "any act . . . whereby any . . . citizen . . . is held up to contempt or ridicule.

³⁰ See *Matter of Hyman v. Jewish Chronic Disease Hosp.*, 15 *N.Y.2d* 317, 206 *N.E.2d* 338, 268 *N.Y.S.2d* 307 (1965). See also, Curley, *Research and Ethics*, *Wall Street Journal*, June 10, 1965, p. 1, col. 1; *N.Y. Times* March 20, 1965, p. 56, col. 1.

³¹ See Eron & Walder, *Test Burning II*, 16 *AMERICAN PSYCHOLOGIST* 237-44 (1961); Nettler, *Test Burning in Texas*, 14 *AMERICAN PSYCHOLOGIST* 682-83 (1959).

³² Although this article is concerned with individual privacy, the claim to institutional and collective (or group) privacy should be noted. Institutional privacy is more than the sum of the claims to privacy of the members of a particular institution. For example, even had each of the members of the jury in the University of Chicago experiment consented to the recording of the jury room proceedings, the tone of the public response indicates that such recording would still have been viewed as tampering with a sacred institution and, therefore, offensive. See Shils, *supra* note 1, at 132-30. The individual claim to privacy is plainly paralleled by the institutional claim, and both are rooted in the need of an organism to learn and grow by quiet trial and error (sometimes called practice) without loss of dignity or public accountability, or risk of punishment. Both involve the concepts of consent and confidentiality discussed later in this article. But the conditions under which the claim may be asserted—by private institutions as well as public—and the determination of who may consent (if the judge cannot consent for the jury, can the President consent to the disclosure of his cabinet discussions?) raise the privacy issues in a different context worthy of separate analysis. The public accountability of institutions (both government and private) must be weighed and balanced with the institutional need for privacy to maintain their effectiveness and integrity. This is well appreciated by all who are responsible for the destiny of an institution and who have dealt, for example, with journalistic inquiries, congressional investigations, government questionnaires, judicial subpoenas, FBI interviews or stockholders' demands. A recent illustration of a lack of sensitivity to this claim of institutions for privacy is afforded by a bill introduced in the New York State Senate on March 9, 1965 (Senate Print 2832, Intro. 2691) which would have declared "all books, bills, vouchers, checks, contracts or other papers connected with or used or filed in the office of every authority or commission . . . or with any officer acting for or on its behalf . . . public records . . . open to public inspection at all times . . ." (Emphasis added.)

jury shocked the community when the experiment became public knowledge in October, 1955. Federal and state statutes were promptly passed, in 1956 and 1957, to ban all attempts to record or observe the proceedings of a jury.³³ The New York statute, for example, reads as follows:

"A person: . . . who, not a member of a jury, records or listens to by means of instrument the deliberations of such jury or who aids, authorizes, employs, procures, or permits another to do so; is guilty of eavesdropping".³⁴

And in New York eavesdropping is a felony punishable by imprisonment!³⁵ Another example where neither physical injury nor emotional trauma is necessarily involved is found in personality testing.³⁶ It requires no Cassandra to predict lawsuits by parents, and a spate of restrictive legislation,³⁷ if those who administer these tests in schools—even for the most legitimate of scientific purposes—do not show a sensitive appreciation for both individual and group claims to a private personality.

The lesson is plain. Unless the advances of science are used with discrimination by scientists engaged in behavioral research—as well as by other professions, by industry and by government—the constructive and productive uses of these advances may be drastically and unnecessarily restricted by a fearful community.³⁸

IV. THE NEED FOR EQUILIBRIUM

Obviously, as Samuel Messick wrote recently:

"Absolute rules forbidding the use of [personality tests] . . . because they delve into contents beyond the bounds of decent inquiry would be an intolerable limitation both to scientific freedom and to professional freedom".³⁹

It should be equally obvious—yet it may not be⁴⁰—that absolute rules permitting professional license, in the name of scientific research, to probe beyond the bounds of decent inquiry are equally intolerable to a free society and to free men. Absolute rules do not offer useful solutions to conflicts in values. What is needed is wisdom and restraint, compromise and tolerance, and as wholesome a respect for the dignity of the individual as the respect accorded the dignity of science.

If discrimination and discernment are in fact brought to bear, then we can be confident that the advances in science and technology pose no intolerable

³³ 18 U.S.C. § 1508 (1964); see, *o.p.*, MASS. ANN. LAWS ch. 272, § 80A (Supp. 1964).

³⁴ N.Y. PEN. LAW § 738. The new penal law, effective Sept. 1, 1967, replaced Section 738 with a general provision prohibiting "wiretapping or mechanical overhearing of a conversation." N.Y. Sess. Laws 1965, ch. 1030, § 250.05. The memory of the Chicago experiment lingers on. See the anti-eavesdropping bill introduced in the Minnesota Legislature on March 4, 1965, S.F. No. 915, § 2(d) (Phillips Legislative Service).

³⁵ N.Y. PEN. LAW § 740. The new penal law makes no substantial change in this provision. N.Y. Sess. Laws 1965, ch. 1030, § 250.05.

³⁶ Lee J. Cronbach, one of the nation's outstanding authorities on psychological testing, in his book, *Essentials of Psychological Testing* (2d ed. 1960) observes:

"Any test is an invasion of privacy for the subject who does not wish to reveal himself to the psychologist. While this problem may be encountered in testing knowledge and intelligence of persons who have left school, the personality test is much more often regarded as a violation of the subject's rights. Every man has two personalities: the role he plays in his social interactions and his "true self". In a culture where open expression of emotion is discouraged and a taboo is placed on aggressive feelings, for example, there is certain to be some discrepancy between these two personalities. The personality test obtains its most significant information by probing deeply into feelings and attitudes which the individual normally conceals. One test purports to assess whether an adolescent boy resents authority. Another tries to determine whether a mother really loves her child. A third has a score indicating the strength of sexual needs. These, and virtually all measures of personality, seek information on areas which the subject has every reason to regard as private, in normal social intercourse. He is willing to admit the psychologist into these private areas only if he sees the relevance of the questions to the attainment of his goals in working with the psychologist. The psychologist is not "invading privacy" where he is freely admitted and where he has a genuine need for the information obtained."

Id. at 450-60.

³⁷ See S. REP. No. 553, 88th Cong., 1st Sess., 41 (1963) for the legislative proposal (H.R. 4955) of Representative Ashbrook of Ohio. In New York, Assemblyman Russo introduced a bill in 1964 (A.S. 1701) to preclude the testing of a school child without the consent of a parent or guardian.

³⁸ In addition to the restrictions that may be imposed on the uses of science and technology, there should also be considered the prospect of legal liability for any injury that may be suffered from their use. See Kholmgold, *supra* note 27; Comment, *Legal Implications of Psychological Research with Human Subjects*, 1960 DUKE L.J. 265. See also note 65 *infra* for statutes which make eavesdropping—including eavesdropping by behavioral scientists in the course of research—a crime.

³⁹ Messick, *Personality Measurement and the Ethics of Assessment*, 20 AMERICAN PSYCHOLOGIST 136, 140 (1965).

⁴⁰ See a not unrelated discussion in WEST, *THE NEW MEANING OF TREASON* 158-61 (1966).

threat to privacy. Indeed, they promise to contribute more to an understanding of the claim to private personality, to the recognition of its proper limits, and to the protection of its creative integrity than anything in our recorded experience. Worthy of note is Dr. Robert Morison's reminder that: ". . . the sciences are providing more accurate ways of describing moral problems, and are actually calling attention to types of moral problems which heretofore have not been recognized."⁴¹

It is not enough to be optimistic about the consequences of the tensions between science and privacy. It is incumbent upon lawyer and scientist to accommodate the goals of science with the claim to privacy, and to help articulate the rules and concepts that will maintain both the productivity of science and the integrity of personality.

In his well-known essay *On Liberty*, John Stuart Mill, while concluding that "over himself, over his own body and mind, the individual is sovereign," continued:

"There is a limit to the legitimate interference of collective opinion with individual independence; and to find that limit, and maintain it against encroachment, is as indispensable to a good condition of human affairs, as protection against political despotism.

"But though this proposition is not likely to be contested in general terms, the practical question, where to place the limit—how to make the fitting adjustment between individual independence and social control—is a subject on which nearly everything remains to be done. . . . Some rules of conduct, therefore must be imposed, by law in the first place, and by opinion on many things which are not fit subjects for the operation of law. What these rules should be, is the principal question in human affairs; but if we except a few of the most obvious cases, it is one of those in which least progress has been made in resolving."⁴²

Although more than a century has passed since this pessimistic estimate was made, its essential validity remains.

Our purpose is to identify some of the rules of conduct which, by providing balance and sensitive awareness, can in this century accommodate, and perhaps even resolve, the confrontation of the values of privacy with other values. While the focus here is on behavioral research, it should be emphasized again, that this clash with the values of privacy is not unique to behavioral research.⁴³ The rules of conduct which can accommodate behavioral research to the claims of private personality may, it is hoped, provide useful parallels in other areas.

V. BEHAVIORAL RESEARCH AND INDIVIDUAL PRIVACY

The traditional methods of behavioral research may, on occasion, involve a violation of the individual claim to private personality.⁴⁴ These traditional research methods can be grouped into three broad types: first, self-descriptions elicited by interviews, questionnaires, and personality tests; secondly, direct observations and recording of individual behavior; and thirdly, descriptions of a person by another serving as an informant, or the use of secondary data such as school, hospital, court or office records.

These three major research methods do not necessarily lead to a violation of the claim to privacy. All may be, and most often are, used under conditions of anonymity or individual consent and with strict control over confidentiality. Nevertheless, each method, if improperly employed, can make serious inroads on personal privacy. Thus, some personality tests induce the subject unwittingly to reveal more about himself than he wishes to; carefully designed questionnaires and interview procedures can be used to trap the individual into making public those facts and feelings about himself or others that he would not wish to disclose. Direct observational methods similarly can involve privacy invasion; as, for example, in the use of one-way glass for the observation of children without their knowledge, or in the use of an unidentified participant observer such as a social scientist pretending to be either a patient in a mental hospital or a member of a minority group, or a drug addict among

⁴¹ Morison, *Foundations and Universals*, 93 DAEDALUS 1109, 1137 (1964).

⁴² MILL, *ON LIBERTY* 7-8 (Bobbs-Merrill 1956).

⁴³ See notes 24-29 *supra* and accompanying text.

⁴⁴ They may also involve the invasion of group or institutional privacy. One example is provided by research on minority groups or associations. See note 32 *supra*.

troubled juveniles. Descriptions of one individual by another, either oral or in the form of written records, can also be used in ways that invade the individual's privacy. Illustrative is information elicited from children about their parents' life together, or the description of husbands by wives, or the use of institutional records, originally compiled for one purpose, for quite another. An example of the latter is found when school data are made available to outsiders for research not related to the administration of the educational program. It is the same when welfare data are made available for purposes not connected with the welfare objectives for which they were obtained.

Each of these three basic research methods may engage one or both of the two central—and ethical—issues which are at the core of the relationship between research and personal privacy. These are first, the degree of individual consent that exists and, second, the degree of confidentiality that is maintained. The former concerns the conditions under which information is obtained from a person, the latter, the conditions under which the information is used.

Let us consider some of the ways in which these two issues are raised by behavioral research.

In the use of self-description, a privacy issue arises if the individual respondent does not participate willingly, or if he participates without knowledge of the information being elicited from him, or without an understanding of the purposes for which such information will be used. The nature of the private information being yielded can be obscured from the respondent either by direct artifice, by reliance on the respondent's ignorance or his lack of sophistication, or by some form of coercion, employed to enlist his cooperation. Similarly, with direct observations, a privacy issue arises if the examinee does not know he is being observed, or if he is put off by misleading instructions as to the nature or purpose of the observation or the identity of the observer, or if he is an unwitting participant in a deceptively constructed test situation. An examinee, for example, might be the only person not to know that a group of which he is a part is behaving in a planned abnormal manner so as to test his desire to conform. Where informants, or secondary data, are employed, privacy questions can arise in several ways. An inducement to a breach of faith or confidence may be involved; naivete may be purposefully and systematically exploited. Alternatively, the information may have been supplied only because its nature, or the subsequent use to be made of it, were not known to the respondent.

In each of these three research techniques, an additional point of some complexity can be involved: was the privacy-related data obtained originally for a different purpose? For example, we may consent to yielding vital data for the purpose of being admitted to practice law, or society may properly insist on some loss of individual privacy in order to combat disease or other hazards to life or tranquility.⁴⁵ In any such case, however, the individual should not then be deemed to have consented, without qualification, to the subsequent use of such data by a credit agency, or by a member of the school board, or even a scientist engaged in bona fide research.⁴⁶

Lawyers are persuaded that they must not talk about their clients' affairs. While this is now a matter of professional ethics, this restraint is rooted in a recognition that any other state of affairs would corrode the trust which is of the very essence of the professional relationship. The effectiveness of the doctor, plainly, is similarly vulnerable if patients ever believed they could not rely on their physicians to respect imparted confidences. In quite another area: what would happen to the process of education if student attitudes, as revealed in the Socratic interchanges of the classroom, were recorded and reported by the teacher and then used for scientific research or for other purposes—such as responding to inquiries by potential employers?

The point, then, is that consent and confidentiality have a pragmatic as well as a moral importance to the pursuit of any profession. The quality and

⁴⁵ The Public Health Law of New York, for example, requires physicians, and others, to report communicable diseases to the local health officer (§ 2101), permits health officers to seek court orders to compel persons to be examined for venereal diseases (§ 2301), and requires vaccination of school children for smallpox (§ 2180).

⁴⁶ The New York statute, for example, contains provisions designed to preserve the confidentiality of the private information obtained about the venereal diseases with which a person may be infected. See N.Y. PUB. HEALTH LAW § 2306.

effectiveness of behavioral research will depend, accordingly, on the confidence the public has in the behavioral scientists and in the way they pursue their science.⁴⁷

VI. THE CONCEPT OF CONSENT

The essence of the claim to privacy is the choice of the individual as to what he shall disclose or withhold, and when he shall do so. Accordingly, the essential privacy-respecting ethic for behavioral research must revolve around the concept of consent.⁴⁸ Taken literally, the concept of consent would require that behavioral research refuse to engage in the probing of personality, attitudes, opinions, beliefs, or behavior without the fully informed consent, freely given, of the individual person being examined. There are, however, several reasons why the concept of consent cannot be so literally invoked in the name of privacy.

In the first place, a rigid and literal insistence on formal consent, in a research context, can readily become unrealistic. In some instances, insistence on consent would shake the validity of the research itself. The very selectivity involved in consent would ensure that the research was based on a biased sample and therefore could not be generalized to a wider population. And where subtle attitudes are being measured, knowledge of, and consent to, what is being sought is almost certain to distort the results. In other instances, the requirement of consent might frustrate the project at the outset.⁴⁹ Finally, in many instances a full appreciation of the nature of the research, the purposes to be achieved and the risks involved would be impossible to convey fully, either because of their essential complexity, or because they involve unknown factors, or because they are beyond the capacity of the subject to understand.

Any application of the concept of consent as a privacy-protecting test for scientific research is further complicated by the difficult factual problem of assessing, in each particular case, what constitutes consent. When is it informed; when is it freely given; who is entitled to give it? In research situations consent may be given by tacit acquiescence, by explicit oral avowal, by written statement, or it may be implied from the totality of the circumstances. While each of these methods of consent can raise troublesome issues, implied consent is by far the most difficult.

Obviously, in many situations, consent can be fairly implied. Certainly, public figures, particularly those who appear to the public for elective office, have impliedly consented to the yielding up of some areas of private personality. The comings and goings of a Mayor or Governor, or Hollywood starlet, and a public evaluation and discussion of their strengths and weaknesses in their public roles, are proper subjects of news report, analysis, and research. Similarly when a client seeks occupational counseling from a psychologist, or a parent seeks educational guidance for his child, or when a patient seeks psychotherapy he has consented to some probing, and revelation, of his private personality.⁵⁰ While the combination of circumstances that will warrant the implication of informed consent are myriad, restraint must be exercised not to imply such consent in the absence of reasonably compelling facts. Otherwise, the whole requirement of consent can too readily be rationalized away through implication.

Moreover, consent to the revelation of private personality for one purpose, or under one set of circumstances, is not license to publish or use the information so obtained for different purposes or under different conditions. This is especially so when the operative consent is implied or when it would be reasonable to assume that the initial consent would not have been given for the new pur-

⁴⁷ See Gross, *Social Science Techniques: a Problem of Power and Responsibility*, 83 *THE SCIENTIFIC MONTHLY* 242 (1956); Mead, *The Human Study of Human Beings*, 133 *SCIENCE* 163 (1961).

⁴⁸ The tribunal in the Nuremberg trials considered at some length the circumstances under which medical research conducted with human beings would conform to the ethics of the medical profession. It evolved ten basic principles that "all agree . . . must be observed in order to satisfy moral, ethical and legal concepts." The first of these ten Nuremberg commandments was that: "The voluntary consent of the human subject is absolutely essential." *II TRIALS OF WAR CRIMINALS BEFORE THE NUREMBERG MILITARY TRIBUNALS UNDER CONTROL COUNCIL LAW NO. 10, THE MEDICAL CASE* (United States v. Brandt) 181 (U.S. Gov't Printing Office 1949). See generally Lewis, *supra* note 27.

⁴⁹ How many people, for example, could be expected to participate willingly in a test to devise a standard of homosexual tendencies? Or to measure intra-family hostility?

⁵⁰ See CHONBACH, *op. cit. supra* note 25, at 459-62.

pose or the different situation. Further, varying degrees of consent must be recognized. Consent, however given, may be restricted in numerous ways—as to the methods to be used, the risks to be taken, the degree of information the subject wishes to give or receive, the type of data to be obtained, or the uses to which it may be put.

Another complicating factor in the concept of consent is the determination of whether consent has been freely given or coerced. Torture is an old and well-tried technique for extracting private information—and torture need not be physical. Mental anguish can be just as searing and difficult to endure. The prospect of release from suffering, therefore, is a powerful lever for access to the private area. Its uses for the manipulation of behavior or the probing for knowledge are not unknown to sheriffs and prosecutors, to personnel directors, school teachers, and parents—indeed, to virtually anyone who has experienced authority. Conversely, its uses are very well known by the jobless, the hungry, the homeless, the ambitious and the young. The obvious cases of physical, mental, economic, or social duress are readily identifiable; but when does a subtle inducement such as the regard of your boss or even of your peers, or some inducement, not quite so subtle, such as an extra point added to your college grade in return for participation in psychological experiments—when do these become tantamount to duress? What about the vast prestige of scientific research itself as a means of persuasion upon the unsophisticated? And when does the relative disproportion between the knowledge, sophistication and talents of the investigator and his subject make the consent of the respondent questionable, however freely and explicitly given? It is all too apparent that the distinction between consent and concealed coercion may often be difficult to establish. This is however, the type of distinction with which our social institutions, in particular our law and our courts, have a demonstrated competence to deal.

As compared with the complexities of coercion, the problem of identifying the person whose consent must be obtained can, in most cases, be more readily resolved. Normally, when a competent adult is the examinee, or the subject of research, he is the person whose consent must be obtained. If he is not an adult, or if he is not legally competent, then the consent must be obtained from the person legally responsible, namely, a guardian or parent. In the case of children, however, while the legal principles may be clear, a lingering ethical question remains. Should not a child, even before the age of full legal responsibility, be accorded the dignity of a private personality? Considerations of healthy personal growth, buttressed with reasons of ethics, seem to command that this be done. If so, then, in the case of adolescents (and probably even earlier), some form of prior consent to privacy probing should be obtained from both the parent and the respondent child.⁵¹

A special word should be said about anonymity in behavioral research. Frequently it is possible to obtain data of value for behavioral research where the subjects need never be identified by name. National opinion surveys are one example; the use of students in a college classroom may be another. Where anonymity in fact exists, the invasion of privacy involved in behavioral research might well be regarded as *de minimis*. Nevertheless, it must be stressed that anonymity is not a complete substitute for consent. On occasion an individual may feel that his privacy is being invaded when asked to reveal his thoughts or feelings, or to describe his actions, even though he remains quite anonymous to the researcher. It is a fact that many people even under conditions of anonymity resist such revelation to others. So it would seem that, wherever possible, both consent and anonymity should be sought in behavioral research.

The condition of anonymity sometimes is used as a justification for the invasion of privacy in psychological experiments where the subject is deceived as to the meaning of the experiment, or where false information is given to the person so as experimentally to arouse or decrease self-esteem, motivation, or

⁵¹ For an interesting commentary on some of the subtle ethical problems involved, see Mace, *Privacy in Danger*, 171 THE TWENTIETH CENTURY 173, 176-77 (1962). Compare *State v. Kinderman*, 136 N.W.2d 577 (Minn. 1965), where the court held that an adult home owner could effectively consent to a search of his adult child's room notwithstanding the absence of both a court warrant and the consent of the adult child. This is another instance of a judicial preoccupation with the concepts of property when the claim to privacy is involved. See cases cited note 3 *supra* and accompanying text.

other similar feelings. That the subject remains anonymous, however, can not justify the failure to obtain his consent prior to any such purposeful manipulation of his personality.⁵²

Behavioral scientists need no reminder that the concept of consent is not now universally operative as a condition of the research projects on which they are engaged. The use of human guinea pigs is not confined to prisons. Examples of "forced" submission to privacy probes can be found in our hospitals, our schools, our colleges, our social welfare programs, our research institutes, and our institutions for the disturbed, handicapped, or retarded. Such a disregard for the dignity of personality—occasional though it may be—must be guarded against and eliminated by the social scientists themselves.⁵³ If they fail or refuse to exercise self-control, then the community will inevitably feel compelled to act for itself and legislate for the protection of personal privacy.

While the knowledgeable, freely-given consent of a participant should be a basic ground rule for all behavioral research, there is, of course, a need for exceptions. There must be, indeed, a fundamental exception to cover the many instances where society will accept the invasion of privacy as permissible and reasonable. Thus, when the general welfare requires it and due process is observed, our society permits the taking of private property without consent. There is no reason to doubt that, under similar circumstances, society will permit at least a limited invasion, or taking, or private personality. Circumstances under which the community tolerates the probing into private areas without the consent, and if necessary, without the knowledge of the examinee do, in fact, exist. A number of examples can be easily found in law enforcement, in selection for military service, in social welfare work, in the protection of the public health, in the national census, and in the selection of employees for the Central Intelligence Agency or as airline pilots.

A public trial may also invade the privacy of the individuals involved in the litigation. Yet since our society is persuaded that a public hearing is essential to a fair trial and to social order, it finds entirely reasonable that the individual claim to privacy must yield in this instance. Even here, however, the equilibrium between the competing values is sensitively preserved and there are occasions when the court is cleared, or the testimony sealed.⁵⁴

⁵² It is apparent that this view is not yet fully shared by the behavioral scientists. For example, Dr. Lee J. Cronbach, who has given thoughtful consideration to the problems of ethics in psychological testing, and who sensitively perceives the ethical issues involved in the use of psychological tests in other contexts, with respect to scientific research, has stated:

"No ethical objection can be raised to the use of subtle techniques and even of misleading instructions when the information so obtained will be used entirely for research purposes, the subject's identity being concealed in any report."

Cronbach, *op. cit. supra* note 25, at 461. Even for research purposes, however, Cronbach raises a caution where the investigator occupies a position of authority over the person being tested. *Id.* at 462.

⁵³ An excellent example of a responsible attitude toward behavioral research in schools is to be found in Kohn & Beker, *Special Methodological Considerations in Conducting Field Research in a School Setting*, 1 *PSYCHOLOGY IN THE SCHOOLS* 31 (1964). See also Castaneda & Fabel, *The Relationship between the Psychological Investigator and the Public Schools*, 16 *AMERICAN PSYCHOLOGIST* 201-03 (1961). While neither of these articles deals with the claim to privacy as such, Messrs. Kohn and Beker show a lively appreciation of it, and recognize the importance of consent, anonymity and confidentiality in, and for, behavioral research.

⁵⁴ Examples of the range of protections available in the judicial process are:

(a) Court orders to protect confidential information obtained for evidentiary purposes from being improperly used for other purposes. See *Covey Oil Co. v. Continental Oil Co.*, 340 F.2d 993 (10th Cir. 1965), *cert. denied*, 380 U.S. 964 (1965); *United States v. Lever Brothers Co.*, 193 F. Supp. 254 (S.D.N.Y. 1961), *appeal dismissed*, 371 U.S. 207 (1962), *cert. denied*, 371 U.S. 982 (1962). See also N.Y. CPLR § 3103 (preventing the abuse of pre-trial disclosure proceedings).

(b) Statutory provisions relating to the disposition of the evidence submitted to the Tax Court, see *ISR. REV. CODE OF 1954*, § 746; or the reception of certain evidence by the Civil Rights Commission. See Civil Rights Act of 1957, 102(g), as amended, 78 Stat. 249 (1964), 42 U.S.C. § 1975a(e) (1964).

(c) Statutory provisions for the sealing of records in judicial proceedings and limiting access thereto. See N.Y. DOM. REL. LAW §§ 114 (adoption), 235 (matrimonial actions); N.Y. FAMILY CT. ACT § 166 (privacy of records); N.Y. SOC. WELFARE LAW §§ 372(4) (records as to children), 132, 136 (welfare records).

(d) Statutory provisions for the exclusion of the public from court proceedings. See N.Y. JUDICIARY LAW § 4; N.Y. FAMILY CT. ACT § 531 (paternity proceedings).

(e) Statutory provisions restricting the availability of information obtained by the Department of Justice under a Civil Investigative Demand, see Antitrust Civil Process Act § 4(e), 76 Stat. 550 (1962), 15 U.S.C. § 1313(e) (1964), or obtained by the Department of Commerce. See 13 U.S.C. § 9 (1964).

(f) Statutory prohibitions against televising or broadcasting of judicial proceedings, such as N.Y. CIV. RIGHTS LAW § 52.

Even where the public interest may warrant the taking of private property or of private personality, no absolute license is justified. The taking should be reasonable, it should be conducted with due process, and it should be limited to no more than what is necessary for the fulfillment of the public purpose which, in fact, warranted the invasion.

If we apply these principles to behavioral research, it is clear that, in determining whether the interference with the right of private personality is reasonable, one must appraise many diverse factors. They include such matters as whether the research is necessary, or simply desirable; whether the identification of the individual is in fact required for the successful conduct of the research; whether the invasion of privacy is being limited to the narrowest extent possible; whether artifice and the risk of physical or psychological injury are being avoided; whether the research is being conducted by trained professionals under controlled conditions; whether the paramount public interest favors the research at the risk of a reduction in individual privacy; and whether the paramount nature of the public interest has been explicitly recognized, or otherwise accepted, by the community in its laws, by its codes, through its political action, or in such other laborious ways as social consensus is reached and expressed in a free society.

The analogy between behavioral research in the public interest and investigative visits by welfare agents administering public assistance is pertinent. So are the words of the Deputy Commissioner of the New York City Department of Welfare:

"The fact that public assistance is a statutory right means, therefore, that it is subject to conditions imposed by the Legislature. . . . It means that the Legislature may require that the applicant waive his right to privacy to permit a thorough investigation of his eligibility for public assistance. It means that the applicant must open his home to admit representatives of the Welfare Department to enter and to inquire and to observe. It does not mean, of course, that this permissible and necessary invasion of privacy may go so far as to violate the constitutional right against unreasonable search and seizure. It does not mean that the investigator may enter forcibly and without the consent of the applicant nor does it mean that the investigator may come in the dead of night, but it does mean that the applicant must submit to an investigation and, therefore, to an invasion of privacy which falls short of being unreasonable and that if he refuses to submit and refuses to permit such infringement upon his right of privacy, then he may not exercise his right to receive public assistance. The question, therefore, is wholly one of reasonableness and in this respect there may well be a difference of opinion among people of good will. . . ."⁶⁵

A clear and paramount public interest in a particular behavioral research inquiry, in spite of a high cost in human privacy, can no doubt frequently be established. However, the recent emergency of behavioral science knowledge as a potential contribution to human welfare has yet to be matched with an explicitly recognized set of laws or codes or otherwise publicly expressed agreements on the value of different kinds of research. Thus, there are and will be many occasions in which conflict between the individual's claim to privacy and the larger community interest in research for the general good must be resolved—and the method of resolution must be an expression of community consensus.

This concept of consensus is not employed in any formal mechanistic way. In a sense, what is meant is that the issue of paramountcy as between private personality and a particular program of scientific research should not be left solely to the decision of the research investigator. There should be some strong element of community approbation; the delicate balancing of the colliding values involved should reflect more than a single point of view.

Community consensus can obviously be expressed in laws, judicial decisions, or political constitutions. But it demands no such formal manifestation, and can also be expressed in far more subtle but equally pervasive ways. For example, consensus can be expressed in the values of our peers as they are articulated to us. Consensus can be formed through the stated views of our opinion leaders whether they be leaders in government or industry, in labor, the professions or the clergy. Consensus can also be reflected in the provisions of collective bargaining contracts between labor and management, in the execu-

⁶⁵ See Sokol, *supra* note 20; see also Coser, *The Sociology of Poverty*, 13 *SOCIAL PROBLEMS* (Oct. 1965).

five orders or instructions issued by Presidents, cabinet officers, personnel directors, and administrators of all kinds.

Yet, most appropriate for scientific research—as it is for all the professions—is the expression of a consensus on values in a published and operative code of ethics. Such a code yields a triple return—it articulates the values involved, uplifts thereby the awareness and standards not only of the profession but the entire community, and can provide a means for disciplining transgressions within the profession.

Thus, in launching any behavioral research project, the investigator should first determine whether voluntary, informed consent, as well as anonymity, can be accommodated with the integrity of the research. If not, the investigator should then ascertain whether the community consensus approves the conduct of the research, under the proposed conditions, without the actual consent and anonymity of the subjects. As a minimum, this means the knowledgeable concurrence of those responsible for both the research project (for example, the financing institution) and for the well being of the subject (as, for example, the administration of the college he attends). The history of public health and medicine in this country, and earlier in Europe, gives many illustrations of the establishment of just such a community consensus on the invasion of privacy for the general welfare.⁵⁶

One may anticipate that, as behavioral science develops and its contributions to society increase, the democratic process may afford to it more occasions of publicly approved invasions of personal privacy.

VII. THE CONCEPT OF CONFIDENTIALITY

Whether private data are collected with consent, or without consent but with society's permission because of the perceived public interest involved, the minimal requirements of privacy seem to call for the retention of the private data in a manner that assures its maximum confidentiality consistent with the integrity of the research. Thus, the second privacy issue presented by behavioral research, as it is with all inroads on the private personality, is the issue of confidentiality.

One of the most important ways in which the concept of confidentiality in behavioral research can be served is to seek to design the research so that the responses of the persons providing the data can be anonymous; the design should avoid identifying any individual respondent with a particular response. While this should be possible in all opinion surveys, in many instances the nature of the research will require an ability to identify each respondent with the data elicited from him. This would of course be true in longitudinal studies—as of child growth and development—where respondents must be examined or interviewed a number of times, or in studies of several diverse sets of records which must be matched up to a particular individual.

If full anonymity is not possible in the research design,⁵⁷ then there are several other safeguards which should be stressed to provide some degree of anonymity or confidentiality. The first, needing no more than a passing mention, is the integrity of the behavioral research scientist, which, along with his interest in science, must be assumed as a basic prerequisite. The integrity of the

⁵⁶ See note 45 *supra*.

⁵⁷ It should be borne in mind that there are various degrees of anonymity in the gathering of research data, and it may be useful to distinguish between them in balancing the values of particular research with the costs in privacy that may be involved. Dr. Isidor Chein, Professor of Psychology at New York University's Graduate School of Arts and Science, in a letter to the authors making this point, identified, among the possible levels of anonymity, the following six:

(a) the particular subject is never identifiable, not even by the investigator or his agents; (b) the particular subject is temporarily identifiable, but his identity is never ascertained up to and including the point at which the data that he has provided are consolidated in some meaningful and interpretable form; (c) the particular subject is temporarily identifiable and his identity is known up to, but not including, the point at which the data that he has provided are consolidated in some meaningful and interpretable form; (d) the particular subject is temporarily identifiable and can be associated with data that are in themselves meaningful and interpretable, but his identity is not ascertained; (e) the identity of the particular subject is known in conjunction with meaningful and interpretable data, but his identifiability and identity are submerged in the treatment of the data from many subjects and his own data are never scrutinized from the point of view of interpreting or drawing any inferences about him or his behavior; and (f) the identity of the particular subject is known in conjunction with meaningful and interpretable data and these data are scrutinized from the point of view of interpreting some aspect of the individual or his behavior, but his identity is thereafter submerged in the collection of similar processes of interpretation for many subjects.

professional scientist will assure both his informants and society at large that he will be responsible and will maintain the confidence of any information given to him by identifiable informants. That there are occasional breaches of professional confidence at this level underscores the significance of putting stress on the responsibility of the investigator both during his professional training and throughout his research career.

Another important safeguard for confidentiality can be provided through control techniques. For example, the identity of the respondent may be coded and separated from his response except for the code number. The code, in turn, may be made accessible only to a few of the most responsible officials, or perhaps, only on two signatures or by the use of double keys, even as elementary a safeguard as a locked file can make for substantial improvement. Penalties within the profession may also be devised for any breach of the confidentiality which should be of the very essence of professionalism.

Another readily available step is the destruction of research data. At the very least, that part of the data which would identify any individual with any portion of it should be destroyed, and destroyed at the earliest moment it is possible to do so. Today, it is quite rare for an institution or an individual scientist to take what is now viewed as a radical step and destroy data which potentially has value over a longer time span. Indeed, behavioral scientists have strong incentives to retain all original research data.⁵⁸ Such data can provide information of a longitudinal nature about the development of personality or organizations over time, the early childhood antecedents of career success, the degree of change in interest and attitude from one age to another, the effects of marriage upon personality characteristics and other fascinating problems. There are now great repositories of such data in the United States collected about individuals in schools, both secondary and college, and other institutional settings, which have been maintained because of this natural resistance of the research scientist to discard anything of such potential value. Nevertheless, the maintenance and use of this information for purposes other than that originally agreed to, and the threat to confidentiality inherent in its continued maintenance, strongly suggest that the proper course of the person or institution possessing such data is either to obtain the consent of the individual involved to its continued preservation, or to destroy the data, painful as the latter prospect may be.

It should be emphasized that neither the integrity of the scientist nor the technical safeguards of locks and codes can protect research data against a valid subpoena; such data are at present quite clearly subject to subpoena. In the last analysis, therefore, unless our laws are changed to accord a privileged status to privately given research information, confidentiality can be assured only by destruction of the data. The change in the law required to accord a privileged status to research data can be accomplished by statute. Thus, by statute in eighteen states,⁵⁹ a privilege has already been afforded to information received by a psychologist from his client. That statutory privilege does not, however, seem to extend to psychological research.⁶⁰

⁵⁸ See, e.g., Johnson, *Retain the Original Data*, 19 *AMERICAN PSYCHOLOGIST* 350-51 (1964). See also de Mille, *Central Data Storage*, 19 *AMERICAN PSYCHOLOGIST* 772-73 (1964). The prospect of the use of computers for central recording, storage and retrieval of research data in the behavioral sciences adds a troublesome new dimension to the protection of privacy. Computerized central storage of information would remove what surely has been one of the strongest allies of the claim to privacy—the inefficiency of man and the fallibility of his memory.

⁵⁹ The eighteen states are: Alabama, ALA. CODE tit. 46, § 207(36) (Supp. 1963); Arkansas, ARK. STAT. ANN. § 72-1516 (1957); California, CAL. BUS. & PROF. CODE § 2104; Colorado, COLO. REV. STAT. ANN. § 154-1-7(8) (1963); Delaware, DEL. CODE ANN. tit. 24, § 3534 (Supp. 1964); Georgia, GA. CODE ANN. § 84-3118 (1955); Idaho, IDAHO CODE ANN. § 54-2314 (Supp. 1965); Illinois, ILL. ANN. STAT. ch. 91½, § 406 (Smith-Hurd Supp. 1964); Kentucky, KY. REV. STAT. ANN. § 319.111 (Supp. 1965); Michigan, MICH. COMP. LAWS § 338.1018 (Supp. 1961); Nevada, NEV. REV. STAT. § 48.085 (1963); New Hampshire, N.H. REV. STAT. ANN. § 330-A:19 (Supp. 1963); New Mexico, N.M. STAT. ANN. § 67-30-17 (Supp. 1965); New York, N.Y. EDUC. LAW § 7611; Oregon, ORE. STAT. § 44.040 (1963); Tennessee, TENN. CODE ANN. § 63-1117 (1955); Utah, UTAH CODE ANN. § 58-25-9 (1963); Washington, WASH. REV. CODE § 48.83.110 (1957).

⁶⁰ A Montana statute does, however, seem to extend a limited privilege to certain types of behavioral research if conducted by a person teaching psychology in a school. The Montana statute reads as follows:

"Any person engaged in teaching psychology in any school, or who acting as such is engaged in the study and observation of child mentality, shall not without the consent of the parent or guardian of such child being so taught or observed testify in any civil action as to any information so obtained."

MONT. REV. CODES ANN. § 93-701-4(6) (1964).

While statutes may be desirable, they may not always be necessary. A privilege status has been afforded by the common law to communications between husband and wife,⁶¹ and attorney and client;⁶² privilege also inheres a constitutional doctrine—as in the privilege against self-incrimination. Thus, it is conceivable that privilege could be extended by the courts to other situations—perhaps in a persuasive case, where a research scientist was willing to resist a subpoena and risk imprisonment, in order to protect the private research data in his possession. While there is a role for the martyr both in science and in law, privilege should not be viewed as a status symbol for the scientist.⁶³ It should, rather, be a protective shield for his informant. As the law now stands, however, it is apparent that the research scientist who probes in the realm of the private personality, without consent, bears a special and heavy responsibility to the subjects of his research. It is a responsibility for confidentiality which, at present, in the face of a subpoena he may find himself powerless to discharge.

Of crucial importance also to the protection of confidentiality is a sensitivity on the part of the scientist to the limited purpose for which the research data were originally obtained. It is generally accepted that research data should not be published by the investigator with identities of the individual subjects attached to the data, and there is no reason why this same ethical sense of the confidentiality, or the privacy, of the data cannot be extended to other forms of publication. Thus, it should be part of the responsibility of the research scientist not to make this research data, in which individuals are identifiable, available to others, whether such others be personnel directors, private detectives, police officers, journalists, government agents, or even other scientists.

Assuredly, one can visualize situations in which the release of research data for a use not initially contemplated would, because of the great public interest involved, be socially tolerable. But, just as certainly, it is possible to visualize situations in which it clearly would not. In the latter category, for example, obviously falls the sale of personal information to commercial organizations for subscription or mailing lists.

In determining the proper limits to be placed on the availability of research data, a workable proposition may well be to confine such data to the particular research purpose for which permission was initially obtained, or to a reasonably equivalent purpose. At the least, such a proposition might be accepted as an operative rule in the absence of persuasive considerations to the contrary. Of course, it must be recognized that as an individual may consent to an initial privacy invasion, so may he waive a limitation of that consent to the original research purpose. Care must, however, be taken in such instances not to imply a waiver in situations where it may not have been intended.

As in other affairs, there is, unquestionably a happy mean between excessive privacy and indecent exposure in behavioral research. One way to begin to establish such a mean is for the behavioral scientists themselves to demonstrate, by codes of ethics and research standards, their own acute sensitivity and concern for the problem. Psychologists have made a start on an enforceable code of ethical standards directed primarily to the client relationship.⁶⁴ Other disciplines can learn from their example and all can extend such codes more broadly to behavioral research.

VIII. AN ETHICAL CODE

From the foregoing there emerges an outline of the contest between the values of privacy and those of behavioral research. The community is sensitive to

⁶¹ See generally 8 WIGMORE, EVIDENCE §§ 2332-41 (McNaughten rev. 1961).

⁶² See, e.g., *Hurlburt v. Hurlburt*, 128 N.Y. 420, 424, 28 N.E. 651, 652 (1891) (dictum). See also Louisell, *Confidentiality, Conformity and Confusion: Privileges in Federal Court Today*, 81 Tul. L. Rev. 101 (1956). See generally 8 WIGMORE, *op. cit. supra* note 61, §§ 2290-2320. It is unlikely that testimonial privilege will be judicially extended to situations that do not fully satisfy Dean Wigmore's four conditions for the existence of a privilege: (1) the privileged communication must originate in a confidence that it will not be disclosed, (2) the element of confidentiality must be essential to the relationship of the parties to the communication, (3) the relationship is one which is to be assiduously fostered, and (4) the injury that would inure to the relationship by disclosure of the communication must be greater than the benefit to be gained from its contribution to the disposition of the litigation. *Id.* § 2285.

⁶³ This, nevertheless, seems to be the situation in those eighteen states which accord the privilege only to licensed or registered psychologists. See Geiser & Rheingold, *Psychology and the Legal Process: Testimonial Privileged Communications*, 10 AMERICAN PSYCHOLOGIST 831 (1964).

⁶⁴ See *Ethical Standards of Psychologists*, 18 AMERICAN PSYCHOLOGIST 56 (1963).

both values. Our society will support, and indeed, will insist on, a decent accommodation between them. An accommodation which takes into account the ethical and legal obligations of the investigating scientist can be achieved without diminishing the effectiveness of the scientific inquiry. Scientists who are responsive to the claim of privacy will find themselves pressed to develop better and more rational research techniques. Their innate inventiveness can be expected to yield new and better research methods.

Not only will the behavioral scientists be inventive in accommodating the competing values of privacy and research, but in doing so they will be more sensitive to the complexities and nuances involved than either courts or legislatures. To be sure, however, judges and legislators do have a supportive role and can be expected to fill it either by correcting abuses or protecting the responsible investigator who operates in accordance with the ethical consensus of the community.

The supportive measures available to the law, several of which have already been mentioned, are numerous and varied. One is the extension of a privileged status to the confidential communication of private information to a behavioral scientist. Another is the provision of civil or criminal remedies for the breach of the right of privacy.⁶⁵ A third is to assess and define the contexts in which, or the conditions under which, the cost in privacy is either marginal or *de minimis*, or permissible, because outweighed by the positive gains perceived for society in particular research. A fourth measure is to preclude public officials or employees from disclosing confidential information acquired in the course of employment.⁶⁶ A fifth approach is to develop "disciplinary proceedings" to enforce the claim to privacy against public officials in some form of mandamus or contempt,⁶⁷ and against private professional persons through disbarment or loss of license. Still another possible supportive legal measure is to require registration for the possession of all privacy-invading devices.⁶⁸ The alternatives are clearly varied. It should be noted, however, that the existing legislative attempts to prohibit eavesdropping by use of devices have been uniformly defective. The current statutes are either inadequate in scope or indiscriminate in application, or both.

⁶⁵ Remedies for the breach of this right are already available in many states:

(a) See the list of states which recognize a common-law right of privacy in Prosser, *supra* note 14, at 386-89.

(b) Oregon and Maryland have statutes which make eavesdropping, without the consent of all persons being overheard, a crime. Neither accords any exemption for behavioral research. Thus, in Oregon, it is unlawful to obtain any part of a conversation by an eavesdropping device "if all participants in the conversation are not specifically informed that their conversation is being obtained." ORE. REV. STAT. § 165.540(1)(c) (1963). Violation of this Oregon statute is punishable by fine or imprisonment and renders the violator liable for damages in a civil suit. ORE. REV. STAT. §§ 30.780, 165.540(6) (1963). In Maryland it is unlawful to use any device "to overhear or record any part of the conversation or words spoken to or by any person in private conversation without the knowledge or consent, expressed or implied, of that other person." MD. ANN. CODE art. 27, § 125A(a) (Supp. 1964).

(c) See the statutes in five other states which make eavesdropping unlawful without the consent of a party to the conversation—again without an exemption for scientific research: CAL. PEN. CODE § 653; ILL. ANN. STAT. ch. 38, §§ 14-2, 14-4 (Smith-Hurd (1964)); MASS. GEN. LAWS ANN. ch. 272, § 9D (Supp. 1964); NEV. REV. STAT. § 200.650 (1957); N.Y. PEN. LAW § 738.

(d) See also the comparable but more limited statutes in six other states: ARK. STAT. ANN. § 41-1426 (1964) (loitering for purposes of invading privacy); GA. CODE ANN. § 26-2001 (1953) (peeping or similar acts tending to invade privacy); N.D. CENT. CODE § 12-42-05 (Supp. 1965) (using any mechanical or electronic device to overhear or record and to repeat with intent to vex or injure); OKLA. STAT. tit. 21, § 1202 (1941) (loitering with intent to overhear and repeat to vex or injure); S.C. CODE ANN. § 16-554 (1962) (peeping or similar acts tending to invade privacy); S.D. CODE, § 13.1425 (1939) (loitering with intent to overhear and repeat to vex or injure).

(e) See RESTATEMENT (SECOND), TORTS § 286 (1965), which reflects the judicial acceptance of such statutory standards as a basis for civil liability.

⁶⁶ See, e.g., Antitrust Civil Process Act § 4(c), 76 Stat. 550 (1962), 15 U.S.C. § 1313(c) (1964); N.Y. EDUC. LAW § 1007; N.Y. LAB. LAW § 587; N.Y. PEN. LAW § 702; N.Y. PUB. OFFICERS LAW § 74(b).

⁶⁷ The Swedish Ombudsman suggests another interesting possibility. See *A State Statute to Create the Office of Ombudsman*, 2 HARV. J. LEGIS. 213 (1965).

⁶⁸ Maryland, by House Bill 1197, approved by the Governor on April 8, 1965, added a new § 125D to Article 27 of its Annotated Code and thereby became the first state to require "every person possessing any eavesdropping and/or wiretapping device" to register such device with the State Police. Unless registered it is unlawful to manufacture or possess any such device. It will be interesting to see how vigorously and effectively this new statute is enforced. Will it be applied, for example, as it would seem to be intended, to the manufacturers of tape recorders or dictaphone? Or to the lawyers or scientists who use them?

A precondition for the development of a proper balance between the values of privacy, and those of behavioral research is the growth, among behavioral scientists themselves, of a heightened sense of their own confidential professional relationship with their informants. One of the best ways of articulating and developing this heightened sense of the confidential professional relationship is through the development and observance of codes of ethics in which the claim to privacy is recognized.

Codes of ethics for the several disciplines of scholarship and research are sound and sensible, and such codes should be general rather than specific, simple rather than complex. A workable code of ethics should be subject to expansion interpretation, and application in specific cases according to the distinctive character of the research situation.

In accord with this view, seven principles are suggested for inclusion in a general code of ethics for behavioral research:

One: There should be a recognition, and an affirmation, of the claim to private personality.

Two: There should be a positive commitment to respect private personality in the conduct of research.

Three: To the fullest extent possible, without prejudicing the validity of the research, the informed, and voluntary, consent of the respondents should be obtained.

Four: If consent is impossible without invalidating the research, then before the research is undertaken, the responsible officials of the institutions financing, administering and sponsoring the research should be satisfied that the social good in the proposed research outweighs the social value of the claim to privacy under the specific conditions of the proposed invasion. These officials in turn are responsible, and must be responsive, to the views of the larger community in which science and research must work.

Five: The identification of the individual respondent should be divorced as fully and as effectively as possible from the data furnished. Anonymity of the respondent to a behavioral research study, so far as possible, should be sought actively in the design and execution of the study as a fundamental characteristic of good research.

Six: The research data should be safeguarded in every feasible and reasonable way, and the identification of individual respondents with any portion of the data should be destroyed as soon as possible, consistent with the research objectives.

Seven: The research data obtained for one purpose should not thereafter be used for another without the consent of the individual involved or a clear and responsible assessment that the public interest in the newly proposed use of the data transcends any inherent privacy transgression.

Neither these seven suggested principles, nor any other set, will resolve, nor should be expected to resolve, the productive tension between the needs and advancement of science and the vibrant diversity of human personality. If it is correct, however, that there has been a growing imbalance in the relation of science and research to the values of privacy, then either the dignity, diversity and strength of the individual in our free democratic society will be diminished, or society will correct the balance. If the balance is to be corrected—as it will and must be—the lead should be taken by the scientific community through its own codes, its own attitudes, and its own behavior.

[Item VI.D.2]

VIOLENCE AND THE BRAIN, CHAPTERS 11 AND 12, DRs. VERNON MARK AND FRANK ERVIN (NEW YORK), pp. 146-161.

CHAPTER 11—THE RELATION OF THE DYSCONTROL SYNDROME TO VIOLENCE IN OUR SOCIETY

[In the state of nature] no arts, no letters, no society and, which is worst of all, continual fear and danger of violent death, and the life of man solitary, poor, nasty, brutish and short.—Thomas Hobbes.

The F.B.I. statistics on violence indicate that in 1968 there were over 14,000 murders, 31,000 rapes, and 288,000 cases of aggravated assault in the United

States. This represents a 10 to 15 per cent increase over 1967's figures. There were also an estimated million* cases of assault against infants and children, and 60,000 deaths and 3 million injuries caused by automobile accidents. We cannot pretend to say how much of this mayhem was committed by individuals with abnormalities of the brain, since we have no factual data on this matter one way or the other. What we can say, however, on the basis of both sociological and biological studies, is that seriously violent acts are likely to be carried out by individuals who have given at least some warning of trouble to come. There is considerable evidence to indicate that much of the violence is done by people who have poor impulse control, who have a previous history of violent acts, and who keep repeating their impulsive and violent behavior even when it is obviously in their own interest not to do so.

Whatever the underlying causes for this violence, the fact is that it does exist and its incidence is apparently rising. The best efforts of sociologists, educators, psychologists, social psychiatrists, and public officials along with millions of dollars worth of governmental aid have not been able to reverse this trend or diminish the amount of violence. The question thus arises: Can this violence ever be controlled by the kind of environmental manipulations now being used even if it were done well, or is some additional approach worth trying?

It is relatively easy to see that an environmental approach is not likely to have much effect on the cases we cited to illustrate the dyscontrol syndrome. Tony D. and Theresa L. were not only impulsively violent, they had difficulty in restraining their impulses in all other areas of their lives, too. Nor were they deterred by the knowledge or threat of punishment, because the mechanisms that keep most of us from immediately acting on our impulses were deficient or absent in them. Some of the prisoners we saw were similarly unable to control their behavior, no matter what the circumstances. A notorious and skillful bank robber who successfully eluded capture in three states was picked up while carrying \$300,000 because he had, on impulse, decided to steal a car and drive from Las Vegas to Reno. Another prisoner, who had robbed a large jewelry store and was driving away from the robbery, decided that he would jump the stop light at a busy intersection; he had the misfortune to run head on into a police car and subsequently found it difficult to explain what the burglar's tools, gun, and large assortment of valuable jewelry were doing on the front seat of his car. It is impossible with present methods to reeducate or to threaten such people into behaving rationally. They are too easily provoked by environmental stimuli, and too unable to control their inappropriate reactions.

Nonetheless, something must be done. The need for finding some way to curb violence and to identify abnormal and potentially violent individuals grows ever more acute as technological advances in bacteriology and chemistry make it more and more possible for a single abnormal person to kill great numbers of people.

The Texas tower tragedy in Austin, in which Charles Whitman shot 41 people, killing 17, and Richard Speck's murder of 8 nurses in Chicago, are examples of preventable public catastrophes. Weeks before committing his crime, Whitman told a psychiatrist of having "forced thoughts" about climbing the tower and killing many students with a rifle. And after he was killed, his post-mortem examination showed he had a brain cancer—the kind of cancer that could have been picked up on a routine isotope scan of the brain. Of course, Whitman's life might not have been saved as the cancer was highly malignant; but if he had been in the hospital under treatment, he certainly would not have been able to carry out his mass murders. Richard Speck, too, had symptoms of serious brain disease. Both he and Whitman had committed acts of senseless brutality before they murdered. If they had been identified as potentially violent men, and treated before it was too late—before they killed, instead of afterwards—they might have been stopped in time to save their victims' lives.

Oswald, the alleged assassin of President Kennedy, is another example of someone about whom eventual murders could have been predicted. He had a history of repeated episodes of uncontrolled impulsive assaultive behavior before he attempted to assassinate General Walker or kill Officer Tippitt. He

* This total is based on figures for 1965.

was involved in a number of street fights and tried to commit suicide by slashing his wrists when he was in Russia. In addition, he beat his wife unmercifully on a number of occasions. Their neighbors noticed that Marina's head, face, and neck were often severely bruised, and were afraid that one day he would kill her.

These well-publicized and socially important tragedies simply underscore the need for a program that will help us understand and prevent violence. The present methods—which depend upon changing only environmental factors—have proved inadequate; and, in persons whose violence is related to brain dysfunction, they will undoubtedly continue to be inadequate.

Even though sociological and environmental approaches to control violent behavior have failed to produce much in the way of constructive results, they should not be lightly dismissed, and we do not mean to downgrade the obvious importance of social or environmental influences on the brain and behavior. Workers in the field of sociology, criminology, and social anthropology have produced an extensive literature on the subject of human violence. Without covering this field in any detail, we will mention and describe several of the theories that have been formulated to explain the causes of human violence.

One of these is the culture-conflict hypothesis of Thorsten Sellen. This conflict has been described as the natural outgrowth of the process of social differentiation, which, in turn, produces an infinity of social groupings, each with its own definitions of like situations, its own interpretations of social relations, and its own ignorance or misunderstanding of the social values of other groups. Sellen and his followers have suggested that the transformation of a culture from a well-integrated, homogeneous one to a disintegrated type is accompanied by an increase in conflict situations. If this theory had universal applicability, an extremely homogeneous society would be a peaceful one, but the example of Hitlerian Germany suggests that the concept must have exceptions. That country was both homogeneous and well-integrated and yet was infamous for mass murder and brutality.

Some scientists have developed useful models of violent behavior on the basis of individual and group frustrations, with subsequent aggressive behavior. While it is certainly true that frustrating environmental situations play a genuine role in generating violent behavior, individuals vary greatly in their tolerance to frustrating situations. Furthermore, the relation of frustration to violence, in any given individual, is by no means constant. Clearly, we would emphasize the role of the individual's threshold for violent action in defining the outcome of the frustration experience. The applicability of this model to group behavior is another matter.

Cloward and Ohlin, as well as Wolfgang and Ferracuti contend that the form of social violence is determined by a subcultural nominative system. They suggest that a predisposition to violence is transmitted by child-raising practices and peer group relationships in certain segments of the population; their focus is on the urban male in lower socioeconomic groups. While differing subculture norms for acceptable expressions of emotion account for much diversity in our pluralistic society, we would predict that within a given subculture, those individuals most likely to commit personal violence, are those with poor impulse control of the kind we have described.

Yablonsky and others have studied the violent behavior of juvenile urban gangs. In some ways these gangs epitomize certain urban subcultures, but it is difficult to estimate the contribution of juvenile gangs to the total picture of violent behavior. For example, in 1963, there were 1,131 gang incidents in New York City (as recorded by Chwast and Sellen). However, these many incidents, each involving a number of participants, resulted in the slaying of "only" 12 people. While the slaying of anyone is a great tragedy, it is difficult to accept this phenomenon as a major source of homicide in New York City.

Recently the subculture theories have been criticized by Erdleman. He states:

"Research and theory which assume that the subculture of the poor generates violent behavior reflect on the subculture bias of the behavioral scientist who is developing the theory. The middle-class-oriented behavioral scientist abhors racial theories. As a result, he generally tends to shun theories based on physiology. Having convinced himself that he has successfully removed all vestiges of racism from his formulations, the theorist retains his prejudices, imputing characteristics to a population he does not fully understand while denying that

these characteristics exist within his own group. Some criminologists are coming to the conclusion that the case for subcultural violence is overstated." (From *Violence in the Streets* edited by Shalom Endleman. Copyright © 1968 by Shalom Endleman.)

One might summarize the sociological approaches by saying that social disintegration, frustrations and aggressions, and the subcultural norms of violence all play a part in generating violent behavior. There seems, however, to be no general agreement among sociologists or cultural anthropologists on the relative importance of these mechanisms; nor have these theories led, as yet, to definitive programs which have reduced the incidence of the violent behavior in our society.

Frederick Wertham among others has emphasized the role of mass media and particularly television in changing the climate of public opinion and the level of general acceptance of violent behavior. This is an appealing hypothesis, but it is difficult to get objective evidence or to devise experimental situations that give a convincing formulation of the effect of mass media on human behavior. Bandura and his associates have studied the effect of aggressive models (movies and cartoons of violence) on 48 boys and 48 girls enrolled in the Stanford University Nursery School. They found that a significant percentage of their subject would copy what they had seen if the tools were available in applying "aggression" to inanimate objects. The experiment still left unanswered the question as to whether these subjects would have engaged in personal violence had they had the opportunity to do so.

Studies are being undertaken which should contribute to answering this question. Clearly the thousands of hours of exposure to television experienced by the average maturing brain must be reflected in its final structure. However, if television were the principle determinant of violence it would be difficult to explain the disparity in the aggravated assault rates (almost 8 to 1) when one compares Boston and Montreal, as these cities are both saturated with the same television programs. This does not mean that a relationship between television violence and actual violence does not exist; it simply means that we cannot define it at the present time.

The obvious importance and social significance of group violence is hampered by the difficulties in critically analyzing this phenomenon. Wars are the most devastating sort of group violence, since they produce the greatest number of deaths, injuries, and most widespread destruction of property. In an army of national conscripts, chosen by the lottery method, focal brain disease probably poses a minor problem *except in those individuals who lose control of themselves* under the stress of battle and kill their own comrades or innocent civilians.

Revolutions, revolts, and riots provide an interesting borderline area of study. The anatomy of the urban riot has been lucidly dissected by John Spiegel, while Ohlin has thoroughly studied the phenomenon of prison riots.

One of the outstanding features of the widespread urban riots that have recently swept through the United States is the relatively small amount of personal violence committed compared to the large number of people taking part in the riot. In the Watts community of 330,000 people, there were about 10,000 rioters; 37 people were killed, and 118 were wounded by gun fire. Many of these people were killed by police and National Guard troops and some were killed when they were unwittingly left behind in burning buildings. It is our opinion that the riot atmosphere represents a powerful environmental influence on all those people taking part in the riot. The fact that so few people were killed or injured in these riots makes us believe that unusually strong control mechanisms were operating both in the individual rioters and in the police and National Guard troops who sought to keep the riot under control. It would be particularly interesting under these circumstances to examine in detail those individuals who did cause serious injury or death—be they rioters or members of the police and National Guard.

It is important to keep in mind that each individual taking part in a riot has a unique life experience stored in his brain. Furthermore, each individual receives unique visual, auditory, cutaneous, olfactory, and gustatory cues which are transmitted to his brain for the integration and synthesis that result in the vocalizations and muscular movements of human behavior. This is not to deny the tremendous homogenizing influence that a group has on any individual taking part in group activity. Nevertheless, each individual is re-

sponsible for his own behavior; that this behavior may blend perfectly into the group activity is a tribute to the flexibility and adaptability of the central nervous system. It does not mean that an individual's brain has ceased to function, nor does it mean that his individual behavior can be ignored.

The increase in both group and individual domestic violence has brought two kinds of responses from an afflicted society. One approach concentrates on the "rigid enforcement of law and order." This phrase has often been a euphemism for the suppression of public demonstrations and protests. It brings with it the specter of an authoritarian police state. The other approach to the control of violence calls for the dissolution of the slums, the abolition of poverty, and the correction of social injustices—all vitally necessary goals. Up to this time neither of these approaches in their piecemeal application has resulted in an effective reduction of violent behavior. But both of these approaches have one thing in common: they ignore the individual and his brain.

Finally, we should like to emphasize that—in spite of our apparent criticism of our sociologically oriented colleagues—we realize that these professionals are working in a difficult and complex field. However, they should not have to labor alone. With new technological skills and equipment, the brain scientists and clinicians can give them some significant help. Together the two disciplines can shoulder the public burden that violence causes.

REFERENCES

- Altman, J., and Ziporyn, M. C. *Born to Raise Hell*. New York, Grove Press, 1967.
- Bandura, A., Ross, D., and Ross, S. A. Imitation of film-mediated aggressive models. *J. Abnorm. Soc. Psychol.* 66:3-11, 1963.
- Carthy, J. D., and Ebling, F. J. (eds.). *The Natural History of Aggression*, New York, Academic Press, 1964.
- Cloward, R. A. "Social Control in the Prisons." In: *Theoretical Studies of the Social Organization of the Prison*, Bulletin #15, March 1960.
- Cloward, R. A., and Ohlin, L. E. *Delinquency and Opportunity*. Glencoe, Ill., The Free Press, 1960.
- Cohen, J., and Murphy, W. S. *Burn, Baby, Burn*. New York, Avon Books, 1966.
- Endleman, S. (ed.). *Violence in the Streets, Chicago*, Quadrangle Books, 1968.
- Ford, G. R., and Stiles, J. R. *Portrait of an Assassin*. New York, Ballentine Books, 1965.
- Gibbs, F. A., Bagchi, F. A., Bloomberg, W. EEG study of criminals. *Amer. J. Psychiat.* 109:294-298, 1945.
- Glueck, S., and Glueck, E. *Predicting Delinquency and Crime*. Cambridge, Mass., Harvard Univ. Press, 1950.
- Goldensohn, E. S. EEG and Ictal and Postictal Behavior. In: *EEG and Behavior* (G. H. Glaser, ed.). New York, Basic Books, pp. 293-314, 1963.
- Graham, H. D., and Gurr, T. R. *Violence in America: Historical and Comparative Perspectives*. New York, Bantam Books, 1969.
- Helfer, R. E., and Kempe, C. H. (eds.). *The Battered Child*. Chicago Univ. of Chicago Press, 1968.
- Johnson, N., Savitz, L. and Wolfgang, M. E. (ed.). *The Sociology of Punishment and Correction*. New York, Wiley, 1962.
- Levy, S., and Kennard, M. A. Study of electroencephalogram as related to personality structure in group of inmates of state penitentiary. *Amer. J. Psychiat.* 109:832, 1953.
- Mark, V. H., and Ervin, F. R. Is there a need to evaluate the individuals producing human violence? *Psychiatry, Opinion* 5:32-34, 1968.
- Mark, V. H., Ervin, F. R., Sweet, W. H., Solomon, P., and Geschwind, N. "Brain Disease and Violent Behavior." In: *Neuro-ophthalmology*, vol. IV. St. Louis, Mosby, pp. 282-287, 1968.
- Mark, V. H., Ervin, F. R., Geschwind, N., Solomon, P., and Sweet, W. H. The neurology of behavior: its application to human violence. *Med. Opin. Rev.* 4:20-31, 1968.
- Masotti, L. H., and Corsi, J. R. *Shoot-out in Cleveland: Black Militants and the Police*. July 23, 1968. New York, Bantam Books, 1969.
- Menninger, K. *The Crime of Punishment*. New York, Viking Press, 1969.
- Silverman, D. EEG and criminals. *Arch. Neurol. Psychiat.* 52:38-42, 1944.

- Small, J. G. The organic dimension of crime. *Arch. Gen. Psychiat.* 15:82-80, 1966.
- Spiegel, J. P. Race relations and violence—a social psychiatric perspective. Presented before the Association for Research in Nervous and Mental Diseases, New York, Dec. 1, 1967.
- Spiegel, J. P. Psychosocial factors in riots—old and new. *Amer. J. Psychiat.* 125:281-285, 1968.
- Spiegel, J. P. The tradition of violence in our society. *Washington Star*, Oct. 13, 1968.
- Spiegel, J. P. "The Social and Psychological Dynamics of Militant Negro Activism: A preliminary Report." In: *The Dynamics of Dissent*, vol. XIII. J. H. Masserman, (ed.). New York, Grune & Stratton, pp. 136-157, 1968.
- Stafford-Clark, D. and Taylor, F. H. Clinical and electroencephalographic studies of prisoners charged with murder. *J. Neurol. Neurosurg. Psychiat.* 12: 325-330, 1949.
- Sweet, W. H. (Member of Gov. Connally's Blue Ribbon Committee). On the Whitman case. Personal communication to the authors, 1968.
- Walker, D. *Rights in Conflict: "The Chicago Police Riot."* New York, The New American Library, 1968.
- Wertham, F. *A Sign for Cain*. New York, Macmillan, 1966.
- Wertham, F. *The Show of Violence*. New York, Doubleday, 1949.
- Winkler, G. E., and Kove, S. S. Implications of electroencephalographic abnormalities in homicide cases. *Neuropsychiat.* 3:322-330, 1962.
- Wolfgang, M. E. *Patterns in Criminal Homicide*. Philadelphia, Univ. of Pennsylvania Press, 1958.
- Wolfgang, M. E. and Ferracuti, F. *The Subculture of Violence*. London, Tavistock, 1967.
- Wolfgang, M. E. (ed.). *Studies in Homicide*. New York, Harper & Row, 1967.
- World Almanac*, 1969.
- Yablonsky, L. The violent gang. *Commentary*, 30:125-130, 1966.

CHAPTER 12—VIOLENCE PREVENTION

I established law and justice in the land.—The Code of Hammurabi

Chiefs, who no more in bloody fights engage.—Homer, Iliad, Book III.

Happy be he who could learn the causes of things and who put beneath his feet all fears.—Virgil, Georgics, I, Line 490

The problem that modern biological and social scientists have in trying to deal with violence is much like the problem that 19th century neurologist and psychiatrists had with "insanity"—learning enough about its causes and natural history to be able to assess individual cases and treat each patient properly. In the 19th century the insane asylums were full of people lumped together as "crazy," but who in reality had many different diseases. Some actually had pellagra. Once doctors could recognize vitamin deficiencies, and know how to prevent and treat them, people no longer developed pellagra-related symptoms of mental illness. Others were suffering from the late stages of syphilis, and still others from undiscovered brain tumors; both conditions became accessible to diagnosis and treatment, thereby shrinking the "crazy" category still further. In short, the more psychiatrists and neurologists learned about the various causes of "insanity," the more effectively were they able to differentiate between mental conditions that appeared to be the same, but, because they had different causes, required very different methods of treatment.

We are in the same state today vis-à-vis violence: we need to find out more about the condition and learn how to sort out its different causes, so that we can decide which are the most important biological and/or social factors in each individual case, and then treat each patient appropriately.

In our view, the best way to go about gathering the information we so desperately need about violence is to start with a sociobiological study of violent persons. This study must be aimed at (1) establishing the physical and social causes for such behavior; (2) developing reliable early-warning tests for violence; (3) assessing presently available methods of treatment, including medical and surgical techniques, as well as behavioral therapies; and (4) establish-

ing community facilities to help violent persons—facilities that also might be used for medical and sociological studies.

This kind of study is a big job and we face it with inadequate tools. The tool we need the most is a satisfactory method of predicting a given individual's threshold for violent acts. That is, we should develop tests for limbic brain function and dysfunction. This development, in turn, will be dependent upon thorough-going investigations of violent individuals who are known to have disease of the limbic brain.

Two kinds of facilities are necessary for any such investigation. One is a place to house the individuals being studied; the other is a medical center staffed with specialists in the field of neurology, psychiatry, neurosurgery, psychology, and genetics. Of necessity, these two institutions should coexist—as they do *not* today—and be set up so that the safety of the community is not jeopardized by the violent patients. This means a building with a particular kind of physical construction, and a staff of physicians, nurses, and attendants who are capable of dealing with the violent behavior of the inmates. Hopefully, this structure would abut or be on the campus of a major university medical center, as this kind of institution is the only one likely to have either specialists and/or physical facilities to carry out complex brain examinations.

The team that studies violent individuals should include not only brain scientists and clinicians, but also social scientists, criminologists, legal experts, cytogeneticists, and specialists in public health. The studies, to be made on each person with a history of violence, should include:

1. A thorough psychiatric examination
2. A complete social history
3. An exacting neurological and general medical examination
4. The appropriate laboratory examinations—including the multiple recording of brain waves, x-ray examination of the head, visual field examinations, special hearing tests, and (if indicated) isotopic brain scans and special x-ray films of the brain itself.

5. Psychological examinations, which should include not only the use of techniques for personality assessment but also special tests for brain damage

6. A genetic evaluation, which should include chromosomal analysis, anthropometric measurements (such as fingerprints), an assay of reproductive function, an electrocardiogram, a test of intellectual performance, and a thorough investigation of the family history for instances of mental illness or impairment, infertility or fetal loss, congenital deformities, tumors, and autoimmune disease.

Only time will tell which of these tests will be most valuable in predicting or diagnosing the thresholds for individual violence.

Ideally, this kind of study would be made on two groups: individuals self-referred to the general hospital because of inability to control destructive impulses; and individuals who appear before the courts who have committed violent antisocial acts. After a statistically significant number of individuals in each of these groups has been examined, the data could be compared either to a control group of the brothers and sisters of the hospitalized individuals, or to a control group of other hospital patients admitted for routine matters and matched for age, sex, religion, and socioeconomic factors.

Even more important than applying conventional statistical methods would be quantitatively assessing the concurrence of the various abnormal factors discovered from the group of patients with episodic violence. It would be necessary to isolate a small population, perhaps 10 to 20 individuals in each group, with a concentration of chromosomal, electrophysiological, psychological, and neurological abnormalities. The testing or development of additional methods of measurement could be done on these smaller samples, and it might even be possible to explore the interaction of the various pertinent variables in producing the violent act.

We have already suggested in Chapter 7 the lines of investigation to be pursued in individuals with both temporal lobe epilepsy and uncontrollable violent behavior. These particular individuals, with implanted brain electrodes, offer an unusual opportunity to assess abnormalities in limbic brain function, and also represent the best chance we have to find out how to detect these abnormalities. We might, for instance, find out if changes in the brain's electrical activity could be correlated with changes in plasma or urine hormone levels; or if there might be a valid correlation with psychological test scores. It is possi-

ble that an as yet unperceived relationship might emerge from such studies that would give us a simple test to help predict accurately whether a given person has a dangerously low threshold for impulsive violence.

If detecting a potentially violent individual is the first order of business for meaningful investigation, the second is to improve our treatment methods. This could well start with a reevaluation of the kinds of psychotherapy given to violent patients. As certain forms of conditioning (i.e., conditional reflex therapy—à la Pavlov) have been shown to improve or alleviate special kinds of temporal lobe epilepsy, applications of improved techniques in behavior therapy might have important consequences for the psychotherapeutic treatment of impulse disorders.

The recent pharmacologic advances in anticonvulsants and tranquilizers presage not the end but the beginning of a psychopharmacological revolution. Many new and important chemical agents and drugs will be added to our armamentarium for the treatment of impulsive and violent behavior. But even with these new psychotherapeutic and medicinal tools, some people with brain disease may still require surgical treatment for the control of violence. How can we improve our surgical operations? By making smaller and more precise lesions within the brain? By using electrical stimulation as we did with Thomas R. instead of making destructive brain lesions? Perhaps a prolonged therapeutic effect can be obtained by the introduction of chemical agents into focal areas of the brain to produce chronic chemical stimulation over a long period of time.

We have described our hopes for the newer techniques in the diagnosis and treatment of violent patients. All these matters, however, are tasks for clinicians and investigators who are primarily interested in individuals rather than in groups. It is beyond the scope of this book and, in fact, our competence, to tell specialists in group behavior how to study and influence the prevailing moods in our society that make up the framework of social interaction. But we should like to point out that as long as senseless killings and brutality are acceptable events in our cities, on our highways, and in our foreign relations, then identifying any violent individual as unique will continue to be very difficult indeed. How, in fact, can society even define what is "abnormal" under these circumstances? Only when our society—through its educational, religious, family, and governmental structures—clearly defines and uniformly reacts to violence as being unacceptable, will we be able to approach the situation in a truly rational way.

The definition of "unacceptable violence" is, of course, a major stumbling block. What is "unacceptable violence"? The "law and order" faction of our society might define any liberal group protest as falling into this category, while protesting groups might label any action of police against demonstrators as "police brutality"—a clear-cut case of "unacceptable violence." Some minority groups have gone even further and, having identified the deprivation of civil rights as a form of violence, have equated this term with physical violence, and justified physically violent retaliation.

Obviously any definition of unacceptable violence, no matter how carefully articulated, is going to be responsive to the judgment of the people participating in or observing a given violent action. But we would agree with Harvard's professor of humanities, Howard Mumford Jones, who states in his monograph (*Violence and Reason*): "the celebration of violence either as an end in itself or as a short-cut to political or social change can only end, unless all history is in error, in the disruption of order and culture."

We would define "acceptable violence" as the controlled minimum necessary action to prevent personal physical injury or wanton destruction of property. This definition would apply equally to police or public authorities as well as to politically activist groups (students, racial, etc.), and all violent acts that did not fit into this category would be "unacceptable." We use our definition as an example rather than as dogma. There might be better definitions that could be more readily applied. The important thing, however, is for such a definition to be formulated, publicized, and accepted, for this is a first step in the orderly and systematic process that must be used in our society if we are to find a method of recognizing potentially violent individuals with a malfunctioning brain.

The human species now dominates the earth. Our greatest danger no longer comes from famine or communicable diseases. Our greatest danger lies in our

selves and in our violent fellow humans. In order to reverse the trend of human violence, we must set certain basic standards of behavior (e.g., "golden rule" or "Ten Commandments") that any individual with a normal brain can follow. In addition, we need to find some way to detect those individuals with brain abnormalities who are unlikely to be able to follow those standards. In other words, we need to develop an "early warning test" of limbic brain function to detect those humans who have a low threshold for impulsive violence, and we need better and more effective methods of treating them once we have found out who they are. Violence is a public health problem, and the major thrust of any program dealing with violence must be toward its prevention—a goal that will make a better and safer world for us all.

REFERENCES

- Calder, N. (ed.) *Unless Peace Comes: A Scientific Forecast of New Weapons*. New York, Viking Press, 1968.
- Delgado, J. M. R. Action of hormones upon brain excitability. *10. 20th Int. Physiol. Congr.* No. 469, 1956.
- Delgado, J. M. R. "Pharmacological Modifications of Social Behavior." In: *Pharmacological Analysis of Central Nervous Action* (W. D. M. Paton, ed.). Oxford: Pergamon Press, pp. 265-292, 1962.
- Delgado, J. M. R. Intracerebral chemo-stimulation in unanesthetized monkeys (Abst.). *Fed. Proc.* 22:515, 1963.
- Folkman, J., and Mark, V. H. Diffusion of anesthetic and other drugs through silicone rubber: Therapeutic implications. *Trans. NY Acad. Sci.* 30:1187-1195, 1968.
- Folkman, J., Mark, V. H., Ervin, F. R., Suematsu, K., and Hagiyara, R. Intracerebral gas anesthesia by diffusion through silicon rubber. *Anesthesiology* 20:419-425, 1968.
- Freedman, D. X., and Giarman, N. J. "Brain Amines, Electrical Activity, and Behavior." In: *EEG and Behavior* (G. H. Glaser, ed.). New York, Basic Books, pp. 198-243, 1963.
- Hanai, T., and Delgado, J. M. R. Microinjections of drugs within the brain of awake monkeys (Abst.). *XXIII Int. Congr. Physiol. Sci.* Tokyo, Sept., 1965.
- Huber, G. Die Bedeutung der Neuroradiologie für die Psychiatrie. *Fortsch. Med.* 81:705-709, 1963.
- Jones, H. M. *Violence and Reason: A Book of Essays*. New York, Atheneum, 1969.
- Kahn, M. W. Correlates of Rorschach reality adherence in the assessment of murderers who plead insanity. *J. Project. Techn.* 31:44-47, 1967.
- Lion, J. R., and Thornton, R. The violent patient: Social and vocational aspects of treatment. Unpublished data.
- Mark, V. H., Folkman, J., Ervin, F. R., and Sweet, W. H. Focal brain suppression by means of a silicone rubber chemode. *J. Neurosurg.* 30:195-199, 1969.

[Item VI.D.3]

THE USE OF ELECTRONICS IN THE OBSERVATION AND CONTROL OF HUMAN BEHAVIOR AND ITS POSSIBLE USE IN REHABILITATION AND PAROLE

Barton L. Ingraham* and Gerald W. Smith**—*Issues in Criminology*, Vol. 7, No. 2 (1972), pp. 35-53

I. INTRODUCTION

In the very near future, a computer technology will make possible alternatives to imprisonment. The development of systems for telemetering informa-

* Barton L. Ingraham received his A.B. degree from Harvard University in 1952, and a Dr. Criminology degree from the School of Criminology, University of California in 1972. He is presently a professor at the Institute of Criminal Justice and Criminology, University of Maryland.

** Gerald W. Smith received his B.A. and M.A. degrees from the University of Louisville, Kentucky and his Dr. Criminology degree from the School of Criminology, University of California in 1969. Dr. Smith is presently a professor in the Department of Sociology at the University of Utah.

tion from sensors implanted in or on the body will soon make possible the observation and control of human behavior without actual physical contact. Through such telemetric devices, it will be possible to maintain twenty-four hour-a-day surveillance over the subject and to intervene electronically or physically to influence and control selected behavior. It will thus be possible to exercise control over human behavior and from a distance without physical contact. The possible implications for criminology and corrections of such telemetric systems is tremendously significant.

The purpose of this paper is: (1) to describe developments during the last decade in the field of telemetry and electrophysiology as they relate to the control of human behavior; (2) to dispel, if possible, some of the exaggerated notions prevalent amongst legal and philosophical Cassandras as to the extent of the power and range of these techniques in controlling human behavior and thought; (3) to discuss some applications of these techniques to problem areas in penology and to show how they can make a useful contribution, with a net gain, to the values of individual freedom and privacy; and (4) to examine critically "ethical reservations" which might impede both valuable research in these areas and the application of their results to solving the problem of crime control.

II. ELECTRONIC TECHNIQUES FOR OBSERVING AND CONTROLLING BEHAVIOR IN HUMANS

A telemetric system consists of small electronic devices attached to a subject that transmit via radio waves information regarding the location and physiological state of the wearer. A telemetry system provides a method whereby phenomena may be measured or controlled at a distance from where they occur—i.e., remotely (Grisamore, 1965). The great benefit derived from the use of such systems in studying animals (including man) lies in the ability to get data from a heretofore inaccessible environment, thus avoiding the experimental artifacts which arise in a laboratory setting (Slater, 1965; Schwitzgebel, 1967b). It also provides long-range, day-to-day, continuous observation and control of the monitored subject, since the data can be fed into a computer which can act as both an observer and a controller (Konecni, 1965a).

Telemetry has been put to many and diverse uses. In aerospace biology, both man and animal have been telemetered for respiration, body temperature, blood pressure, heart rate (ECG's), brain waves (EEG's) and other physiological data (Konecni, 1965b; Slater, 1965; Barr, 1960). Telemetric devices have been placed on and in birds, animals and fish of all kinds to learn about such things as migration patterns, hibernation and spawning locations, respiration rates, brain wave activity, body temperatures, etc. (Slater, 1965; Lord, 1962; Sperry, 1961; Mackay, 1961; Young, 1964; Epstein, 1968). Telemetry has also been used in medicine to obtain the EEG patterns of epileptics during seizures, and to monitor heart rhythms and respiration rates in humans, for purposes of diagnosis and rescue in times of emergency (Slater, 1965; Caceres, 1965). The technology has proceeded so far that one expert in the field remarked (Mackay, 1965):

"It appears that almost any signal for which there is a sensor can be transmitted from almost any species. Problems of size, life, and accuracy have been overcome in most cases. Thus, the future possibilities are limited only by the imagination."

Telemetric systems can be classified into two types of devices—"external devices" and "internal devices."

External devices.—For the past several years, Schwitzgebel (1967a, b; Note: *Harvard Law Review*, 1966) at Harvard has been experimenting with a small, portable transmitter, called a Behavior Transmitter-Reinforcer (BT-R), which is small enough to be carried on a belt and which permits tracking of the wearer's location, transmitting information about his activities and communicating with him (by tone signals). The tracking device consists of two containers, each about the size of a thick paperback book, one of which contains batteries and the other, a transmitter that automatically emits radio signals, coded differently for each transmitter so that many of them may be used on one frequency band. With a transmitting range of approximately a quarter of a mile under adverse city conditions and a receiving range of two miles, the BT-R signals are picked up by receivers at a laboratory base station and fed into a modified missile-tracking device which graphs the wearer's location and

displays it on a screen. The device can also be connected with a sensor resembling a wristwatch which transmits the wearer's pulse rate. In addition, the wearer can send signals to the receiving station by pressing a button, and the receiver can send a return signal to the wearer.

At present, the primary purpose of the device is to facilitate medical and therapeutic aid to patients, i.e., to effectuate the quick location and rescue of persons subject to emergency medical conditions that preclude their calling for help, such as cases of acute cardiac infarction, epilepsy or diabetes (Schwitzgebel, 1967a). Also, so far, the use of the device has been limited to volunteers, and they are free to remove the device whenever they wish (Schwitzgebel, 1967b). Schwitzgebel has expressed an interest in applying his device to monitoring and rehabilitating chronic recidivists on parole.

At the University of California, Los Angeles, Ralph Schwitzgebel's brother, Robert Schwitzgebel, has perfected a somewhat similar device in which a miniature two-way radio unit, encased in a wide leather belt containing its own antenna and rechargeable batteries, is worn by volunteer experimental subjects (R. Schwitzgebel, 1969). Non-voice communication is maintained between a central communications station and the wearer by means of a radio signal which, when sent, activates a small coil in the wearer's receiver unit that makes itself felt as a tap in the abdominal region, accompanied by a barely audible tone and a small light. Information is conveyed to the subject by a coded sequence of taps. In turn, the wearer can send simple coded signal messages back to the central station, indicating his receipt of the signal, his general state of well being, or the lack of it, and many other matters as well. So far, this device and its use depend entirely upon a relationship of cooperation and trust between experimenter and subject.

Another use of radiotelemetry on humans which has reached a high level of sophistication is the long-distance monitoring of ECG (electro-cardiogram) waves by Caceres (1965) and his associates (Cooper, 1965; Hagan, 1965). They have developed a telemetry system by which an ambulatory heart patient can be monitored continuously by a central computer in another city. The patient has the usual electrocardiograph leads taped to his chest, which are connected to a small battery powered FM radio transmitter on the patient's belt. The ECG waves are transmitted, as modulated radio frequencies, to a transceiver in the vicinity which relays them via an ordinary telephone (encased in an automated dialing device called a Dataphone). The encoded signals of the ECG can then be transmitted to any place in the world which can be reached by telephone. On the receiving end, there is an automatic answering device that accepts the call and turns on the appropriate receiving equipment. In the usual case this will be an analog-to-digital converter, which quantizes the electrical waves and changes them to a series of numbers, representing amplitudes at certain precise times. The computer then analyzes the numerical amplitude values and, when an abnormal pattern appears, it not only warns the patient's physician (with a bell or light) but will produce, on request, some or all of the previous readings it has stored. The computer can monitor hundreds of patients simultaneously by sharing computer time among hundreds of input signals, and produce an "analysis" of ECG activity for each in as little as 2.5 minutes—the time required for the signal to get into the computer's analytical circuits. Although this "analysis" does not yet amount to a diagnosis of heart disease or the onset of an attack, there is no reason why computers could not be taught to read ECG patterns as well as any heart specialist, and with their ability to make stochastic analyses, in time they should become better at it than most doctors.

The third area where external telemetry has been used to advantage is also in the medical field. For several years, Vreeland and Yeager (1965) have been using a subminiature radiotelemeter for taking EEG's of epileptic children. The device is glued to the child's scalp with a special preparation and electrodes extend from it to various places on the child's scalp. A receiver is positioned in an adjoining room of the hospital and sound motion pictures record the child's behavior, his voice and his EEG on the same film. Some of the benefits derived from the use of this equipment are: (1) that it permits readings to be taken of an epileptic seizure as it occurs; and (2) it allows studies to be made of EEG patterns of disturbed children without encumbering them in trailing wires. At present, however, the device is "external" in the sense that the electrodes do not penetrate into the brain, and only surface cortical brain

wave patterns are picked up by the transmitter. It is believed, however, that many epileptic seizures originate in areas deep in the subcortical regions of the brain (Walker, 1961), and to obtain EEG readings for these areas, it would be necessary to implant the electrodes in these areas stereotaxically. The significance of such a modification would be that if the transmitter were transformed into a transceiver (a minor modification), it would then be possible to stimulate the same subcortical areas telemetrically. This would, then, convert the telemetry system into an "internal" device, such as the ones we are now about to describe.

Internal devices.—One of the leaders in the field of internal radio-telemetry devices is Mackay (1961). He has developed devices which he calls "endoradiosondes." These are tiny transmitters that can be swallowed or implanted internally in man or animal. They have been designed in order to measure and transmit such physiological variables as gastrointestinal pressure, blood pressure, body temperature, bioelectrical potentials (voltage accompanying the functioning of the brain, the heart and other muscles), oxygen levels, acidity and radiation intensity (Mackay, 1965). In fact, in many cases for the purposes of biomedical and physiological research, internal telemetry is the only way of obtaining the desired data. In the case where the body functions do not emit electrical energy (as the brain, heart and other neuromuscular structures do), these devices have been ingeniously modified in order to measure changes in pressure, acidity, etc., and to transmit electrical signals reflecting these changes to receivers outside the body. In this case the transmitters are called "transducers." Both "active" and "passive" transmitters have been developed, "active" transmitters containing a battery powering an oscillator, and "passive" transmitters not containing an internal power source, but having instead tuned circuits modulated from an outside power source. Although "passive" systems enjoy the advantage of not being concerned with power failure or battery replacement, they do not put out as good a signal as an "active" system. Both transmitter systems, at present, have ranges of a few feet to a dozen—just enough to bring out the signal from inside the body (Mackay, 1965). Thus, it is generally necessary for the subject to carry a small booster transmitter in order to receive the weak signal from inside the body and increase its strength for rebroadcasting to a remote laboratory or data collection point. However, with the development of integrated circuits, both transmitters and boosters can be miniaturized to a fantastic degree.

Electrical Stimulation of the Brain.—The technique employed in electrophysiology in studying the brain of animals and man by stimulating its different areas electrically is nothing new. This technique was being used by two European physiologists, Fritsch and Hitzig, on dogs in the latter half of the 19th Century (Sheer, 1961; Krech, 1966). In fact, much of the early work in experimental psychology was devoted to physiological studies of the human nervous system. During the last twenty years, however—perhaps as a result of equipment which allows the implantation of electrodes deep in the subcortical regions of the brain and the brain stem by stereotaxic instruments—the science of electrophysiology has received new impetus, and our understanding of neural activity within the brain and its behavioral and experiential correlates has been greatly expanded.

The electrical stimulation of various areas of the brain has produced a wide range of phenomena in animals and humans. An examination of published research in electrical stimulation of the brain suggests two crude methods of controlling human behavior: (1) by "blocking" of the response, through the production of fear, anxiety, disorientation, loss of memory and purpose, and even, if need be, by loss of consciousness; and (2) through conditioning behavior by the manipulation of rewarding and aversive stimuli (Jones, 1965). In this regard, the experiments of James Olds (1962; 1967) on animals and Robert G. Heath (1966) and his associates at Tulane on humans are particularly interesting. Both have shown the existence in animals and humans of brain areas of or near the hypothalamus which have what may be very loosely described as "rewarding" and "aversive" effects. The interesting thing about their experiments is that both animals and man will self-stimulate themselves at a tremendous rate in order to receive stimulation "rewards" regardless of, and sometimes in spite of, the existence of drives such as hunger and thirst. Moreover, their experiments have put a serious dent in the "drive-reduction" theory of operant conditioning under which a response eliciting a reward

ceases or declines when a point of satiation is reached, since in their experiments no satiation point seems ever to be reached (the subject losing consciousness from physical exhaustion unless the stimulus is terminated beforehand by the experimenter). Thus their experiments indicate that there may be "pleasure centers" in the brain which are capable of producing hedonistic responses which are independent of drive reduction. In humans, however, the results of hypothalamus stimulation have not always been as clear as those with animals, and some experimenters have produced confusing and inconsistent results (King, 1961; Sem-Jacobsen, 1960).

Current research in the field of electrophysiology seems to hold out the possibility of exerting a limited amount of external control over the emotions, consciousness, memory and behavior of man by electrical stimulation of the brain. Krech (1966) quotes a leading electrophysiologist, Delgado of the Yale School of Medicine, as stating that current researches "support the distasteful conclusion that motion, emotion and behavior can be directed by electrical forces and that humans can be controlled like robots by push buttons." Although the authors have the greatest respect for Delgado's expertise in this field, they believe he overstates the case in this instance. None of the research indicates that man's every action can be directed by a puppeteer at an electrical keyboard; none indicates that thoughts can be placed into the heads of men electrically; none indicates that a man can be directed like a mechanical robot. At most, they indicate that some of man's activities can possibly be deterred by such methods, that certain emotional states might be induced (with very uncertain consequences in different individuals), and that man might be conditioned along certain approved paths by "rewards" and "punishments" carefully administered at appropriate times. Techniques of direct brain stimulation developed in electrophysiology thus hold out the possibility of influencing and controlling selected human behavior within limited parameters.

The use, then, of telemetric systems as a method of monitoring man, of obtaining physiological data from his body and nervous system, and of stimulating his brain electrically from a distance, seems in the light of present research entirely feasible and possible as a method of control. There is, however, a gap in our knowledge which must be filled before telemetry and electrical stimulation of the brain could be applied to any control system. This gap is in the area of interpretation of incoming data. Before crime can be prevented, the monitor must know what the subject is doing or is about to do. It would not be practical to attach microphones to the monitored subjects, nor to have them in visual communication by television, and it would probably be illegal (Note: *Harvard Law Review*, 1966). Moreover, since the incoming data will eventually be fed into a computer,¹ it will be necessary to confine the information transmitted to the computer to such non-verbal, non-visual data as location, EEG patterns, ECG patterns and other physiological data. At the present time, EEG's tell us very little about what a person is doing or even about his emotional state (Konecni, 1965a). ECG's tell us little more than heart rhythms. Certain other physiological data, however, such as respiration, muscle tension, the presence of adrenalin in the blood stream, combined with knowledge of the subject's location, may be particularly revealing—e.g., a parolee with a past record of burglaries is tracked to a downtown shipping district (in fact, is exactly placed in a store known to be locked up for the night) and the physiological data reveals an increased respiration rate, a tension in the musculature and an increased flow of adrenalin. It would be a safe guess, certainly, that he was up to no good. The computer in this case, *weighing the probabilities*, would come to a decision and alert the police or parole officer so that they could hasten to the scene; or, if the subject were equipped with an implanted radiotelemeter, it could transmit an electrical signal which could block further action by the subject by causing him to forget or abandon his project. However, before computers can be designed to perform such functions, a greater knowledge derived from experience in the use of these devices on human subjects, as to the correlates between the data received from them and their actual behavior, must be acquired.

¹ Obviously, no system monitoring thousands of parolees would be practical if there had to be a human monitor for every monitored subject on a 24-hour-a-day, seven-day-a-week basis. Therefore, computers would be absolutely necessary.

III. CONDITIONS UNDER WHICH TELEMETRY TECHNIQUES MIGHT INITIALLY BE APPLIED IN CORRECTIONAL PROGRAMING

The development of sophisticated techniques of electronic surveillance and control could radically alter the conventional wisdom regarding the merits of imprisonment. It has been the opinion of many thoughtful penologists for sometime that prison life is not particularly conducive to rehabilitation (Sutherland, 1966; Sykes, 1966; Vold, 1954; Morris, 1963). Some correctional authorities, such as the Youth and Adult Corrections Agency of the State of California, have been exploring the possibilities of alternatives to incarceration, believing that the offender can best be taught "to deal lawfully with the given elements of the society while he functions, at least partially, in that society and not when he is withdrawn from it" (Geis, 1964). Parole is one way of accomplishing that objective, but parole is denied to many inmates of the prison system, not always for reasons to do with their ability to be reformed or the risk of allowing them release on parole. The development telemetric control systems could help increase the number of offenders who could safely and effectively be supervised within the community.

Schwitzgebel suggests (1967b) that it would be safe to allow the release of many poor-risk or nonparolable convicts into the community provided that their activities were continuously monitored by some sort of telemetric device. He states:

"A parolee thus released would probably be less likely than usual to commit offenses if a record of his location were kept at the base station. If a two-way tone communication were included in this system, a therapeutic relationship might be established in which the parolee could be rewarded, warned, or otherwise signalled in accordance with the plan for therapy."

He also states:

"Security equipment has been designed, but not constructed that could insure the wearing of the transmitting equipment or indicate attempts to compromise or disable the system."

He further states that it has been the consistent opinion of inmates and parolees interviewed about the matter that they would rather put up with the constraints, inconveniences and annoyances of an electronic monitoring system, while enjoying the freedom outside an institution, than to suffer the much greater loss of privacy, restrictions on freedom, annoyance and inconveniences of prison life.

The envisioned system of telemetric control while offering many possible advantages to offenders over present penal measures also has several possible benefits for society. Society, through such systems, exercises control over behavior it defines as deviant, thus insuring its own protection. The offender, by returning to the community, can help support his dependents and share in the overall tax burden. The offender is also in a better position to make meaningful restitution. Because the control system works on conditioning principles, the offender is habituated into non-deviant behavior patterns—thus perhaps decreasing the probability of recidivism and, once the initial cost of development is absorbed, a telemetric control system might provide substantial economic advantage compared to rather costly correctional programs. All in all, the development of such a system could prove tremendously beneficial for society.

The adequate development of telemetric control systems is in part dependent upon their possible application. In order to ensure the beneficial use of such a system, certain minimal conditions ought to be imposed in order to forestall possible ethical and legal objections:

1. The consent of the inmate should be obtained, after a full explanation is given to him of the nature of the equipment, the limitations involved in its usage, the risks and constraints that will be placed upon his freedom, and the option he has of returning to prison if its use becomes too burdensome.

2. The equipment should not be used for purposes of gathering evidence for the prosecution of crimes, but rather should be employed as a crime prevention device. A law should be passed giving the users of this equipment an absolute privilege of keeping confidential all information obtained therefrom regardless of to whom it pertains, and all data should be declared as inadmissible in court. The parole authorities, if they be the users of this equipment, should have the discretionary power to revoke parole whenever they see fit without

the burden of furnishing an explanation, thus relieving them of the necessity of using data obtained in this fashion as justification for their actions. The data should be destroyed after a certain period of time, and, if the system is hooked up with a computer, the computer should be programmed to erase its tapes after a similar period of time.

By employing the above safeguards, the use of a telemetric system should be entirely satisfactory to the community and to the convicts who choose to take advantage of it. Nevertheless there are a number of ethical objections which are bound to arise when such a system is initially employed that deserve special discussion.

IV. ETHICAL OBJECTIONS

The two principal objections raised against the use of modern technology for surveillance and control of persons deemed to be deviant in their behavior in such a degree as to warrant close supervision revolve around two issues: privacy and freedom (Note: *Harvard Law Review*, 1966; King, 1964; Miller, 1964; Fried, 1968; Ruebhausen, 1965).

Privacy.—It has often been said that privacy, in essence, consists of the "right to be let alone" (Warren, 1890; Ernst, 1962). This is a difficult right to apply to criminals because it is precisely their inability to leave their fellow members of society alone that justifies not leaving them alone. This statement, however, might be interpreted to mean that there is a certain limited area where each man should be free from the scrutiny of his neighbors or his government and from interference in his affairs. While most people would accept this as a general proposition, in point of fact it is not recognized in prison administration, where surveillance and control are well-nigh absolute and total (Sykes, 1966; Clemmer, 1958). Therefore, it is difficult to see how the convict would lose in the enjoyment of whatever rights of privacy he has by electronic surveillance in the open community. If the watcher was a computer, this would be truer still, as most people do not object to being "watched" by electric eyes that open doors for them. It is the scrutiny of humans by humans that causes embarrassment—the knowledge that one is being judged by a fellow human.

Another definition of privacy is given by Ruebhausen (1965).

"The essence of privacy is no more, and certainly no less, than the freedom of the individual to pick and choose for himself the time and the circumstances under which, and most importantly, the extent to which, his attitudes, beliefs, behavior and opinions are to be shared with or withheld from others."

To this statement the preliminary question might be raised as to the extent to which we honor this value when we are dealing with convicts undergoing rehabilitation, mental patients undergoing psychiatric treatment, or even minors in our schools. Certainly it is not a statement that can be generally applied, especially in those cases where every society deems itself to have the right to shape and change the attitudes, beliefs, behavior and opinions of others when they are seriously out of step with the rest of society. But a more fundamental objection can be raised, in that the statement has little or no relevance to what we propose. Not only does the envisioned equipment lack the power to affect or modify directly the "attitudes," "beliefs" and "opinions" of the subject, but it definitely does not force him to share those mental processes with others. The subject is only limited in selected areas of his behavior—i.e., those areas in which society has a genuine interest in control. The subject is consequently "free" to hold any set of attitudes he desires. Of course, on the basis of behavioral psychology, one would expect attitudes, beliefs and opinions to change to conform with the subject's present behavior (Smith, 1968).

Still a third definition of privacy has been proposed by Fried (1968) in a recent article in the *Yale Law Journal*, an article which specifically discusses Schwitzgebel's device. He advances the argument that privacy is a necessary context for the existence of love, friendship and trust between people, and that the parolee under telemetric supervision who never feels himself loved or trusted will never be rehabilitated. While this argument might have some validity where the device is used as a therapeutic tool—a point that Schwitzgebel (1967b) recognizes since he would use it partly for that purpose—it is not particularly relevant where no personal relationship is established between the monitors and the subject and where the emphasis is placed upon the device's ability to control and deter behavior, rather than to "rehabilitate." Rehabilitation, hopefully, will follow once law-abiding behavior becomes habitual.

As far as privacy is concerned, most of the arguments are squarely met by the conditions and safeguards previously proposed. However, when one begins to implant endorhinosondes subcutaneously or to control actions through electrical stimulation of the brain, one runs into a particularly troublesome objection, which is often included within the scope of "privacy," although perhaps it should be separately named as the "human dignity" or "sacred vessel of the spirit" argument. This is the argument that was raised when compulsory vaccination was proposed, and which is still being raised as to such things as birth control, heart transplants, and proposals for the improvement of man through eugenics. The argument seems to stem from an ancient, well-entrenched belief that man, in whatever condition he finds himself, even in a state of decrepitude, is as Nature or God intended him to be and inviolable. Even when a man consents to have his physical organism changed, some people feel uneasy at the prospect, and raise objections.

Perhaps the only way to answer such an argument is to rudely disabuse people of the notion that there is any dignity involved in being a sick person, or a mentally disturbed person, or a criminal person whose acts constantly bring him into the degrading circumstances, which the very persons praising human dignity so willingly inflict upon him. Perhaps the only way to explode the notion of man as a perfect, or perfectible, being, made in God's image (the Bible), a little lower than the angels (Disraeli), or as naturally good but corrupted by civilization (Rousseau), is to review the unedifying career of man down through the ages and to point to some rather interesting facets of his biological make-up, animal-like-behavior, and evolutionary career which have been observed by leading biologists and zoologists (Lorenz, 1966; Morris, 1967; Rostand, 1959). Unfortunately, there is not time here to perform such a task or to rip away the veil of human vanity that so enshrouds these arguments.

Freedom.—The first thing that should be said with regard to the issue of human freedom is that there is none to be found in most of our prisons. As Sykes (1966) remarks:

“. . . the maximum security prison represents a social system in which an attempt is made to create and maintain total or almost total social control.”

This point is so well recognized that it need not be belabored, but it does serve to highlight the irrelevancy of the freedom objection as far as the prison inmate is concerned. Any system which allows him the freedom of the open community, which maintains an unobtrusive surveillance and which intervenes only rarely to block or frustrate his activities can surely appear to him only as a vast improvement in his situation.

Most discussions of freedom discuss it as if man were the inhabitant of a natural world, rather than a social world. They fail to take into account the high degree of subtle regulation which social life necessarily entails. As Hebb (1961) put very well:

“What I am saying implies that civilization depends on an all-pervasive thought control established in infancy, which both maintains and is maintained by the social environment, consisting of the behavior of the members of society. . . . What we are really talking about in this symposium is mind in an accustomed social environment, and more particularly a social environment that we consider to be the normal one. It is easy to forget this, and the means by which it is achieved. The thought control that we object to, the ‘tyranny over the mind of man’ to which Jefferson swore ‘eternal hostility,’ is only the one that is imposed by some autocratic agency, and does not include the rigorous and doctrinaire control that society itself exercises, by common consent, in moral and political values. I do not suggest that this is undesirable. Quite the contrary, I argue that a sound society must have such a control, but let us at least see what we are doing. We do not bring up our children with open minds and then, when they can reason, let them reason and make up their minds as they will concerning the acceptability of incest, the value of courtesy in social relations, or the desirability of democratic government. Instead we tell them what's what, and to the extent that we are successful as parents and teachers, we see that they take it and make it part of their mental processes, with no further need of policing.”

“The problem of thought control, or control of the mind, then, is not how to avoid it, considering it only as a malign influence exerted over the innocent by foreigners, Communists, and other evil fellows. We all exert it; only, on the whole, we are more efficient at it. From this point of view the course of a developing civilization is, on the one hand, an increasing uniformity of aims and

values, and thus also of social behavior, or on the other, an increasing emotional tolerance of the stranger, the one who differs from me in looks, beliefs, or action—a tolerance, however, that still has narrow limits."

Discussions of freedom that one customarily finds in law journals also fail to take into account the distinction between objective and subjective freedom. Objective freedom for each man is a product of power, wealth or authority, since it is only through the achievement of one or more of these that one can control so as not to be controlled—i.e., it is only through these that one can, on one hand, guard against the abuses, infringements, and overreaching of one's fellow man which limit one, and, on the other hand, commit those very offenses against one's neighbor and, by doing so, obtain all one's heart desires. This is not to neglect the role of the law in preventing a war of all against all, in providing the freedom that goes with peace, and with ensuring that all share to a certain extent in the protections and benefits of a well-ordered society. But laws are themselves limitations imposed upon objective freedom. Radical objective freedom is inconsistent with social life, since in order for some to have it, others must be denied it. Such a radical freedom may also be intolerable psychologically; one may actually feel "constrained" by an excess of options (Fromm, 1963).

Subjective freedom, on the other hand, is a sense of not being pressed by the demands of authority and nagged by unfulfilled desires. It is totally dependent on *awareness*. Such a concept of freedom is easily realizable within the context of an ordered society, whereas radical objective freedom is not. Since society cannot allow men too much objective freedom, the least it can do (and the wise thing to do) is to so order its affairs that men are not aware or concerned about any lack of it. The technique of telemetric control of human beings offers the possibility of regulating behavior with precision on a subconscious level, and avoiding the cruelty of depriving man of his subjective sense of freedom.

V. CONCLUSION

Two noted psychologists, C. R. Rogers and B. F. Skinner, carried on a debate in the pages of *Science* magazine (1956) over the issue of the moral responsibility of behavioral scientists in view of the everwidening techniques of behavior control. Skinner said:

"The dangers inherent in the control of human behavior are very real. The possibility of misuse of scientific knowledge must always be faced. We cannot escape by denying the power of a science of behavior or arresting its development. It is no help to cling to familiar philosophies of human behavior simply because they are more reassuring. As I have pointed out elsewhere, the new techniques emerging from a science of behavior must be subject to the explicit counter control which has already been applied to earlier and cruder forms."

Skinner's point was that the scientific age had arrived; there was no hope of halting its advance; and that scientists could better spend their time in explaining the nature of their discoveries so that proper controls might be applied (not to stop the advance, but to direct it into the proper channels, rather than in establishing their own set of goals and their own *ne plus ultra* to "proper research." This is a valid point. Victor Hugo once said: "Nothing is as powerful as an idea whose time has arrived." The same holds true for a technology whose time is upon us. Those countries whose social life advances to keep pace with their advancing technology will survive in the world of tomorrow; those that look backward and cling to long-outmoded values will fall into the same state of degradation that China suffered in the 19th and early 20th Centuries because she cherished too much the past. These are not inappropriate remarks to make here, because the nations that can so control behavior as to control the crime problem will enjoy an immense advantage over those that do not. Whether we like it or not, changes in technology require changes in political and social life and in values most adaptable to those changes. It would be ironic indeed if science, which was granted, and is granted, the freedom to invent weapons of total destruction, were not granted a similar freedom to invent methods of controlling the humans who wield them.

Rogers agreed with Skinner that human control of humans as practiced everywhere in social and political life, but framed the issues differently. He said (1956):

"... They can be stated very briefly: Who will be controlled? Who will exercise control? What type of control will be exercised? Most important of all,

toward what end or what purpose, in pursuit of what values, will control be exercised?"

These are very basic questions. They need to be answered, and they should be answered.

Jean Rostand (1959), a contemporary French biologist of note, asks: can man be modified? He points to the fact that, since the emergence of *homo sapiens* over 100,000 years ago, man has not evolved physically in the slightest degree. He has the same brain now that he had then, except that now it is filled up with the accumulated knowledge of 5,000 years of civilization—knowledge that has not seemed to be adequate to the task of erasing certain primitive humanoid traits, such as intraspecific aggression, which is a disgusting trait not even common to most animals. Seeing that man now possesses the capabilities of effecting certain changes in his biological structure, he asks whether it isn't a reasonable proposal for man to hasten evolution along by modifying himself into something better than what he has been for the last 100,000 years. We believe that this is a reasonable proposal, and ask: What better place to start than with those individuals most in need of a change for the better?

REFERENCES

- Barr, N. L., 1960. "Telemetering Physiological Responses During Experimental Flight." *American Journal of Cardiology* 6:54.
- Caceres, C. A. and James K. Cooper, 1965. "Radiotelemetry: A Clinical Perspective." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.
- Clemmer, Donald, 1958. *The Prison Community*. New York: Holt, Rinehart and Winston.
- Cooper, James K. and C. A. Caceres, 1965. "Telemetry by Telephone." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.
- Ernst, Morris L. and Alan U. Schwartz, 1962. *Privacy: The Right to Be Let Alone*. New York: Macmillan.
- Epstein, R. J., J. R. Haunann and R. B. Keener, 1968. "An Implantable Telemetry Unit for Accurate Body Temperature Measurements." *Journal of Applied Physiology* 24(3):439.
- Fried, Charles, 1968. "Privacy." *Yale Law Journal* 77:475.
- Fromm, Erich, 1963. *Escape From Freedom*. New York: Holt, Rinehart and Winston.
- Geis, Gilbert, 1964. "The Community-Centered Correctional Residence." *Correction in the Community: Alternatives to Incarceration*. Sacramento, California: Youth and Adult Corrections Agency, State of California.
- Grisamore, N. T., James K. Cooper and C. A. Caceres, 1965. "Evaluating Telemetry." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.
- Hagan, William K., 1965. "Telephone Applications." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.
- Heath, R. G. and W. A. Mickle, 1969. "Evaluation of Seven Years' Experience With Depth Electrode Studies in Human Patients." *Electrical Studies of the Unanesthetized Brain*. Edited by E. R. Ramey and D. S. O'Doherty. New York: Paul B. Hoeber, Inc.
- Hebb, D. O., 1961. "The Role of Experience." *Man and Civilization: Control of the Mind: A Symposium*. Edited by Seymour M. Farber and R. H. L. Wilson. New York: McGraw-Hill.
- Jones, H. G., Michael Gelder and H. M. Holden, 1963. "Behavior and Aversion Therapy in the Treatment of Delinquency." *British Journal of Criminology* 5(4):355-387.
- King, D. B., 1964. "Electronic Surveillance and Constitutional Rights: Some Current Developments and Observations." *George Washington Law Review* 33:210.
- King, H. E., 1961. "Psychological Effects of Excitation in the Limbic System." *Electrical Stimulation of the Brain*. Edited by Daniel E. Sheer. Austin: University of Texas Press.
- Konecni, E. B. and A. James Shiner, 1965a. "The Developing Challenge of Biosensor and Bioinstrumentation Research." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press. 1965b. "Uses of Telemetry in Space." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.

Krech, David, 1966. "Controlling the Mind-Controllers." *Think* 32 (July-August) :2.

Lord, R. D., F. C. Bellrose and W. W. Cochran, 1962. "Radiotelemetry of the Respiration of a Flying Duck." *Science* 137:39.

Lorenz, Konrad, 1966. *On Aggression*. New York: Harcourt, Brace and World, Inc.

Mackay, R. S., 1961. "Radiotelemetering From Within the Body." *Science* 134:1196, 1965. "Telemetry From Within the Body of Animals and Man: Endoradiosondes." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.

Miller, A. S., 1964. "Technology, Social Change and the Constitution." *George Washington Law Review* 33:17.

Morris, Desmond, 1967. *The Naked Ape*. New York: McGraw-Hill.

Morris, Terrence and Paulene Morris, 1963. *Pentonville: A Sociological Study of an English Prison*. London: Routledge and Kegan Paul.

Note, 1966 "Anthropotelemetry: Dr. Schwitzgebel's Machine." *Harvard Law Review* 80:403.

Olds, James, 1962. "Hypothalamic Substrates of Reward." *Physiological Reviews* 42:554, 1967. "Emotional Centers in the Brain." *Science Journal* 8(5):87.

Reubhausen, O. M. and O. G. Brim, 1965. "Privacy and Behavior Research." *Columbia Law Review* 65:1184.

Rogers, C. R. and B. F. Skinner, 1956. "Some Issues Concerning the Control of Human Behavior." *Science* 124:1057.

Rostand, Jean, 1959. *Can Man Be Modified?* London: Secker and Warburg.

Schwitzgebel, Ralph, Robert Schwitzgebel, W. N. Palinke and W. S. Kurd, 1964. "A Program of Research in Behavioral Electronics." *Behavioral Science* 9:233.

Schwitzgebel, Ralph, 1967a. "Electronic Innovation in the Behavioral Sciences: A Call to Responsibility." *American Psychologist* 22(5):364, 1967b. "Issues in the Use of an Electronic Rehabilitation System with Chronic Recidivists." (unpublished paper).

Schwitzgebel, Robert L., 1969. "A Belt From Big Brother." *Psychology Today* 2(11):45-47, 65.

Sem-Jacobsen, C. W. and Arne Torkildsen, 1960. "Depth Recording and Electrical Stimulation in the Human Brain." *Electrical Studies of the Unanesthetized Brain*. Edited by E. R. Ramey and D. S. O'Doherty. New York: Paul B. Hoeber, Inc.

Sheer, Daniel, 1961. "Brain and Behavior: The Background of Interdisciplinary Research." *Electrical Stimulation of the Brain*. Edited by Daniel Sheer. Austin: University of Texas Press.

Slater, Lloyd E., 1965. "A Broad-Brush Survey of Biomedical Telemetric Progress." *Biomedical Telemetry*. Edited by C. A. Caceres. New York: Academic Press.

Smith, Gerald W., 1968. "Electronic Rehabilitation and Control: An Alternative to Prison." Paper read at the American Correctional Association Meeting, San Francisco.

Sperry, C. J., C. P. Gadsden, C. Rodriguez and L. N. N. Buch, 1961. "Miniature Subcutaneous Frequency-Modulated Transmitter for Brain Potentials." *Science* 134:1423.

Sutherland, Edwin and Donald R. Cressey, 1966. *Principles of Criminology*. Seventh Edition. Philadelphia: Lippincott.

Sykes, Gresham, 1966. *The Society of Captives*. New York: Atheneum.

Vold, George B., 1954. "Does Prison Reform?" *Annals of the American Academy of Political and Social Science* 293:42-50.

Vreeland, Robert and C. L. Yeager, 1965. "Application of Subminiature Radio Telemetry Equipment to EEG Analysis from Active Subjects." Paper delivered at Sixth International Congress of Electroencephalography and Clinical Neurophysiology, Vienna.

Walker, A. E. and Curtis Marshall, 1961. "Stimulation and Depth Recording in Man." *Electrical Stimulation of the Brain*. Edited by Daniel Sheer. Austin: University of Texas Press.

Warren, Samuel D. and Louis D. Brandeis, 1890. "The Right to Privacy." *Harvard Law Review* 4:193.

Young, I. J. and W. S. Naylor, 1964. "Implanted Two-Way Telemetry in Laboratory Animals." *American Journal of Medical Electronics* 3:28.

TOKEN AND TABOO: BEHAVIOR MODIFICATION, TOKEN ECONOMIES, AND THE LAW

David B. Wealer*—61 *Calif. L. Rev.* 81 (1973)

Not surprisingly, legal concepts from the prisoners' rights movement have begun to spill over into the arena of the rights of the institutionalized mentally ill. Since the mental patient movement is free of the law and order backlash that restrains the legal battles of prisoners, it may evoke considerable sympathy from the public, the legislatures, and the courts.

Commentators and authorities have recently directed attention to important problems in the administration of psychiatric justice¹ and to the legal issues presented by various methods of therapy. Legal restrictions on a hospital's right to subject unwilling patients to electroconvulsive therapy² and psychosurgery³ are developing rapidly, and close scrutiny is now being given to "aversive" techniques of behavior modification and control⁴—such as procedures for suppressing transvestitism by administering painful electric shocks to the patient while dressed in women's clothing, and procedures for controlling alcoholism or narcotics addiction by arranging medically for severe nausea or even temporary paralysis (including respiratory arrest) to follow ingestion of the habituating substance.⁵ It is likely that certain treatments may be deemed so offensive, frightening, or risky that the law may eventually preclude them altogether,⁶ or at least restrict them by requiring the patient's informed consent.⁷

Though aversive therapeutic techniques are receiving close attention, schemes of "positive" behavior control⁸—whereby appropriate, non-deviant behavioral responses are encouraged by rewarding their occurrence—have not been subjected to any careful study. It is perhaps assumed that when rewards rather than punishments are employed, no grave legal, social or ethical questions are involved.⁹ To a great extent, that is unquestionably true; few would have their ire aroused, for example, by praising a child and offering him

* Professor of Law, University of Arizona. B.A., 1961, Harper College; J.D., 1964, New York University.

¹ See, e.g., Wexler, Scovill et al., *The Administration of Psychiatric Justice: Theory and Practice in Arizona*, 13 *ARIZ. L. REV.* 1 (1971) [hereinafter cited as *PSYCHIATRIC JUSTICE PROJECT*].

² N.Y. Times, July 15, 1972, at 7, col. 3. In California, section 5325(f) of the Welfare and Institutions Code gives a patient the right to refuse shock treatment, but the following section allows the professional person in charge of the institution, or his designee, to deny the right "for good cause." *CAL. WELF. & INST'NS CODE* § 5326 (West Supp. 1971).

³ Breggin, *The Return of Lobotomy and Psychosurgery*, 118 *CONG. REC.* B1602 (daily ed. Feb. 24, 1972). Possible neurological bases of deviant and violent behavior are discussed in V. MARK & F. ERVIN, *Violence and the Brain* (1970). Sociological implications of the Mark & Ervin work are explored in Wexler, *Book Review*, 85 *HARV. L. REV.* 1489 (1972).

⁴ R. SCHWITZGEBEL, *DEVELOPMENT AND LEGAL REGULATION OF COERCIVE BEHAVIOR MODIFICATION TECHNIQUES WITH OFFENDERS* (1971). Schwitzgebel's work has been condensed to article form in Schwitzgebel, *Limitations on the Coercive Treatment of Offenders*, 8 *CRIM. L. BULL.* 267 (1972). On aversion therapy generally, see S. RACHMAN & J. TEASDALE, *AVERSION THERAPY AND BEHAVIOR DISORDERS* (1969); A. BANDURA, *PRINCIPLES OF BEHAVIOR MODIFICATION* 293-354 (1969) [hereinafter cited as *BANDURA*].

⁵ See Schwitzgebel, *Limitations on the Coercive Treatment of Offenders*, 8 *CRIM. L. BULL.* 267, 285-86 (1972). Anequine, a drug that induces temporary paralysis and respiratory arrest, has been used for behavior control in some California institutions. See Note, *Conditioning and Other Technologies Used to "Treat" "Rehabilitate" "Demolish?" Prisoners and Mental Patients*, 45 *SO. CALIF. L. REV.* 616, 633-40 (1972).

⁶ Dr. Peter Breggin argues that psychosurgery should be precluded on these grounds. See generally Breggin, *supra* note 3.

⁷ "Patients have a right not to be subjected to treatment procedures such as lobotomy, electroconvulsive treatment, aversive [sic] reinforcement conditioning or other unusual or hazardous treatment procedures without their express and informed consent after consultation with counsel or interested party of the patient's choice". *Wyatt v. Stickney*, 344 F. Supp. 373, 380 (M.D. Ala. 1972), (dealing with Bryce and Searcy Hospitals for the mentally ill). See also *Wyatt v. Stickney*, 344 F. Supp. 387, 400 (M.D. Ala. 1972), (dealing with Partlow State School and Hospital for the mentally retarded). These two cases will hereinafter be distinguished by bracketed indication of the hospital they dealt with.

⁸ *BANDURA, supra* note 4, at 217-92.
⁹ Cf. McIntire, *Spare the Rod, Use Behavior Mod.*, *PSYCHOLOGY TODAY*, Dec. 1970, at 42. Considerable controversy is, of course, generated by calls for behavioral engineering on a society-wide scale, such as is advocated in B. G. SKINNER, *BEYOND FREEDOM AND DIGNITY* (1971). See e.g., Ramsey, *Book Review*, 7 *ISSUES IN CRIM* 131 (1972) (reviewing Skinner's book).

study for correctly spelling or reading a word,¹⁰ nor would many be upset over a scheme that encouraged scholastic achievement of institutionalized juvenile delinquents by offering them, contingent upon academic success, private rooms, a wider choice of food, and selections of items from a mail-order catalogue.¹¹ But, as will be seen in the following section, many techniques of positive control are far more troubling. Most troubling of all seem to be the use of token economies with chronic psychotic mental patients.

I.—PSYCHOLOGY AND TOKEN ECONOMIES

A. General Considerations

Many behavior modification practitioners apply clinically the learning theory principles of Skinnerian operant conditioning. Operant theory is bottomed on the principle, amply demonstrated by empirical data, that behavior is strengthened or weakened by its consequences.¹² The frequency of a behavior increases if it is followed by desirable consequences, whereas it will be extinguished if the positive consequences are discontinued or if the consequences are aversive.¹³

The application of operant conditioning to humans has come a long way since 1949, when a severely regressed person was taught to raise his arm by a procedure that rewarded appropriate arm motions by the subsequent squirting of a sugar-milk solution into his mouth.¹⁴ Now, a multitude of therapeutic behavior modification systems are in operation on ward-wide and institution-wide scales. By and large, these programs seek to shape¹⁵ and maintain appropriate behavior patterns—designated as “target behaviors” or “target responses”—by rewarding or “reinforcing” the desired responses. Usually, rewards are dispensed in the form of tokens or points—known as “secondary” or “generalized” reinforcers—which can then be converted, pursuant to a specific economic schedule, to “primary reinforcers” such as snacks, mail-order catalogue items, and the like.

These “token economies” have flourished since their development in the sixties¹⁶ and are currently employed in a variety of clinical settings.¹⁷ This

¹⁰ Cf. BANDURA, *supra* note 4, at 240-50 (positive reinforcement as a technique for improving reading skills).

¹¹ Cf. BANDURA 278-79.

¹² A good introductory text on operant conditioning is J. R. MILLENSON, *PRINCIPLES OF BEHAVIORAL ANALYSIS* (1967). Chapters Two and Three deal with Classical or Pavlovian Conditioning, which is to be distinguished from operant conditioning; the latter provides the basis of the token economy. See also Note, 45 SO. CALIF. L. REV. 610, 627-28 (1972).

¹³ Note that the behavioral psychologist explains both normal and abnormal behavior by the same principles, in an approach which differs fundamentally from “dynamic” psychology, of which the Freudian system of psychoanalysis is probably the most familiar to laymen. The dynamic psychologists, who follow a “medical model,” explain abnormal behavior as the product of “inner conflicts” and the like. For a good introduction to behavior modification and how it contrasts with traditional dynamic concepts, see L. ULLMAN & L. KRASNER, *CASE STUDIES IN BEHAVIOR MODIFICATION* 1-65 (1965). See also BANDURA 7-69. For more recent accounts of the application of behavioral psychology to clinical settings, see any recent issue of the *JOURNAL OF APPLIED BEHAVIOR ANALYSIS*.

Technically, the term extinction is reserved for the process of reducing the frequency of a behavior by discontinuing the “reinforcing” [rewarding] consequences.

¹⁴ Fuller, *Operant Conditioning of Vegetative Human Organism*, 62 *AM. J. PSYCHOLOGY* 587 (1949). For somewhat more recent studies, see ULLMAN & KRASNER, *supra* note 12, and R. ULLICH, T. STACHNIK, J. MARRY, *CONTROL OF HUMAN BEHAVIOR* (1966).

¹⁵ “Shape” is a technical term used by operant psychologists to describe the process of gradually building a new behavior by rewarding closer and closer approximations to it.

¹⁶ Ayllon & Azrin, *The Measurement and Reinforcement of Behavior of Psychotics*, 8 *J. OF THE EXPERIMENTAL ANALYSIS OF BEHAVIOR* 357 (1965); T. AYLLON & N. AZRIN, *THE TOKEN ECONOMY: A MOTIVATIONAL SYSTEM FOR THERAPY AND REHABILITATION* (1968) [hereinafter cited as *TOKEN ECONOMY*] report of a project begun in 1961. In part, the flourishing is no doubt due to the fact that much behavior therapy can be conducted by psychiatric nurses, attendants, and paraprofessional personnel. See Ayllon & Michael, *The Psychiatric Nurse as a Behavioral Engineer*, 2 *J. OF THE EXPERIMENTAL ANALYSIS OF BEHAVIOR* 323 (1959). The rationale behind emphasizing the development of constructive behavior rather than emphasizing the elimination per se of so-called “pathological” behavior appears to be that pathological traits in an otherwise well-functioning individual may well be dismissed as mere idiosyncrasies, and, moreover, that pathological traits may not be able to coexist with functional behavior. *TOKEN ECONOMY* 23.

¹⁷ These include populations of juvenile delinquents, newly admitted and chronic psychotics, mentally retarded patients, etc. *TOKEN ECONOMY* 217. For various descriptions, see BANDURA 261-82; Davison, *Appraisal of Behavior Modification Techniques with Adults in Institutional Settings*, in *BEHAVIOR THERAPY: APPRAISAL AND STATUS* 250 (C. Franks ed. 1969); Krasner, *Token Economy As an Illustration of Operant Conditioning Procedures with the Aged, with Youth, and with Society*, in *LEARNING AND*

Article will be confined almost exclusively to a discussion of the application of the token system to chronic psychotics.

There are two reasons for this limitation in scope: first, despite mammoth advances in psychopharmacology¹⁸ and a burgeoning community psychiatry movement¹⁹ which have combined to reduce drastically mental hospital enrollment, almost all chronic psychotics are still hospitalized.²⁰ If other clinical categories are increasingly diverted from institutions, while the chronics continue to accumulate, the treatment of the chronic psychotic may soon constitute the major therapeutic concern of mental hospitals. Second, because the behavior patterns of chronic psychotics are by definition particularly resistant to therapy, more drastic methods of behavior modification have been applied to them. These therapeutic methods will raise important legal questions.

B. Token Economics

Teodoro Ayllon and Nathan Azrin pioneered the token economy concept on a ward of chronically psychotic female patients at the Anna State Hospital in Illinois.²¹ Because of their adaptation to long periods of stagnant hospitalization, chronic patients typically suffer from extreme apathy and dependency. This condition, known as institutionalization²² impedes the chronic's chances for improvement or release. To overcome this problem, Ayllon and Azrin rewarded target behaviors that would reverse the institutionalization syndrome. Work assignments within the hospital and various self-care behaviors were rewarded with tokens. The self-care category included grooming, bathing, toothbrushing, bed making and the like.²³ Work assignments included kitchen chores, serving in the dining rooms, assisting in the laundry, janitorial work, and related tasks.²⁴

For the token economy to succeed, it is necessary to insure that the items or events purchasable with the tokens are effective reinforcers—in lay terms, that they would in fact be desired by the patients. To solve this problem, the Anna State Hospital psychologists applied the "Premack Principle":²⁵ if certain behaviors occur naturally with a high frequency then the opportunity to engage in those behaviors can be used as an effective reinforcer to strengthen a low-frequency behavior. The psychologists determined the high frequency-behaviors empirically:

It was noted that certain patients often hoarded various items under their mattresses. The activity in this case, in a general sense, consisted of concealing private property in such a manner that it would be inaccessible to other patients and the staff. Since this event seemed to be highly probable, it was formally scheduled as a reinforcer. Keys to a locked cabinet in which they could conceal their private possessions just as they had been doing with the mattresses were made available to patients.

Another activity that was observed to be highly probable was the attempt of patients to conceal themselves in several locations on the ward in an effort to enjoy some degree of privacy. A procedure was therefore instituted whereby a patient could obtain a portable screen to put in front of her bed or access to a bedroom with a door. Another event that had a high probability of occurrence for some patients was a visit with the social worker or psychologist. This was used as a reinforcer by arranging appointments with either of these staff members.²⁷

PROCESSES TO THERAPEUTIC BEHAVIOR CHANGE 74 (D. Lewis ed. 1970). See generally Kazdin & Bootzin, *The Token Economy: An Evaluative Review*, 5 J. OF APPLIED BEHAVIOR ANALYSIS 343 (1972).

¹⁸ Jarvik, *The Psychopharmacological Revolution*, in READINGS IN CLINICAL PSYCHOLOGY TODAY 93 (1970).

¹⁹ PSYCHIATRIC JUSTICE PROJECT, *supra* note 1, at 118-27.

²⁰ E.g., Bruce, *Tokens for Recovery*, 66 AM. J. NURSING 1700 (1966).

²¹ TOKEN ECONOMY, *supra* note 16.

²² See generally D. GOFFMAN, *ASYLUMS* (Anchor ed. 1961). See also PSYCHIATRIC JUSTICE PROJECT 237-38: "The depressing surroundings, the idleness, the loss of ordinary privileges, the isolation from family, friends and developments in the outside world—these and many other aspects of institutional life, which are almost inherent characteristics of state hospitals, lead to a loss of motivation, to withdrawal and regression, and to apathy, submissiveness and an inability to make decisions. In short, hospitalization itself produces a distinct functional pathology, appropriately dubbed 'institutional neurosis.'" (citations omitted).

²³ TOKEN ECONOMY, *supra* note 16, at 250.

²⁴ *Id.* at 134-35.

²⁵ *Id.* at 60. See Premack, *Toward Empirical Behavior Laws: I. Positive Reinforcement*, 60 PSYCHOLOGICAL REV. 219 (1959).

²⁶ TOKEN ECONOMY 61.

Ground privileges and supervised walks by the staff were also established as reinforcers by application of the Premack Principle, since patients were frequently observed to "stay at the exit to the ward and try to leave."²⁷ The opportunity to attend religious services was also used as a reinforcer since several patients attended frequently when they were allowed to freely.²⁸

Thus, personal cabinets, room dividers, visits with the professional staff, ground privileges, supervised walks, and religious services were all made contingently available to the patients; they could be purchased if the patient had performed a sufficient number of target responses to have earned the requisite tokens to purchase the reinforcers. They were otherwise unavailable. Other reinforcers in the Anna State Hospital program included a personal chair, writing materials and stationery, movies, television programs, and various commissary items.²⁹

By using these "strong, albeit untapped"³⁰ sources of motivation, the Ayllon and Azrin economy produced rather impressive results when measured by standards of work performance. They compared the work output of their patients during a specified period of the token economy with a subsequent experimental period during which the various reinforcers were freely available without tokens—a situation which "approximated the usual conduct of a mental hospital ward."³¹ Ayllon and Azrin found that patient performance during the experimental period plummeted to less than one-fourth the token economy level. Hence, they concluded that "the performance on a usual ward would be increased fourfold by instituting this motivating environment."³²

Nonetheless, the Anna State Hospital program did not change the behavior of 8 out of the 44 patients³³ involved:

Eight patients, who expended fewer than 50 tokens within 20 days, all earned by self-care rather than from job assignments, were relatively unaffected by the reinforcement procedure. Statistical comparison of them within the other patients revealed no difference in diagnosis or age. It appears that their failure to modify behavior appreciably stemmed from the relative absence of any strong behavior patterns that could be used as reinforcers. The only two behaviors that existed in strength were sleeping and eating. The present program did not attempt to control the availability of food. This action may have to be considered in future research in order to rehabilitate patients with such an extreme loss of behavior.³⁴

Many token economy programs have been patterned after the Ayllon and Azrin model.³⁵ In Atthowe's program for chronic patients at the Palo Alto Veterans Administration Hospital, for example, patients earned points not only for their industrial therapy job assignments, but also for participating in group activities, in recreational therapy, and for attending weekend movies.³⁶ And reinforcers in various programs include later wake-up times,³⁷ passes,³⁸ clothing,³⁹ clothing maintenance,⁴⁰ reading materials,⁴¹ dances,⁴² and even

²⁷ *Id.* at 221. See also *id.* at 64-65.

²⁸ *Id.* at 62-63.

²⁹ *Id.* at 226.

³⁰ *Id.* at 269.

³¹ *Id.* at 183.

³² *Id.* See also *id.* at 256-61.

³³ *Id.* at 239.

³⁴ *Id.* at 269. But see the remarks of Davison directed at Ayllon & Azrin's conclusion: "I believe that Ayllon and Azrin would do well to break set and at least consider the possibility that the behavior (both overt and covert) of some chronic hospital patients is regulated by processes which have little, if anything, to do with operant conditioning." Davison, *supra* note 17, at 250.

³⁵ E.g., Atthowe & Krashner, *Preliminary Report on the Application of Contingent Reinforcement Procedures (Token Economy) on a "Chronic" Psychiatric Ward*, 78 J. ABNORMAL PSYCHOLOGY 37 (1968).

³⁶ Atthowe, *Ward 113 Program: Incentives and Costs—A Manual for Patients 7-8* (Veterans Ad., Palo Alto, Calif., Oct. 1, 1964).

³⁷ *Id.* at 4. The present author also visited a token economy where naps were available for five tokens per hour.

³⁸ *Id.* at 5.

³⁹ Lloyd & Abel, *Performance on a Token Economy Psychiatric Ward: A Two Year Summary*, 8 BEHAV. RES. & THERAPY 1, 6 (1970).

⁴⁰ Narrol, *Experimental Application of Reinforcement Principles to the Analysis and Treatment of Hospitalized Alcoholics*, 28 Q. J. OF STUDIES ON ALCOHOL 105, 108 (1967).

⁴¹ Gripp & Magaro, *A Token Economy Program Evaluation with Untreated Control Ward Comparisons*, 9 BEHAV. RES. & THERAPY 137, 141 (1971).

⁴² *Id.*

release.⁴³ Moreover, several programs have taken the step recommended but not taken by Ayllon, and Azrin and have made food and beds available only on a contingent basis.⁴⁴ Indeed, those programs have exceeded the Ayllon and Azrin recommendation by using beds and meals as reinforcers on a ward-wide basis, and thus even for patients who have not failed under a system where food and sleeping facilities were non-contingently available.

One of the token economies that hinges food and beds on appropriate behavioral responses—a chronic ward at the Patton State Hospital in San Bernardino, California—is “willing to let a patient go for as long as five days without food, or until he has been reduced to 80% of his previous body weight.”⁴⁵ The Patton program is one of several token economies⁴⁶ that follows a “pluse” or “tier” system, where at least certain privileges are dependent upon the patient’s place in the hierarchy of tiers.

At Patton, for example, newly admitted patients are placed in the orientation group, where living conditions are exceedingly drab, and where the subsistence-level existence can be purchased for a small number of tokens. After a patient has adapted well to the orientation group, he is elevated to the middle group, where conditions are better but are considerably more expensive. Patients in the middle group are given five months to be promoted to the rather luxurious ready-to-leave group, but if after three months in the middle group a patient is not adequately facing the eventual prospect of life on the outside, he will be returned to the orientation group.⁴⁷ Margaret Bruce, a psychiatric technician at the Patton State Hospital, described the orientation group in these words:

“This group sleeps in a relatively unattractive dormitory which conforms to bare minimums set by the state department of mental hygiene. There are no draperies at the windows or spreads on the beds, and the beds themselves are of the simplest kind. In the dining room the patient sits with many other patients at a long table, crowded in somewhat uncomfortably. The only eating utensil given him is a large spoon. The food is served in unattractive, sectioned plastic dishes. So long as he is in this group, he is not allowed to wear his own clothes and cannot go to activities which other patients are free to attend off the unit. He may not have permission for off-the-ground visits, and the number of visitors who can see him is restricted.

“During this time, the patient learns that his meals, his bed, his toilet articles, and his clothes no longer are freely given him. He must pay for these with tokens. These tokens pay for all those things normally furnished and often taken for granted. In the orientation group most of the things the patient wants are cheap; for example, it costs one token to be permitted to go to bed, one token for a meal. Patients find it easy enough to earn the few tokens necessary for bare subsistence.”⁴⁸

⁴³ Glicksman, Ottomaneli & Cutler, *The Earn-Your-Way Credit Systems Use of a Token Economy in Narcotic Rehabilitation*, 6 *INT’L. J. OF THE ADDICTIONS* 525 (1971). Cf. Lloyd & Abel, *supra* note 39, at 5.

⁴⁴ E.g., Schaefer, *Investigations in Operant Conditioning Procedures in a Mental Hospital*, in *REINFORCEMENT THEORY IN PSYCHOLOGICAL TREATMENT—A SYMPOSIUM* 25, 26 (J. Fisher & R. Harris eds., 1966) (Calif. Ment. Health Res. Monog. No. 8); Bruce, *Tokens for Recovery*, 66 *AM. J. NURSING* 1700, 1801 (1966); Gripp & Magaro, *supra* note 41, at 141; Lloyd & Abel, *supra* note 39 at 6.

⁴⁵ Schaefer, *supra* note 44, at 33-34. Actually, the quoted remark was made in the context of overcoming refusal-to-eat problems exhibited by some of the patients, but if the hospital is medically willing to allow those patients to miss five consecutive days of meals, it seems reasonable to assume that the same medical standard would be applied to patients who presumably desire to eat but who have not earned a sufficient number of tokens to pay for meals.

⁴⁶ E.g., Lloyd & Abel, *supra* note 39; Narrol, *supra* note 39. Cf. Atthowe & Kransner, *supra* note 35.

⁴⁷ Bruce, *Tokens for Recovery*, 66 *AM. J. NURSING* 1700, 1802 (1966).

⁴⁸ *Id.* at 1800-01. The Patton system seems to carry to the extreme the position often advocated by behaviorists that noncontingent rewards ought to be provided at an “adequate but relatively low level,” with preferred reinforcers being available “contingent upon the occurrence of desired response patterns.” BANDURA, *supra* note 4, at 231. Under such an approach, therapy can be managed chiefly by positive reinforcement, without resort to punishment, and patients, the argument continues, have only themselves to blame if their privileges seem inadequate. Indeed, several programs have noted the benefits of an earn-your-way system, in notable contrast to more traditional approaches where “mandating educational or group therapy participation by threatening loss of visiting and other privileges or delayed release appeared to stimulate the social defiance and self-defeating traits of the population, and rebellion against the regulations of the institution provided an increase in prestige and enhanced status in the eyes of

Before leaving a description of token economies, it will be instructive to discuss in some detail a token environment established at the Richmond State Hospital in Indiana.⁴⁹ This particular system, although involving a population of civilly committed alcoholics rather than chronic psychotics, is particularly worthy of note because it suggests just how easily the Ayllon and Azrin token economy model can be extended to other clinical categories of patients.⁵⁰

Prior to the inception of the token economy, legally committed alcoholics at Richmond State were first admitted to the Receiving Unit, where they were provided with rest and medical care. Within one or two weeks the patient was usually assigned to an open ward, with a work assignment within the hospital and all the available privileges.⁵¹ When the token system was introduced, certain alcoholic patients without intellectual, organic or psychotic impairments were inducted into the program.⁵² Work in the hospital labor force, compensated by points, was deemed the target behavior. The reinforcers included a broad range of patient needs and privileges:

The motivational power of the points was derived from allowing their exchange for every possible purchase within the hospital; thus, room and board, clothing maintenance, canteen purchases, Alcoholics Anonymous meetings, short leaves of absence, disulfiram treatment, different kinds of psychotherapy, and special instruction could all be freely selected, if paid for out of earnings.⁵³

Points were also needed to purchase advancement through the five tier system used at Richmond. The five tiers consisted of two closed wards, a semi-closed ward where ground privileges were available by purchase, and two open wards with pass privileges. Patients could purchase promotion only at weekly intervals.

The program was considered aversive by prospective members,⁵⁴ as well as by the inducted members who requested weekly group meetings which became, mainly, "a grievance session centering around project rules."⁵⁵ No doubt the grievances were in part attributable to the fact that "a deprivation situation was established by starting patients in a closed ward of low status, substandard material and social comfort, and curtailed freedom, relative to other wards in the hospital."⁵⁶ The legal issues raised by the token economies may

the peer group." Glicksman, Ottomanello & Cutler, *The Earn-Your-Way Credit System: Use of a Token Economy in Narcotic Rehabilitation*, 6 *EXPL. J. OF THE AMERICAN* 525 (1971). Some commentators have criticized our peno-correctional system for giving inmates non-contingently whatever benefits may be available, and then denying some of the benefits as punishment for wrongful behavior—a system where "the staff members are cast in the unenviable role of punitive agents, and the [inmates] can move only in a downward direction." BASTURA 230. To the same effect, see Hindelang, *A Learning Theory Analysis of the Correctional Process*, 4 *ISSUES IN CRIMINOLOGY* 43, 44-45 (1969). See also M. Hindelang, *Social Learning Theory and Social Problems: The Case of Prisons* 9 (unpublished manuscript on file with author): "At the same time that a noncontingent system of rewards is operating a contingent system of punishments is attempted; the result is that inmates come to view the rewards as rights rather than privileges and when they are threatened with the denial of those rewards they become justifiably embittered." (citations omitted). It has been suggested that when contingencies are so managed, "the majority of the participants comply half-heartedly with the minimum demands of the institution in order to avoid penalties for any breach of the rules," and that, in a psychiatric setting, "patients can best maximize their rewards by merely adopting a passive patient role." BASTURA 230. If the legal system wishes to accept the advice of the behaviorists, the crucial question for the law, of course, will be to define, for various effluent populations, just where the line of non-contingent rewards at an "adequate but relatively low level" ought to be drawn.

⁴⁹ Narrol, *Experimental Application of Reinforcement Principles to the Analysis and Treatment of Hospitalized Alcoholics*, 28 *Q. J. OF STUDIES ON ALCOHOL* 105 (1967).

⁵⁰ As will be apparent, it also raises certain serious questions about the ethical propriety of the type of psychological research involved. See also Rubin, *Jokers Wild in the Lab*, *PSYCHOLOGY TODAY*, Dec., 1970, at 18.

⁵¹ Narrol, *Experimental Application of Reinforcement Principles to the Analysis and Treatment of Hospitalized Alcoholics*, 28 *Q. J. OF STUDIES ON ALCOHOL* 105, 107 (1967).

⁵² *Id.*

⁵³ *Id.* at 108. With respect to the right to treatment, the same author states: "The obligation to treat the patient need not be neglected, since purchase of all the available therapeutic services may be permitted." *Id.* at 106-07.

⁵⁴ *Id.* at 109.

⁵⁵ *Id.*

⁵⁶ *Id.* at 108. Of particular concern, from the viewpoint of the ethics of research, is that "work was made the target behavior for the purposes of simple demonstration of reinforcement technique." *Id.* at 107-08. In other words, "the project had no therapeutic purpose, but demonstrated that behavior can be controlled in a simulated economy." *Id.* at 107. The study proved simply that project patients worked 8-hour days as opposed to the 4-hour days worked by non-project alcoholic patients. *Id.* at 109. But that is hardly a startling finding, particularly since the project was based on the Ayllon & Azrin study, which had already established the point. Indeed, the author was himself hardly surprised by the outcome: "Definite evidence of increased work output was obtained, as might be expected." *Id.*

be apparent by now and they will be considered in the next section. An analytical examination of some of the more difficult competing psychological and legal considerations will, however, be deferred until section III.

II.—LAW AND TOKEN ECONOMIES

To speak at the moment of a specific "law of token economies" is of course out of the question, for at this date there is scarcely a handful of statutory and judicial pronouncements dealing even generally with the rights of the institutionalized mentally ill. Until very recently, the judicially manufactured "hands-off" doctrine enabled the courts to duck important questions regarding the limits of administrative discretion in the operation of prisons and mental institutions.⁵⁷ Accordingly, the correctional and therapeutic establishments were in effect given, by default, the legal nod to manage their institutions—and to conduct their therapy⁵⁸—as they saw fit. But the last few years have witnessed a remarkable turnabout in the willingness of courts to scrutinize living conditions in total institutions. Though the activity has thus far been slower in the mental health area than it has been with regard to prisons, the successful legal penetration of mental hospitals appears to be a more promising prospect than in the analogous prison movement. Already, some bold and far-reaching decisions have been rendered,⁵⁹ and there is the further possibility of widespread legislative action.⁶⁰ From the sparse legal precedents, one can detect a rather clear trend, and the emerging law bears rather directly on the rights of patients subjected to a token economy.

The encouragement of certain target responses—such as proper personal hygiene and self-care—surely seems beyond legal question,⁶¹ but it will be recalled that the principal target response of most token economies is adequate functioning on an institutional work assignment. Many persons both within and without the legal profession, however, find it objectionable in effect to require patients—especially involuntarily committed patients—to work for mental institutions, particularly without standard compensation. Though the work assignments are often cast in therapeutic terms, such as overcoming apathy and institutionalization, the critics view the jobs as simple laborsaving devices which exploit patients⁶² and, indeed, which sometimes make hospital retention of particular patients almost indispensable to the functioning of the institution.⁶³

That patient job assignments are in fact often laborsaving is beyond question, as is the fact that work output will increase substantially when work is contingently reinforced by the standard reinforcers employed by token economies. Indeed, it will be recalled that an Anna State Hospital in Illinois. Ayllon and Azrin concluded that ward efficiency soared astronomically—fourfold⁶⁴—because of a token system involving job performance, and they noted further that unsatisfactory job performance resulted in administrative disruption.⁶⁵ During a patient vacation period "the additional work required to keep the ward functioning . . . had to be made up by paid employees whose hours almost doubled."⁶⁶

⁵⁷ E.g., Note, *Beyond the Ken of Courts: A Critique of the Judicial Refusal to Review the Complaints of Convicts*, 72 YALE L. J. 506 (1963).

⁵⁸ E.g., N. KITTRIE, *THE RIGHT TO BE DIFFERENT: DEVIANCY AND ENFORCED THERAPY* 207-08 (1971). Cf. O'Donoghue v. Riggs, 73 Wash. 2d 814, 820 n.2, 440 P.2d 823, 828 n.2 (1968): "One who enters a hospital as a mentally ill person either as a voluntary or involuntary patient, impliedly consents to the use of such force as may be reasonably necessary to the proper care of the patient. . . ."

⁵⁹ Covington v. Harris, 491 F.2d 617 (D.C. Cir. 1969); Wyatt v. Stickney, 344 F. Supp. 373 (M.D. Ala. 1972) (Bryce and Searcy Hospitals).

⁶⁰ E.g., CAL. WELF. & INST'NS CODE § 5325 (West Supp. 1971).

⁶¹ Ironically, however, an experiment conducted by Ayllon and Azrin seems to demonstrate that "although the reinforcement for self-care was initiated to maintain a minimum standard of cleanliness and personal hygiene, changes in the reinforcement contingencies produced no appreciable difference in self-care practices." *TOKEN ECONOMY*, *supra* note 16, at 255.

⁶² E.g., Innis, *Civil Liberties and Mental Illness*, 7 CRIM. L. BULL. 101, 122-23 (1971). At Anna State Hospital, because the token value of jobs is set by factors of supply and demand, "some jobs that were fairly demanding physically and that required about three hours through the day for completion, such as sweeping the floors, earned only about five tokens. . . ." *TOKEN ECONOMY* 204.

⁶³ *TOKEN ECONOMY*, *supra* note 16, at 201.

⁶⁴ *Id.* 188.

⁶⁵ *Id.* at 201-02.

⁶⁶ *Id.* at 210.

It seems clear that the law will not tolerate forced patient labor that is devoid of therapeutic purpose and which is required solely as a labor saving technique. The Second Circuit, invoking a Thirteenth Amendment involuntary servitude rationale, so held in 1966.⁶⁷ Since then, recognition that there is not always a sharp line dividing therapeutic and non-therapeutic assignments has led to varying legal theories for dealing with—or for avoiding—the problem.

One rule is suggested by Bruce Eanis, a leading mental health lawyer who is keenly aware of the disparate per diem cost between private and state hospitalization and of the cost-saving devices resorted to by state hospitals. He would adopt the following as a legal rule of thumb in deciding whether work assignments have therapeutic value: "If a given type of labor is therapeutic, we would expect to find patients in private facilities performing that type of labor. Conversely, labor which is not generally performed in private facilities should be presumed . . . to be cost-saving rather than therapeutic."⁶⁸

The "avoidance" approach is exemplified by the elaborate decision in *Wyatt v. Stickney*,⁶⁹ in which the court barred all involuntary patient labor involving hospital operation and maintenance—whether therapeutic or not—but permitted voluntary institutional work of either a therapeutic or a non-therapeutic nature, so long as the labor is compensated pursuant to the federal minimum wage law.⁷⁰ To insure the voluntary nature of any institutional work assignment undertaken, the *Wyatt* court specified further that "privileges or release from the hospital shall not be conditioned upon the performance of labor."⁷¹ Involving hospital maintenance.⁷²

The approach taken by the landmark *Wyatt* decision, widely followed, would have an immense impact on traditional token economies. Patients could not be forced in any way to perform institutional labor assignments—and the force could not legitimately be exerted indirectly by making basic reinforcers "contingent" upon appropriate performance. Further, if patients should decide voluntarily to undertake institutional tasks, the minimum wage is the legally required "reinforcer." Under *Wyatt*, therapeutic assignments unrelated to hospital operations can constitute legitimate target responses that can be rewarded without regard to the minimum wage. But, perhaps most significant for token economies, *Wyatt* and related legal developments seem to have a great deal to say regarding the definition of legally acceptable reinforcers. *Wyatt*, together with an occasional piece of proposed⁷³ or enacted⁷⁴ legislation, has begun the process of enumerating the rights guaranteed to hospitalized mental patients. The crux of the problem, from the viewpoint of behavior modification, is that the items and activities that are emerging as absolute rights are the very same items and activities that the behavioral psychologists would employ as reinforcers—that is, as "contingent rights."

According to the *Wyatt* court, a residence unit with screens or curtains to insure privacy, together with "a comfortable bed, . . . a closet or locker for [the patient's] personal belongings, a chair, and a bedside table are all constitutionally required."⁷⁵ Under *Wyatt*, patients are also insured nutritionally

⁶⁷ *Johnson v. Henne*, 355 F.2d 120, 132 n.3 (2d Cir. 1966). The court also noted that if concededly involuntary labor is non-therapeutic, even compensation for the work will not necessarily satisfy Thirteenth Amendment requirements, for "the mere payment of a compensation, unless the receipt of the compensation induces consent to the performance of the work, cannot serve to justify forced labor." *Id.*

⁶⁸ Eanis, *Civil Liberties and Mental Illness*, 7 *Crim. L. Bull.* 101, 123 (1971) (emphasis in original).

⁶⁹ *Wyatt v. Stickney*, 344 F. Supp. 373 (M.D. Ala. 1972) (Bryce and Searcy Hospitals).

⁷⁰ *Id.* at 381. The minimum wage law is the Fair Labor Standards Act, 29 U.S.C. § 206 (1971). Judge Johnson in *Wyatt* further ordered that payment to patients for such work shall not be applied to offset hospitalization costs. *Id.* at 13.

⁷¹ 344 F. Supp. at 381.

⁷² Under *Wyatt*, the only type of work that can seemingly be "required," and the only type of work exempt from minimum wage coverage, is therapeutic work unrelated to hospital functioning. Further, according to *Wyatt*, patients may also be required "to perform tasks of a personal housekeeping nature such as the making of one's bed." *Id.*

⁷³ Ralph Nader's Center for Study of Responsive Law has produced a suggested statute covering rights of committed patients. The proposal is reproduced in *PSYCHIATRIC JUSTICE PROSPECT*, *supra* note 1, at 225-26.

⁷⁴ *E.g.*, The Lanterman Petris-Short Act, CAL. WELF. & INST'NS CODE § 5325 (West Supp. 1971).

⁷⁵ *Wyatt v. Stickney*, 344 F. Supp. 373, 381-82 (M.D. Ala. 1972) (Bryce and Searcy Hospitals).

adequate meals with a diet that will provide "at a minimum the Recommended Daily Dietary Allowances as developed by the National Academy of Sciences."⁷⁶ *Wyatt* further enunciates a general right to have visitors,⁷⁷ to attend religious services,⁷⁸ to wear one's own clothes⁷⁹ (or, for those without adequate clothes, to be provided with a selection of suitable clothing), and to have clothing laundered.⁸⁰ With respect to recreation, *Wyatt* speaks of a right to exercise physically several times weekly and to be outdoors regularly and frequently,⁸¹ a right to interact with members of the other sex,⁸² and a right to have a television set in the day room.⁸³ Finally, apparently borrowing from Judge Bazelon's opinion for the District of Columbia Circuit in *Covington v. Harris*,⁸⁴ Judge Johnson in *Wyatt* recognized that "patients have a right to the least restrictive conditions necessary to achieve the purposes of commitment"⁸⁵—presumably including, if clinically acceptable, ground privileges and an open ward.

Thus, the usual target behaviors for token economies would be disallowed and the usual reinforcers will be legally unavailable. The emerging law appears to vindicate the assertions of the patients who, at the inception of the Patton State Hospital token economy, "pointed out to the nurses that the state had an obligation to feed them and that the nurses were acting illegally in denying them entrance to the dining room."⁸⁶ Chronic patients at Anna State Hospital who had to work for screens and personal lockers to insure privacy would, under *Wyatt*, have those items provided noncontingently. According to the "least restrictive conditions" rationale of *Covington* and *Wyatt*, it would seemingly be impermissible to house on closed wards those patients clinically capable of exercising ground privileges, such as Richmond State Hospital's admittedly non-psychotic alcoholic patients who, before the onset of the token economy program, would have quickly been placed on an open ward.⁸⁷ The identical "least restrictive conditions" rationale would presumably also invalidate programs, such as the one at Anna State Hospital,⁸⁸ in which ground privileges or supervised walks are available only by purchase, and programs in

⁷⁶ *Id.* at 383.

⁷⁷ *Id.* at 379. See also CAL. WELF. & INST'NS CODE § 5325(c) (West Supp. 1971).

⁷⁸ 344 F. Supp. at 381.

⁷⁹ *Id.* at 380. See also CAL. WELF. & INST'NS CODE § 5325(a) (West Supp. 1971).

⁸⁰ 344 F. Supp. at 381.

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.* at 382.

⁸⁴ 419 F.2d 617 (D.C. Cir. 1969).

⁸⁵ *Wyatt v. Stickney*, 344 F. Supp. 373, 379 (M.D. Ala. 1972) (Bryce and Searcy Hospitals). The "least restrictive alternative" or "less drastic means" rationale was first applied in the mental health law area in *Luke v. Cameron*, 384 F.2d 657 (D.C. Cir. 1968), an opinion authored by Judge Bazelon, which held that commitment itself should be ordered only if no suitable but less drastic alternatives to commitment could be located. For a discussion of the constitutional doctrine of "less drastic means" in the commitment context, see PSYCHIATRIC JUSTICE PROJECT, *supra* note 1, at 140-46. See also Chambers, *Alternatives to Civil Commitment of the Mentally Ill: Practical Guides and Constitutional Imperatives*, 70 MICH. L. REV. 1107 (1972). In *Covington v. Harris*, 419 F.2d 617 (D.C. Cir. 1969), Judge Bazelon simply extended the doctrine to life within the confines of the hospital environment.

⁸⁶ Schaefer, *supra* note 44, at 29.

⁸⁷ A similar problem seems to be present in the token economy system of State Hospital North, Orofino, Idaho, as described in Lloyd & Abel, *Performances on a Token Economy Psychiatric Ward: A Two Year Summary*, 8 BEHAV. RES. & THERAPY 1 (1970). In addition to using tokens for "standard" reinforcers, the State Hospital North program has a phase system which requires the accumulation of tokens for phase promotion. Group C, for example, is a closed ward, and promotion to Group B which has ground privileges, requires earning 2,000 tokens in a three week period. Further, failure to earn substantial tokens while in Group B or A may result in demotion to Group C. *Id.* at 5. To the extent that certain Group C patients could clinically manage ground privileges—which, given the system, seems almost beyond doubt—this program and many others devised along similar patterns seem to offend the "less drastic means" test of *Covington* and *Wyatt*.

⁸⁸ TOKEN ECONOMY, *supra* note 16, at 226. Ayllon and Azrin do not specify the percentage of patients on their ward clinically capable of exercising ground privileges, but Atthowe and Krasner, in their report on a token economy for chronic psychotics at the Palo Alto Veterans Administration Hospital, estimate that fully 40% of their patients could, without difficulty, leave the ward unescorted. Atthowe & Krasner, *Preliminary Report on the Application of Contingent Reinforcement Procedures (Token Economy) on a "chronic" Psychiatric Ward*, 73 J. OF ABNORMAL PSYCHOLOGY 37, 35 (1968). Any scheme that required such patients to purchase ground privileges would presumably run afoul of *Covington* and *Wyatt*.

which outright release from the institution is conditioned upon the accumulation of a set number of tokens or points.⁸⁰

Wyatt is obviously a decision of extraordinary detail and specification, perhaps because of comprehensive stipulation among the parties and amici.⁸⁰ Nonetheless, the case⁸¹ is fully consistent with the trend of legal thought.⁸² Because the distinct direction of legal thinking bears so heavily on traditional tactics for the behavior modification of chronically psychotic behavior, it is important to examine closely certain particulars of the psycho-legal conflict and their implications and to point, if possible, to a proper path for future legal and therapeutic development.

III.—ANALYSIS AND IMPLICATIONS

The important question of the therapeutic or non-therapeutic nature of institutional labor is unfortunately far more complex than would be indicated by the black or white treatment it has received from both legal and psychological

⁸⁰ A token economy program in New York which involves civilly committed narcotic addicts presumably hinges release—or at least eligibility for release consideration—upon the accumulation of 936 points. Glieksman, Ottomanelli & Cutler, *The Earn-Your-Way Credit System: Use of a Token Economy in Narcotic Rehabilitation*, 6 INT'L J. OF THE AMERICANS 525-27 (1971). To the extent that the point accumulation system does not mesh squarely with statutory or clinical criteria for release, such a system presents serious questions regarding the unwarranted deprivation of liberty. The only saving grace for the described program seems to be that its patients are released after an average stay of 4 months, whereas committed addicts not on the earn-your-way token system are confined for an average of 7.5 months. *Id.* at 528. See also Atthowe, *Ward 113 Program: Incentives and Costs—A Manual For Patients 5, 10 (Veterans Ad., Palo Alto 1964)* (before patient can be eligible for 90-day trial visit, must be in Group A for 30 days, and it costs 120 tokens to enter Group A, assuming there is an opening).

⁸¹ *Wyatt v. Stickney*, 344 F. Supp. 373, 375-76 (M.D. Ala. 1972) (Bryce and Searcy Hospitals).

⁸² Another, somewhat less precise, legal problem facing token economies may exist in the confusion between activities that constitute target responses and those that constitute reinforcers. More specifically, different token economies may classify the same activity differently. For example, chronic patients at the Palo Alto Veterans Administration Hospital earned tokens for attending group activities, recreational events, and movies (which were viewed as target behaviors), whereas Anna State Hospital patients had to expend tokens to attend similar activities (which were viewed as reinforcers). Compare Atthowe, *supra* note 80, at 7, with *TOKEN ECONOMY*, *supra* note 16, at 226. In view of the emerging constitutional right to treatment [see *Wyatt v. Stickney*, 325 F. Supp. 781 (M.D. Ala. 1971)], it seems problematic at best to charge for psychotherapy sessions, as at Anna State Hospital and Richmond State Hospital, particularly when so few patients seem willing to expend tokens to attend such sessions. *E.g.*, *TOKEN ECONOMY* 66-67, 226, 234; *Narrol*, *supra* note 51, at 108-09. Indeed, even the previously mentioned activities—such as recreational events and movies—may have significant therapeutic value (and may fall within the scope of the right to treatment) in reducing boredom, increasing interaction and, in the case of movies, in providing a vicarious experience for learning or modeling appropriate social behavior. See *BANDURA*, *supra* note 4, at 179-82.

It can be easily contended, therefore, that therapy sessions, recreational events, movies, writing materials (to increase contact with the world outside) and other items and events ought to be provided, as part and parcel of the right to treatment, on an absolute, noncontingent basis. Cf. *Covington v. Harris*, 419 F.2d 617, 625-26 (D.C. Cir. 1969). Interestingly, however, even the noncontingent ready availability of such therapeutic items and events may be insufficient to arouse interest in them on the part of a highly apathetic patient population. A possible solution is to convert important therapeutic activities into token-earning target responses, as Atthowe did in Palo Alto. In psychological terms, such a course of action requires "considering the selection of a reinforcer as a response to be strengthened." Ayllon & Azrin, *Reinforcer Sampling: A Technique for Increasing the Behavior of Mental Patients*, v. J. of APPLIED BEHAVIOR ANALYSIS 13, 14 (1968). In legal terms, we seem to have developed a new category of "reinforced rights."

Those with Hofstadterian hangups might wish to construct a spectrum of patient rights—and correlative hospital obligations—along the line of privileges (dispensed or withheld by hospital discretion), contingent rights (legitimate primary reinforcers mandatorily available by token purchase), rights (available absolutely and noncontingently), and reinforced rights (target responses which can be engaged in as a matter of right and which will be reinforced by tokens)!

⁸³ *E.g.*, *Eunis, Civil Liberties and Mental Illness*, 7 CRIM. L. BULL. 101 (1971). See *CAL. WELF. & INST'N.*; *COB* § 5325 (West Supp. 1971). See also *PSYCHIATRIC JUSTICE PROJECT*, *supra* note 1, at 225-26 (draft legislation prepared by Center for Study of Responsive Law). The legislative developments occasionally cover ground not touched by *Wyatt*. The California statute, for example, gives patients the right "to have ready access to letter writing materials, including stamps . . ." *CAL. WELF. & INST'N.*, *COB* § 5325(e), and the statutory proposal of the Center for Study of Responsive Law states, explicitly, that patients are "to be given adequate writing paper, pencils, envelopes and stamps." See *PSYCHIATRIC JUSTICE PROJECT* 225. Indeed, the failure of these detailed statutes to cover some of the more basic rights—such as food and beds—must be attributed to an assumption on behalf of the draftsmen that such rights were beyond dispute or beyond denial in practice.

quarters. For instance, Ennis's initially attractive and easy-to-apply rule of thumb—that types of patient labor performed at public but not at private hospitals should be presumed cost-saving rather than therapeutic⁹³—simply cannot withstand close scrutiny. Ennis's formula is undermined by the clinical and socio-economic differences between private and public hospital patients. Private hospital patients are typically skilled, of adequate means, and in the hospital for a short stay. Chronic psychotics at state institutions are almost invariably persons who have been hospitalized and unemployed for long periods of time; they are overwhelmingly poor, unskilled, of advanced age, and likely to suffer considerable stigmatization upon release from the hospital.⁹⁴

Given this characterization of chronic mental patients, combined of course with apathy, dependency, and institutionalization, ambitious employment opportunities for released chronics are virtually out of the question.⁹⁵ Indeed, when viewed from that perspective, together with the fact that work of almost any kind is probably superior to idleness in offsetting apathy, a wide range of institutional work activities have both therapeutic value and realistically approximate future employment goals. For example, Ayllon and Azrin noted about their patients at Anna State Hospital:

"Almost all of the patients in the programmed environment were from rural or lower-class communities. They were all females. Most were housewives prior to admission and presumably would continue to be so after discharge. Their advanced age and their limited formal education indicated that if they were to be employed, they could hold only non-skilled positions. The target behaviors for these individuals seemed, therefore, to be the various performances involved in housekeeping and in unskilled employment."⁹⁶

Further evidence that the motivation behind establishing such target behaviors is indeed therapeutic rather than simply cost-saving can be gleaned from several facts and from examples where cost-saving was not in issue. One Veterans Administration program for discharged chronics, for instance, provides patients with token-earning formal classes in shopping, washing, ironing and mending clothing, and related tasks.⁹⁷ Moreover, in one of the few reported instances where released chronics managed to adjust successfully to a form of community life and to remain employed—George Fairweather's project where released patients lived and worked together in a semiautonomous community lodge⁹⁸—the nature of the employment was perfectly consistent with training provided by standard institutional tasks.

When the group of patients in Fairweather's project was about to leave the hospital for the community, for example, it originally planned on opening a restaurant, the bulk of positions to consist of "cook, assistant cook, dishwasher, busboys, waiters and cashier."⁹⁹ Eventually, however, the men settled on janitorial work and gardening as their source of income, but even those jobs were performed inadequately¹⁰⁰ until the men received specific training for the work.¹⁰¹ And in a successful project conducted by one of Fairweather's associates and patterned after that model, but involving both sexes of chronic patients, community employment followed a strikingly similar course: "Men worked at golf courses and other such places in teams doing gardening, land-

⁹³ Ennis, *Civil Liberties and Mental Illness*, 7 *CRIM. L. LITL.* 101, 123 (1971).

⁹⁴ E.g., *TOKEN ECONOMY*, *supra* note 16, at 54; BANDURA, *supra* note 4, at 278. See also Lloyd & Abel, *Performance on a Token Economy Psychiatric Ward: A Two Year Summary*, 8 *BEHAV. RES. & THERAPY* 1, 8 (1970); Spiegler, *The Use of a School Model and Contingency Management in a Day Treatment Program for Psychiatric Outpatients* 8 (paper presented at Rocky Mountain Psychological Association Convention, Denver, Colorado, May 1971).

⁹⁵ E.g., G. FAIRWEATHER, D. SANDERS, H. MAYNARD, D. CRESSLER, & D. BLECK, *COMMUNITY LIFE FOR THE MENTALLY ILL: AN ALTERNATIVE TO INSTITUTIONAL CARE* 207 (1968) [hereinafter cited as *COMMUNITY LIFE*]. Indeed, the relapse rate for released chronics is so high and employment prospects are so dim that some commentators have questioned hospital release as an appropriate therapeutic goal. See Lloyd & Abel, *supra* note 94, at 8.

⁹⁶ *TOKEN ECONOMY*, *supra* note 16, at 54.

⁹⁷ Spiegler, *supra* note 94, at 4.

⁹⁸ *COMMUNITY LIFE*, *Op. B. PASAMANICK, F. SCARFETTI, & S. DINITZ, SCHIZOPHRENICS IN THE COMMUNITY: AN EXPERIMENTAL STUDY IN THE PREVENTION OF HOSPITALIZATION* (1967).

⁹⁹ *COMMUNITY LIFE* 46.

¹⁰⁰ *Id.* at 5.

¹⁰¹ *Id.* at 50-51, 54.

scaping, and groundskeeping work. The women worked in groups at several nursing homes, as well as in motels and restaurants in the local area."¹⁰²

From these examples, it should be apparent that many forms of institutional labor, even though concededly cost-saving, prevent apathy and prepare patients for life, however marginal,¹⁰³ on the outside. If the performance of therapeutic institutional labor by patients is to be encouraged, however, certain safeguards should perhaps be required to insure that no patient becomes indispensable to his supervisor, a possibility which might result in the patient's continuation on the job becoming more important to the staff than his welfare, his treatment, or even his discharge. Administrative precautions taken in the Anna State Hospital program may prove instructive as legal guidelines: Ayllon and Azrin insisted upon periodic job rotation¹⁰⁴ and, moreover, established a firm rule that "no patient was ever allowed to obtain a position for which she alone was qualified."¹⁰⁵ Instead, "a position was established only when several patients were known to be capable of filling that position."¹⁰⁶

If, given certain safeguards, voluntary¹⁰⁷ institutional labor by chronic patients is to be encouraged, what of Wyatt's minimum wage mandate? Such a mandate, besides vitiating any cost-saving benefits of patient performance, might cause serious complications. First, it will inevitably divert scarce legislative appropriations away from other hospital and therapeutic uses. Second, a minimum wage requirement may encourage the hospital—and indeed the encouragement may be compounded by union and community pressure—to fill its institutional positions with permanent outsiders instead of with patients, perhaps leaving the patients to pursue less therapeutic activities.¹⁰⁸ In other words, a minimum wage requirement may possibly result in greater expenditures for less effective therapy.

Thus, although compensating all institutional tasks with the minimum wage appears to be an attractive goal, it is clear that several major problems might be created by that requirement.¹⁰⁹ It is clear, too, that various safeguards short

¹⁰² *Id.* at 332. That cost-saving and therapeutic labor are not necessarily mutually exclusive concepts was recognized in *Johnson v. Henne*, 355 F.2d 129 (2d Cir. 1966). Note that the therapeutic or non-therapeutic nature of particular institutional work assignments may well vary among clinical groups. Just as these tasks may be therapeutic from the perspective of public hospital chronic patients but not for private hospital patients, see text accompanying note 97 *supra*, so too the work may be therapeutic for chronic state hospital patients but not necessarily for prisoners or, particularly, for juvenile delinquents—who seemingly need academic proficiency to achieve vocational success in their long lives ahead far more than they need training in janitorial work. Cf. BANDURA, *supra* note 4, at 278. In fact, the entire legal analysis of token economies should probably vary with different clinical populations. For instance, the law would probably view the privacy claim that a room-divider screen ought to be provided as an absolute right (rather than merely be available as a contingent reinforcer) far differently in the context of dormitory-style living for the adult mentally ill than in the context of a juvenile institution. But see *Wyatt v. Slickney*, 344 F. Supp. 387, 404 (M.D. Ala. 1972) (Partlow Hospital) (screens or curtains mandated in an institution for mentally retarded children and adults). Further, resort to certain reinforcers may be arguably necessary to encourage appropriate behavior among one clinical group, but be unnecessary to induce the target behavior among a different clinical category. Consider in that connection, the Richmond State Hospital scheme of treating nonpsychotic alcoholics in a manner very similar to the way other token economy programs treat chronic psychotics.

¹⁰³ *Id.* COMMUNITY LIFE, *supra* note 95, at 337. In view of the traditionally astounding speedy relapse rates for the great majority of discharged chronic patients, BANDURA, *supra* note 4, at 280, marginality in the outside community seems, at least for the near future, to be an acceptable goal.

¹⁰⁴ TOKEN ECONOMY, *supra* note 16, at 202.

¹⁰⁵ *Id.* at 201.

¹⁰⁶ *Id.*

¹⁰⁷ Truly voluntary work would assume, of course, that no basic rights—food, beds, ground privileges, privacy—were made contingent upon performance.

¹⁰⁸ Activities are less therapeutic if the skills they train are not marketable in the outside community. There is no point in using the hospital setting to build up socially adaptive behaviors if one can expect that the environment the patient is placed in after release does not also reward those behaviors. See generally, TOKEN ECONOMY, *supra* note 16, at 49-54.

¹⁰⁹ Another possible difficulty with mandating a minimum wage is that it imposes an external force on the token economy and may upset the system's delicate economic balance, its incentive system, etc. Winkler, who has studied the economics of token economies, has concluded that token systems constitute subtle and intricate economic models which parallel remarkably the economic system of the outside world. Winkler, *The Relevance of Economics Theory and Technology to Token Reinforcement Systems*, 9 BEHAV. RES. & THERAPY 81 (1971). In the Ayllon and Azrin token economy, for example, the token values of the various positions were set by concepts of supply and demand. TOKEN ECONOMY 204. A minimum wage reinforcer for all hospital positions, even if appended to a token system with different numbers of tokens available for different assignments, would surely have a profound influence on the pre-existing incentive system. See also Kagel & Winkler, *Behavioral Economics: Areas of Cooperative Research Between Economics and Applied Behavioral Analysis*, 5 J. OF APPLIED BEHAVIOR ANALYSIS 335 (1972).

of the minimum wage can be invoked to prevent patient peonage, and that voluntary patient labor can probably be encouraged either by monetary rewards somewhat below the minimum wage or by whatever other reinforcers satisfy the *Wyatt* test.

But in many respects the work and wage question is secondary to the question of legally acceptable and psychologically effective reinforcers. If adequate appropriations were available, if community residents did not threaten to displace patients in the institutional labor force, and if certain other kinks could be ironed out,¹¹⁰ few objections would be raised to specifying the minimum wage as a legally required reinforcer for patient-performed hospital work assignments. Indeed, if monetary rewards, whether of minimum wage proportions or not, were sufficient to induce patient work performance, that would be a small price to pay to strengthen target behaviors.

The major problem faced by the token economy is the current trend towards expansion of the category of protected inmate interests. The law, relying on concepts such as freedom and dignity, would require, for example, that all patients be accorded minimal levels of privacy and comfort. To the behavioral psychologist, who operates from the premise of determinism, philosophical notions of "freedom" and "dignity" are irrelevant.¹¹¹ Rather, the psychologist views privacy or comfort as no more than useful tools which he can manipulate to make a psychotic's behavior more appropriate and socially adaptive—a goal which presumably all agree is in the best interest of both the patient and the society. In the psychologist's view it would surely be an ironic tragedy if, in the name of an illusory ideal such as freedom, the law were to deny the therapist the only effective tools he has to restore the chronic psychotic to his health—and his place in the community.

Wyatt thus poses a painful dilemma. The behavior modifier suggests that chronic psychotics respond initially to only the most primitive reinforcers, and, therefore, only their contingent availability can motivate development of socially adaptive behavior.¹¹² It follows, the behaviorists claim, that if the basics are made freely available as rights rather than as reinforcers, chronic psychotics may be destined to spend their lives functioning poorly in an institutional setting, whereas if those basic rights are converted into contingent reinforcers, there may be a real prospect of clinical improvement and discharge.¹¹³

If the empirical evidence supported the claim that token economies relying on primitive reinforcers worked very well with chronic patients—that, for example, virtually all patients improved dramatically and were able to earn the reinforcers required for a decent existence or if the evidence demonstrated that no less drastic means could accomplish similar results—a re-evaluation of the emerging law might very well be in order. But a review of the pertinent literature suggests the behavior modification proponents may have difficulty sustaining a burden of proof with respect to those matters.

First of all, while most token economy outcome studies report favorable results,¹¹⁴ the successes are far from overwhelming. Even in a project as dramatic as the Anna State Hospital study, eight of the 44 subject patients were basically unresponsive to the program,¹¹⁵ and success for the remaining patients

¹¹⁰ Such as the impact of a minimum wage requirement on the economic incentive system of the hospital. See discussion in note 100 *supra*.

¹¹¹ See B. F. SKINNER, *BEYOND FREEDOM AND DIGNITY* (1971).

¹¹² E. g., BANDURA *ibid.*; *TOKEN ECONOMY* 260.

¹¹³ At first blush, the behaviorist position seems to clash with the data provided by J. K. Wing, who found that the clinical states of schizophrenic patients at three different hospitals correlated closely—and positively—with the respective hospital policies on patient rights and liberty. Wing, *Evaluating Community Care for Schizophrenic Patients in the United Kingdom*, in *COMMUNITY PSYCHIATRY* 138, 147-57 (Anchor ed., L. Roberts, S. Halleck & M. Loeb, eds. 1969). Wing's analysis may possibly be reconciled with the behaviorist contention. First, it is not entirely clear from Wing's study that patients were assigned to the three hospitals on a random basis, and if they were not, a causal connection between patient rights and clinical states could not conclusively be inferred. And even if it could, the connection could well be limited to instances where contingency management systems are absent. In other words, it may be that it is far more the upshot to provide patients with certain privileges absolutely than it is to deny them those privileges absolutely, but that it is better still to provide the privileges on a contingent basis.

¹¹⁴ See, e.g., Gripp & Magara, *A Token Economy Program Evaluation With Untreated Control Ward Comparisons*, 9 *BEHAV. RES. & THERAPY* 137 (1971) (summarizing results achieved by other researchers).

¹¹⁵ *TOKEN ECONOMY supra* note 10, at 260. See also Lloyd & Abel, *Performance on a Token Economy Psychiatric Ward: A Two Year Summary*, 8 *BEHAV. RES. & THERAPY* 1, 7 (1970) (at least 10 of 52 patients remained predominantly in the lowest group, which was a closed ward, throughout the course of the study).

was measured solely by their work output.¹¹⁶ When judged by release data rather than by measures of work output, decreased apathy,¹¹⁷ or improved clinical state,¹¹⁸ results of token economy systems with chronic psychotics have not been encouraging. Even in the Atthowa and Krasner project at the Palo Alto Veterans Administration Hospital, which reported a doubling of the discharge rate, 11 of the 24 released patients returned to the hospital within 9 months,¹¹⁹ a more rapid relapse than is normally found in studies of chronic patients.¹²⁰

We must also consider whether the results achieved by token economies—whatever they may be—could be matched or surpassed by less drastic means.¹²¹ Information is wanting, perhaps in part because behavior modifiers have not employed reinforcers other than the basics in standard use. It may be, for example, that creative observation of patient behavior preferences would reveal frequent behavior patterns, other than basic behaviors, which could be utilized as reinforcers. Also, although it is an impure technique according to orthodox behaviorism, another practical approach is simply to ask the patients what they would like to possess or to do.¹²²

By exploring creatively for reinforcers, it is likely that therapists could construct a list of idiosyncratic objects and activities—mail order catalogue items,¹²³ soft-boiled rather than standard hard-boiled eggs,¹²⁴ and feeding kittens¹²⁵ are actual clinical examples—that could be made available contingently in order to strengthen appropriate target responses. Moreover, to the extent that effective reinforcers are in fact idiosyncratic, it follows almost by definition that their contingent availability could not conflict with the legally emerging absolute general rights of patients.

A system of positive behavior modification based heavily on idiosyncratic reinforcers might be clinically as well as legally superior. Psychologists employing such systems¹²⁶ have been able to devise individual treatment plans assuring each patient independent diagnostic and therapeutic attention.¹²⁷

¹¹⁶ Even the drastic deprivations at Patton State did not produce spectacular results. Schaefer, *supra* note 44, at 32. Schaefer did, however, claim some spectacular results in an individualized positive reinforcement program, where a behavior modification plan is tailored to each patient's particular problems. *Id.* at 33-36. Individualization will be discussed further in text *infra*.

¹¹⁷ Schaefer & Martin, *Behavioral Therapy for "Apathy" of Hospitalized Schizophrenics*, 19 *PSYCHOLOGICAL REPORTS* 1147 (1966).

¹¹⁸ Gripp & Migaro, *supra* note 114.

¹¹⁹ Atthowe & Krasner, *Preliminary Report on the Application of Contingent Reinforcement Procedures (Token Economy) on a "Chronic" Psychiatric Ward*, 73 *J. ABNORMAL PSYCH.* 37, 40 (1968).

¹²⁰ "Results based on follow-up studies disclose that approximately 70 percent of chronic patients who are discharged from mental hospitals return within 18 months regardless of the type of treatment received during the period of hospitalization." *BANBURA*, *supra* note 4, at 260.

¹²¹ In fact, token economy programs differ considerably among themselves with regard to the nature of deprivations and contingent reinforcers resorted to. For instance, food and beds were subject to purchase at Patton State Hospital but were noncontingently available at Anna State Hospital. Further, patients in certain programs are able to earn tokens for engaging in activities which would cost tokens in other programs. See discussion in note 98, *supra*. Unfortunately, however, because reports of token economy programs are often inadequate in their description of reinforcers, and because they often measure success according to different criteria, inferences of comparative efficacy are difficult to draw, leaving our knowledge rather incomplete with respect to the therapeutic necessity of resorting to the more drastic reinforcers.

¹²² This technique is "impure" because, unlike the Premack principle, it relies on verbal expressions of intention to ascertain preferred behavior, and the match is not always a perfect one. Ayllon and Azrin resorted to the technique to a limited extent. *TOKEN ECONOMY* 67-72. To help insure that a patient will refrain from requesting items that he does not in fact deeply desire, a down payment of a specified number of tokens can be required at the time of the request. *Id.* at 71-72.

¹²³ *TOKEN ECONOMY*, *supra* note 16, at 60.

¹²⁴ *Id.* at 68.

¹²⁵ Atthowe & Krasner, *supra* note 119, at 38.

¹²⁶ E.g., Schaefer, *supra* note 44, at 33-36 (Patton State Hospital individualized behavior modification program far more spectacular than its general token economy program); Spiegler, *supra* note 94.

¹²⁷ In the Patton State Hospital program, individual problem areas included eating problems, grooming habits, and hallucinatory behavior. Schaefer, *supra* note 44, at 33-36. Note that under an individualized program, it would not be unusual to have "some people paying while others are paid to play table games. . . ." Spiegler, *supra* note 94, at 8. Such an individualized approach may solve the legal problem posed by the fact that some token economies treat as reinforcers activities which others treat as target responses. See discussion of the problem in note 91 *supra*. Cf. *TOKEN ECONOMY* 10-11 (visitors, ground privileges, recreational activities not desired by certain chronic patients).

But individualized treatment plans, required by Wyatt¹²⁹ and perhaps part of the emerging right to treatment,¹³⁰ are not incompatible with the operation of ward-wide or hospital-wide general treatment systems designed to overcome general patient problems such as indecisiveness, dependency, or apathy. In fact, the most fruitful combination might be to combine individualized treatment programs with an efficient, easy-to-administer general therapeutic system.¹³⁰ If, however, the criteria for a successful system is efficacy with the least drastic deprivations possible, it appears that token economies for chronic psychotics may well finish no better than second best.¹³¹

Specifically, although it may not be determinative, the work of George Fairweather is highly relevant here.¹³² Though he speaks the language of social psychology and of small group theory rather than the language of behaviorism and learning theory, Fairweather relies in part on principles of behavior modification, and his work is discussed prominently in texts on that subject.¹³³ But his study was bottomed on the belief that chronics, to survive outside, must acquire problem-solving and decision-making skills, and on the knowledge that small cohesive groups can effectively control the behavior of their members.¹³⁴ Patients were divided into small task groups with monetary and pass privileges awarded according to the level of responsibility each individual attained. The money privileges for the most part came from personal funds of the patients who participated in the programs. The amounts of money and number of passes were set up in advance for each of four progressive levels of achievement. The task group as a unit became responsible for the progress of its individual members through the four designated steps. Step one involved personal care, punctuality on assignments, and cooperation in the orientation of new members. Step two required, in addition, acceptable work on the job assignment. Requirements in step three were individualized, with patients responsible for recommending the level of their own rewards. In step four the patient had responsibility for his departure plans, and had unlimited rights to withdrawal of money and passes. In step one the patient received ten dollars and a one day pass each week; in step two he received fifteen dollars per week and an overnight pass every other week.¹³⁵

The task group was responsible for dealing with patient problems and for recommending to the staff the level of pass and monetary privileges deserved by each patient member. Patient task group recommendations were considered weekly by a staff committee.¹³⁶ To establish cohesive and well-functioning groups, Fairweather would at times advance or demote the group as a unit.¹³⁷

Fairweather found that over time pride in group achievement appeared to become a more important motivator than money or passes.¹³⁸ Leaders emerged

¹²⁹ Wyatt v. Stickney, 344 F. Supp. 373, 384 (M.D. Ala. 1972) (Bryce and Searcy Hospitals).

¹³⁰ E.g., Brnbaum, *The Right to Treatment*, 46 A.B.A.J. 400 (1960); *Rouse v. Cameron*, 373 F.2d 451 (D.C. Cir. 1966).

¹³¹ See Davison, *Appraisal of Behavior Modification Techniques with Adults in Institutional Settings*, in *BEHAVIOR THERAPY: APPRAISAL AND STATUS* 257 (C. Franks ed. 1960); Atthowe & Krauser, *supra* note 110, at 41.

¹³² The empirical evidence is convincing. See *COMMUNITY LIFE*, *supra* note 36; *SOCIAL PSYCHOLOGY IN TREATING MENTAL ILLNESS: AN EXPERIMENTAL APPROACH* (G. Fairweather ed. 1964) [hereinafter cited as *SOCIAL PSYCHOLOGY*].

¹³³ See references in note 131 *supra*.

¹³⁴ E.g., BANDURA, *supra* note 4, at 200-71, 275-78.

¹³⁵ In this connection, Bandura cites an interesting unpublished report where the researchers "studied the amount of disruptive classroom behavior displayed by a child in the absence of any special reinforcement and during subsequent periods when either she alone earned five points, or she and her immediate peers each earned one point for her commendable behavior. It is interesting to note that the child's activities were more effectively controlled under the peer contingency even though it produced only one-fifth of the amount of reinforcement provided on the individual basis. Apparently, through the group reward, change agents were able to enlist the peers' aid in modifying the behavior of their companion." BANDURA 251.

¹³⁶ *SOCIAL PSYCHOLOGY* 30. Fairweather's project was conducted at a Veterans Administration Hospital, and the patients were presumably drawing psychiatric disability benefits, which is where the monetary rewards utilized in the experiment came from. Note, however, that even if this money were provided by the hospital, rather than from the patients' own sources, the total expenditure would probably be far less than if the patient labor were mandatorily compensated by the minimum wage. For comments on the possible disincentives to recovery provided by disability compensation—surely a fruitful topic for psycho-legal investigation—see Spiegler, *supra* note 94, at 6; Davison, *supra* note 130, at 257.

¹³⁷ *SOCIAL PSYCHOLOGY*, *supra* note 31, at 40-41. The staff committee could of course amend or reject the suggestions. *Id.*

¹³⁸ *Id.* at 173.

¹³⁹ *Id.* at 189.

in the chronic psychotic groups as well as in other clinical categories,¹³⁹ and the program was a therapeutic success: As compared with a control group subjected to traditional hospital therapy (not a token economy), the small group patients showed significantly less pathological behavior,¹⁴⁰ greater social interaction,¹⁴¹ and greater participation during meetings.¹⁴² Moreover, the small group program substantially reduced hospitalization.¹⁴³ When combined with an after-care program involving a voluntary living arrangement in a semiautonomous (and eventually autonomous) community lodge, the Fairweather system achieved the long-awaited goal of adequate employment and community adjustment for discharged chronic psychotics.¹⁴⁴ Fairweather thus produced impressive results with chronic psychotics in an environment clearly "less drastic" in deprivation than any of the traditional token economies. Obviously, Fairweather's patients were provided with food and beds. Further, the ward was open and patients had complete access to the hospital grounds.¹⁴⁵ The ward was equipped with a television set, table games, magazines and the like,¹⁴⁶ and freely available activities included library reading, movies, dances and bowling.¹⁴⁷

Most of these privileges were available only by purchase in the token economy programs. Yet a patient at the bottom of Fairweather's hierarchy was provided, without a work assignment, not only with these privileges, but also with ten dollars and a one day pass each week. Indeed, life at the lowest level of Fairweather's ladder compares favorably with the conditions at advanced levels in some token systems.¹⁴⁸

Fairweather's approach, then, seems preferable to token economies on several counts. First and foremost, his small group system has yielded impressive results which are unmatched by token systems. Second, while token systems deprive patients of basic comforts in their reliance on primitive reinforcers, Fairweather employs only money and passes.¹⁴⁹ Third, Fairweather's approach is thoroughly oriented toward release and community adjustment, and he recognizes that once cohesive groups have been formed in the hospital, "an immediate move to the community is essential."¹⁵⁰ Finally, Fairweather's behavior

¹³⁹ *Id.* at 181, 283. The patients in Fairweather's study constituted a heterogeneous population and varied considerably in degree of chronicity, but the various task groups surely had their share of chronic psychotics. *Id.* at 83. And Fairweather's follow-up community adjustment project involved almost exclusively chronic patients. *COMMUNITY LIFE*, *supra* note 95, at 32, 238. It seems, then, that a comment made by Davison that Fairweather's study did not involve chronic psychotics, is simply erroneous. Davison, *supra* note 130, at 257. As an aside, it should be noted that Fairweather's study of heterogeneous groups yielded fascinating findings regarding the ideal clinical mixture required in small groups to produce first-rate decision-making. *SOCIAL PSYCHOLOGY*, *supra* note 131, at 193, 200.

¹⁴⁰ *SOCIAL PSYCHOLOGY*, *supra* note 131, at 61.

¹⁴¹ *Id.* at 70, 285.

¹⁴² *Id.* at 80.

¹⁴³ *Id.* at 108.

¹⁴⁴ *COMMUNITY LIFE*. When unaccompanied by a cohesive group aftercare arrangement, however, chronic patients who had participated in the small group program prior to discharge had a high relapse rate, as do chronics generally. *SOCIAL PSYCHOLOGY* 168.

¹⁴⁵ *SOCIAL PSYCHOLOGY* 32.

¹⁴⁶ *Id.* at 46.

¹⁴⁷ *Id.* at 153. It is not clear whether Fairweather's patients were provided with such items as screens or personal lockers, but it is clear that those items were either available or unavailable *noncontingently*: that is, it is not the case, as was true at Anna State Hospital, that they were available only to those able to purchase them. Because Fairweather did not employ those items as reinforcers, his therapeutic system would seemingly be unaffected by a requirement, such as enunciated in *Wyatt*, that all patients be given those items as a matter of absolute right.

¹⁴⁸ *E.g.*, Bruce, *Tokens for Recovery*, 66 *AM. J. NURSING* 1709, 1802 (1966) (discussing conditions for the "middle group" at Patton State Hospital); Lloyd & Abel *Performance on a Token Economy Psychiatric Ward: A Two Year Summary*, 8 *BEHAV. RES. & THERAPY* 1, 5 (1970) (discussing conditions for "Group B" at Idaho's State Hospital North); Narrol, *Experimental Application of Reinforcement Principles to the Analysis and Treatment of Hospitalized Alcoholics*, 28 *Q. J. OF STUDIES ON ALCOHOL* 105, 108 (1967) (discussing steps 3 and 4 at Richmond State Hospital). See also text accompanying notes 52-54 *supra*.

¹⁴⁹ Fairweather's contingent pass device may pose a question in light of the requirement of *Covington v. Harris*, 419 F.2d 617 (D.C. Cir. 1969), that patients be provided with as much liberty as is clinically appropriate. But the fact that even lowest level patients are entitled in the Fairweather system to one day pass per week may alleviate *Covington* objections, especially if the contingent availability of passes above and beyond one per week are shown empirically to constitute powerful motivators. But whatever *Covington* problem may exist could, of course, be vitiated entirely if monetary rewards alone were found to be sufficient reinforcers, as future research might indeed show.

¹⁵⁰ *SOCIAL PSYCHOLOGY*, *supra* note 131, at 0.

modification model emphasizes the development of confidence and decision-making ability rather than performance of assignments. For whatever it is worth, Fairweather's system may be ethically or at least emotionally more palatable than the manipulative techniques of the token economies.

CONCLUSION

Fairweather's small group model, with its rich results and rather minor deprivations, poses a serious threat to token economies. If further studies continue to indicate that, except in extreme circumstances, token economies for chronic psychotics resort to more drastic deprivations than other therapies without producing better results,¹⁵¹ it is likely that token systems will soon find themselves subject to both legal and behavioral extinction.

Indeed, if the law's general direction in the patient rights area proceeds uninterrupted, token economies may well become legally unavailable even if they are therapeutically superior to other approaches. That is because the developing law is creating new patient rights unaware that these rights will under-

¹⁵¹ One possible exception is the most extremely regressed cases who fall under all other techniques. Even under Fairweather's system, for example, it is probably true, as he admits, *SOCIAL PSYCHOLOGY* 172, that some patients may be unresponsive, and it is certainly possible that, for those patients, idiosyncratic reinforcers will be undiscoverable or unworkable. For them, the fields of law and psychology must face the issue whether, in the hopes of therapeutic success, basic and primitive items and activities should be used as reinforcers. If the answer is affirmative, certain safeguards should be built into the legal structure to insure that decisions to invoke the traditional token economy model are made only after full consideration and only in rare instances. For example, demonstrated ineffectiveness of the Fairweather and idiosyncratic systems could be a legal prerequisite to reliance on the traditional token technique. Such an approach, which may create an additional incentive for patients to succeed within the Fairweather scheme and accordingly avoid the more distasteful ordeal of a standard token system, would insure that basic rights are not converted to contingent reinforcers for the bulk of chronic psychotics for whom that appears unnecessary and, *a fortiori*, for other clinical categories, such as juvenile delinquents and non-psychotic alcoholics, who presumably can be motivated by non-primitive reinforcers which fall without the prohibitions of *Wyatt* and related legal mandates. In effect, if reliance on reinforcers falling below the *Wyatt*-type baseline are to be resorted to, such a drastic scheme of positive token reinforcement should be properly deemed "aversive" for legal purposes and should follow, as closely as possible, emerging legal restrictions on aversive therapy. Hopefully, one such restriction will be the "less drastic means" rationale. *cf.* *BANDURA, supra* note 4, at 551 (complaining that "exceedingly noxious procedures are occasionally employed even though they produce no greater changes than stimuli in much weaker intensities"); *Schwitzgebel, supra* note 2, at 279 (alcoholics have been treated with drastic drugs causing respiratory arrest, even though "[t]he results . . . are not clearly better than with emetics."). A requirement of informed consent is also emerging in the aversive therapy area, [*e.g.*, *Wyatt v. Stickney*, 344 F. Supp. 373, 380 (M.D. Ala. 1972) (*Bryce and Searcy Hospital*)], but that requirement may have an awkward application in the token economy area: it is easy to imagine homosexual or alcoholic patients consenting to aversive techniques in hopes of securing desired behavioral improvement, but it is far more difficult to imagine an apathetic long-term patient, almost by definition unconcerned about his clinical state and his future, voluntarily consenting to forgo the standard benefits of hospital life in favor of treatment under which those benefits would be available only by purchase. Surely, even if informed consent were given by such a patient, it might soon be revoked. *cf.* *Ex parte Lloyd*, 13 F. Supp. 1005 (D.D. Ky. 1938) (addict who volunteered for treatment and contracted to remain in hospital for specified time period but later changed his mind could not be compelled to remain hospitalized for the specified period); *contra, Oretga v. Rasor*, 291 F. Supp. 748 (S.D. Fla. 1968). Arguably, informed consent in a token economy setting could be replaced by an alternative protective device, such as the informed approval of a judicially selected human rights committee chosen from outside the hospital. *See, e.g., Wyatt v. Stickney*, 344 F. Supp. 387, 400 (M.D. Ala. 1972) (*Partlow Hospital*) (requirement that aversive behavior modification programs involving the mentally retarded "shall be reviewed and approved by the institution's Human Rights Committee and shall be conducted only with the express and informed consent of the affected resident, if the resident is able to give such consent, and of his guardian or next of kin, after opportunities for consultation with independent specialists and with legal counsel"). Further, a time limit should probably be set on the length of time the token procedure could be invoked, with provision for a return to the noncontingent availability of basic benefits for patients seemingly unresponsive to even the token system. But clear-cut answers on the extent to which traditional token economies should be treated legally as an aversive technique must await further development in the law of aversive therapy itself—an area which, as noted in the Introduction to this Article, is receiving an ever-increasing amount of attention from the courts and the commentators. The use of aversive techniques raises squarely one of the perennial problems of law and research: society will obviously want to forbid aversive practices unless they have been demonstrated to be efficacious, but *research*—rather than legal prohibition—is needed to demonstrate whether the practices are in fact efficacious. To the extent that many aversive therapies are obviously experimental in nature, the emerging legal and ethical restrictions regarding experimentation with human subjects ought to be pertinent in devising a balanced but protective regulatory framework for their application. *See generally EXPERIMENTATION WITH HUMAN BEINGS* (1972).

mine a basic behavior modification technique. On the other hand, the behavior modifiers seem busy constructing token economies unaware that legal developments may soon call for their demolition.

Forcing these disparate disciplines to take note of each other—obviously the principle object of this Article—should be helpful to both of them. Behavior modification proponents, convinced of the therapeutic indispensability of token economies for chronic patients, may have reservations about the Fairweather model. But unless systematic comparative studies of alternative therapies are performed soon,¹⁵² the law will be unable to incorporate the results in developing a sensible package of patient rights, and expected legal developments may ultimately preclude such studies.

[Item VI.D.5]

THE TORTURE CURE

Jessica Mitford, Harpers Magazine, August 1973, pp. 16-30.—Winning criminal hearts and minds with drugs, scalpels, and sensory deprivation

Recognition of failure dawns slowly in a bureaucracy but dawned it has in California prison treatment circles. Prison psychiatrists who are willing to level with reporters admit that they now spend 90 percent of their time on paperwork, writing up reports for the Adult Authority based on perfunctory annual interviews with prisoners, that "treatment" most often takes the form of heavy tranquilization of inmates labeled psychotic as well as those diagnosed as troublemakers. Group therapy, once hailed as an exciting new technique for transforming the "deviant personality," is withering on the vine. Nor have the treatment programs produced the anticipated docility in the convict population; work strikes, hunger strikes, and other forms of protest are now endemic throughout the California prisons.

Some disconcerting conclusions about the efficacy of treatment are set forth in a report to the State Assembly titled "The California Prison, Parole, and Probation System." It cites an exhaustive study conducted for the Department of Corrections in which the researchers observed gloomily, "Thousands of inmates and hundreds of staff members were participating in this program at a substantial cost to the Department of Corrections in time, effort, and money. Contrary to the expectations of the treatment theory, there were no significant differences in outcome for those in the various treatment programs or between the treatment groups and the control group." They further reported that group counseling did not lessen adherence to the inmate code, nor did it reduce the frequency of discipline problems.

James O. Robison, author of the report and longtime researcher for the Department of Corrections, traced the course of disillusionment. "The high mystique of treatment peaked at the end of the Fifties," he told me. "The idea took hold in Corrections that at last, through sophisticated techniques of psychotherapy, we have it in our power to transform the deviant and to predict with accuracy his future behavior. But in the early Sixties the high priests of Corrections began a sifting of the entrails. After that, disenchantment and embarrassment set in—the reason was the evident empirical failure of the treatment programs, as demonstrated by the recidivism rate remaining constant over the years.

"The rationale for failure was always, 'We haven't carried treatment far enough, there isn't enough of it, it isn't professional enough'—in other words, we need more and better of same, in spite of the fact we've seen it doesn't work. Even this reasoning began to break down in the middle Sixties, when there was more attention paid to the fact nothing was happening and more talk of 'Why?'

"What you are likely to see now is the end of the liberal treatment era—the notion that you can make convicts into converts of the dominant culture 'religion,' the missionary fervor—that's being replaced with 'behavior modification' experiments. The latest reasoning is that it's costly and inappropriate to go the psychotherapy route with these people, to pay high-priced psychiatrists to

¹⁵² The desirability of such studies has been repeatedly noted. See e.g., BANDURA, *supra* note 4, at 274.

talk them into recognizing the truth of our 'religion'; instead, we'll focus on their deviant behavior and force them to shape up. Of course, this flies in the face of the earlier rhetoric. The Behaviorists say they are bad, not mad, and we can stop them being bad by utilizing new techniques. This fits in with the law-and-order, no-nonsense conservative viewpoint; henceforth the slogan will be, "They must be made to behave."

This new trend in Corrections must be highly inspiring for the behavioral scientists, who have long been eyeing the prisons as convenient reservoirs of human material on which to try out new theories. The shape of things to come was forecast a decade ago at a seminar of prison wardens and psychologists chaired by James V. Bennett, then director of the U.S. Bureau of Prisons. As described in *Corrective Psychiatry & Journal of Social Change*, Second Quarter, 1962, the seminar provided "provocative, fruitful interaction between social scientists and correctional administrators."

Addressing himself to the topic "Man Against Man: Brainwashing," Dr. Edgar H. Schein, associate professor of psychology at MIT, told the assembled wardens: "My basic argument is this: in order to produce marked change of behavior and/or attitude, it is necessary to weaken, undermine, or remove the supports to the old patterns of behavior and the old attitudes"; this can be done "either by removing the individual physically and preventing any communication with those whom he cares about, or by proving to him that those whom he respects are not worthy of it and, indeed, should be actively mistrusted."

Dr. Schein, who said he got most of his ideas from studying brainwashing techniques used by North Korean and Chinese Communists on GI prisoners of war, cautioned his audience not to be put off by this fact: "These same techniques in the service of different goals may be quite acceptable to us. . . . I would like to have you think of brainwashing not in terms of politics, ethics, and morals, but in terms of the deliberate changing of human behavior and attitudes by a group of men who have relatively complete control over the environment in which the captive population lives."

Some of the techniques which could usefully be applied in the U.S. prisons: "Social disorganization and the creation of mutual mistrust" achieved by "spying on the men and reporting back private material"; "tricking men into written statements" that are then shown to others, the objective being "to convince most men they could trust no one," "undermining ties to home by the systematic withholding of mail." The key factor is change of attitude: "Supports for old attitudes have to be undermined and destroyed if change is to take place. . . . Do we not feel it to be legitimate to destroy the emotional ties of one criminal to another, or of a criminal to a sick community?" How to bring about the desired change was explained by Dr. Schein: "If one wants to produce behavior inconsistent with the person's standards of conduct, first disorganize the group which supports those standards, then undermine his other emotional supports, then put him into a new and ambiguous situation for which the standards are unclear, and then put pressure on him. I leave it to you to judge whether there is any similarity between these events and those which occur in prisons when we teach prisoners 'to serve their own time' by moving them around and punishing clandestine group activity not sanctioned by the prison authorities."

The discussion, says the report, ranged from "specific, practical management issues such as 'How shall we manage the Muslims?' 'Whom should we isolate?'" to more basic questions, such as "the use and effectiveness of brainwashing and other means of persuasion." Dr. Bennett recalled that "during the war we struggled with the conscientious objectors—nonviolent coercionists—and believe me, that was really a problem. . . . we were always trying to find some way in which we could change or manipulate their environment."

Much attention was focused on what to do about the Black Muslims: "not so much whether you take action against the Muslims as a group," as one speaker put it, "but how can you counteract the effects of the kinds of techniques they use to recruit members and cause general mischief in the prison system?" To which a Dr. Lowry responded, "We found that many of these Negro Muslims were highly intelligent. . . . here again, we have to apply the techniques which we heard about in terms of appreciating what the goal of the Muslims is, or of any other group, and then doing some analytic study of the methods that they are using so that we can try to dissipate the forces that

are going in the direction that we regard as destructive. "On ways of dealing with the unruly a panelist offered this: "To some extent where we formerly had isolation as a controlling technique, we now have drugs, so that drugs in a sense become a new kind of restraint. The restraint, therefore, is biochemical, but it is restraint nevertheless."

Summarizing the discussion, Dr. Bennett pointed out that the federal prison system, with some 24,000 men in it, presents "a tremendous opportunity to carry on some of the experimenting to which the various panelists have alluded." He added, "What I am hoping is that the audience here will believe that we here in Washington are anxious to have you undertake some of these things: do things perhaps on your own—undertake a little experiment of what you can do with the Muslims, what you can do with some of the sociopath individuals."

That Dr. Bennett's counsel was taken to heart by his subordinates in the federal prison system can be inferred from a report addressed to the United Nations Economic and Social Council, prepared and smuggled out of Marion Federal Penitentiary in July 1972, by the Federal Prisoners' Coalition, a group of convicts housed in the segregation unit for refusing to participate in the behavioral research programs. "In the latter part of 1968 some changes in the U.S. Department of Justice enabled the U.S. Bureau of Prisons to make a quiet beginning at implementing an experimental program at Marion Federal Prison to determine at first hand how effective a weapon brainwashing might be for the U.S. Department of Justice's future use," says the report. It describes how Dr. Martin Groder, prison psychiatrist, applies the proposals outlined in Dr. Schein's paper to "agitators," suspected militants, writ-writers, and other troublemakers. The first step, according to the report, is to sever the inmate's ties with his family by transferring him to some remote prison where they will be unable to visit him. There he is put in isolation, deprived of mail and other privileges, until he agrees to participate in Dr. Groder's Transactional Analysis program. If he succumbs, he will be moved to new living quarters where he will be surrounded by members of Dr. Groder's "prisoner thought-reform team," and subjected to intense group pressure. "His emotional, behavioral, and psychic characteristics are studied by the staff and demiprofessional prisoners to detect vulnerable points of entry to stage attack-sessions around. During these sessions, on a progressively intensified basis, he is shouted at, his fears played on, his sensitivities ridiculed, and concentrated efforts made to make him feel guilty for real or imagined characteristics or conduct. . . . Every effort is made to heighten his suggestibility and weaken his character structure so that his emotional responses and thought-flow will be brought under group and staff control as totally as possible.

" . . . It is also driven in to him that society, in the guise of its authorities, is looking out for his best interests and will help if he will only permit it to do so. Help him be 'reborn' as a highly probable 'winner in the game of life,' is the way this comes across in the group's jargon." Once reborn as a winner, he will be moved into a plush living area equipped with stereo, tape recorders, typewriters, books. He is now ready to indoctrinate newcomers into the mysteries of the group "and like a good attack dog, he is graded and evaluated on his demonstrated capacity to go for the vulnerable points of any victim put before him." The entire program is made self-perpetuating and economically feasible by the participants doing the work themselves, says the report: "They are taught to police not only themselves but others, to inform on one another in acceptable fashion—as bringing out misconduct of another in a truth-session is not considered informing even if a staff member is present."

Evidently these techniques are finding increasing favor with the federal prison administration. Scheduled to open early in 1974 near Butner, North Carolina, is a new federal institution, the Behavioral Research Center, built at a cost of \$13.5 million, which, says a handout from the Bureau of Prisons, will be "a unique facility in the federal correctional system." Some of the unique features are spelled out in a confidential operations memorandum from the bureau to staff, dated October 25, 1972, on the subject of Project STAIR, acronym for Special Treatment and Rehabilitative Training, already in operation in Springfield Federal Penitentiary. The goal, according to the memorandum, is "to develop behavioral attitudinal changes in offenders who have not adjusted satisfactorily to institutional settings" and to provide "care, custody, and correction of the long-term adult offender in a setting separated from his home

institution." "Selection criteria" include: "will have shown repeated inability to adjust to regular institutional programs"; "will be transferred from the sending institution's segregation unit"; "generally, will have a minimum of two years remaining on his sentence"; "In terms of personality characteristics shall be aggressive, manipulative, resistive to authority, etc."

Dr. Martin Groder, who will direct the Butner operation, told Tom Wicker of the *New York Times* that he "believes in the possibility of rehabilitating prisoners" because he has done it, at Marlon. He does not favor any large-scale return of incarcerated men to community programs; on the contrary, he prefers to keep them in his custody: "If we can get a topnotch rehabilitation program within the institution, a prisoner will be better off in it than wandering around the streets." Wicker reports that Dr. Groder is "not precise" about the rehabilitative methods he intends to apply, and that he is "cheerfully aware that the new federal center he will head is suspect in some circles—not least among federal prisoners, who are not anxious to be 'guinea-pigs' in behavior research. He is nevertheless pressing ahead . . ."

A further elaboration on the brainwashing theme is furnished by James V. McConnell, professor of psychology at the University of Michigan, in an article in the May 1970 issue of *Psychology Today* titled "Criminals Can Be Brainwashed—Now." It reads like science fiction, the fantasy of a deranged scientist. Yet much of what Dr. McConnell proposes as appropriate therapy for tomorrow's lawbreaker is either already here or in the planning stages in many of the better financed prison systems.

Dr. McConnell, who spent many years successfully training flatworms to go in and out of mazes at his bidding by administering a series of painful electric shocks, now proposes to apply similar techniques to convicts: "I believe the day has come when we can combine sensory deprivation with drugs, hypnosis, and astute manipulation of reward and punishment to gain almost absolute control over an individual's behavior . . . We'd assume that a felony was clear evidence that the criminal had somehow acquired full-blown social neurosis and needed to be cured, not punished . . . We'd probably have to restructure his entire personality."

The exciting potential of sensory deprivation as a behavior modifier was revealed through an experiment in which students were paid \$20 a day to live in tiny, solitary cubicles with nothing to do. The experiment was supposed to last at least six weeks, but none of the students could take it for more than a few days: "Many experienced vivid hallucinations—one student in particular insisted that a tiny spaceship had got into the chamber and was buzzing around shooting pellets at him." While they were in this condition, the experimenter fed the students propaganda messages: "No matter how poorly it was presented or how illogical it sounded, the propaganda had a marked effect on the students' attitudes—an effect that lasted for at least a year after they came out of the deprivation chambers."

Noting that "the legal and moral issues raised by such procedures are frighteningly complex," Dr. McConnell nevertheless handily disposes of them: "I don't believe the Constitution of the United States gives you the right to commit a crime if you want to; therefore, the Constitution does not guarantee you the right to maintain inviolable the personality forced on you in the first place—if and when the personality manifests strongly antisocial behavior."

The new behavioral control techniques, says Dr. McConnell, "make even the hydrogen bomb look like a child's toy, and, of course, they can be used for good or evil." But it will avail us nothing to "hide our collective heads in the sand and pretend that it can't happen here. Today's behavioral psychologists are the architects and engineers of the Brave New World."

For some convicts in California, those perceived as "dangerous," "revolutionary," or "uncooperative" by the authorities, it has happened here, and Dr. McConnell's Brave New World is their reality. Signposts in this bizarre terrain may need translation for the outsider:

Sensory Deprivation.—Confinement (often for months or years) in the Adjustment Center, a prison-within-prison.

Stress Assessment.—The prisoner lives in an open dormitory where it is expected he will suffer maximum irritation from the lack of privacy. He is assigned to the worst and most menial jobs. In compulsory group therapy sessions staff members deliberately bait the men and try to provoke conflicts

among them. The idea is to see how much of this a person can stand without losing his temper.

Chemotherapy.—The use of drugs (some still in the experimental stage) as "behavior modifiers" including antitestosterone hormones, which have the effect of chemically castrating the subject, and Prolixin, a form of tranquilizer with unpleasant and often dangerous side effects.

Aversion Therapy.—The use of medical procedures that cause pain and fear to bring about the desired "behavior modification."

Neurosurgery.—Cutting or burning out those portions of the brain believed to cause "aggressive behavior."

The "Behavior Modification" programs are for the most part carried out in secret. They are not part of the guided tour for journalists and visitors, nor are outside physicians permitted to witness them. Occasionally word of these procedures leaks out, as in the autumn of 1970, when *Medical World News* ran an article titled "Scaring the Devil Out" about the use of the drug Anectine in "aversion therapy" in the California prisons.

Anectine, a derivative of the South American arrow-tip poison curare, is used medically in small doses as a muscle relaxant, but behavioral researchers discovered that when administered to unruly prisoners in massive amounts—from twenty to forty milligrams—it causes them to lose all control of voluntary muscles.

An unpublished account of the Anectine therapy program at Vacaville, California, by two of the staff researchers there, Arthur L. Mattocks, supervisor of the research unit, and Charles Jew, social research analyst, states that "the conceptual scheme was to develop a strong association between any violent or acting-out behavior and the drug Anectine and its frightful consequences," among which were "cessation of respiration for a period of approximately two minutes' duration." Of those selected to endure these consequences, "nearly all could be characterized as angry young men," say the authors. Some seem to have been made a good deal angrier by the experience, for the report notes that of sixty-four prisoners in the program "nine persons not only did not decrease but actually exhibited an increase in their overall number of disciplinary infractions."

According to Dr. Arthur Nugent, chief psychiatrist at Vacaville and an enthusiast for the drug, it induces "sensations of suffocation and drowning." The subject experiences feelings of deep horror and terror. "as though he were on the brink of death." While he is in this condition a therapist scolds him for his misdeeds and tells him to shape up or expect more of the same. Candidates for Anectine treatment were selected for a range of offenses: "frequent fights, verbal threatening, deviant sexual behavior, stealing, unresponsiveness to the group therapy programs." Dr. Nugent told the *San Francisco Chronicle*, "Even the toughest inmates have come to fear and hate the drug. I don't blame them, I wouldn't have one treatment myself for the world." Declaring he was anxious to continue the experiment, he added, "I'm at a loss as to why everybody's upset over this."

More upset was to follow a year later, when the press got wind of a letter from Director Raymond Procunier to the California Council on Criminal Justice requesting funding estimated at \$48,000 for "neurosurgical treatment of violent inmates." The letter read, in part: "The problem of treating the aggressive, destructive inmate has long been a problem in all correctional systems. During recent years this problem has become particularly acute in the California Department of Corrections institutions . . . This letter of intent is to alert you to the development of a proposal to seek funding for a program involving a complex neurosurgical evaluation and treatment program for the violent inmate . . . surgical and diagnostic procedures would be performed to locate centers in the brain which may have been previously damaged and which could serve as the focus for episodes of violent behavior. If these areas were located and verified that they were indeed the source of aggressive behavior, neurosurgery would be performed . . ." Confronted by reporters with this letter, Laurence Bennett, head of the Department of Corrections Research Division, explained: "It is not a proposal, it's just an idea-concept." He added wistfully, "It's quite likely that we will not proceed with this, but if we had unlimited funds we would explore every opportunity to help anyone who wants such assistance."

(20)

Although the plan for psychosurgery was halted—at least temporarily—by the newspaper uproar that ensued, the authorities have other methods at hand for controlling the unruly, principal among which is forced drugging of prisoners. In widespread use throughout the nation's prisons is the drug Prolixin, a powerful tranquilizer derived from phenothiazine, which, if given in large doses, produces dangerous and often irreversible side effects. A petition addressed to the California Senate Committee on Penal Institutions by La Raza Unida, a Chicano organization of prisoners confined in the California Men's Colony, describes these: "The simple fact that a number of prisoners are walking the yard in this institution like somnambulists, robots, and vegetables as a result of this drug should be reason enough to make people apprehensive as to the effect it is having. That no prisoner feels safe because he never knows when he will become a candidate for said drug is another factor in producing tension in this institution."

According to its manufacturer, E. R. Squibb, Prolixin is "a highly potent behavior modifier with a markedly extended duration of effect." Possible adverse side effects listed by Squibb include: the induction of a "catatonic-like state," nausea, loss of appetite, headache, constipation, blurred vision, glaucoma, bladder paralysis, impotency, liver damage, hypotension severe enough to cause fatal cardiac arrest, and cerebral edema. Furthermore, Squibb cautions that "a persistent pseudo-parkinsonian [palsy-like] syndrome may develop . . . characterized by rhythmic, stereotyped dyskinesic involuntary movements . . . resembling the facial grimaces of encephalitis . . . The symptoms persist after drug withdrawal, and in some patients appear to be irreversible."

The theme of prison as a happy hunting ground for the researcher is very big in current penological literature. In *I Chose Prison*, James V. Bennett poses the question, What will the prisons of 2000 A.D. be like? And answers it: "In my judgment the prison system will increasingly be valued, and used, as a laboratory and workshop of social change." Dr. Karl Menninger echoes this thought in *The Crime of Punishment*: "About all this [causes of crime], we need more information, more research, more experimental data. That research is the basis for scientific progress, no one any more disputes . . . Even our present prisons, bad as many of them are, could be extensively used as laboratories for the study of many unsolved problems."

Taking these injunctions to heart, researchers are descending in droves upon the prisons with their prediction tables, expectancy scales, data analysis charts. With all the new money available under federal crime control programs, and the ingenuity of grant-happy researchers, the scope of the investigations seems limitless. In California some \$600,000 of the Department of Corrections budget is earmarked for research, but this is just the tip of the iceberg, for most of the work is done under lavish grants from universities, foundations, and government agencies.

Something of the quality of the research, and the bitter irony of the situation in which the convict-research subject finds himself, can be inferred from the stream of monographs, research reviews, and reports that flow out of the prisons. His captors having arranged life for the prisoner so that he becomes enraged, perhaps goes mad, and (no matter what his original sexual preferences) turns homosexual, they invite researchers to put him under their microscopes and study the result. A forty-eight page monograph titled "Homosexuality in Prisons," published in February 1972 by the Law Enforcement Assistance Administration, reports, "In view of methodological difficulties, the following estimates of male homosexuality should be viewed with caution," and proceeds to give them, complete with footnotes referring the luckless reader to yet other publications on this subject. Estimates of the incidence of homosexuality given by experts vary, says the author, from 7 to 90 percent. He concludes, "There is above all a compelling need for a wide variety of comparative data," and proposes to fill the need by conducting "longitudinal or retrospective studies."

Among the offerings of the California Department of Corrections *Research Review* for 1971 is "The Self-Esteem Project," its aim "to obtain some picture of the effect of incarceration upon the perception of self-worth," in which the Modified Coopersmith Self-Esteem Scale is found to be "a useful instrument for measurement." Having subjected the inmate's self-esteem to the pulverizer of prison, the department proceeds to measure and tabulate what is left.

If the prisoner happens to be Chicano, he will be eligible for a study entitled "The Consequences of Familial Separation for Chicano Families," its purpose "to study the consequences of separation from family members for Chicano inmates and also for their families in terms of social, psychological, and economic needs and stresses." Thus the precise quantity and quality of suffering, anxiety, and impoverishment of families caused by locking up Chicanos can be tidily computed and catalogued for the edification of social scientists. By now the prisoner may well be ready for the Buss Rating Scale of Hostility or the Multiple Affect Adjective Checklist, "a standardized and reliable rating instrument that can be scored for anxiety, depression, and, most importantly, hostility."

Omitted from the 1971 *Research Review* is one of the more ambitious experimental projects of that year: establishment of a Maximum Psychiatric Diagnostic Unit (MPDU) designed to hold eighty-four convicts (a number possibly chosen in subconscious tribute to George Orwell) selected as research subjects from the 700 inmates of the state's Adjustment Centers. The goal of MPDU, as defined in the department's grant application to the California Council on Criminal Justice, is "to provide highly specialized diagnostic service for Adjustment Center inmates who are violently acting-out and management problem cases within the California prison system . . . and arriving at decisions as to the needed intervention and placement." The budget for this "service" would be approximately \$500,000.

Who are the Adjustment Center inmates from whose ranks the eighty-four would be chosen? Robert E. Doran, who made a study of them under a grant from LEAA for the American Justice Institute, says they are "deviants within a society of deviants," or put another way, rebels who refuse to conform to prison life. They are younger and darker than the prison population as a whole: 61 percent are under thirty compared with 30 percent of the total prison population, 60 to 70 percent are black or Chicano compared with a non-white overall prison population of 45 percent. The majority are there for "disrespect for authority," disobeying some disciplinary rule—refusing to work, shave, attend group therapy; a growing number are there because they are suspected of harboring subversive beliefs.

In 1972 ten inmates of Folsom Prison filed a federal suit (unsuccessful), charging they had been kept in long-term solitary confinement because of their political views, and alleging that the practice is routinely used against prisoners who are outspoken about prison conditions or voice "militant" political views. Department spokesmen strenuously deny that they use lock-up in the Adjustment Center as punishment for political dissidents and leaders of ethnic groups. Philip Guthrie, press agent for the Department, told the *Sacramento Bee* on March 10, 1972: "We're very careful not to lock a guy up just because of his political views." But in their closed departmental meetings it is a different story. As reported in the confidential minutes of the wardens and superintendents meetings, October 11-12, 1972, under the topic "Inmate Alliances," Director Raymond Proemier "asked the problem be kept in perspective, comparing it to the Muslim situation ten years ago. The director suggested the leaders of the various groups be removed from the general population of the institutions and locked up."

Much has been written about the California Adjustment Centers, for it was in the exercise yard of "O-Wing," Soledad Adjustment Center, that three unarmed black convicts were shot to death by a guard in early 1970, triggering a series of events that culminated in the death of George Jackson, the trial of the surviving Soledad Brothers, and the trial of Angela Davis, all acquitted by juries. From three sources one can infer something about conditions of life in the Adjustment Centers, and the roots of violence therein.

Departmental memoranda to staff in charge of "O-Wing" contain these directives:

Yard Exercise.—Two officers (one armed with a Gas Billy and one armed with Mace) will enter the tier to be released and, after subjecting each inmate to an unclothed body search, release him from his cell, by key, directing him to the yard.

All inmates housed in "O-Wing" first tier, when escorted from the security section for any reason, are to be given an unclothed body search while still in their cells . . . The inmate will be given a visual inspection of his body, to in-

clude his hair, ears, mouth, private parts and feet . . . The inmate will be handcuffed behind his back and escorted from the section . . .

"O-Wing" Equipment.—1: Gas Billy (blast type), 2: Gas Billy Reload, 3: Triple Chaser Grenade, 4: Aerosol Mace (Mark IV Atomizer) . . .

Any inmate who self-mutilates or attempts to hang himself will be housed in the Hospital Annex cells only on the direction of the medical staff.

Robert E. Doran describes what he learned about the guards' view of assignments to the Adjustment Center. "Those staff who have 'really been there,' experienced the trouble, used the gas, the batons, the weapons, and the muscle, and did so effectively, receive the highest status and deference from other custodial staff. . . . Staff battle ribbons and badges are won or lost within the A/C when trouble takes place. Actually the A/C, much like the general prison situation, has in terms of relative percentage of time, very little trouble. But it is the folklore, the beliefs and the history as passed from one generation of custodial personnel to the next that promulgates the idea that has grown up around the A/C which in effect says, "This is the front line: here is where the battle is really won or lost for staff who wear the custodial uniform."

Testifying in San Francisco before a Congressional subcommittee, two lawyers related some exploits of these frontline heroes. Edwin T. Caldwell of San Francisco said, "I will testify for the record that I am a registered Republican from a conservative background. This is such a shocking thing for me I just can't believe it exists."

Caldwell told the committee his client in Soledad's "O-Wing" had been "viciously attacked" by guards on numerous occasions, and had suffered a fractured tooth, a broken jaw, and lacerations requiring six sutures. Fay Stender of Oakland headed the committee chairman a note signed by Lieutenant Flores, Adjustment Center guard, written in response to an inmate who was coughing blood and had asked for help. The note said: "Yell for help when the blood is an inch thick, all over the floor, and don't call before that."

Details of the highly specialized services to be rendered the eighty-four chosen from this milieu, and the nature of the needed intervention, were discussed at a "think session" called in November 1971 at the University of California at Davis by Laurence Bennett, head of the Department of Corrections Research Division. Participants were some twenty-five representatives of the healing professions—medicine, psychology, psychiatry—many of them faculty members from nearby universities and medical schools.

The new unit, said Max May, program administrator, would be closely modeled after Patuxent Institution in Maryland, with four twenty-one-man cell-blocks, "single five-by-seven-foot cells with bars, only we call them barriers." Construction costs would be kept to a minimum since the prisoners were to build their own cages, the work, according to the grant application, consisting "primarily of pouring two concrete floors, erecting wire screen partitions, also a gun tower."

The objective, said Bennett, is "to develop a basic knowledge of the causes of aggressive, violent behavior. Our aim is to learn how to identify small groups, how to deal with them more adequately. We hope through psychological management to learn how to lessen their violence potential."

Discussion from the floor, and at the pleasant luncheon gathering in the faculty club dining room, centered on methods by which this might be accomplished: "We need to find the stimulus to which the subject responds. We also need to find out how he thinks *covertly* and to change how he thinks." "We need to dope up many of these men in order to calm them down to the point that they are accessible to treatment." "Those who can't be controlled by drugs are candidates for the implantation of subcortical electrodes (electrodes plunged deep into the brain)."

Dr. Keith Brody of Stanford University, who said he runs a "unit for mood disorders," stressed the importance of "intensive data collection" via spinal taps and other tests: "These tests can lead to therapy decisions. We need to segregate out and dissect out these sub-groups." Other proposals for therapy were to burn out electrically those areas of the brain believed to be the "source of aggressive behavior"—one speaker said he reckoned about 10 percent of the inmates might be candidates for this treatment; the administration of antifetosterone hormones, which have the effect of emasculating the subject; the use of pneumoencephalograms (injecting air into the brain cavities).

Asked whether the Anecline torture "therapy" would be resumed in the new unit, Bennett did not answer directly but declared with some exasperation, "If it could be shown empirically that hitting an inmate on the head with a hammer would cure him, I'd do it. You talk about his civil rights—civil rights for what? To continue to disrupt society?" Nor would he answer the further questions: "Does not the prison system itself, and particularly the Adjustment Center, generate violence?" and "Would the researchers be directing any part of their injury to violence by guards against prisoners?"

As for the compliant participation of the distinguished group of faculty members in this bizarre discussion, one possible explanation was suggested by the lone black psychiatrist present, Dr. Wendell Lipscomb, who had stormed out of the meeting halfway through, declaring he "couldn't take any more of this crap." Later, he told me, "What you were seeing at that meeting were the grant hunters, hungry for money, willing to eat any shit that's put before them."

[Item VI.D.6]

THE PACIFICATION OF THE BRAIN

Stephen L. Chorover, Psychology Today, May 1974, pp. 59-69

To suppress violent people, surgeons now burn the brain's fragile centers. A neuroscientist, reviewing the scientific evidence, reports the operation's side-effects on monkeys: they lost their grip on reality, became deranged, and directed their sexual activity toward a wide variety of animate and inanimate objects. By treating antisocial behavior as an individual matter, he says, we ignore the larger pressures of society and enter the brain at the patient's peril.

Biologists and behavioral scientists stand today where nuclear physicists stood almost 30 years ago. In 1945, developments in nuclear physics led to the atomic bomb, and ushered in a new world of ethical and social problems. During the past few decades, developments in the behavioral sciences have spawned a wide-ranging psychotechnology, a varied arsenal of tools and techniques for predicting and modifying human behavior. Like thermonuclear technology, psychotechnology is complex and controversial. Its development and deployment raise problems that we can no longer afford to ignore.

Psychosurgery is a particularly controversial form of psychotechnology. Also known as "psychiatric neurosurgery," "mental surgery," "functional neurosurgery," and "sedative neurosurgery," it is brain surgery performed to alter thoughts, social behavior patterns, personality characteristics, emotional reactions, or other aspects of subjective experience in human beings. However, it does not encompass brain surgery directed at treating specific kinds of neuropathology (e.g., tumors and strokes) or disorders of movement (e.g., tremors and paralysis).

The proponents of psychosurgery claim that certain mental illnesses, behavior disorders, and emotional disturbances can be treated by surgically destroying particular brain regions. Some of its more outspoken advocates have gone as far as to suggest that psychosurgery ought to be used to control the behavior of criminals and other social deviants. M. Hunter Brown, a California psychosurgeon, has pointed out the supposed cost benefits: "Each violent young criminal incarcerated from 20 years to life costs taxpayers perhaps \$100,000. For roughly \$6,000, society can provide medical treatment [i.e., psychosurgery] which will transform him into a responsible, well-adjusted citizen."

Instead of summarizing the legal and ethical issues raised by the use of psychosurgery as a treatment for violence, I wish to focus here upon its purported scientific basis. I will examine whether psychosurgery is a therapeutic procedure in which specific benefits for the patient reliably follow the production of brain lesions, or an experimental procedure with consequences that are unpredictable and may be disastrous.

SICK MINDS, SICK BRAINS

Since ancient times, physicians have known that there is a relationship between the brain and the mind, and that brain injury or disease may be accompanied by dramatic and debilitating changes in the afflicted person's mental life.

During the 19th century, the idea took hold that mental disease was synonymous with brain disease, and that the disturbed or disturbing behavior of certain people had its origins in the derangement of specific brain organs. All that remained to prompt the birth of psychosurgery was for someone to get the idea of abolishing troublesome behavior by selectively destroying the offending brain organ.

In the first published account of psychosurgery, in 1891, Gottlieb Burckhardt, supervisor of an insane asylum at Préfargier, Switzerland, justified the destruction of brain tissue in psychotic patients by arguing that ". . . our psychological existence is composed of single elements, which are localized in separate areas of the brain." Burckhardt thought that the excitement and impulsivity of his patients resulted from an excess of neural activity originating in the cerebral cortex; if one removed appropriate parts of the cortex, one would remove the pathological impulses.

Burckhardt operated on six patients, with poor results. One patient died, and although the survivors purportedly were peaceful and easier to manage on the wards, they continued to exhibit psychotic symptoms. Burckhardt was not discouraged, and he urged his colleagues to "tread the path of cortical extirpation." But he faced vigorous opposition by a large segment of the medical community, and it was to be almost another half century before another psychosurgeon appeared on the scene to claim he had tread the path with success.

INDIFFERENT MONKEYS

In 1935, at the International Congress of Neurology, two American brain researchers, Carlyle F. Jacobsen and John F. Fulton, reported that they had destroyed the prefrontal regions of the brain in monkeys and chimpanzees. The animals showed marked deficits in learning and memory, as well as a host of other drastic behavioral changes. In several cases, bilateral frontal lobe lesions made the animals strikingly indifferent to stimuli that previously had provoked extreme agitation and frustration.

In the audience was a Portuguese neurologist, Antonio Egas Moniz. He rose to ask if it would not be possible to relieve anxiety in man by surgical means. Fulton was shocked by this proposal, but Moniz was undeterred. He returned to Portugal convinced of the similarity between Jacobsen and Fulton's description of animal behavior and the querulous and agitated state of many chronically hospitalized mental patients. And he became determined to surgically modify the mental life of obsessed and melancholic patients, through the operation that came to be known as prefrontal leucotomy or lobotomy.

In their first operation, Moniz and his colleague Almeida Lima used injections of alcohol to coagulate certain fiber tracts running between the frontal lobes and other parts of the brain. Within a short period of time, however, they abandoned this technique in favor of cutting the fibers with a special knife called a leucotome, which they inserted through a small opening drilled in the skull. During a 10-week period in late 1935, Moniz and Lima performed 20 leucotomies.

Moniz claimed that seven of his patients were "cured" by the surgery, and that another eight, who had previously been violent and agitated, became calm, tractable, and generally easier to manage. He described his cases with a minimum of critical detail and a large measure of self-praise, hailing the advent of leucotomy as "a great step forward . . . in the study of psychic functions on an organic basis . . . [with] both cures and improvements, but no failures to make us draw back."

Like Burckhardt before him, and like many of his psychosurgical successors, Moniz was anxious to give his procedures the semblance of scientific validity. But the fact remains that from the start, prefrontal lobotomy could be justified only by ignoring the evidence from animal experiments, that the destruction of frontal-lobe tissues led to a wide range of disabling behavioral effects.

DAMAGED PEOPLE

As long as prefrontal lobotomies were performed mainly on chronically hospitalized psychotics, untoward side effects were difficult to recognize. Eventually, however, the operation became so popular that it was in use throughout the world, not only on psychotic patients, but also on so-called psy-

choneurotics, and individuals with psychosomatic complaints. With surgical candidates coming increasingly from less-disturbed segments of the general population, the occurrence of untoward side effects became more apparent. As one might have expected from a careful reading of the original Jacobsen and Fulton report, prefrontal lobotomy, even in the hands of an expert craftsman, often rendered the patient not only calm, but apathetic, irresponsible and asocial. The operation could blunt a patient's intellect, impair judgment, and reduce creativity. In some cases, complex metabolic changes led to wasting of the body, weakness, coma, and finally death.

Some estimates suggest that as many as 70,000 prefrontal lobotomies were performed in the United States and Britain from the mid-'30s to the mid-'50s. The acknowledged dean of American lobotomists, the late Walter Freeman, revealed before his retirement that he personally had performed more than 3,500 lobotomies. But by the end of the 1950s, most of the psychiatric community had lost its enthusiasm for the operation. Mounting concern over bad results, coupled with the growing popularity of alternative treatments (such as drugs and electroshock) brought psychosurgical practice to a virtual halt.

THE MODERN ERA

During the past 20 years, however, a new generation of psychosurgeons has emerged. On the whole, these surgeons are willing to acknowledge that their predecessors exhibited excessive enthusiasm and obtained poor results. But most do not question the validity of a surgical attack upon the mind. On the contrary, they seem no less convinced than their predecessors of the scientific justification and therapeutic efficacy of the entire enterprise. For them, the excesses of the past were due not to faulty reasoning, or a failure to heed unfavorable evidence, but rather to technical crudity.

Many psychosurgeons today point with pride to technical developments that allegedly make their operations more powerful and reliable. They claim that with new and more sophisticated methods, they can effect remarkably specific cures, without inducing any disturbing side effects. While psychosurgery may not lead invariably to a worsening of the patient's condition, I believe that improvements are far from assured, despite the resort to new techniques and targets. Moreover, I believe the claims of these psychosurgeons remain grossly exaggerated and at variance with much that we now know about the relations between brain function and behavior. Let us look briefly at the techniques and targets in question.

The relative inaccessibility of structures deep within the brain posed a serious problem for early psychosurgeons. Encased within its solid cranial vault, the brain is relatively impervious to surgical assault. Even when the skull is partially removed, the cerebral hemispheres that lie exposed comprise only a small and superficial portion of the entire brain volume. Hidden beneath them is a vast and incredibly complex system of cells, fibers, blood vessels and neural networks. One cannot gain direct access to these deeper regions, without mutilating the overlying areas in the process.

NEW TECHNIQUES

To solve this problem, students of animal brain function developed, around the turn of the century, a method that came to be called stereotaxic brain surgery. This method permits a surgeon to identify the location of a particular point within the brain in terms of three coordinates, using anatomical landmarks on the head's surface as reference points. Sets of maps or stereotaxic brain atlases, are now available for many species, including human beings. After determining the coordinates of a particular brain region from the appropriate atlas, the surgeon positions the subject's head within the working field of a special stereotaxic instrument. He can then direct probes or electrodes comprised of fine insulated wires toward the intended target; through a small hole drilled in the skull. It is possible to leave the probes in place within the brain for extended periods of time, with little discomfort to the subject, by securing the shafts of the probes to the surface of the skull.

Once in place, the electrodes may serve several purposes. First, by using electronic amplifiers and other equipment, one can record the electrical signals arising from the region of the brain near the uninsulated electrode tips. Al-

though one cannot be sure that such signals originate in the immediate vicinity, grossly abnormal patterns of electrical activity often indicate disordered functioning near the electrode tip, or in a brain region functionally related to it.

Second, by passing a weak electric current through the electrode and into the brain, one can stimulate the tissue in the vicinity of the electrode tip, frequently this seems to produce a particular kind of behavioral response in the patient. Although such behavior may be only remotely related to the response patterns normally associated with the brain region in question, stimulation experiments have figured prominently in recent attempts to learn more about how brain functions are organized.

Third, by passing stronger currents through the implanted electrode, a surgeon can destroy the tissue in the vicinity of the electrode tip. Thus psychosurgeons can produce lesions in parts of the brain which were formerly inaccessible.

Psychosurgeons have recently introduced yet another technique, drawn from the world of modern electronic communications. Miniaturized, wireless telemetry systems make it possible to transmit signals between an electrode implanted in the brain of a freely-moving patient, and a stimulating or recording device located some distance away. This means that the person in control of the telemetry system can unobtrusively monitor or manipulate the brain activity and behavior of an otherwise unrestrained individual.

NEW TARGETS

The advent of stereotaxic psychosurgery has stimulated interest in new targets within the brain. The major focus of attention has shifted from the frontal lobes to the limbic system. This system includes certain "primitive" portions of the cerebral cortex (the hippocampus, hippocampal gyrus, and cingulate gyrus), and also a number of deeper-lying structures with which they have primary connections (the amygdala, septal nuclei, anterior thalamic nuclei, and hypothalamus). Overlying the limbic system, especially in primates (including man) is the enormous, mushrooming neocortex, with which most brain scientists associate our "higher" cognitive ability.

Loosely speaking, then, the limbic system occupies an intermediate position between the lower and higher parts of the brain. It seems ideally situated to receive, transform and transmit signals passing between the older brain structures, which are involved in stereotyped behavior and visceral ("gut") and glandular responses, and the newer structures, which involve sensation, perception, thought, language, and other complex social acts. As one long-time student of the brain has put it, in the limbic system lie possible mechanisms by which "the brain transforms the cold light with which we see into the warm light which we feel."

Finally, limbic-system mechanisms seem to contribute to a person's sense of individuality and concepts of reality. They mediate emotional feelings that ultimately guide behavior required for self-preservation and the preservation of the species.

What happens when these critical structures are injured or destroyed? As in the case of prefrontal lobotomy, we find an early and portentous answer in experiments on laboratory animals.

DERANGED MONKEYS

In 1937, Heinrich Klüver and Paul C. Bucy reported that they had destroyed the temporal lobes and parts of the limbic system in rhesus monkeys. After the operations, they observed striking derangements in the behavior of the monkeys, including difficulty in recognizing objects, increased sexual activity directed toward a wide variety of animate and inanimate objects; and a compulsive orality that caused the monkeys to place both food and nonfood objects repeatedly in their mouths.

There were two other important effects. Although these monkeys had previously been fearful, wild, and difficult to handle, after the operation they became quite tame. They also appeared unable to inhibit responses leading to painful consequences, often exposing themselves to threatening or injurious situations. In a film that Klüver made, an operated monkey placed the lighted

end of a cigarette in its mouth, quickly threw it down when he was burned, and then repeated the same painful act several times again in rapid succession.

The "Kluver-Bucy syndrome" demonstrated that temporal lobe structures are involved in a wide range of behavioral activities. Its dramatic features soon induced other investigators to pursue similar studies. For our purposes, the most important subsequent discovery was that in many species, several of the more severe emotional aspects of the syndrome could be produced by lesions restricted to one part of the limbic system, the amygdala.

In one study, Arthur Kling and several colleagues performed amygdalotomies on monkeys that had been living in a freeranging colony. In the laboratory, most of the operated animals seemed to become less aggressive, and friendlier toward their human handlers. Of course, this result was exactly what one would predict on the basis of Kluver and Bucy's original findings. But, when the animals rejoined their old troop in the wild, a very different picture began to emerge. Although they had exhibited increased friendliness toward their human captors, they appeared confused and fearful among their former friends and relations. When other troop members approached in a neutral and nonthreatening way, the amygdalotomized animals would usually cover or flee. Conversely, when a dominant member of the group made a threatening gesture, an altered animal, which would otherwise have adopted a submissive posture, would instead display an unseemly degree of insubordination, it would attempt to attack the dominant animal, and thereby invite a predictable and often terrible beating.

All in all, the amygdalotomized monkeys were incapable of coping with the complexities of social life in their normal environment. This incapacity caused them to become social isolates. Eventually they all died, either from starvation or from attacks by predators.

The results of these animal experiments suggest that no single part of the limbic system is concerned with only a single aspect of behavior. They should make us skeptical about the claim that specific therapeutic effects are attainable by destroying the amygdala or various other parts of the limbic system. Since we have devoted our attention to the effects of amygdalotomy upon behavior in nonhuman primates, let us now focus on destructive lesions in the amygdalas of human beings.

EXCISING VIOLENCE

In a previous PT article I pointed out that some psychosurgeons have suggested the existence of a causal link between brain disease and social violence, and have advocated psychosurgery as a scientifically valid and therapeutically successful treatment for human beings whom they perceive as exhibiting "poor control of violent impulses." In that connection, I referred to a book called *Violence and the Brain*, in which Vernon H. Mark and Frank R. Ervin describe their use of bilateral amygdalotomy with people who were allegedly suffering from episodes of unprovoked and uncontrollable violence due to limbic brain disease. Since that article was not primarily concerned with psychosurgery, I was content to state my conviction that Mark and Ervin's arguments have many logical and scientific shortcomings. Nor did I attempt to substantiate my belief that the book fails to provide the reader with clear and self-critical accounts of the cases reported.

In the book, Mark and Ervin described most of their patients as not only disturbed and impulsively violent, but also as suffering from some form of epilepsy. It is their contention that in most of these cases, the violent behavior was not only irrational and unprovoked, but was also directly traceable to brain disease. They assert, furthermore, that in most cases, their patients' behavioral problems were substantially alleviated by an amygdalotomy or other forms of limbic-system psychosurgery.

In attempting to evaluate these claims, it should be noted at the outset that here has long been a popular belief in a connection between epilepsy and violence. The common phrase, "a fit of anger" nicely epitomizes this view. But several clinical studies that have dealt with this question have failed to confirm this belief. A comprehensive review of the question, sponsored by the National Institute of Neurological Diseases and Stroke, concluded that "... the best generalization is that violence and aggressive acts do occur in patients with temporal lobe epilepsy but are rare, perhaps no higher than in the general population."

Bearing in mind that the existence of a relationship between epilepsy and violence remains an open question, let us consider closely one of Mark and Ervin's most highly touted cases, "Thomas R."

COURTESY AND RAGE

Mark and Ervin introduce Thomas as "a brilliant, 34-year-old engineer with several important patents to his credit." They say his manner was ". . . quiet and reserved, and he was both courteous and sympathetic." They say further that "he was an extremely talented, inventive man, but his behavior at times was unpredictable and even frankly psychotic."

In this connection, they allege a prolonged history of violence that included spells of rage, "sometimes directed at his co-workers, and friends, but . . . mostly expressed toward his wife and children." They report that Thomas was "very paranoid, and harbored grudges which eventually produced an explosion of anger." They say that in a conversation with his wife, "he would seize upon some innocuous remark and interpret it as an insult. At first, he would try to ignore what she had said, but could not help brooding, and the more he thought about it, the surer he felt that his wife no longer loved him and was 'carrying on with a neighbor.' Eventually he would reproach his wife for these faults, and she would hotly deny them. Her denials were enough to set him off into a frenzy of violence." Mark and Ervin say that he also experienced periods of confusion and hallucination, but "Thomas' chief problem was his violent rage."

Mark and Ervin report that prolonged psychiatric treatment had not improved the patient's behavior, and that the referring psychiatrist felt Thomas' spells of rage represented an unusual form of temporal lobe seizure. According to Mark and Ervin, an electroencephalogram revealed electrical brain activity often indicative of epilepsy, and further tests indicated the presence of other brain abnormalities.

What happened next is best described in Mark and Ervin's own words, from a 1968 report:

"After a futile attempt to control his seizures and violence with a wide range of pharmacological agents, chronic temporal lobe electrodes were implanted in his amygdala.

"Over a period of weeks, repeated stimulation and recordings were carried out to find the optimal site for destructive lesions.

"It is of interest that stimulation in the medial portion of the left amygdala nucleus produced a feeling of 'going wild' and 'I'm losing control.' On the other hand, stimulation in the lateral amygdala, three millimeters away, repeatedly produced a sensation of 'hyper-relaxation,' a feeling of 'detachment,' just like an injection of Demerol,' 'just the antithesis of my spells.'

"In his usual state, this patient was keenly aware of the slightest personal insult or threat and his response was often sudden or violent. Under the effects of lateral amygdala stimulation, he showed bland acquiescence to the suggestion that the medial portion of his temporal lobe was to be destroyed. This suggestion, under ordinary circumstances, would provoke wild, disordered thinking. Indeed, eight to 10 hours after stimulation had been completed, and coincident with the disappearance of his detached and hyper-relaxed feeling, he became wild and unmanageable and protested vigorously against any destructive lesions in his amygdala." According to Mark and Ervin's account, it took "many weeks of patient explanation, and a near social tragedy" (not otherwise explained), before Thomas accepted bilateral amygdala lesions.

In any event, the 1968 report continues: "[The lesions] were carried out sequentially, and he has not suffered a generalized rage attack in the six months following his last amygdala lesion." In *Violence and the Brain*, published two years later, they devoted twice as many sentences to the same point: "Four years have passed since the operation, during which time Thomas has not had a single episode of rage. He continues, however, to have an occasional epileptic seizure with periods of confusion and disordered thinking."

The reader, recalling the original claim that "Thomas' chief problem was his violent rage," might conclude that amygdalotomy has effected a specific cure. The rage allegedly is gone, the other symptoms remain essentially unchanged, and there are no permanent, postoperative side effects. In light of the devastating effects of amygdalotomy in monkeys, Mark and Ervin's reports of suc-

cess with Thomas seem remarkable indeed. To me, it is especially surprising that the only adverse side effect mentioned in any of the reports I examined is temporary impotence.

Prior to his operation, Thomas was a married man who supported his family through his work as an engineer. Is he still married? Is he employed? What are his present circumstances and future prospects? Unfortunately, Mark and Ervin's brief descriptions are silent on these and many other questions.

ANOTHER VIEW

There is, however, some independent information about Thomas now available from other sources. For example, a psychiatrist and well-known critic of psychosurgery, Peter R. Breggin, has conducted his own inquiry and published some of his findings regarding this case. Breggin claims to have interviewed Thomas and his relatives, reviewed the hospital charts, and discussed the case with several involved individuals. In recent months, I have obtained additional information to supplement Breggin's material.

According to Breggin, Thomas was continuously employed through December 1965. That year, he began to have serious marital problems, and visited his wife's psychiatrist. The psychiatrist has told Breggin in a telephone interview that although Thomas' wife was indeed afraid of him, the psychiatrist could remember no actual harm done to her. Breggin says, "[The] psychiatrist remembers that Thomas was depressed, but not sufficiently depressed to warrant electroshock or drugs. His memory is entirely consistent with the hospital records which report no hallucinations, delusions, paranoid ideas, or signs of difficulty with thinking. In the charts, his most serious psychiatric diagnosis is 'personality-pattern disturbance' [a classification] reserved for mild problems with no psychotic symptomatology."

Thomas worked intermittently during the early months of 1966, until the first of his diagnostic hospitalizations at Massachusetts General Hospital, on March 11, 1966. Breggin says that the hospital charts indicate Thomas had never been in trouble at work or elsewhere for aggressive behavior. During his four diagnostic hospitalizations, according to Breggin, Thomas "was never restrained, never forced into a locked ward, or in any way treated as a dangerous man." Breggin says that the first violent reactions he saw in the records were those that occurred when Mark and Ervin proposed to make lesions in Thomas' brain.

Apparently Thomas was uneasy about the diagnostic procedures he was undergoing. At one point he referred to the tests as science fiction, and wrote to his mother that he would spare her the details. But by October 1966, he had had multiple electrodes implanted, and his mother received a telegram from the hospital informing her that her son was recovering well from the "minor surgical operation" (to implant the electrodes) and was in good condition.

According to Breggin's account, the electrodes remained in place until August 1, 1967. During the nine-month period when the stimulation experiments and brain lesions were being performed, Thomas' wife served divorce papers to him on the ward. She eventually married the neighbor about whom Thomas had been so concerned.

On August 27, 1967, Thomas left the hospital in the care of his mother and moved to her home in California. Within a short time, it became clear that he was socially confused and unable to cope with the complexities of normal life. He was picked up by the police in a nearby city, and on November 20 he entered a Veterans Administration hospital. It was the first psychiatric hospitalization of his life. He was hallucinating, delusional and confused, and he wound up on a locked ward under heavy doses of medication.

During this time the V.A. physicians apparently did not have access to his previous medical records, and thus did not recognize the realistic basis of his delusions. Breggin quotes a passage in the discharge summary of May 22, 1968: "Patient stated that . . . Massachusetts General Hospital were [sic] controlling him by creating lesions in his brain tissue by microwave and that they had placed electrodes in his brain tissue some time before. Stated that they can control him, control his moods and control his actions, they can turn him up or turn him down." Certainly anyone with a story like that would appear to be imagining things. The V.A. diagnosis was "schizophrenic reaction, paranoid type."

Only five months after release from the V.A. hospital, Thomas was rehospitalized. Breggin reports that hospital staff notes indicate he had exhibited the first officially recorded episode of public violence in his life. An entry on October 28, 1968 says: "arrested by police—involved in fight, very impulsive." The Veterans Administration declared him to be totally disabled.

Breggin asserts that at the present time, Thomas continues to be confused and delusional; he is unable to work, generally incapable of caring for himself, and has been periodically rehospitalized as assaultive and psychotic. Breggin claims that during a recent confinement Thomas walked about the wards with his head covered by bags, newspapers and rags, fearful that his brain would be further destroyed. He quotes Thomas' mother as saying that since the operation, "The poor guy has been almost a vegetable . . . We know he was destroyed by that operation."

A VISIT TO BOSTON

There are other sources of information about Thomas' postoperative troubles. In August 1972, Ernst Rodin, a Detroit neurosurgeon, visited Mark's project in Boston. At that time, Rodin was coauthor of a proposal to perform psychosurgery on patients who were in a state hospital because of "severe, uncontrollable, aggressive outbursts." The purpose of his visit, as he described it in a memorandum he wrote shortly thereafter, was "to obtain the most up-to-date information on the results of surgery for aggressive behavior in human beings."

Rodin apparently hoped this new information would strengthen his own proposal, but he found the results of his interviews "quite disturbing." After questioning Ira Sherwin, a neurologist on the project, Rodin concluded: "The reports on the operated patients do not jive exactly between Dr. Sherwin and Dr. Mark . . . The patient Thomas R., an engineer of high IQ . . . is floridly paranoid and in a V.A. hospital in [a West-Coast city]. I was told that he will never be able to function in society. Of physiological interest, is the fact that Mark and Ervin figure prominently in his delusional system, but the delusions are not aggressively flavored and there is no drive to 'get even' for what they have done to his brain."

Rodin wrote that he and Sherwin had also discussed other patients, including those described in *Violence and the Brain*. Sherwin, he said, "was not aware of any genuinely successful cases." As regards the scientific validity of some of Mark and Ervin's results, Rodin wrote: "Sherwin . . . has no faith in the data. But since his Neurosurgical superiors do possess this faith, some of the material may appear in print."

This revealing memorandum is part of the public record; it was an exhibit in a civil action brought on behalf of the first proposed candidate for psychosurgery under Rodin's project. That important case ended in a decision barring experimental brain surgery upon individuals involuntarily confined in Michigan's public institutions (see page 69).

What, then, has happened to Thomas? Late in 1973, a declaration was filed in Massachusetts' Suffolk Superior Court on behalf of the patient known as Thomas R. It charges that as a result of the surgery "the plaintiff was permanently injured and incapacitated, has suffered . . . great pain of body and mind, has been required . . . to incur substantial expenses for medical care and treatment, and has been permanently deprived of his earning capacity and his ability to work. . . ." At this writing, the matter is still in litigation.

The apparent fate of Thomas R., however pathetic and disturbing, is wholly consistent with our rudimentary understanding of the brain and the complexity of its functions. No brain activity occurs in isolation, without correlated activity in other regions. As the complexity of behavior increases, so does the extent of interaction in the brain. Yet many psychosurgeons continue to ignore these facts, in favor of a pretentious and extreme doctrine of brain localization.

OPERATING ON DEVIANCE

Proponents of this doctrine sometimes attempt to use it to justify a psychotechnological approach to social conflict. I have already mentioned as a case in point the proposal to perform psychosurgery on prisoners. And, as I have argued elsewhere, there are public officials as well as psychotechnologists for

whom the distance is short from brain disease to social disorder, and the passage is swift from the medical control of neurophysiological problems to the social control of deviant individuals and groups.

Psychosurgery has been performed on sexual deviants and drug addicts. A report of 22 such cases from Germany was published in 1973. Operations have also been performed on "hyperactive" children in several countries during the past few years. One psychosurgical team, for example, recently reported results of limbic-system lesions made in 115 children, including 39 who were under the age of 11. They claimed that lesions of the cingulate gyrus, amygdala, and regions of the hypothalamus, "proved to be useful in the management of patients who previously could not be managed by any other measure." O. J. Andy, a well-known psychosurgeon at the University of Mississippi, has reported operations on a number of children six to 19 years old. In recent testimony before a Senate subcommittee, Andy said he had performed 13 or 14 such operations, and that a majority had produced "good" or "fair" results. He also presented a few "brief case reports." Here is one in its entirety:

"A seven-year-old, mentally retarded child had sudden attacks of screaming, yelling, running and beating the head against the wall. The walls were actually indented by the blows. Following thalamotomy three years ago, the patient did not display the wild, aggressive and screaming behavior. The improved behavior was an enjoyment for both the child and the parents."

SHIFTING THE EMPHASIS

Although the abusive deployment of psychosurgery might be curbed by legislative or legal means, I think that the most important task before us is to develop alternative ways of perceiving social problems. We must learn to see such things as violence and hyperactivity as something other than individual infirmities. We must understand that they cannot be overcome by merely treating certain people with the most efficient or inexpensive technological methods available. Finally, we must shift the emphasis in our thinking from a preoccupation with controlling individual deviance to the problem of understanding the various systems (social, political, family) of which both deviance and its control are interrelated parts.

Clearly, the age of psychotechnology has arrived, and psychosurgery is merely its cutting edge. We must carefully examine the entire spectrum of psychotechnology, and begin to question the basic ideologies of behavioral prediction, modification and control. To pretend that physical control of the mind is merely a futuristic fantasy is plainly foolish. To believe that it can't happen here is even worse. For to deny the power and political appeal of a repressive psychotechnology is to expedite its encroachment, and to refrain from combating it is to surrender our constitutional freedom and our human dignity.

Stephan L. Chorover, whose postdoctoral studies explored the effects of brain injury in human beings and other primates, is professor of psychology and brain science at M.I.T. In his first *Psychology Today* article, "Big Brother and Psychotechnology" [October 1973], he warned that psychosurgery, drug therapy, and behavior modification have become dangerous tools for social and political repression. He is developing plans for a continuing research project on the social impact of psychotechnology.

VII. BIBLIOGRAPHY

I. ARTICLES

- Aarons, Leroy F., "Brain Surgery Is Tested on 3 California Convicts," *The Washington Post*, (February 25, 1972).
- Albertson, Peter, "Mark Denies Racism Charge, Believes Violence Ubiquitous," *Medical Tribune*, (January 2, 1974), p. 1.
- Auerback, Stuart, "Scientists Seek to Curtail Money for Psychosurgery," *The Washington Post*, (January 19, 1973).
- Breggin, Peter Roger, "Psychosurgery for the Control of Violence—Including a Critical Evaluation of the Work of Vernon Mark and Frank Ervin," *The Congressional Record*, (March 30, 1972), permanent edition, p. 11396.
- Breggin, Peter Roger, "The Return of Lobotomy and Psychosurgery," *The Congressional Record*, (February 24, 1972), permanent edition, p. 5567.
- Chorover, Stephan L., "Big Brother and Psychotechnology," *Psychology Today*, (October 1973) p. 43.
- Chorover, Stephan L., "The Pacification of the Brain," *Psychology Today*, (May 1974), pp. 59-69.
- Clairborne, William, "Battle of Wills in U.S. Prison," *The Washington Post*, (December 16, 1973).
- Clairborne, William, "New Prison Stirs Experiment Fears," *The Washington Post*, (December 17, 1973).
- Cunningham, Gloria, "Crisis Intervention in a Probation Setting," *Federal Probation*, (December 1973), p. 16.
- DiSpoldo, Nick, "Arizona's Clockwork Orange Bill," *The New York Times*, (June 20, 1974).
- Edson, Lee, "The Psyche and the Surgeon," *The New York Times Magazine*, (September 30, 1973), p. 14.
- "Exploring the Frontiers of the Mind," *Time*, (January 14, 1973), p. 50.
- Gould, Donald, "The Mind Changers," *New Scientist*, (April 26, 1973), p. 226.
- Grinspoon, Lester, and Susan B. Singer, "Amphetamines in the Treatment of Hyperkinetic Children," 43 *Harvard Educational Review* 515 (1973).
- Handel, Anthony T., "Can Technology Control Behavior?: Orwellian Law," *Res Ipsa Loquitur*, (Fall 1972), p. 90.
- Hendlin, David, "Pacemakers for the Brain," *Saturday Review/World*, (January 26, 1974), p. 66.
- Holden, Constance, "Psychosurgery: Legitimate Therapy or Laundered Lobotomy?" *Science*, (March 16, 1973), p. 1109.
- Ingraham, Barton L. and Gerald W. Smith, "The Use of Electronics in the Observation and Control of Human Behavior and Its Possible Use in Rehabilitation and Parole," *Issues in Criminology*, vol. 7, No. 2 (1972), pp. 35-53.
- Justice, Blair, Rita Justice and Irvin A. Kraft, "Early Warning Signs of Violence: Is a Trait Enough?" 131 *American Journal of Psychiatry* 457 (1974).
- Knight, Michael, "Child Molesters Try 'Shock' Cure," *The New York Times*, (May 21, 1974), p. 37.
- Koskoff, Yale David, "Psychosurgery," *Pittsburgher*, (Fourth Quarter 1973), p. 9.
- Levy, Charles S., "On the Development of a Code of Ethics," *Social Work*, (March 1974), p. 207.
- Lowinger, Paul, "Psychosurgery, the Detroit Case," *The New Republic*, (April 13, 1974), p. 17.
- Mark, Vernon H., and Frank R. Ervin, "Is There a Need to Evaluate the Individuals Producing Human Violence?" *Psychiatric Opinion*, Vol. 5, No. 3, (August 1968), p. 32.
- "Mind Control Hit," *Washington Star-News*, (September 28, 1972).

- Mitford, Jessica, "The Torture Cure," *Harpers Magazine*, (August 1973), pp. 16-30.
- Palmer, Craig A., "Surgery Report Bottled Up," *Washington Post*, (June 5, 1974), p. A-9.
- Powers, Charles T., "Pat Frawley: Millionaire on a Crusade: Advocate of Shock Therapy for Alcoholics," *Los Angeles Times*, (November 8, 1973).
- "Privacy and Behavioral Research," *Science*, Vol. 155, (February 3, 1967), p. 535.
- "Probing the Brain," *Newsweek*, (June 21, 1971), p. 60.
- "Psychosurgery Returns," *Time*, (April 3, 1972), p. 50.
- "Psychosurgery Trend Alarming," *Washington Star-News*, (March 2, 1972).
- Randal, Judith, "Psychosurgeon Hails Success on Children," *Washington Star-News*, (January 19, 1973), p. A-3.
- Restak, Richard, "The Promise and Peril of Psychosurgery," *Saturday Review/World*, (September 25, 1973).
- Reubhausen, Oscar, and Orville G. Brim, Jr., "Privacy and Behavioral Research," 65 *Columbia Law Review* 1184 (1965).
- Rosenburg, Ronald H., "Constitutional Law—The Eighth Amendment and Prison Reform," 51 *North Carolina Law Review* 1539 (1973).
- Sansweet, Stephen J., "Aversion Therapy: Punishing of People to Change Behavior Gains Use, Controversy," *The Wall Street Journal*, (January 2, 1974), p. 1.
- Schein, Edgar H., "Man Against Man: Brainwashing," *Corrective Psychiatry and Journal of Social Therapy*, Vol. 8, No. 2, (1962), pp. 90-92.
- Schneck, Harold M., Jr., "Psychosurgery on Brain Debated," *The New York Times*, (January 22, 1973), p. 34.
- Schwitzgebel, Ralph K., "Limitations on the Coercive Treatment of Offenders," 8 *Criminal Law Bulletin* 266 (1972).
- Schwitzgebel, Robert L., "Development and Legal Regulation of Coercive Behavior Modification Techniques With Offenders," *Crime and Delinquency Issues*, (February 1971), p. 61.
- Shapiro, Michael H., "Legislating the Control of Behavior Control: Autonomy and the Coercive Use of Organic Therapies," 47 *Southern California Law Review* 237 (1974).
- Steinman, Clay, "The Case of the Frightened Convict," *The Nation*, (December 3, 1973), p. 590.
- Sweet, William H., "Treatment of Medically Intractable Mental Disease by Limited Frontal Leucotomy—Justifiable?" 289 *New England Journal of Medicine* 1117 (1973).
- "The Ethical Problems of Brain Manipulation," *Dissent*, (Summer 1973), p. 362.
- Trotter, Robert J., "A Clockwork Orange in a California Prison," *Science News*, (March 11, 1972), p. 174.
- Trotter, Sharland, and Jim Warren, "The Carrot, The Stick, and The Prisoner," *Science News*, (March 16, 1974), p. 180.
- "Violence and Surgery," *The Washington Star*, October 18, 1972, p. A-16.
- Welsch, Ellen Bowman, "You May Not Know It, But Your Schools Probably are Deeply Into the Potentially Dangerous Business of Teaching With Drugs," *American School Board Journal*, (February 1974), p. 41.
- Wenk, Ernst A., James O. Robison, and Gerald W. Smith, "Can Violence Be Predicted?" *Crime and Delinquency*, (October 1972), p. 393.
- Wertz, Elizabeth, "The Fury of Shock Treatment, A Patient's View," *The Washington Post*, (December 10, 1972), *Potomac*, p. 36.
- Wexler, David B., "Token and Taboo: Behavior Modification, Token Economics, and the Law," 61 *California Law Review* 81, (1973).
- Wicker, Tom, "Prisoners, Not Guinea Pigs," *The New York Times* (December 31, 1972).

II. BOOKS

- Ferguson, Marilyn, *The Brain Revolution: The Frontiers of Mind Research* (New York, 1974).
- Katz, Jay, *Experimentation With Human Beings*, (New York, 1972).
- Mark, Vernon, and Frank Ervin, *Violence and the Brain*, (New York, 1970).
- Mitford, Jessica, *Kind and Usual Punishment*, (New York, 1973).
- Pines, May A., *The Brain Changers*, (New York, 1974).

- Schwitzgebel, Robert L., and Ralph K. Schwitzgebel, *Psychotechnology: Electronic Control of Mind and Behavior*, (New York, 1973).
 Skinner, B. F., *About Behaviorism*, (New York, 1974).
 Skinner, B. F., *Beyond Freedom and Dignity*, (New York, 1971).

III. REPORTS AND HEARINGS

Behavior Modification Programs in the Federal Bureau of Prisons, Hearing Before the Subcommittee on Courts, Civil Liberties, and the Administration of Justice of the Committee on the Judiciary, House of Representatives, 93d Cong., 2d Sess., (1974).

Brain Research and Violent Behavior, Report of the National Institute of Neurological Diseases and Stroke of the Department of Health, Education and Welfare, reprinted in *The Archives of Neurology*, Vol. 30 (January 1974), p. 1.

Conference Report on H.R. 7724, National Research Act, United States Senate, Report No. 93-960, 93rd Cong., 2nd Sess. (1974).

Constitutional Rights of the Mentally Ill, Hearings before the Subcommittee on Constitutional Rights of the Committee on the Judiciary, United States Senate, 91st Cong., 1st and 2nd Sess. (1969-70).

Ethical Principles in the Conduct of Research With Human Participants, Report of the ad hoc Committee on Ethical Standards in Psychological Research of the American Psychological Association, Inc. (1973).

Final Report of the Tuskegee Syphilis Study Ad Hoc Advisory Panel, United States Department of Health, Education and Welfare (1973).

Inspection of Federal Facilities at Leavenworth Penitentiary and the Medical Center for Federal Prisoners, Report of the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the Committee on the Judiciary, United States House of Representatives, 93rd Cong., 2nd Sess. (1974).

Privacy and Behavioral Research, Report of the Office of Science and Technology of the Executive Office of the President (February 1967).

Psychosurgery in Veterans' Administration Hospitals, Joint Hearing before the Subcommittee on Health of the Committee on Labor and Public Welfare and the Subcommittee on Health and Hospitals of the Committee on Veterans' Affairs of the United States Senate, 93d Cong., 1st Sess., (1973).

Quality of Health Care—Human Experimentation, Hearings before the Subcommittee on Health of the Committee on Labor and Public Welfare, United States Senate, 93d Cong., 1st Sess., (1973).

Report on the Biomedical Research Aspects of Brain and Aggressive Violent Behavior, Report of the National Institute of Neurological Diseases and Stroke, National Institutes of Health, Department of Health, Education, and Welfare, (1973).