



MINISTRY OF
SOCIAL DEVELOPMENT
Te Manatū Whakahiato Ora

Getting it right
**An evaluation of New Zealand community treatment
programmes for adolescents who sexually offend**
Ka pu te ruha, ka hao te rangatahi

Summary report

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Executive summary

Purpose

This evaluation was commissioned by the Department of Child, Youth and Family (CYF) in 2003.

The primary objective was to evaluate the effectiveness of community-based treatment programmes for adolescents who sexually offend and determine whether treatment resulted in a reduction in sexual reoffending, improved psychological health and positive outcomes, and was cost-effective.

The study involved the three main treatment programmes at SAFE Network Auckland, WellStop in Wellington and STOP in Christchurch.

Note: Reoffending was defined as any officially recorded sexual and/or non-sexual offending which occurred following termination of the young person's involvement with a specialist community treatment programme. Official sources included CYF records and charges and convictions recorded by the New Zealand Police.

Method

Three evaluations of treatment for adolescents who sexually offend were undertaken; a process evaluation, an outcome evaluation, and a cost-effectiveness evaluation. The adolescents included females, youths with special learning needs, and children under 13 years of age.

The **process evaluation** involved interviewing 91 participants (adolescents, parents and caregivers, programme staff and external agency staff) over an 11-month period between December 2003 and October 2004. The study aimed to: document the operation and characteristics of the programmes; examine clinical practice and processes that contribute to success and failures; and identify factors associated with successful programme progress.

The **outcome evaluation** involved gathering data from 702 client files and the assessment of psychometric measures. A final sample of 682 clients was included in the reoffending study. This study aimed to determine the effectiveness of the programmes with regard to sexual reoffending. This is the largest international reoffending study ever undertaken with adolescents who sexually offend.

The reoffending rate for the Treatment Completers group was compared to reoffending rates for those in the No Treatment and Treatment Dropout groups of the same programmes.

The association between reoffending and a range of other factors was also explored.

The median time period from end of treatment to end of offence data availability was 4.5 years (range: 1–10 years). A follow-up period of up to 10 years is not often achieved in reoffending research on adolescents who sexually offend.

The **cost-effectiveness evaluation** used decision tree modelling, data from client files and financial accounts to assess programme and treatment delivery costs. This study aimed to determine whether the three programmes were cost-effective.

Results

Process evaluation

- Overall, adolescents and their families reported positive experiences of the services that were provided by the programmes.
- Adolescents reported that they made positive changes as a result of the treatment they received. This was confirmed by parents, caregivers and external agency staff.
- Some of the reasons for making positive change included: the provision of holistic services; the incorporation of culturally appropriate treatment components for Māori clients; the Good Way model at WellStop (Ayland and West 2006); emphasis on systemic treatment approaches; multimodal (individual, family and group) treatment interventions; and strong client–therapist relationships.
- Māori clients were not always matched with Māori staff as there were insufficiently trained Māori clinicians. This suggested a need for the programmes to prioritise Māori workforce development issues in their strategic plan.
- Cultural training and cultural supervision for non-Māori staff were identified as areas requiring improvement.
- While Māori staff incorporated cultural components into treatment, a need was identified to develop and integrate Māori models of practice into the programmes.
- There was general consensus that the consultation and liaison arrangements with mana whenua, iwi, hapū and Māori service providers in the community needed to be improved.
- There was general agreement that more could be done to identify Pacific youths who sexually offend, and that the programmes did not meet their cultural needs. The programmes experienced difficulties recruiting Pacific clinicians and there was insufficient networking with their communities.

Outcome evaluation

- An overall sexual reoffending rate of 2% was obtained across the three programmes for those youth who had successfully completed treatment. Statistical analysis revealed the rate of sexual reoffending for the Treatment Completers group was significantly lower when compared to the Treatment Dropout group (10%) and the No Treatment group (6%).
- These results indicated a substantial treatment effect, with the reoffending rate of those who completed treatment (2%) being approximately one-third the reoffending rate of those in the No Treatment comparison group (6%).
- These results compared very favourably with the findings from previous international studies of youth who attended adolescent offender treatment programmes. For example, in a 2003 Australian study, a sexual reoffending rate of 11% was found.

- A non-sexual reoffending rate of 38% was found for those youth who had successfully completed treatment compared with 44% of those in the No Treatment group and 61% in the Treatment Dropout group. Statistical analysis indicated that the Treatment Dropout group was significantly more likely to non-sexually reoffend compared with the No Treatment group and Treatment Completers group.
- Higher sexual and non-sexual reoffending was found to be related to non-completion of the programme. Higher rates of prior non-sexual offending within the Treatment Dropout group may have contributed to this finding.
- Reoffending was not found to be related to age, ethnicity, number of previous convictions, victim gender preference, number of previous sex offences, or total number of previous offences.
- Reoffending was also not related to treatment characteristics such as length of treatment, the year treatment was started, and time since completion of treatment.
- Older youth who were referred to treatment were at increased risk of dropping out of treatment.
- Youth with a history of non-sexual offending prior to referral were at greater risk of non-sexual reoffending.
- Analysis of three psychological measures at SAFE and STOP found a reduction in behavioural and psychological problems when comparing pre-treatment to post-treatment.

Cost-effectiveness evaluation

- The average cost of treatment per client was \$5,615 across the three treatment centres. This ranged from \$2,169 in Wellington to \$5,225 in Auckland and to \$8,487 in Christchurch.
- Comparing those youths who did not begin treatment with those youths who did begin treatment (either dropping out or completing), the results suggest there is no difference in the average rate of sexual reoffending. The average for both groups was 6%. As the average cost of treatment for those who began treatment was \$5,616, this suggests the youths who entered the treatment programme had a higher cost but were not less likely to sexually reoffend.
- However, comparing the rates of sexual reoffending for those youths who completed treatment (reoffending rate of 2%) with those youths who did not complete treatment (reoffending rate of 10%) suggests that an additional expenditure of \$459 was associated with a 1% reduction in the probability of sexual reoffending.
- Although treatment shows a decrease in the rate of sexual reoffending for those youths who completed treatment compared with those who did not begin treatment, it is not possible to compare costs between these groups.
- The treatment programmes offered treatment at a lower cost than similar treatment programmes in other countries.

- The programmes were cost-effective when compared to international studies, especially if the wider societal costs (including victim costs and reductions in quality of life) were taken into consideration.

Conclusions

These results indicate:

- Widespread support from adolescents, parents and caregivers, and external agency staff for the service the programmes were providing.
- Clients and families felt positive about the treatment adolescents received and reported its positive impact on changing behaviour across family, school, peer and community elements.
- Cultural services for both Māori and Pacific clients require further development.
- The programmes had not provided services that attended to the cultural context for Pacific clients.
- These programmes were having a significant impact on lowering both the sexual and non-sexual reoffending rate among youths they treated when compared with youths who dropped out and those who did not receive any treatment.
- The sexual reoffending rates of youths completing treatment on these programmes were at the very low end compared with rates reported in international evaluation studies.
- Youth who dropped out of treatment before successful completion were at the highest risk of both sexual and non-sexual reoffending.
- The programmes were providing treatment that was cost-effective when compared with treatments provided internationally.

Recommendations

A number of recommendations are made regarding programme and service delivery. Some of these include development of:

- better data management systems and data entry processes
- more intensive services for youths who are at risk of dropping out of treatment and their families
- Māori models of practice and cultural services for Māori
- culturally appropriate services for Pacific clients.

Introduction

Over the past 20 years there has been increased acknowledgement of the benefits of providing treatments for persons who sexually offend. Alongside this knowledge has been recognition of the need to provide specifically targeted treatment to a range of persons who have sexually offended, including adolescents, children aged 10–12 years, females and those with intellectual disabilities.

The National Task Force on Juvenile Sexual Offending was set up in North America in 1986 to provide direction for standards of assessment and treatment for adolescent sex offenders (National Adolescent Perpetrator Network 1993). The reports of the taskforce have been instrumental in guiding treatment philosophies and clinical practice worldwide, with many of their recommendations still in practice today. The taskforce recommended a broad spectrum of services to cater for adolescents who sexually offend, outlining ethical issues, treatment philosophies, and key treatment interventions. This report highlighted the importance of providing a comprehensive range of treatment services so that each adolescent receives the appropriate level of intervention for their level of offending. Such services would cater for both the needs of adolescents and their families, while also ensuring the safety of the community.

The extent of adolescent sexual offending in New Zealand

Despite the historical belief that sexual offending during adolescence was “experimentation”, data would indicate otherwise. A random community sample of adult women reported that 25% of the sexual abuse reported by 500 women was perpetrated by adolescents aged 18 years and younger. Similarly, Mullen et al (1991:2) state that: “teenage offenders were a large and often quite violent group, who carried out one quarter of the offences”. New Zealand Police statistics indicate that for the years 2000 to 2005, youth under the age of 17 years committed on average 15% of all sexual offences in New Zealand (Statistics New Zealand 2005). So, if such a problem exists, what has been done to address it?

Treatment programmes

In New Zealand, as in many countries, the treatment and research services for adolescents who sexually offend grew out of models based in North America. Though initially lagging behind their North American counterparts, the New Zealand treatment programmes quickly developed from their inception in Auckland in 1988. By the early 1990s, three community-based specialist treatment programmes for adolescents were operating; in Auckland, Wellington and Christchurch. Throughout the 1990s the programmes became increasingly sophisticated and cognisant of the community's needs.

Today it is widely recognised that comparing New Zealand treatment programmes with those in North America is no longer appropriate. In many ways, the treatment programmes in New Zealand offer a more dynamic and fluid treatment approach. Many North American programmes are residentially based and under pressure to keep their bed numbers up in order to meet the financial demands of management. Clinical experience would suggest that a child living in a residential centre in the United States would be living in the community in New Zealand. It is likely that the psychological and safety needs of young people and their families can be better met in community settings.

Currently in New Zealand there are nine specialist community treatment programmes for adolescents who sexually offend and one residential unit. The three main programmes for adolescents are the SAFE Programme (Auckland), WellStop¹ (Wellington), and STOP Christchurch. Smaller satellite programmes are currently run in other regional centres; Hamilton (SAFE Network), Napier, Gisborne, Palmerston North (WellStop), New Plymouth (affiliated with WellStop) and Dunedin and Invercargill (STOP Trust). These programmes cater for the majority of adolescents who sexually offend. They operate group programmes and conjunctive individual and family therapy.

Services are contracted out to the three main treatment programmes by CYF. In addition to these programmes, there is a secure residential facility, Te Poutama Arahi Rangitahi (TPAR), situated in Christchurch, which caters for high-risk adolescents. TPAR was not included in the current evaluation as the focus was specialist community-based treatment programmes.

The current evaluation

In 2003, CYF commissioned a research team to conduct a process and outcome evaluation, along with a cost-effectiveness analysis of the three main community treatment programmes in New Zealand.

The primary aim of the evaluation was to assess the effectiveness of community-based treatment programmes for adolescents who have sexually offended and determine whether treatment resulted in a reduction in sexual reoffending and improved psychological health and was cost-effective. A secondary aim was to evaluate the quality of the treatment programmes and the extent to which they were having positive outcomes for young people who sexually offend.

It was envisaged that the evaluation would provide information to policymakers regarding the quality of the programmes and the extent to which they were meeting intended outcomes. Findings provided the basis for recommendations aimed at improving service delivery and programme effectiveness.

Definition of sexual abuse

Sexually abusive behaviour is usually characterised by three factors: lack of informed consent; lack of equality (or power differential); and use of coercion or force. However, sexual abuse does not necessarily “involve force or even touching” (SAFE Network Inc 1998:2–7).

Children and adolescents are referred to specialist treatment programmes in New Zealand for a range of sexual offences including:

- “hands off” offending, such as voyeurism (peeping), exposure and public masturbation, stealing underwear and obscene phone calls or letters/emails
- “hands on” offending, such as sodomy (anal penetration), and vaginal penetration (penile, digital or object)
- indecent assault (eg sexualised touching) and genital oral contact
- bestiality (sexual acts with animals).

New Zealand has a unique youth justice system which is designed to keep children and young people out of the adult justice system. Within this system young people

¹ WellStop was previously called Wellington STOP Adolescent Programme.

are not necessarily charged with offences, and few are convicted for their offending. Children and young people who attend specialist community-based treatment programmes include a mix of mandated and non-mandated youth. Therefore, within the context of this research they are considered to be sexual offenders by virtue of their sexually inappropriate behaviour, which may not have resulted in an official conviction.

Project advisory group

In this study, the research team worked in collaboration with a number of intended users. These included the CYF Evaluation Advisory Group which was made up of community and government stakeholders who shared responsibility for overseeing the project, and programme managers. Māori cultural experts were involved in the design and implementation of the evaluation and the rationale for this is given below. Regular meetings were held to clarify ideas about the methodology and to detail how the research would be undertaken in practice. Programme site visits were conducted so that the evaluation plan could be presented to managers and staff at each site with a view to obtaining their input and support for the project as well as approval for access to documentation. Thereafter, a consultative process was maintained with the CYF Evaluation Advisory Group and programme staff for the duration of the study.

Cultural safety and cultural differences

Overall, Māori adolescent clients represented just under one-third of the total numbers of adolescents involved in treatment. Given that one of the objectives of the evaluation was to assess the extent to which the programmes met the needs of adolescent clients and their families, the importance of including Māori perspectives was prioritised. This highlighted the need to be sensitive to issues of cultural difference. Rawiri Wharemate, of Ngāpuhi/Tainui descent, was employed as cultural consultant and Kaumatua for the evaluation project to provide oversight and ensure cultural safety. Additional consultation involved the Māori programme staff at the Auckland site and Karen Clarke, of Ngati Kahungunu descent, the cultural advisor for the CYF Evaluation Advisory Group.

Regular meetings occurred between members of the research team and the cultural consultants. This was to identify and address any cultural issues to ensure that Māori protocol was observed and that Māori interests were protected at every stage of the research process. Initial discussions focused on developing culturally appropriate questions for Māori participants and identifying a suitable Māori interviewer for Māori participants. A subsequent decision was made that Rawiri Wharemate would interview all Māori participants with Jan Geary in attendance.

Research objectives

Process evaluation objectives

A. Programme description

- 1 To document the operation and characteristics of the programmes, the environment in which they operated, their limitations, and how this relates to best practice parameters which are outlined in the literature.

B. Effectiveness

- 1 To investigate client, parent and caregiver perceptions of the extent to which the programme met their needs.
- 2 To investigate external agency staff responses to the programmes, including perceptions of strengths and weaknesses.
- 3 To investigate the potential efficacy of the therapeutic models and processes used with reference to the international literature and adolescent client perceptions.
- 4 To assess the extent to which the programmes catered for specific population groups (Māori and Pacific people, youths with special learning needs, females, children aged 10 to 12 years).
- 5 To investigate the degree to which the programmes had quality assurance systems in place.
- 6 To examine staff characteristics with regard to personal and professional qualities, treatment orientations and preferences, training and supervisory support.

C. Changes/recommendations

- 1 To identify processes to improve the programmes that will be informed by information obtained from interviews with programme staff, adolescent clients, parents and caregivers, and staff in external agencies.

Outcome evaluation objectives

- 1 To present a detailed description of the individual, family and offending characteristics of adolescents referred to community-based specialist adolescent treatment programmes. This included three identified special populations: youth with special learning needs, females and children (Study 1).
- 2 To determine the effectiveness of the programmes in reducing sexual and non-sexual reoffending (Study 2).
- 3 To explore factors which may be associated with increased risk of sexual reoffending among adolescents who sexually offend and/or drop out of treatment prior to successful completion (Study 3).
- 4 To explore factors associated with increased risk of sexual reoffending among adolescents who drop out of treatment prior to successful completion (Study 3).

Cost-effectiveness evaluation objectives

- 1 To identify the resources associated with providing treatment to the clients at each centre.
- 2 To identify the costs associated with providing the treatment from the perspective of the treatment centres.
- 3 To determine whether the treatment was cost-effective using the rate of reoffending as the outcome variable.

Research methodologies

Process evaluation

Qualitative research methods were used, as these facilitate a detailed exploration of programme dynamics and processes. Qualitative data was obtained from a series of structured, open-ended interviews, direct observation and written documentation. A literature review was undertaken as a reference point for prioritising interview questions and comparing findings to practices and interventions that are associated with effective treatment programmes in other countries.

Interviews, which comprised the primary source of information for the evaluation, were conducted with four stakeholder groups: programme staff (including managers), clients, parents/whānau/caregivers, and external agency staff. Data was collected from 91 participants between December 2003 and October 2004 which involved approximately 150 hours of interviewing. This generated a vast array of data that allowed researchers to gain an in-depth understanding of the particular processes that contribute to different outcomes.

To reflect the proportion of Māori clients involved in the programmes, approximately 30% of the participants were Māori. This necessitated close consultation with, and involvement of, Māori cultural experts. All interviews with Māori participants were conducted by the kaumatua for the project.

Using methods suited to qualitative research where the analysis is guided by research objectives, a general inductive approach was used to code data and generate themes (Thomas, 2004). The researchers were guided by the project kaumatua in relation to the interpretation of data involving Māori participants. The strategy of triangulation was used to compare and cross-check the consistency of information across different data sources.

Outcome evaluation

The outcome evaluation comprised three studies which are described below.

Study 1

An audit of 702 client files from the three treatment programmes was undertaken. Clients referred between 1 January 1996 and 31 June 2004 were included in the research. Data was analysed in order to identify individual, family and offending characteristics of the youths referred to the programmes. Three special populations were also considered: females, those with special learning needs and children 12 years and under. It is noted that no research of this nature had been conducted on adolescents who sexually offend in New Zealand. This study therefore makes a significant contribution to our knowledge and understanding of the individual, family and offence characteristics of adolescents who sexually offend in New Zealand.

Study 2

The outcome study involved 682 youth who had been referred to the treatment programmes. Reoffending information was collected from multiple sources (CYF records and Police criminal charge and conviction data) in order to ensure offences that were dealt with through both the youth and adult justice systems were captured and to allow for triangulation of data. Reoffending rates for both sexual and non-

sexual offences were recorded from each data source. Overall sexual and non-sexual reoffending rates were calculated.

Three psychometric measures (Child Behavior Checklist, Youth Self-Report and Millon Adolescent Clinical Inventory) were examined for any change in behavioural problems and the psychological functioning of adolescents between assessment and the end of treatment.

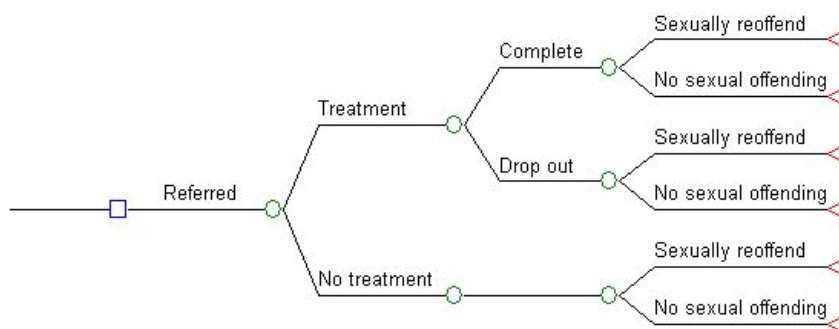
Study 3

There is limited international research and no New Zealand research investigating factors associated with increased levels of risk of reoffending in adolescents who sexually offend. Information collected in Studies 1 and 2 were combined in order to explore variables which predicted treatment outcomes (ie sexual reoffending) and treatment engagement (ie treatment dropout) using logistic regression.

Cost-effectiveness evaluation

The evaluation focused on three groups of youths: those who were referred and/or assessed but did not begin treatment (No Treatment Group), those who began treatment but did not complete their treatment programme (Treatment Dropout Group) and those who completed their treatment programme (Treatment Completers). The evaluation uses decision tree modelling, grounded in the economic evaluation literature, to track the resource use (eg number and type of treatment sessions) and the outcomes (sexual reoffending) associated with each group. The outcomes are shown in the decision tree in figure 1. The probabilities of each outcome and the associated resources (treatment sessions) were estimated from primary source data gathered from the three centres for the time period 1995 to 2004. Paper and electronic client treatment records were used to ascertain information on the type and number of treatment sessions delivered. Financial accounts were used to ascertain information on issues relating to treatment delivery, such as the percentage of the budget allocated to the clinicians treating the adolescents.

Figure 1: Decision tree



Data collection

Information on the resources associated with treatment was identified via review of documents, case records, and financial accounts from the three treatment centres. Additional information regarding resources and the costs of administering the

programme were gathered via personal communication with other research evaluators, managers of the programmes, and experts in providing treatment to this population group.

Data on rates of reoffending was collected by a member of the research team from case records, the New Zealand Police Profiling Unit and CYF records. This is described in detail in the outcome evaluation (Fortune and Lambie 2006).

Calculating cost of treatment

The cost per treatment session was calculated using the variables including the number of clinicians at each session, the amount of each clinician's time required for the session (length of time of the session plus the support time), the cost per clinician (hourly rate times an overhead charge), and the number of clients in each session. The formula used to calculate the cost per session is shown in Equation 1. The total cost for the client was therefore the sum of the number of each type of session multiplied by the cost for that type of session, plus an initial assessment cost. This calculation is shown in Equation 2.

Where t = length of session, s = support time attributable to session, c = number of clinicians present at session, r = the rate the clinicians were paid, λ = common cost multiplier and p = number of clients present at session. For the total cost, I = average number of individual sessions, G = average number of group sessions, F = average number of family sessions, SR = average number of system reviews sessions, SO = average number of significant other sessions, CC = average number of case conferences, λ = generic support time multiplier, αx = assessment cost, C = refers to the cost of the session indicated by the subscript and wp = wilderness programme.

Equation 1 Cost per session

$$\text{Cost per session} = \frac{((t + s)(c * r) * \lambda)}{p}$$

Equation 2 Total cost

$$TC = (I * C_I + G * C_G + F * C_F + SR * C_{SR} + SO * C_{SO} + CC * C_{CC} + WP * C_{WP}) * \lambda + \alpha x$$

Calculating cost-effectiveness ratio

The results report cost-effectiveness ratios using the rate of sexual reoffending as the outcome variable. Because of the relatively low numbers of clients for whom there was accurate data (especially in Wellington and Christchurch), the analysis does not report the cost-effectiveness ratios for each site separately. Instead, the data from the three sites is combined.

Using the three groups described above (No Treatment, Treatment Completers, and Treatment Dropouts), two comparisons were made. First, the ratio of the cost of those in treatment (both completed and dropped out) divided by the difference in the rate of reoffending between those who entered treatment and those who did not enter treatment (note that those not in treatment did not incur any treatment costs).

Where ΔR refers to the difference in the rates of sexual reoffending between the group of clients who began treatment (tx) and those who did not begin treatment ($notx$). This ratio provided information on the investment ($cost$) required to reduce the rate of reoffending by 1% for a client. In order to assess the importance of completing the treatment programme, the ratio of the difference in average treatment cost between clients who did and did not complete treatment divided by the difference in rates of reoffending was calculated (Equation 4).

Equation 3 Cost-effectiveness ratio – Treatment versus No Treatment

$$\frac{\Delta Cost}{\Delta R} = \frac{Average\$tx}{Re-offending_{tx} - Re-offending_{notx}}$$

Equation 4. Cost-effectiveness – Completed Treatment versus Dropped Out

$$\frac{\Delta Cost}{\Delta R} = \frac{Average\$tx_c - Average\$tx_{do}}{Re-offending_c - Re-offending_{do}}$$

Programme descriptions

Generally speaking, the adolescent programmes offered treatment for up to two years for 10–18 year olds. However, programme duration and intensity sometimes varied depending on the particular needs of the offender. The majority of adolescents accepted for treatment by the programmes were regarded as medium to high risk of further offending. Those adolescents who had been referred to the programmes and subsequently considered to be low risk were often referred to counsellors and psychologists in the community for individual and family counselling. More than 120 adolescent sexual offenders receive treatment through SAFE, WellStop and STOP each year. The treatment agencies provided a range of services, including specialist programmes for adolescents with intellectual disabilities and developmental delay, and social work services. Specialist family group homes were provided in Auckland and Wellington by Barnardos and in Christchurch by Richmond Fellowship.

In the early days, there were unique components to adolescent sexual offender treatment in New Zealand that placed these programmes on the world stage. Specifically, this was the use of psychodrama and wilderness-based therapy to enhance motivation and provide an alternative modality of learning for the youth. Few, if any, other programmes internationally were using these methods. Today, it is the use of culturally appropriate services for Māori youth and their whānau and the Good Way model that provide a unique New Zealand perspective to adolescent sexual offender treatment. Few programmes outside New Zealand are cognisant of the need to address cultural factors with clients.

Referral process

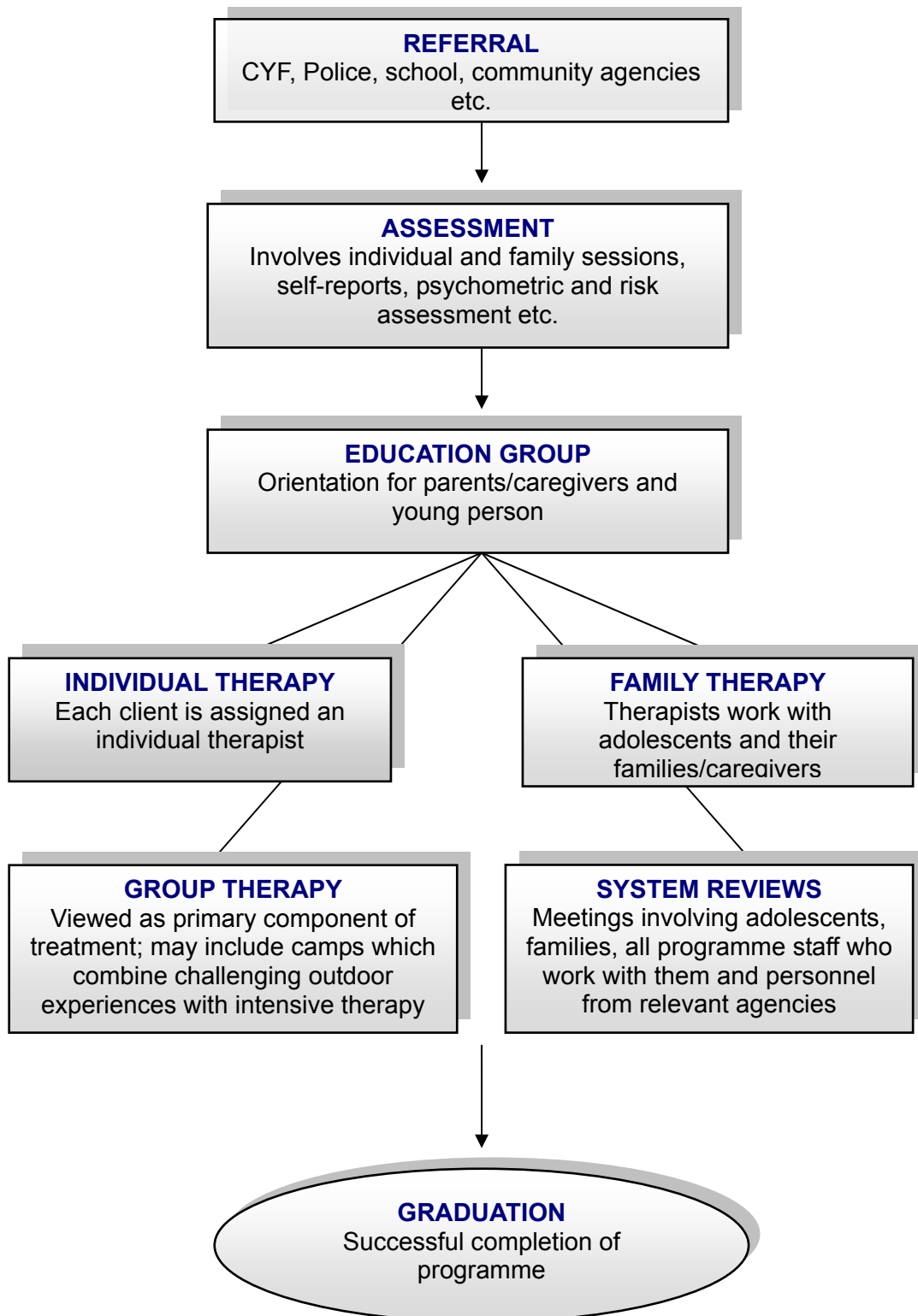
In the current study the treatment programmes received the majority of their referrals from CYF. The remaining referrals were received from individuals, family members, child, adolescent and family mental health services, and non-governmental community agencies. More than a quarter of youths referred to the programmes successfully completed treatment. The reasons youths did not complete treatment were: they refused to attend or were withdrawn from treatment by family/caregivers; they were referred to another treatment provider; they were imprisoned; or their poor progress or attendance resulted in termination. About 11% of youth did not complete treatment due to statutory agency (eg CYF, Corrections or the Police) involvement and/or funding being withdrawn. The youths who were mandated to attend stopped attending treatment once the mandate ceased.

Just under one-third of youths referred to the programmes were Māori or part Māori. This study found that Māori youths referred for treatment were *least* likely to receive treatment. However, it was found that Māori youths and their families did engage well with the treatment programmes and received ongoing support for their involvement in treatment from statutory agencies (eg CYF, Community Corrections, Courts). One of the main reasons that Māori youth did not commence treatment was that they were often referred on to other services which the treatment programmes considered were better able to meet their needs. For a more detailed description of the views of Māori youths and their whānau on the treatment programmes refer to the Process Evaluation (Geary and Lambie 2005).

Pacific youths were also referred to the treatment programmes. SAFE and WellStop had the highest referral rate of Pacific youths. The researchers were only aware of STOP having a dedicated Pacific worker. Pacific youth were *more* likely to drop out of treatment compared with Māori and European/Pākehā youth. This study found that

Pacific youths, when compared with adolescents of other ethnicities, often dropped out of treatment following the withdrawal of involvement and/or funding by a statutory agency (eg CYF, Community Corrections, Courts). This is of concern and indicates a lack of ongoing support for Pacific youths and their families, which needs to be addressed by statutory agencies such as CYF.

Figure 2 Stages of treatment



System reviews – Meetings involving adolescents, families, all programme staff who work with them and personnel from relevant agencies.

Group therapy – Viewed as primary component of treatment; may include camps which combine challenging outdoor experiences with intensive therapy.

Family therapy – Therapists work with adolescents and their families/caregivers

Individual therapy – Each client is assigned an individual therapist.

Assessment – Involves individual and family sessions, self-reports, psychometric and risk assessment etc.

Referral – CYF, Police, school, community agencies etc.

Education group – Orientation for parents/caregivers and young person.

Graduation – Successful completion of programme.

Programme clients

Consistent with international research, adolescents in the current study were not only presenting with their sexually abusive behaviour but also other psychological and behavioural issues. These included a history of childhood sexual and physical abuse, and behavioural and mental health problems. Other common issues were drug and alcohol misuse and a history of suicidal ideation, deliberate self-harm behaviours or attempted suicide. The adolescents often had poor social skills and struggled to establish appropriate peer relationships. Many of the youth came from multi-problem and chaotic family backgrounds, had multiple changes in parental figures and experienced numerous out-of-home placements. These findings are consistent with international research.

It is also important to recognise some of the strengths of the young people who were referred to the programmes. Most were still attending school or were in some other form of training course when referred to the programmes. Half the youth were actively engaged in at least one sporting activity and/or hobby.

The adolescents primarily victimised male and female children (12 years or younger) who they were acquainted with or related to. Very few victimised strangers. They engaged in both “hands on” (eg penetrative acts, oral contact, sexualised touch) and “hands off” offences (eg voyeurism, exposure). The most common strategies used to overcome or gain the compliance of their victims were physical force, grooming behaviours and threats.

The average age at referral to the programmes was 15 years. The average age at first known inappropriate sexual behaviour was 13 years (range: 2 to 19 years). This indicated a delay of approximately two years between first known sexual offence and referral to an appropriate treatment service. Research indicates that the older age at initial assessment may be associated with increased risk of sexual reoffending.

Specialised services

This study found that children who had engaged in sexually abusive behaviours, youths with special learning needs and females all presented with similar histories to other adolescents who sexually offend. They often came from chaotic and multi-problem families where their parents had separated or divorced, and there were family members with histories of sexual and non-sexual offending, domestic violence, and drug and alcohol misuse. They commonly had little or no contact with their fathers, had experienced multiple changes in parental figure and had a number of out-of-home placements.

As with other youths who sexually offend, youths with special learning needs and females had often experienced childhood sexual and physical abuse. Females were at particularly high risk of having experienced childhood sexual abuse and childhood physical abuse. All three population groups had poor social skills and experienced difficulties developing peer relationships.

However, all three population groups exhibited similar strengths to the other adolescents in this study; many children, females and special-needs youths were still attending school, and many were engaged in at least one sporting activity and hobby.

Children with sexually abusive behaviours

Children (those aged under 13 years) with sexually abusive behaviours commonly had behavioural problems. Although some had a history of non-sexual offending behaviours before referral, they tended to have lower levels of involvement with youth justice for non-sexual offending compared with adolescents. Children with sexually abusive behaviours tended to engage in their first sexually abusive behaviour before 10 years of age. Similar to the adolescents, the children abused both male and female victims. They also tended to victimise children aged 12 years or younger (although some also sexually abused adolescents and adults), and engaged in both “hands on” and “hands off” offending. Similar to the adolescents, the children mostly victimised people they knew or were related to. An important point to note is that the children in this study engaged in strategies to gain the compliance of their victims including grooming and physical force. Children with sexually abusive behaviours were most likely to attend treatment at Auckland SAFE.

Females with sexually abusive behaviours

During the study period (January 1996 to June 2004) only 13 females of the total sample of 682 were referred to the treatment programmes. As with adolescent males who sexually offend, females victimised males and females, and engaged in both “hands on” and “hands off” offending. All the victims of the females were under 17 years old, with the majority being under the age of 10. As with other offenders, females tended to victimise those known or related to them.

Youths with special learning needs

Of the three centres, Wellstop was least likely to be attended by adolescents with special learning needs. Other presenting issues included behaviour problems, some historical suicidal ideation and deliberate self-harm, and drug and alcohol misuse. Approximately one-quarter of adolescents with special learning needs had a history of non-sexual offending. The characteristics of both the sexual offending and victims of adolescents with special learning needs were similar to the other adolescents. They tended to victimise males and females they knew or were related to. They engaged in both “hands off” and “hands on” offending and commonly used force. As with the other adolescents, they tended to victimise children 12 years or younger, although about 21% of victims were adolescents (13–17 years).

Specialised treatment services

Although specialised programmes for youths with special learning needs and children aged 10 to 12 years had been developed and treatment services are available for females and Māori adolescents, programme staff and external agency staff reported that in some cases the programmes failed to attract clients from these population groups. This was attributed to insufficient promotion of services to potential referrers

and not enough education about sexual abuse in the community. Findings suggested the need for programmes to direct more active attention to providing educational services and developing a clear public relations strategy.

Treatment sessions

Table 1 shows the types of sessions recorded by each of the programmes. The session names are presented as they occur in the databases of the programmes. This table gives an indication of what information is being collected by each of the programmes.

Table 1 Types of treatment received at each location

Auckland	Wellington	Christchurch
Assessment Individual Family Group System review Wilderness Education Other	Assessment Individual Family Group session Case conference Significant other session System review Phone calls Travel time	Assessment Individual Family Group session Client administration Consultation Case review Telephone session with client/parent System review Case conference

Results

Programme delivery

Integration of holistic approaches

In the literature regarding best clinical practice, there has been increasing recognition of the need to adopt holistic approaches to the assessment, management and treatment of adolescents who sexually offend (Longo 2002, Morrison 2006, O'Callaghan 2002). Some authors have suggested ways of blending traditional offence-specific interventions with holistic approaches that incorporate developmental issues and humanistic approaches (Longo 2002, Ryan 1999). Moreover, in view of the finding that adolescents who sexually offend are more likely to reoffend non-sexually than sexually, there have been calls for treatment programmes to address factors relating to other forms of problematic behaviours (O'Callaghan 2002). Holistic approaches therefore seek to address the individual's sexually problematic behaviours and promote healthy development within the broader context, by involving family members, schools and social support networks (Morrison 2006).

With this in mind, it was concluded that the New Zealand programmes delivered comprehensive assessments and that staff were adept at tailoring treatment to the needs of individuals. Interventions were delivered within a holistic framework, which included the involvement of families, a focus on client strengths and the development of prosocial skills and positive life goals. While there has been little evaluation on the use of a family focused approach with adolescents who sexually offend, the findings from this evaluation indicated that parental involvement and support was critical to success, and parents and caregivers played an integral role in the treatment process. Nevertheless, from the perspectives of the adolescents, parents and caregivers, programme effectiveness could have been enhanced in some instances by involving more family members, additional support groups for parents and caregivers, and provision of aftercare services so that treatment gains could be maintained. Some programme staff highlighted a need to introduce a positive sexuality and healthy relationships curriculum, to teach strategies to help the adolescents cope with prior childhood victimisation issues, and to give greater emphasis to family work on the programmes.

Salient programme components

These were identified from responses given by the adolescents, parents and caregivers, to questions about what had been learned from the programme and the ways in which the programme had helped them. There were no direct questions about particular treatment components. Programme components that interviewees identified as being influential in bringing about change included; victim empathy (this received the greatest emphasis), cycle of offending, relapse prevention, anger management, and communication and social skills training. Staff adapted these components to suit New Zealand's cultural and community contexts and the developmental needs of clients. There were indications that the understanding of programme components was facilitated by therapists who used the language and concepts of the young people themselves. While these components are typically included in most treatment programmes for adults and adolescents who sexually offend, the appropriateness and effectiveness of these approaches for adolescents has been questioned (Longo and Prescott 2006). Despite concerns about the applicability of the relapse prevention model for adolescents (Hunter and Longo

2004), the findings from this study suggest (taking into account the perspectives of the adolescents, parents and caregivers) that relapse prevention can be used effectively to address issues of risk as one aspect of a holistic approach. Its apparent usefulness may be related to the way it was introduced by therapists, particularly the use of appropriate language that not only invited engagement with the material, but also took into account developmental and contextual issues.

Another aspect of treatment that has received attention in the literature relates to empathy training. Longo and Prescott (2006) point out that a nationwide survey of North American treatment programmes and models conducted by the Safer Society Foundation in 2000, found that less than 7% of adolescent programmes incorporated empathy training. Given the breadth and depth of comments from clients and their families in this evaluation, empathy enhancement appeared to be a particularly valuable treatment component.

Effective therapeutic approaches

While the treatment models and modalities used in these programmes were similar to those used in programmes in other countries, from the clients' perspectives, a number of treatment approaches were highlighted as being particularly effective at facilitating engagement, disclosure and learning. These included: the Good Way model (Ayland and West 2006) developed by Lesley Ayland and Bill West at WellStop (strengths-based, incorporates narrative therapy approaches and relapse prevention); experiential and expressive therapies (music, games and play, active pursuits, sports, and camps); multisystemic approaches to treatment (involving wider social support networks); and multimodal interventions (individual, group and family). Despite the reliance on mainstream psychological models, Māori staff incorporated Māori health models such as Te Whare Tapa Wha (Durie 1994) and the powhiri process which provide concepts and guidelines for working with Māori. From Māori participants' perspectives this generated beneficial outcomes for Māori clients. A need to further develop and integrate Māori models of practice in this field of treatment was identified.

Given the positive comments from many programme staff, the adolescents, parents and caregivers about the Good Way model, it was suggested that this be further developed and evaluated with a view to being used more extensively with different client groups and across other programmes. While it has been suggested that the provision of expressive and experiential therapies in adolescent sexual offender treatment programmes is essential (Rich, 2003), their efficacy for this population group has yet to be established. Findings from this study indicate that the exploration of difficult issues through creative and physical activities strengthened the client–therapist relationship and made it easier for the adolescents to open up. Moreover, taking into account developmental factors (eg age, maturity level, learning stage, and early life experiences), and the verbal skills required for most interventions, it makes sense for programmes to provide alternative avenues for self-expression.

Integration of systemic approaches

In the literature, multisystemic therapy with its focus on the interconnected systems of family, school, work, peers and community, has been described as a promising intervention for this population group (Prescott and Longo 2006). The New Zealand programmes incorporated aspects of this approach and comments from programme staff, the adolescents, parents, caregivers and external agency staff suggested this was a key component of successful treatment. Consistent with a multisystemic therapy approach, therapist availability beyond normal work hours was valued and a

need for assessments and interventions to occur in community settings was identified. The latter conclusion was particularly relevant for Māori clients who can experience feelings of anxiety, fear, self-doubt, and powerlessness in clinical, European dominated environments. For Māori, delivering intervention in the person's home or marae can to some extent redress the balance of power and reduce negative feelings.

Treatment formats and processes

While multimodal interventions (individual, group and family) were highlighted by all participants as being instrumental in facilitating change, concerns about group interventions were raised. Historically, group therapies have been described as the treatment of choice for this population group (National Adolescent Perpetrator Network 1993). While there is very little empirical support for this claim (Righthand and Welch 2001), virtually all treatment programmes for adolescents who sexually offend include group work as a primary component of treatment (Rich 2003). Nevertheless, some authors have warned against the use of certain peer group interventions for adolescents with problem behaviours. Dishion et al (1999) reported that the aggregation of high-risk youth in group interventions can result in negative life outcomes in adulthood. There have also been suggestions that uninformed mixing of disturbed youth with less impaired youth in therapy groups for sexual offending may be harmful (Hunter 2006). While this study indicated support for group interventions, it also highlighted the need for clinicians to give greater consideration to the possible negative effects of combining youth who differ in their demographic profile, psychological and emotional adjustment, risk level, and offending behaviour.

Quality of client–therapist relationship

In this study, participants' comments suggested that strong client–therapist relationships made a significant contribution to programme progression and therapeutic success. Overall, staff were viewed as possessing the necessary skills and personal characteristics to actively engage clients and families. A central theme in the stories of all adolescents, parents and caregivers interviewed was the weight given to engagement across all points of contact with the programmes. This went beyond a focus on therapist characteristics and communication styles to include comments about getting the right information prior to assessment, being welcomed into an inviting physical environment, and the provision of refreshments.

While numerous researchers have concluded that the quality of the client–therapist relationship influences treatment outcomes in other areas of treatment and have identified therapist behaviours that facilitate change with adult sex offenders (Marshall et al 2003), less is known about the nature of the client–therapist relationship that enhances treatment for adolescents who sexually offend. While some of the positive therapist features identified in this study are consistent with descriptions in the general literature, others appear to be particularly relevant for this population group. These include: supportive and challenging approaches, avoiding expressions of anger, using creative methods of engagement, being given time to work at an appropriate pace, communicating respectfully at an appropriate level, being “down-to-earth”, taking a personal interest, availability beyond session times, and instilling hope.

While Māori identified the same therapist characteristics that contributed to effective therapeutic relationships as European/Pākehā participants, they also referred to the importance of having a Māori therapist and cultural input. Māori parents, caregivers and external agency staff referred to the ability of Māori therapists to engage the

adolescents using tikanga and other methods that they knew the young people would respond to. Māori participants made reference to the incorporation of cultural components such as Te Reo Māori, kōrero about tikanga, karakia, mihi, waiata, haka at camps, taonga at graduation and kai for meetings. While the importance of having a Māori therapist was clearly identified, there were insufficiently trained Māori clinicians available to make this possible. The need for the programmes to prioritise Māori workforce development issues in their strategic plan was highlighted.

Service delivery

Funding and external networking

Managers and programme staff cited inadequate funding as affecting programme development and the ability to network effectively with a range of community groups and agencies. Their comments suggested a need for staffing and funding levels to be reviewed so that the programmes could better meet the needs of ethnic minorities, referral agents and other stakeholder groups. In addition, there was general consensus among Māori staff that the consultation and liaison arrangements with mana whenua, iwi, hapū and Māori service providers in the community could be improved.

Relationship with Child, Youth and Family

Many programme staff expressed concern about the relationship with CYF, which was problematic to some degree at all three sites. There were reports of low referral rates, inappropriate referrals, and inadequate social worker support for the adolescents (this was also commented on by many of the adolescents, parents and caregivers). Many programme staff and CYF staff talked about widespread placement problems and the tensions that arose when there were difficulties securing and monitoring safe placements. It was recommended that procedures be set in place to resolve these tensions.

Programme operations

Overall comments from managers, programme staff and some external agency staff suggested that the programmes had effective operational procedures in place, thus providing strong organisational frameworks for the delivery of services. There were references to strong supportive leadership, committed and skilled staff, effective training and supervision practices, attention to staff wellbeing, a positive organisational culture, evidence-based practices, and support for staff to be innovative and creative. While the field of treating adolescents who sexually offend places particular demands on staff, and management had policies and structures in place to support them, the pressure to overwork was a concern at two sites. Without exception, Māori staff at all sites felt well-supported and valued by management and staff. However, a number of areas for improvement were identified, including the need for sexual offence-specific training, induction training for new staff, cultural supervision for non-Māori staff, and provision of clinical and cultural training for new and existing Māori staff. At two sites, there was inadequate documentation of programme goals and treatment protocols.

Reoffending rates

The rates of sexual and non-sexual reoffending can be seen for each of three comparison groups in table 2. This evaluation found that the treatment programmes

were effective in reducing sexual reoffending for those adolescents who completed treatment. Only 2% of adolescents who completed treatment sexually reoffended, compared with 6% in the No Treatment and 10% in the Treatment Dropout groups. Those in the Treatment Completers group were statistically **less** likely to sexually reoffend, compared with the No Treatment and Treatment Dropout groups.

Table 2 Rates of sexual and non-sexual reoffending in New Zealand

	Sexually reoffended		Non-sexually reoffended	
	n	%	n	%
No Treatment	18	6	131	44
Dropouts	16	10	100	61
Completers	5	2	82	38
Total	39	6	313	46

These findings indicate that the New Zealand programmes compare favourably to reoffending rates found for overseas specialist community-based treatment programmes for adolescents who sexually offend. In an Australian study a sexual reoffending rate of 11% was found for those who completed treatment. Outcome evaluations of community-based programmes in the United States and Canada have found sexual reoffending rates of between 0 to 15% (see table 3).

Table 3 Reoffending rates from follow-up studies of specialist treatment programmes for adolescents who sexually offend

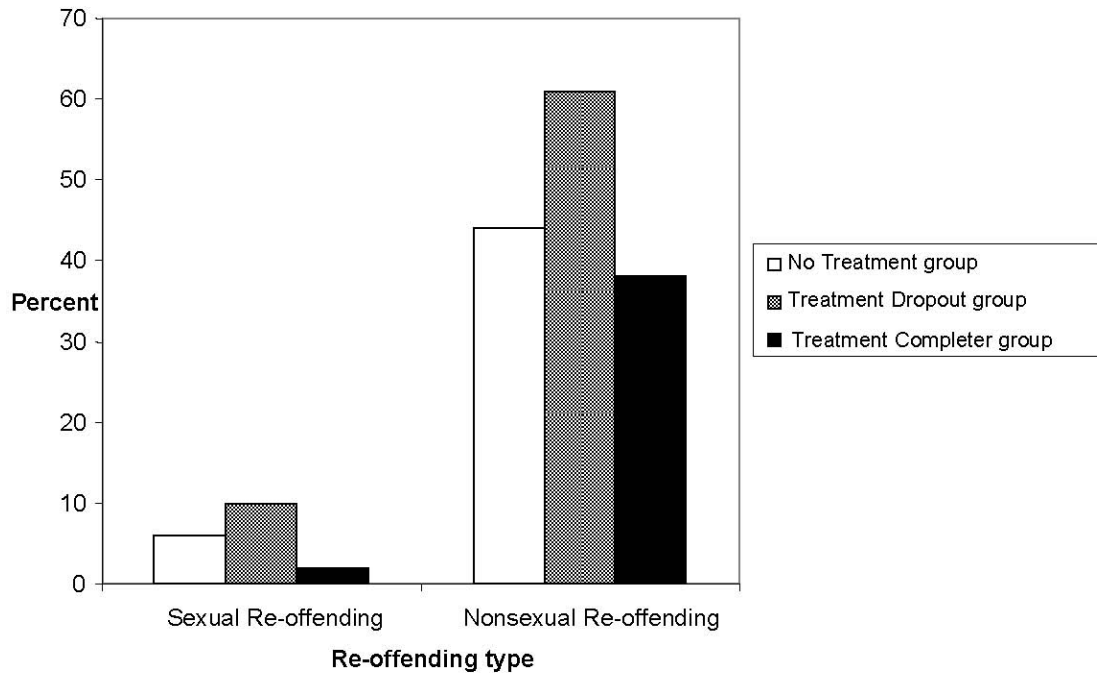
Study	Rates of sexual reoffending	Rates of non-sexual reoffending
Allan et al (2003)	Total sample – 10% (Treated – 11%, Referred – 0%, Assessed only – 33%, No contact – 8%)	Total sample – 66%
Becker (1990)	10%	Not measured
Borduin et al (1990)	Treatment – 13% Comparison – 42%	Treatment – 30% Comparison – 63%
Gretton et al (2001)	15%	General – 51% Violent – 30%
Kahn & Chambers (1991)	8%	
Mazur & Michael (1992)	0%	Not measured
Prentky et al (2000)	4%	7%
Schram et al (1991)	Treated – 0%, 0% Referred – 6%, 0% Withdrawn – 10%, 8%	Treated – 8%, 8% Referred – 44%, 39% Withdrawn – 22%, 18%
Seabloom et al (2003)	Arrests – 12% Convictions – 10%	Arrests – 51% Convictions – 48%
Smets & Cebula (1987)	5%	Not measured
Smith & Monastersky (1986)	14%	35%
Worling & Curwen (2000)	Treated – 5% Comparison – 18%	Treated – 40% Comparison – 82%

* Percentage of arrests, percentage of convictions.

The evaluation also found that completing a community-based specialist treatment programme reduced the risk of non-sexual reoffending. This evaluation found 38% of

those in the Treatment Completers group non-sexually reoffended compared with 44% of the No Treatment and 61% of the Treatment Dropout groups. Overall the Treatment Dropout group was statistically *more* likely to non-sexually reoffend compared with the Treatment Completers groups. Given the programmes' focus on the reduction of sexual offending, this impact on other offending (including violent offending) is a positive finding.

Figure 3: Rates of sexual and non-sexual reoffending in New Zealand



In this study, those adolescents who completed treatment were at high risk of sexual reoffending within the first year of completing treatment. There is limited research on effective aftercare services for adolescents who sexually offend. However, Australian research suggests that monthly support group meetings may assist in the maintenance of relapse prevention plans and help in the development of other life goals.

Youths who dropped out of treatment before successful completion were at high risk of sexual and non-sexual reoffending. International research indicates that mandated attendance means that youths are more likely to stay in treatment. This may have implications for the way CYF and the Courts deal with youths within the youth justice system, as longer periods of supervision may be warranted.

Special populations

Children with sexually abusive behaviours

Overall, two children (under the age of 13) sexually reoffended; one in the No Treatment group and one in the Treatment Completers group. Six children reoffended non-sexually; four in the No Treatment group, one in the Treatment Dropout group and one who completed treatment.

Female youths with sexually abusive behaviours

None of the females included in this study sexually reoffended. One female non-sexually reoffended post-treatment.

Youths with special learning needs

Table 4 summarises the rates for sexual and non-sexual reoffending amongst youth with special learning needs who sexually offend. Overall, 8% of youths with special learning needs who were referred to the programmes sexually reoffended; 2% of special-needs youths who completed treatment sexually reoffended, and 3% of those in the No Treatment group and 4% in the Treatment Dropout group sexually reoffended. Almost half (48%) of special-needs youths non-sexually reoffended.

Table 4: Rates of sexual and non-sexual reoffending by sexually abusive youths with special learning needs

	Sexually reoffended		Non-sexually reoffended	
	n	%	n	%
No Treatment	4	9	21	47
Dropouts	5	13	24	62
Completers	2	4	20	39
Total	11	8	65	48

Other measures of outcome

Reoffending rates are not the only measure of treatment outcome. This study (Study 2 of the outcome evaluation) also examined three psychological measures that were administered at assessment and post-treatment in order to explore any measurable change over time. Small numbers were included in this aspect of the study as many had not completed the psychometric measures of interest at assessment and again at the end of treatment. The small sample also reduced statistical power and therefore only patterns of results were included. The results indicated a general pattern of reduction in behavioural and psychological problems as measured by the psychometric tools; Child Behavior Checklist, Youth Self-Report and Millon Adolescent Clinical Inventory. WellStop was not included in this aspect of the evaluation as, at the time of data collection, they were not administering psychometric measures post-treatment.

The results of the process evaluation concur with the above findings in highlighting the broad success of the New Zealand programmes in producing positive outcomes for young people and their families/whānau. Young people and their families reported improvements in the following areas; family functioning and wellbeing, taking responsibility for offending behaviour, empathic thinking, reducing deviant thoughts, behaviours and attitudes, social and emotional competence, communication, anger management, and self-esteem.

Predicting risk

Study 3 explored variables predictive of non-sexual and sexual reoffending and treatment dropout within a New Zealand population of adolescents who sexually offend. The variables included in the logistic regression analysis were based on overseas research. Many of the variables included in this analysis were not predictive

of sexual or non-sexual offending, or treatment drop-out. However, this study did find that older age at referral was associated with increased risk of youth dropping out of treatment; and youth with a history of engaging in non-sexual offending prior to referral were at greater risk of non-sexual reoffending.

Resource use and cost of treatment

Decision tree modelling was used to identify the pathways and outcomes (sexual reoffending) associated with the treatment programmes. Primary and secondary source data was used to identify the probabilities and resources associated with each treatment outcome. The cost of treatment was then determined by applying a unit cost to each resource.

Economic evaluations involve comparing the costs and consequences (outcomes) of youth who enter the treatment programme with the costs and outcomes of youth who do not have treatment. Because no information was available on the wider costs to society from sexual offending, the evaluation takes the perspective of the service provider, in that only the costs associated with treatment provided were included. Due to the serious nature of sexual offending, nearly all youths who are found to offend are referred for treatment. However, information was available on adolescents who were referred to the system but for reasons outside the control of the treatment centres, were not provided with treatment. The details regarding this group are described elsewhere (Fortune & Lambie, 2006). This group did not differ systematically from the group that was given treatment in areas such as severity of offence, age, or other relevant variables. Thus, they provided a suitable comparison group for the economic analysis described below.

The study is unique in that there have been no previous attempts to determine the cost-effectiveness of treatment programmes for adolescents who sexually offend in New Zealand. As such, it complements the other components of the evaluation by addressing whether the centres provided good value for money.

Cost-effectiveness results

Outcome measure – reoffending

The primary outcome variable was the rate of reoffending. Youths were seen as reoffending if they were recorded in Police or CYF records as having sexually reoffended during the follow-up period. The follow-up period varied from a minimum of 1 year to a maximum of 10 years (mean follow-up period 4.5 years).

Programme costs

The amount of resources and the associated unit costs at each treatment programme was determined using the following information (including source of information):

- Assessment cost – contracted reimbursement rate paid by CYF
- Clinician hourly rate – financial records from the treatment programmes
- Number of clinicians in each session – personal communication with programme managers
- Length of time per treatment session – average amount of time from client records
- Additional treatment-specific support time (non-contact time spent by clinicians on preparation and work resulting from a treatment session) – personal communication with programme managers

- Common cost multiplier (to account for overheads and auxiliary costs) – ascertained from review of financial records of treatment programmes
- Number of clients in group session – personal communication with programme managers
- Generic support multiplier (to account for other time spent by clinicians on work associated with client’s treatment) – personal communication with programme managers
- Unique treatment costs (such as SAFE programme camps) – financial records.

All prices and costs were adjusted for inflation. The estimates for these components of treatment are displayed in table 5.

Table 5: Treatment costs and variables

Variable name		Auckland	Wellington	Christchurch	National
Clinician rate per hour		\$17.30 average across locations			
Number of clinicians	Individual	1	1	1	1
	Group	2	2	2	2
	Family	2	2	2	2
	System review	2	2	3	2.23
	Camp	4			4
	Case conference		1	2	1.5
	Significant other session		1		1
Support time in hours* per session per client	Individual	0.33	0.33	0.33	0.33
	Group	0.67	0.67	0.5	0.63
	Family	0.5	0.5	0.5	0.5
	System review	1.5	1.5	1.5	1.5
	Camp	19			19
	Case conference		0.67	0.67	0.67
	Significant other session		0.33		0.33
Number of clients	Group	6	4	4	4.96
	Camp	6			6

*Times are indicated as a proportion of an hour i.e. 0.5 = half an hour

Sample

As shown in table 6, there were 701 clients referred to the treatment centres between 1995 and 2005. Of this group, 376 were recorded as having started treatment. Of the 376, 45% (171) were recorded as Treatment Dropouts, with 55% (205) recorded as treatment completers. Table 6 shows the demographic composition of those in each group.

Table 6: Analysis breakdown – National

	No Treatment		Treatment Dropout		Treatment Complete	
	n	%	n	%	n	%
Total	325		171		205	
Female	8	2.5	1	0.6	5	2.4
Male	317	97.5	170	99.4	200	97.6
European/Pākehā	159	48.9	90	52.6	144	70.2
Māori	124	38.2	52	30.4	39	19.0

Pacific Islands	23	7.1	21	12.3	12	5.9
Other	19	5.8	8	4.7	9	4.4
Special learning needs	49	15.1	39	22.8	48	23.4

Table 6 also shows the likelihood of completing treatment or dropping out. European/Pākehā youths had a 40% chance of not entering treatment (referral/assessment only), a 23% chance of dropping out, and a 37% chance of completing treatment. In comparison, Māori youths had a 58% chance of not entering treatment, a 24% chance of dropping out and an 18% chance of completing treatment. Pacific youths had a 41% chance of not receiving treatment, a 38% chance of not completing treatment and a 21% chance of completing the treatment.

Table 7 shows the distribution of the sample across the locations. Auckland recorded the largest total sample, with 333 clients out of the total of 701. Of those who were referred, 24% began treatment but dropped out before completion, and 27% completed. Completion rates were relatively similar in Wellington, with 24% of the youths dropping out and 25% completing treatment. Christchurch showed a higher completion rate (38%) compared with the other centres.

Table 7: Treatment status across treatment centres

	Auckland		Wellington		Christchurch		National	
	n	%	n	%	n	%	n	%
No treatment	164	49	94	51	67	37	318	45
Treatment dropout	81	24	44	24	46	25	171	24
Treatment completed	91	27	46	25	68	38	205	29

Table 8: Sample characteristics: entire sample

	Auckland		Wellington		Christchurch		National	
	n	%	n	%	n	%	n	%
Referral only	42	12.5	34	18.5	20	11	96	13.7
Assessment only	122	36.3	60	32.6	47	26	229	32.7
Began treatment								
Treatment data available	100	29.8	30	16.3	33	18.2	163	23.3
No treatment data available	72	21.4	60	32.6	81	44.8	213	30.4
Total	336	100	184	100	181	100	701	100

Treatment information

Information on the specific treatment received was not available for all 376 clients who were recorded as beginning treatment. Data was available for 43% (163 of the 376) of the clients, varying from a high of 58% in Auckland to 29% in Christchurch. Table 8 shows the number of clients at each location who were either referred for treatment or assessed only, but did not receive treatment, and the number who began treatment for whom there either was or was not treatment data available.

Number of treatment sessions and unit cost per session

The cost per session was calculated using the amount of time spent in each session and the resources associated with the session. The average length of a session is shown in table 5. The length of session is used to determine the cost of delivering that type of session. The n values displayed highlight the heterogeneity of clients in

that each client did not receive each type of session for numerous reasons. The accuracy as to the length of the session is reliant on accurate recording procedures. When recording the time taken, it may have been common practice to round to the nearest hour or assign lesser amounts of time than was taken. This could account for some of the uncertainty shown in the large standard deviations. The average length of an individual session was just less than an hour, while the time for a group session was nearly two hours. The average length of camps was more difficult to estimate due to differences in recording procedures at the programmes. Camps may have been recorded in days or in hours and it is not clear whether this recording took account of non-contact time such as sleeping.

The average number of sessions received for the sample is shown in table 8. The sessions are divided up by the type of session and then displayed as a total number of sessions received. The averages include those clients who did not receive a certain type of session. Hence, the average number of sessions for “significant other session”, case conferences and camps are low, as they were not delivered by each programme. The sessions are then displayed for those clients who dropped out, completed, and finally, an average of the two is given. On average, more group sessions (44.89) were delivered than any other type of treatment, followed by individual (37.64) and then family (11.37).

The unit cost for type of each session was calculated using the formulae shown in Equations 1 and 2. The results are shown in table 9. The costs presented here have been multiplied by a generic support-time multiplier. This multiplier represents the time spent by clinicians that cannot be directly assigned to a client or a session. It is used so that costs can be assigned to outputs. Group sessions were the least expensive type of session to hold, as the cost of the sessions was spread over many clients. System reviews were more expensive because of the increased length of time required to hold the session and the number of clinicians involved.

Table 9: Cost per client

	Unit cost (inc. multiplier)	Average session			Cost per client		
		Dropped out	Completed	Total	Dropped out	Completed	Total
Individual	\$37.39	27 (22.36 *)	49.34 (25.71)	37.64 (26.09)	\$1,009.05	\$1,844.80	\$1,407.40
Family	\$96.48	9.02 (12)	14 (14.47)	11.37 (13.45)	\$870.25	\$1,350.72	\$1,096.98
Group	\$28.15	28.53 (31.66)	62.55 (50.12)	44.89 (45.07)	\$803.12	\$1,760.78	\$1,263.65
System review	\$181.12	1.72 (2.18)	3.98 (3.79)	2.8 (3.27)	\$311.53	\$720.86	\$507.14
Case conference	\$82.21	1.78 (4.57)	1.41 (5.69)	1.58 (5.12)	\$146.33	\$115.92	\$129.89
Camps	\$797.50	0.67 (0.94)	1.96 (2.03)	1.29 (1.7)	\$534.33	\$1,563.10	\$1,028.78
Significant other session	\$42.54	0.54 (1.95)	0.29 (1.32)	0.42 (1.66)	\$22.97	\$12.34	\$17.87
Assessment	\$1100	1	1	1	\$1,100.00	\$1,100.00	\$1100.00

Total		69.26 (59.26)	133.53 (78.19)	100 (76.5)	\$4,798.03	\$8,468.52	\$5,651.71
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* Standard deviations shown in parentheses

The cost per client was taken by multiplying the average number of each type of session by the unit cost of that session. The columns were then added to get the total cost. As expected the average cost of treatment for a client who dropped out of treatment (\$4,798) was less than for those who completed (\$8,469).

Relative cost-effectiveness

As mentioned above, data on rates of reoffending (table 2) were combined into a national figure due to concerns over the small sample sizes. As a result, the cost-effectiveness ratios used only the national rate of reoffending. These rates of reoffending were used to plot the resulting probabilities associated with each node of the decision tree in figure 1.

Table 10: Cost per rate of reoffending

	No treatment	Any treatment	Dropped out of treatment	Completed treatment
Total average cost	\$0	\$5,616	\$4,798	\$8,469
Rate of reoffending	6%	6%	10%	2%

Table 10 summarises the average costs for those who had any treatment (either completed or dropped out), and then separately for those who did not and did complete treatment (\$4,798 and \$8,469 respectively). Table 10 also shows the rates of reoffending for sexual offence described above. Turning first to the comparison of the cost-effectiveness of those who entered the treatment programme with those who did not enter the programme, the cost-effectiveness ratio shown in Equation 5 suggests that there was an overall average cost of treatment (\$5,612) but no difference in the rates of reoffending (R).

Equation 5. Cost-effectiveness using rates of reoffending – Treatment versus No Treatment

$$\frac{\Delta Cost}{\Delta R} = \frac{\$5615.71 - \$0}{6 - 6} = \frac{\$5615.71}{0}$$

The result shown in Equation 5 suggests that the additional cost did not yield any additional benefit, implying that the programmes were not cost-effective. However, if the treatment programmes were only effective for those who completed the programmes (rather than those who dropped out and thus, had only partial treatment), then the results shown in Equation 5 might not be providing the full picture. If completing treatment is an important marker of success of the programme, then combining clients who completed treatment with those who dropped out of treatment in the analysis will average out any effects.

In order to examine whether the programmes were cost-effective for those who finished the programmes, the analysis examined the cost-effectiveness for those who completed treatment vs those who dropped out. These results are shown in Equation 6.

Equation 6. Cost-effectiveness using rates of reoffending – Treatment Completed versus Treatment Dropout

$$\frac{\Delta Cost}{\Delta R} = \frac{\$8468.52 - \$4798.03}{2 - 10} = \frac{3670.49}{-8} = -\$458.81$$

On average, those who completed treatment incurred an additional \$3,670 in costs over those who dropped out, but had a reduction of 8% in the overall rate of reoffending (in comparison to those who did not start a treatment programme). This implies an investment of \$459 for each percentage reduction in reoffending or, from a needed-to-treat standpoint, an expenditure of \$45,900 is associated with an avoided sexual offence.

The cost-effectiveness of providing treatment to those who dropped out was compared with those who did not receive any treatment. As shown below in Equation 7, those who dropped out incurred an average cost of \$4,798 and had a 4% higher rate of sexual reoffending. The higher costs and poorer outcomes suggest that the intervention was not cost-effective for these clients.

Equation 7. Cost-effectiveness using rates of reoffending – Treatment Dropout versus No Treatment

$$\frac{\Delta Cost}{\Delta R} = \frac{\$4798.03 - \$0}{10 - 6} = \frac{\$4798.03}{4} = \$1199.51$$

Finally, the cost-effectiveness analysis comparing those who completed treatment with those who received no treatment are shown in Equation 8.

Equation 8. Cost-effectiveness using rates of reoffending – Treatment Completers versus No Treatment

$$\frac{\Delta Cost}{\Delta R} = \frac{\$8468.52 - \$0}{2 - 6} = \frac{\$8468.52}{-4} = -\$2117.13$$

This suggests that each additional expenditure of \$2,117 for treatment on clients who completed treatment is associated with a decrease of 1% rate of reoffending when compared with clients who received no treatment.

Conclusions from cost-effectiveness analysis

This study reports on the cost-effectiveness evaluation of treatment centres for adolescent sexual offenders in New Zealand. This is the first known study to identify the components of treatment and the resources associated with providing each type of treatment. Using this approach, the study identified the resources and the costs associated with each client's treatment. The results suggest that average cost of treatment varied significantly across the three locations, from an average of \$8,487 in Christchurch to \$5,225 in Auckland and \$2,169 in Wellington. The differences result from clients in Christchurch being provided with more treatment sessions than those in Auckland. The number of treatment sessions recorded in Wellington was noticeably lower than the other sites, suggesting that there may have been issues with the recording of some types of sessions in Wellington.

The rate of sexual reoffending is the most commonly used outcome measure in previous studies due to the clear implications of the negative impact of society from reoffending. Due to the small sample sizes at Wellington and Christchurch, the information for the three sites was combined into a national average and used in the analysis. The analysis compares the results for three groups of youths: youths who were assessed but did not begin treatment, youths who began treatment but did not complete their treatment regime, and youths who began treatment and completed their treatment regime. The first analysis compared the rates of reoffending between those who did not begin treatment and those who entered the treatment programme (either dropping out or completing). The results suggest that the average rate of reoffending was 6% for those who did not begin treatment, and 6% for those who began (and either completed or dropped out). Given that there was no difference in rates of reoffending but an increased cost of treatment, this would suggest that the treatment programmes were not cost-effective.

However, the results of comparing the rates of sexual reoffending for those who dropped out of treatment (10% rate of reoffending) with those who completed treatment (2% rate of reoffending) suggests that an additional expenditure of \$460 was associated with a 1% decrease in rates of reoffending. Or expressed as the number of clients needed-to-treat to avoid a sexual reoffending, the results suggest that an additional expenditure of \$46,000 is associated with an avoided future sexual offence. Comparing those who completed treatment with those who did not, the results suggest that an additional expenditure of \$2,117 is associated with a 1% reduction of reoffending.

Sexual offences have a dramatic impact on the quality of life of the victim, an impact that is difficult (and inappropriate) to quantify in monetary terms. In addition, the sexual offence changes the life course of the perpetrator in ways that it is (again) inappropriate to quantify in monetary terms. However, it is possible to identify the resources used as a result of the sexual offence. As discussed in Appendix A, the costs associated with a sexual offence include medical, lost productivity and other victim costs. In addition, there are the costs associated with incarceration and lost productivity on the part of the perpetrator. These can be quite substantial, and thus an expenditure of \$46,000 to avoid a sexual offence seems warranted. On the basis of this comparison, the treatment programmes would appear to be cost-effective for those clients who complete treatment.

It is tempting to conclude from this analysis that completing the programme is of prime importance. This assumes, however, that the three groups used in the analysis (youths who did not start treatment, those who dropped out and those who completed) are equivalent in all ways save for the treatment they are offered. If they were equivalent, then this would suggest that beginning treatment and dropping out somehow has detrimental effects and so it is likely to make a youth more likely to offend. Such a conclusion would imply that additional resources be placed into ensuring that youths complete their treatment programme.

But an alternative explanation is that the groups of youths differ in some important respects. As the study was retrospective, it was not possible to identify the relative importance of these factors. This highlights the need for a prospective study to assess the effectiveness and cost-effectiveness of these programmes.

The programmes would also appear to be providing treatment at a relatively low cost. When compared with other international programmes, the three programmes analysed provided treatment services at a lower cost than other overseas programmes. For instance, it is estimated that the average cost per participant in

America is approximately US\$9,920 (based on dollar values in 2001). This compares to the average cost of treatment in New Zealand of \$5,651 as outlined above.

The results suggest that Māori and Pacific youths were more likely to not begin a treatment programme and to not complete the programme. Due to small sample size, it was not possible to examine the costs and outcomes of Māori compared with non-Māori in greater detail. However, the outcomes for Māori and Pacific clients suggest that future studies should examine the treatment of these young people in greater detail, including the reasons for the relatively high rate of not beginning treatment programmes. At the very least, these results suggest that this is an issue that requires further investigation.

The three programmes analysed in this report delivered slightly different treatment packages. The interpretation of what is meant by each type of treatment needs to be considered in the context of the process evaluation, and the types of treatment delivered analysed against the treatment outcomes for each centre.

The most significant limitation of the current study is its limited scope. From the cost side, the inclusion of treatment costs alone will tend to underestimate the true costs associated with sexual reoffending. Taking justice and other costs into consideration, the cost of reoffending would increase significantly. From the outcomes side, no information was included on treatment benefits other than the rate of reoffending. These benefits might include improved relationships with family, spending more time in school and other factors that are likely to increase the quality of life for the client. By not including these other benefits, the analysis understates the outcomes from the programmes. To gain a more comprehensive understanding of the true costs and benefits of community-based adolescent sexual offender programmes, a more comprehensive study is needed.

Conclusions

This evaluation of community-based treatment programmes for adolescents who sexually offend in New Zealand found widespread support for the services that the programmes were providing. Clients and their families felt positive about the treatment they received. Rates of sexual reoffending for those clients who completed treatment (2%) were significantly lower compared with those who did not receive treatment (6%) and those who dropped out of treatment (10%). Finally, the programmes were providing a service to the community that was cost-effective.

This study also found that managers and staff were an exceptionally dedicated group of people working in a difficult area of treatment. Taking into account these findings and the serious public safety and prevention issues that exist in relation to sexual offending, it can be concluded that the programmes are providing an essential treatment service, and as such, warrant long-term secured funding and support from the government.

Key findings of the process evaluation were:

- Comments from clients, parents, caregivers and external agency staff suggested that the programmes were successful in promoting systemic change across family, school, peer and community elements.
- Some of the reasons for making positive change included: the provision of holistic services; creative treatment approaches; and multimodal (individual, family and group) treatment interventions.
- Clients viewed the quality of the client–therapist relationship and family support as critical to successful outcomes.
- Māori clients responded positively to having a Māori therapist and cultural input. A need was identified for further development of cultural services for Māori.
- The programmes had not provided services that attended to the cultural context for Pacific clients.
- A need was identified for procedures to be set in place to resolve the tensions that existed between CYF and the programmes in relation to the referral process, placement problems, and inadequate social worker support for clients.
- Programme staff and external agency staff reported that insufficient networking with health and social services and community groups limited access to treatment for ethnic minorities and special population groups.
- Programme managers and staff cited lack of funding as affecting their ability to further develop the programmes and network effectively with a range of community groups and agencies.

Key findings of the outcome evaluation were:

- Community-based specialist treatment programmes were effective in reducing sexual and non-sexual reoffending amongst clients who completed treatment, compared with those who did not attend or dropped out.
- Youths who dropped out of treatment before successful completion were at highest risk of sexual reoffending.
- The rate of non-sexual reoffending was more than seven times higher than the rate of sexual reoffending.
- There was a delay of approximately *two years* between first known sexual offence and referral to an appropriate treatment service.
- Māori youth referred to the programmes were *least* likely to commence treatment. A common reason Māori youths did not begin treatment was that they were often referred to other services that the programme staff considered were more suited to meeting their needs. This suggests that they were involved in treatment –

which may explain why non-starters had lower rates of reoffending than the non-completers.

- Pacific youths were *more* likely to drop out of treatment. They often dropped out of treatment following the withdrawal of involvement and/or funding by a statutory agency (eg CYF, Community Corrections, Courts).
- Older age at referral was found to be associated with increased risk of youths dropping out of treatment. Youths with a history of engaging in non-sexual offending prior to referral were at greater risk of non-sexual reoffending.
- The adolescents, females and children in this study commonly engaged in a range of sexually abusive acts against children, adolescents and adults they either knew or were related to.

Key findings of the cost-effectiveness evaluation were:

- There were significant differences between the treatment centres in the type and intensity of treatment, with Christchurch providing the most services and Wellington the least. However, there were questions regarding the accuracy of the data recording, particularly in Wellington.
- The costs of providing the treatment varied across the locations, but when compared with similar programmes overseas, all three centres appeared to be providing treatment at a low cost.
- The treatment programmes were not cost-effective when comparing those who began treatment (both completed and dropped out) with those who did not begin treatment.
- The programmes *were* cost-effective when comparing those who completed treatment with those who dropped out, suggesting the importance of completing the treatment process in order to obtain a positive outcome.
- When compared with international studies, the treatment programmes appear to be cost-effective.

Limitations and strengths of evaluation

Identifying a suitable comparison group of untreated adolescent sexual offenders is a recognised difficulty in reoffending research overseas. A review of the international outcome research indicates that of 27 studies reviewed, only five included a comparison group. After extensive consultation with CYF, Police, and Ministry of Justice it was concluded that it would not be possible to identify a large enough sample of adolescents who had engaged in sexually abusive behaviours and who had not been referred to a specialist programme. The study design was adjusted to accommodate this by involving within-groups comparisons of adolescents referred to the treatment programmes who did not receive treatment (No Treatment group) with Treatment Dropouts and Treatment Completers. This approach is considered a robust and sound methodology to utilise when carrying out outcome evaluations involving adolescents who sexually offend. It is also the most common method employed internationally.

The Treatment Dropout group appeared to have comprised slightly higher risk offenders than the No Treatment and Treatment Completers group. Differences in risk level may have contributed to the group differences in reoffending rates but do not account for all the difference in reoffending rates.

As this study involved the collection of data from other sources (eg programme files, CYF, and Police records), the data is only as accurate and full as recorded by the agency staff. Conducting the audit of the programme files identified limitations in the data collection by the programmes. There was great variability in the consistency,

accuracy and completeness of the data collected and recorded within clients' files. Clinicians appeared to frequently record data to confirm the presence of particular factors but did not always report the absence of them. For example, clinicians recorded if the client had experienced childhood sexual abuse. If it was not recorded in the file, however, can we safely assume that they did not experience childhood sexual abuse? It could simply be the case that it was not asked or recorded during assessment.

The reoffending data presented here is most likely a conservative estimate of the actual rate of reoffending. It is internationally accepted that the reported rate of sexual reoffending underestimates the actual rate of sexual abuse. However, every effort was made to capture as much known reoffending as possible through the triangulation of data across multiple data sources (ie CYF records, criminal charges and convictions). We consider this to be a strength of this study and, to the best of our knowledge, this is one of the few studies internationally that has been able to include both youth and adult reoffending data.

Self-reports or parent/caregiver reports were not included in the current study; reports of sexual and non-sexual offending *may* have provided a less conservative estimate of reoffending by identifying offending that is not officially reported. Self-report was not included in the design of the current evaluation due to the expense and difficulty of collecting such data.

Given the limited number of youth who had completed the three psychometric measures in this study, pre- and post-treatment analysis was not statistically possible.

A highlight of this research is its large sample size and long follow-up period. When compared to other international reoffending studies, this study population is almost twice that of the next largest. The longer follow-up period suggests that reoffending rates would be less conservative.

Future research

The findings from this study suggest several avenues for future research. These include examining the role of organisational characteristics in influencing programme implementation and delivery. By identifying organisational factors that either impede or promote programme delivery and positive outcomes, it may be possible to gain important insights that can inform programme and policy changes. Another area for possible investigation is the identification of factors that influence treatment outcomes for adolescents who sexually offend. To date, there has been little exploration of this area. Moreover, in the search for effective programmes, services that address cultural perspectives for ethnic minorities have largely been ignored. In New Zealand, future research could focus on this issue by looking at the development and integration of Māori and Pacific Island models of practice in this field of treatment.

Finally, while the New Zealand programmes are subjected to regular external audits to ensure that certain standards of excellence are being met and maintained, this form of review is limited as it does not utilise the experiences of clients and their families who attend the treatment programmes. It does not therefore capture the breadth and depth of information that is provided by process evaluation studies. If we are to successfully modify existing treatment programmes and enhance aspects of treatment that work, we need the detailed information provided by process evaluations. Future studies of this type will assist us to move closer to identifying and understanding the specific factors involved in the successful treatment of adolescents who sexually offend.

The future of treatment for adolescents who sexually offend in New Zealand

The aim of this research was to evaluate New Zealand community-based treatment programmes for adolescents who sexually offend through three studies, namely: process, outcome and cost-effectiveness evaluations. The overarching questions to be answered were:

- Does community treatment for adolescents who sexually offend work?
- What are the processes by which this occurs?
- Are the programmes cost-effective?

The evaluation was unique as three different, but interconnected, projects looked closely at different parts of the programmes and each had a different but related set of objectives. All aspects of the evaluation worked closely together, with findings informing the others at different stages of the evaluation.

The resounding conclusion from this evaluation is that community treatment for adolescents who sexually offend in New Zealand is working and meeting the needs of clients and the community. The sexual reoffending results are at the lower end of international studies on reoffending and more importantly, sexual reoffending rates are lower for those who complete treatment than for those who do not have treatment. The process evaluation also indicated that the programmes are delivering therapy for clients and their families that is meeting their needs. Finally, the cost-effectiveness evaluation provided analysis of programme costings and endorsed the overall conclusion that, although the programmes have different costings for treatment, they are providing a cost-effective service for the community. This finding is strengthened if we take into consideration the downstream costs of treating victims of sexual abuse.

So, if the treatment programmes are providing such a good service in the community, where does treatment for adolescents who sexually offend need to be in 10 years' time and how can the current evaluation assist in guiding this? We believe that given the in-depth analysis and understanding that the current evaluation has produced, we are able to use this research to guide future service and policy development. It provides robust empirical data that is superior to the majority of international studies. A solid argument can therefore be made to increase the breadth and complexity of treatment that is provided within New Zealand. It is important that we no longer rely on international studies to guide treatment in this area, but instead look far more closely at what we are doing locally, value this and use it to inform clinical practice. We must remember that North American models of incarceration for this population are inappropriate in the New Zealand context. The majority, if not all, adolescents who sexually offend are able to be treated effectively in community programmes, provided they receive the appropriate specialised treatment and support services.

Culturally appropriate counselling for the adolescents was shown to have a positive impact on treatment and lead to better outcomes for clients and their families. The process evaluation clearly identified the need for more Māori and Pacific services to be developed. Funding is needed to further develop these services which in some areas of New Zealand are nonexistent or in the embryonic stages of development. Alongside the need to enhance cultural services is the need for social workers working for CYF to provide better support to clients and their families. The evaluation clearly showed that the majority of youths came from multi-problem and chaotic families and that a subset of these youths was more likely to drop out of treatment. International research has shown that such comprehensive wraparound services

work best for these families and significantly reduce the likelihood of them dropping out of treatment.

Treatment programmes need to give consideration to non-sexual reoffending rates and review the extent to which they address adolescents' non-sexual offending issues. This may necessitate a broader treatment approach than was previously employed. This may be particularly relevant should subsequent analysis of the data show that their reoffending involves high rates of violence and dishonesty.

This evaluation has clearly indicated the need for the programmes to develop better data systems. We understand that there is currently a project that CYF is funding around this. New Zealand does not have the number of adolescents who sexually offend that other countries have, therefore, linking such a data system into similar ones in other countries would be prudent. This way, comparisons between different countries can be more accurately examined. There is a need for programmes to ensure that programme staff complete and enter data into client files (whether paper or electronic) in a consistent and accurate manner. The current administration of psychological measures which did not allow for appropriate analysis of the data, raises questions about their utility and programme ethics.

If the above issues were addressed, it would allow more in-depth research to take place. We therefore, encourage CYF to fund smaller projects that take a closer look at therapeutic processes that are going well, with the view to examining what it is about these approaches that make them effective. We also note the obstacles within the family and community system that impact upon the young person, such as poor parenting, abuse and criminal behaviour. Researching how these might be addressed, particularly for ethnic minority groups, is crucial to reduce treatment non-completion rates and rates of non-sexual offending.

One of the key issues identified in the current research, and a challenge known to the programmes for the past decade, is the issue of finding therapeutic foster care in the community. Research has reported significant benefits using multi-dimensional foster care for children with antisocial behaviours. It is clear that the current system of finding out-of-home placements for adolescent sexual offenders is not working and steps need to be taken to address this. Working in partnership, CYF and treatment programmes need to find new solutions to solve the shortage of good community living placements. Adolescents should not remain in the same home as their victim or be transferred into unsatisfactory living environments that may lead to the development and/or escalation of antisocial behaviour. It may be that if programmes were given the option and funding to find their own placements for youths they may, in fact, choose to do this. We believe that this option should be made available to the programmes, or at the very least, explored with them.

There is also the need to address the issue of prevention. The impact of computer pornography on a child's development can have far-reaching consequences. Government departments such as Ministry of Education, Department of Corrections, Police, Ministry of Social Development, Department of Internal Affairs, CYF, and Ministry of Health need to work alongside treatment programmes to develop processes to limit and stop youths accessing objectionable material. While there is no research on the relationship of computer and video technology to adolescent sex crimes, anecdotal clinical experience suggests that a relationship does exist.

Alongside the need to develop this area of prevention, is the need for programmes to collaborate with existing services to develop treatment programmes for younger children. Again, this requires that government departments are aware such problems

exist. There is significant room for such work, particularly with CYF and Ministries of Education and Health. This evaluation found that children were engaging in serious sexual offences against other children and young people. Research indicates that sexually abusive behaviour in children is likely to be the result of trauma they have experienced and that a group of these children will continue to sexually offend into adolescence if they do not receive appropriate treatment. We need to raise both professionals' and non-professionals' understanding of this issue and draw their attention to the importance of early intervention.

Ministry of Justice data currently indicates that there are geographical regions where youth crime is on the rise. Some of these areas are Northland, South Auckland, Rotorua/Bay of Plenty and Gisborne. As part of the increase in crime, it is very likely that sexual offending by adolescents will also increase. Currently, some of these areas are not well served by treatment programmes and a need exists for services to be developed.

Though problems were identified in social work practice from Child, Youth and Family, it should also be emphasised that there are many highly competent social workers who provide a professional service to the clients and families/whānau who attend the community treatment programmes. Their ongoing commitment to clients and families is worthy of special recognition. Acknowledgement should also be made to CYF for their support and provision of long term funding to the community treatment programmes. Without this, the positive results in this study would have been unlikely.

Conclusion

To date, this evaluation is the most comprehensive evaluation on youth offending treatment programmes ever undertaken in New Zealand. It unequivocally shows that treatment for adolescents who sexually abuse is working well and that this can be attributed to skilled and committed staff, the models of intervention they are using, and the fact that the adolescents receive treatment in the community.

Finally, in the current climate, some members of society want to adopt a more punitive model for serious youth offenders and incarcerate them. This evaluation shows that providing comprehensive, specialist community-based treatment does work and it is the preferable option for the majority, if not all adolescents who sexually offend in New Zealand. Societal awareness of the positive results of this evaluation is essential. Sexual abuse by children exists across all groups and cultures in New Zealand. It is a community problem and as such the solution lies in the community. Breaking the cycle of abuse and preventing the abuse of future victims is clearly possible, but it means putting research findings such as those from the current evaluation into practice.

Recommendations

The following recommendations are intended as a guide for improving programme service delivery. It is axiomatic that where additional services are recommended, appropriate funding be provided. While the recommendations do not necessarily apply to all sites, site-specific commentary has been conveyed in the separate evaluation reports.

Funding agencies

Continue funding treatment programmes as providing treatment is cost-effective when victim and related costs are taken into consideration. Funding may also need to be increased to accommodate increased needs of different population groups.

Management and staffing issues

We recommend that:

- programme goals and treatment protocols be clearly defined and documented and made accessible to all parties involved in the programme.
- programmes develop formalised induction training courses for new staff.
- programmes ensure staff receive focussed sex offender-specific training. Given the higher level of non-sexual offending, further training in addressing this may also be warranted.
- programme staff receive training in the administration, scoring and interpretation of risk assessment tools for both sexual and non-sexual offending.
- the programmes ensure non-Māori staff receive cultural supervision.
- greater effort should be given to addressing the issue of overwork.
- the programmes consider providing additional satellite services to overcome problems for families created by the distance from the treatment centres.
- programmes make provisions for therapists to become more mobile to enable them to work in family and community settings. This is particularly relevant where Māori clients are concerned.

Waiting lists

- We recommend that the programmes examine strategies to reduce waiting lists. This could involve developing a set of criteria for prioritising clients on the assessment waiting list so that high-risk clients take precedence when deemed appropriate.

Placements

- Responsibility for securing placements for youth aged up to 17 years should be reviewed. Conceivably, this might involve CYF being relieved of this obligation.

Programme delivery

We recommend that:

- a programme-specific education pack for clients and family/whānau members (that includes information about programme content and expectations) be developed and distributed prior to contact with the agencies.

- the importance of providing refreshments to clients and their families when attending counselling be recognised.
- consideration be given to including a positive sexuality and healthy relationships curriculum in programme content.
- programmes review the extent to which they assist adolescents to develop strategies to cope with prior victimisation issues. Priority should be given to providing treatment in this area.
- programmes take greater account of the possible negative effect of having antisocial and conduct-disordered youths in group interventions.
- supervision periods for youth sentenced to treatment programme be reviewed, with a view to extending this in order to more fully meet the needs of clients, as international research indicates that youth who are mandated to attend treatment are less likely to drop-out of treatment.
- programmes review their provision of aftercare services. Youths are at highest risk of sexual reoffending in the first year post-treatment, and programmes may wish to target services during this period according to individual client needs.
- youths with a history of non-sexual offending are at increased risk of dropping out of treatment and so programmes may need to target additional services and resources to reduce this risk.

Therapeutic modality

- We recommend that the Good Way model be further developed so that it can be used more extensively, with different client groups and across other programmes. Evaluation of this model is also required.
- We recommend that the programmes review their current therapeutic practices with the aim of increasing the use of expressive and experiential therapies, and family interventions.

Cultural services

Māori youth and whānau

- Māori youths are at risk of not entering treatment. Programmes should continue to develop cultural services for Māori clients in order to maximise the engagement of Māori youths and their whānau in treatment.
- Wherever possible, Māori adolescents and whānau need to have access to a Māori therapist or Māori key worker from the beginning of treatment.
- The programmes should consult with representatives from the mana whenua to identify a kaumatua or kuia to consult to the programmes.
- The programmes should prioritise Māori workforce development issues in their strategic plans.

- The programmes need to assume responsibility for developing clinical and cultural training for new and existing Māori staff.
- The programmes should continue to develop relationships with mana whenua, iwi, hapū and Māori service providers in the community.
- The managers and Māori staff at all three sites should collaborate with each other and include other professionals, such as Māori psychiatrists and psychologists, to consider planning, development, delivery and review of services for Māori.
- CYF needs to resource the programmes to conduct research on Māori adolescent sexual health that also takes into account the development, and integration of Māori models of practice.

Treatment of Pacific youths

- Pacific youths are at high risk of dropping out of treatment prior to completion. This is associated with the withdrawal of involvement and/or funding by a statutory agency (eg CYF, Community Corrections, Courts). This needs to be addressed by statutory agencies using an intersectorial approach. Agencies need to commit to the ongoing support and funding of treatment for Pacific youths for the duration of treatment.
- All programmes should consider developing culturally appropriate services for Pacific youths in order to continue to engage them in treatment and reduce the risk of them dropping out of treatment. All programmes should continue to develop or start developing relationships with, and offering education and support to, Pacific communities.

Interagency Co-ordination

We recommend that:

- the programmes deliver education to the public and other professionals in health and social services about sexual abuse. The purpose of such education is twofold: first, to provide better access to treatment for children aged 10 to 12 years, adolescent girls and ethnic minorities; and second, to notify relevant people of the specialised treatment services available. Given the high levels of staff turnover in some agencies, this would need to be carried out regularly.
- there needs to be increased awareness/education amongst the general public, statutory agencies (eg CYF, Ministry of Health, Ministry of Education, Police Youth Aid), service providers (NGOs) and other organisations (eg churches and schools, youth groups etc) that females, children under the age of 13 and those with special learning needs are also perpetrators of sexual abuse.
- that procedures be set in place to resolve the ongoing tensions that exist between CYF and the programmes. Specifically, in relation to low referral rates, inappropriate referrals, inadequate social worker support for the adolescents, and placement problems. Regular interagency meetings, the appointment of liaison personnel and the secondment of a CYF social worker on to each programme are suggested as starting points.
- that the programmes and local CYF offices develop a collaborative plan to provide regular support and (six-monthly) training for CYF social workers in the

area of sexual offending. Due to the high turnover of CYF staff it is recommended this take place six-monthly.

- the treatment programmes and others responsible for the care of these youths (eg CYF) need to ensure they are aware of the range and extent of the multiple issues clients may present with (other than their sexualised behaviour) and seek assistance from mental health providers, iwi services, CYF, Group Special Education, and Ministry of Education as necessary.
- programmes need to ensure regular contact occurs with other agencies (eg CYF, Ministry of Health, Ministry of Education, Police Youth Aid), service providers (NGOs) and other organisations (eg churches and schools, youth groups etc) and provide ongoing education and support. Such agencies may have a rapid turnover of staff so regular education and liaison sessions may be warranted (eg having liaison meetings every six months with staff from local CYF offices).

Psychometric measures

- It is strongly recommended that the treatment programmes review the psychometric measures they use and develop a minimum set of measures.
- Programmes also need to administer these psychometric measures routinely as part of their assessment package and again at the end of treatment.
- When psychological measures are used they need to be clearly, accurately and completely filled out, scored and reports written. Staff may wish to check with clients and parents/caregivers once they have completed the forms to reduce the risk of missing data.
- One model that is known to work overseas is having a part-time assistant psychologist who is responsible for the administration and scoring of psychometrics. This may be a useful model for programmes with large numbers of referrals.

Data collection

- Programmes need to ensure that detailed information on individual, family and offending factors are recorded consistently, accurately and as completely as possible within client files. The recording of treatment sessions offered is required so that predictive models can be developed to determine which groups of youths, given their individual characteristics, will respond best to which package of treatment.

Future evaluations

- CYF needs to commit to ongoing funding for future evaluations of the specialist community-based treatment programmes for adolescents who sexually offend in New Zealand.
- Follow-up of reoffending amongst treatment dropouts and completers needs to occur at regular intervals in the future (a maximum of every five years would be recommended).

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