Index

academic performance 141 educational level and 142 Internet use and 98 in middle school 136-7 negative association with 131 students 132, 133, 135, 139 academic resources 104, 105, 109 accessibility 275 and design 261 digital exclusion via 257 features 280 measures 260 for people with disabilities 263 tools 276 web 262 Adigitals 222 adolescents' daily life, smartphone pervasiveness in 132, 137 adoption costs 32-3 adults Finnish 182 older (see older adults) Polish 183 proficiency of 185 "advanced telecommunications capability" 49, 57 affordance-based approach 102 Agarwal, Ritu 34 agency 148, 150, 159, 160 aging society, digital skills inequality in 182-3, 189-90 analytical strategy 187 dependent variable 185-6 independent variable 186 research questions 184 results 187 Agrawal, Ajay 37 AICs see assisted and independent living communities (AICs) Alaska Rural Coalition (ARC) 55 algorithm-based platform 353 algorithmic literacy and platform trust 341 big data literacy and 343-4 digital inequalities and Internet skills 342-3 information-seeking skills 354 limitations 353 methods 345-7 research questions 344-5 results 347-51 self-reported skills 352

algorithmic-literacy variable 348 algorithmic platforms 345 algorithmic skills 354 algorithms 342, 343, 353 centrality of 354 Facebook 149, 160, 344 knowledge about 351, 352 potential impact of 345 social media 341 "All Chile Connected" program 65 Alper, Mervl 263 American Association of Public Opinion Research 242 American disadvantaged communities, digital health behaviors in data and procedure 242 dependent variables 243-4 digital skills and eHealth literacy 240-241 health professional 239-42 independent variables 244 interaction effects of digital skills/eHealth literacy 241-2 mobile health management 237-8, 247-51 online health information searching 236-7, 249-50 online health information seeking 246-7 social inequalities and health status 238-9 American Reinvestment and Recovery Act 2009 46,54 Anderson, J. 343, 344 Apprehensives category 203 ARC see Alaska Rural Coalition (ARC) assisted and independent living communities (AICs) 209, 210, 215 ATLAS.ti. 169 Attewell, P. 1 Australian Digital Inclusion Index (ADII) 258 Balasubramanian, S. 38 basic digital skills 4, 240-42, 244, 246, 248-51 Basic Users category 203 Being Not Rich at UM 178, 179 Best, S. J. 330 Bhargava, R. 343, 344 binomial logistic regression models 314 bivariate correlations 303 Blank, Grant 5, 329, 330 Bode, L. 327 Bonfadelli, H. 4, 222

373

Bourdieu, P. 184 Bourdieu's theory of cultural reproduction 190 broadband access, gaps in 46 development 54 FCC's definition of 49 irony of high-cost 55 municipal 51, 52 penetration, rural 48 rural 53, 56 services 47 technologies, policy and 49-51 Broadband Technology Opportunities Program (BTOP) 53, 54 broader socio-digital inequalities 75 Brown, Michael G. 4 Browning, C. R. 90 Brynjolfsson, Erik 38 BTOP see Broadband Technology Opportunities Program (BTOP) Bucher, P. 222 Büchi, Moritz 4, 298 Buntain, Cody L. J. 5 Bush, George W. 50 Cacciatore, M. A. 224 Cairneross, F. 32 campus cultural norms 174 campus culture and peer socialization 168 capital-enhancing activities 222, 240 online 132 social 167, 200 capital-intensive ventures 51 Casemajor, Nathalie 159 categorical variables, descriptive statistics for 347 CAWI survey see Computer Assisted Web interview (CAWI) survey CC website see College Confidential (CC) website cell phone 49, 114, 118, 120, 121, 128 features 123, 127 functionalities 125, 126 cell phone-based activities 128 cell-phone companies 49 Centers for Disease Control's (CDC) National Health Interview Survey (NHIS) 23 CenturyLink 50 CFA see confirmatory factor analysis (CFA) change over time 276 Chile 3, 62, 63, 71 Choi, H. 298 Chou, W. S. 229 Christozov, D. 343 chronic digital insecurity 10 classical four-step regression approach 139

classical mass media 225 Clinton, Bill 49 CMC see computer mediated communication (CMC) cognitive interviews 78, 80-82, 91 college access, inequalities in 166-7 college choice 166, 169 College Confidential (CC) website 171, 172, 178 college-related social media content 165 college transition process 171, 175, 178 communication campaigns and interventions 228 communication costs 31, 34-5, 39-40 communication media 103, 105 authority and perceived appropriateness 106 - 7media selection and relational factors 106 Wi-Fi and mobile data influence 107–8 Community Anchor Institutions 54 community-owned networks 52 Comprehensive Community Infrastructure category 54 Computer Assisted Web interview (CAWI) survey 134 computer-based Internet connections 115 computer mediated communication (CMC) 209, 210 computers 62-6, 71, 72 confirmatory factor analysis (CFA) 137, 302, 303.310 Connect America Fund 50 Connected Nation Residential Technology Assessment 14–16 connectivity alternatives, rural access challenges and 46-9 Internet 51 "sub-leasing" portions of 55 consumer behavior online and offline 39 contemporary information societies 296 Content Creation skills 76, 84-7, 89 continuous variables, descriptive statistics for 347 controversial austerity regimes 260 conventional liberal privacy paradigm 296 Correa, Teresa 3 correlations (two-tailed) average high skill level 85 Costanzo-Chock, Sasha 264 Cotten, Shelia R. 4 country-level IT adoption 39 Crawford, Susan 53, 55 crucial networking skills 177 "cultural accessibility" 275 Current Population Survey (CPS) Computer and Internet Use module 14, 21–2 cyber-moderates 222 cyber-savvy 222

cyber-skeptics 220

daily life, smartphones usage in 143 daily phone calls, frequency of 120, 125 Dakota Carrier Network (DCN) 54 data-collection practices 299 data collection process 134 data-driven surveillance practices 300 DC-CAN network 55 "Death of Distance" model 32, 40 DEB see Disability Evaluation Board (DEB) defensive stance 159, 160 demographic and socioeconomic characteristics 245-7 demographic control variables 16-17 demographic covariance 312 demographics and offline well-being 314 demographic variables 17, 19, 245, 348, 350 dependent variables 18, 136, 138, 142, 330, 331, 333, 335, 348, 350 digital disability divide 278-9 digital health behaviors in American disadvantaged communities 243-4 digital skills inequality 185-6 millennials' mobile transitions 120-21 well-being 212-13 "design justice" 264 device quality 10, 11, 14, 22, 23 differentiated uses of the Internet 69 Di Gennaro, C. 327 Di Gioacchino, D. 224 "digital ability" 258, 259 Digital Access to Scholarship at Harvard (DASH) 53 digital 'at-risk performers' 183 digital communication channels 199 digital conferencing 31 digital device ownership 22 digital devices 148, 290 digital disability divide 274-5 dependent variables measures 278-9 digital skills, technology and disability 275-6independent variables measures 277-8 results 279 digital disparities, micro-level digital divide to macro-level 223-4 digital disruption 24 digital divide 1, 6, 9, 10, 13, 15, 20-21, 220, 221, 225, 227, 229 first-level to third-level 221 knowledge-gaps as ancestor of 220 to macro-level digital disparity, from micro-level 223-4 as theoretical concept 220-24

traditional patterns of 150 digital divide-related question 28-30 digital ecologies 89 digital exclusion 64, 183, 184, 190, 257 digital health behaviors in American disadvantaged communities data and procedure 242 dependent variables 243-4 digital skills and eHealth literacy 240-41 health professional 239-42 independent variables 244 interaction effects of digital skills/eHealth literacy 241-2 mobile health management 237-8, 247-51 online health information searching 236-7, 249 - 50online health information seeking 246-7 social inequalities and health status 238-9 digital health inequality 250 digital health literacy 225 digital health technologies 240 digital health tools 236 digital inclusion 68, 78, 258, 259, 341, 352 characteristics 83 digital divide and 255 ICTs and 79 mobiles and 64-5 process 62, 63, 67, 71 skills and Internet uses 68-9 digital inequalities 1, 2, 4, 6, 63, 71, 76–8, 142, 165, 255-7, 259, 260, 264-6 among older adults (see older adults) disability lessons for 261-4 factors 353 in health communication 224-9 issues 258 literature 167 in privacy protection 299-301 research 2, 9, 23, 158 role of 261 scholarship 3, 5 theories 75 digital infrastructure 10, 24, 31, 77, 79, 83 digital literacy 4, 46, 196, 204, 287, 343, 352 and algorithmic literacy 342 development 109 Internet skills and 341 skills 102 traditional literacy and 190 digital media 2, 4, 5, 14, 76, 87, 100, 102, 107, 117, 119, 134, 142, 195, 201, 203, 204, 369 adoption and use of 196, 198-200, 204 older adults' turn to 194-6

smartphone pervasiveness in youth daily life 142 substantial role of 98 "digital naives" 109 digital participation with health service 290 digital privacy-protection skills 299 digital skills 66, 75, 187, 190, 195, 196-7, 205, 240.246 by access type 68 cognitive interviews 80 development in schools 306 individualism and societalism in existing research 76-7 interventions on youth 143 neighborhood effects 83-4, 87-90 network effects 83-7 and online activities 200-201, 204 sampling 79 second-level digital divide 76 social contextualization 77-8 socio-digital ecologies 90-91 survey 80-81 survey measures 81-3 technology and disability 275-6 and types of Internet uses 69, 70 digital skills inequality 182-3 analytical strategy 187 dependent variable 185-6 independent variables 186 ordinary least squares regression of proficiency in 188-9 in Poland 183 research questions 184 results 187 Digital Skills to Tangible Outcomes (DiSTO) 76, 78.83 digital social capital 83, 86 digital "spiral of silence" 326 digital subscriber line (DSL) 47 digital technologies 72, 123, 127, 148, 185, 225, 241, 256, 261-3, 266, 267, 284, 290 characteristics of 41 disability and 261 for health care 239 inequality, disability, and 255-9 for people with disabilities 260, 267 rapid development and penetration of 236 use of 75, 284, 291 digital waste 24 D'Ignazio, C. 343, 344 DiMaggio, P. 1, 78, 220, 342 disability 255-9 digital skills, technology and 275-6 lessons for digital inequality 261-4 new approaches to 259-61

"social model" of 259 state-of-the-art of benchmarking 264-6 status 279, 280 theory 259 **Disability Evaluation Board (DEB) 258** "disability innovation turn" 264 disability support pension (DSP) 258 disabled people 4, 274, 275-7, 279, 280 disconnective strategy 148, 159 DiSTO see Digital Skills to Tangible Outcomes (DiSTO) diverse communication media 101 diverse relational development 109 Dobransky, Kerry 4, 257, 258, 264, 274 domestication theory-based research 77 Donohue, George A. 220 Drabowicz, Tomasz 4 Dranove, David 35 DSL see digital subscriber line (DSL) DSP see disability support pension (DSP) Dutton, W. 327 Dutton, W. H. 222, 224, 342 economic disparities 10, 24 economic isolation, costs of 32, 33, 38 educational attainment 132, 136, 210-11, 314, 317 educational inequality 132, 142 educational outcomes 133, 184, 190 educational stratification 335 education-based digital inequality 221 eHealth literacy scale (eHEALS) 4, 224, 244-6, 248 - 51electronic commerce 37, 38 electronic communication 32, 39 Ellcessor, Elizabeth 275, 280 Elliott, G. 212 Ellison, Nicole B. 4, 166 e-Mersives 222 entertainment-oriented platforms 335 environmental quality of life 18, 20, 21 E-rate program 57 Eslami, M. 344 everyday information practices of teens 103-5 explorative contents 104, 110 "expressive style" 116 extrinsic pressures 82, 86, 87 Eynon, R. 223

Facebook avoidance 148, 159–60 as attitude of distinction 154–5 and inequalities 149–50 to instrumental role 157–8 "limited use" 152–4 methodology 150–52

to protect intimate relationships 155-7 "Facebook suicides" 159 face-to-face interaction 32, 35, 98 face-to-face networks 170 face-to-face probabilistic survey 65 face-to-face representative survey 71 FCC see Federal Communications Commission (FCC) federal agencies 317-19 Federal Communications Commission (FCC) 12, 46-8.57 fiber 47, 52, 53, 55, 56 fiber-based Internet connectivity 47 fiber-to-the-home (FTTH) 52 Finnish PIAAC data 189 "first-level digital divide" 221-2 First-Year Writing Program 117 fixed wireless deployments 49 flagship human rights treaty 260 Flash Eurobarometer Survey 225, 226 focus group conversations 364, 367 interviews 5, 298, 359, 370 participants 362 sessions 360 Ford, G. S. 52 Forman, Chris 3, 31, 32, 35, 37, 38 Fort, Teresa C. 39 four-factor latent measurement model 310 four-point Likert scale 313 Franko, W. 78 "frequent periods of disconnection" 148 Freund, Caroline 39 Frieden, R. 51 Friedman. Thomas 32 Friemel, T. N. 223 FTTH see fiber-to-the-home (FTTH) Garip, F. 78 gender, race/ethnicity and Internet experiences 117 mobile phone functions by 123 phone usage diversity by 123

specific mobile phone use patterns by 124-6

gender differences 115, 116, 123, 221, 327

Generalized Linear Models (GLM) 83

of socio-demographics 85

and Internet (see Internet)

of consumer behavior 40

Internet adoption for 31

of skill types 89

geographic inequality 31

Geniets, A. 223

Gerosa, T. 3, 143

geography

GLM see Generalized Linear Models (GLM) Global Initiative for Inclusive Information and Communication Technologies (G3ICT) 261 Gloria, K. 57 Go-Getters category 203 Goggin, G. 4 Goldfarb, Avi 31, 34, 37 Gonzales, Amy L. 2, 11 Goolsbee, Austan 34 governance 296, 297 government benefits 316, 322 grades 136, 137, 139, 141, 175, 176 Grav. R. 344 "gray divide" concept 194–7 Green, B. E. 183 Groseli, D. 224 Gruber, J. 369 Gui, M. 3, 134, 143 Hadge, K. 57 Hämäläinen, R. 182, 185, 186 Hamilton, K. 344 Hargittai, Eszter 3-5, 64, 66, 165, 222, 257, 258, 264, 274, 298, 331, 343, 344, 361 "health and nutrition" 225 health apps 227, 237-41, 250 health campaigns 224, 228 health communication 225, 228, 229 digital divide as theoretical concept 220-24 digital inequalities in 224-9 health disparities 225, 228, 229 health-enhancing behaviors 240 health information 209, 237, 249 interest in and use of 226 online (see online health information) and services 241 Health Information National Trends Survey (HINTS) 14, 289 health information-seeking 316 behavior 227 online 225-7, 238, 246-7 health information technology (HIT) 35 health interventions 229 health knowledge acquisition 224, 227-8 health knowledge gaps 228 health management, mobile apps for 237-8, 240, 247 - 51health privacy as cause and consequence 291 health professional 239-42, 245-51, 290 health promotion, social media for 228-9 health-related activities 290 health-related benefits 251 health-related information, Internet for 210, 226 health-related issues 225

health-related knowledge gaps 224 health-related technology 4 health status 245 factors 250 measures 246, 247 physical or mental 249 social inequalities and 238-9 Helsper, E. J. 3, 64, 78, 133, 183, 221, 223 Heo, J. 210 hierarchical ordinal logistic regression models 322 hierarchical regression 315, 322, 348, 350 high-speed network technologies 54 Hindman, D. B. 223, 225 HINTS see Health Information National Trends Survey (HINTS) HIT see health information technology (HIT) HIV+ survey 18, 19 Hoffmann, C. P. 5, 159, 330 "Hooked on Our Smartphones" 98 Hsieh, Y. P. 66 Huang, H. 133 Hudson, H. 55 "human rights" 255, 260 hybrid users 66-9, 71, 72 hypothesised mediation model 139 ICPSR see Inter-university Consortium for Political and Social Research (ICPSR) ICTs see information and communication technologies (ICTs) ideological stance 159, 160 inclusive design 257, 262, 267 independent variables 118-19, 186, 222 digital disability divide 277-8 digital health behaviors in American disadvantaged communities 244 digital skills inequality 186 kev 17-18 measures 277-8 millennials' mobile transitions 118-20 individualism and societalism in existing research 76-7 inequalities 177-9 additional sources of support 171-2 campus peer culture and information sharing 174 - 6in college access 166–7 disability and digital technology 255-9 gated fantasy lands 172-4 methods 168-9 new approaches to 259-61 in online political participation (see online political participation, inequalities in)

social norms and accessible information 169 - 71in sources of support 167-8 informational privacy 328 information and communication technologies (ICTs) 10, 75, 77-8, 91, 92, 209, 210, 274 adoption, attitude toward new 212 devices 216 information-based goods 31 information practices 107, 110 and investment in social relation, social 100 - 101of teens 103-5 information seeking behavior 166, 224, 225, 227 process 167 skills 354 infrastructure and instance alternative last-mile solutions 51-3 middle-mile networks 53-6 policy and broadband technologies 49-51 rural access challenges and connectivity alternatives 46-9 innovative digital technologies for health care 239 innovative ideas-producing industries 35 in-person communication 104 institutional requirements and nudges 367-8 institution-specific processes 174 "instrumental efficiency" 222 "instrumental style" 116 interactive public communication of Facebook 199 inter-coder reliability 13 International Classification of Functioning, Disability and Health (ICFDH) 257 International Telecommunications Union (ITU) 9,260 Internet 31, 255 access type 66 adoption and use of 32-4 for consumer behavior 37-9 differential access to and use of 221-2 differentiated uses of 66-7, 69 experiences 119-21, 123, 125, 127, 128, 361 - 2for globalization and trade 39-40 for health-related information 226 for innovation 36–7 and social media 334, 335 use 209-11, 215, 216, 312-13 for wealth and productivity 34-6 Internet-based information acquisition 227 Internet service providers (ISPs) 33, 47, 312

Internet skills 3-5, 125, 127, 149, 194, 226-8, 240, 279, 297, 298, 300, 301, 306, 330, 335, 345, 352-4, 361 digital inequalities and 342-3 and digital literacy 341 of disabled people and non-disabled people 274 and experiences 361 measures 119, 277, 331 OLS regression on 279 regression analyses on 280 second-level of divide in 223 types of 303 Internet-use-related variables 301, 303, 304 Internet-using public housing residents 246, 249 Inter-university Consortium for Political and Social Research (ICPSR) 12, 13 interview participants, list of 151 intrinsic motivations 82, 86 INVALSI see Italian National Institute for the Evaluation of the Education System (INVALSI) "investment in social relations" 100 "invisible disabilities" 260 ISPs see Internet service providers (ISPs) IT adoption among individuals 33-4 Italian National Institute for the Evaluation of the Education System (INVALSI) 136, 143 "IT-intensive" industries 35

Jaeger, Paul T. 275 Janc, K. 183 job applications 316, 362 Jung, Y. 298 Just, N. 298

Kadylak, Travis 4 Kaiser Family Foundation 116 Kansas Fiber Network 53, 54 Katz, J. E. 116 Katz, V. S. 64 Kelan, E. K. 116 Kent, Mike 276 key independent variables 17-18 Kim, S. J. 3 Klawitter, E. 344 Klenow, Peter J. 34 knowledge acquisition 86, 220, 223, 367 knowledge-behavior gap 228 knowledge disparities 224, 227 knowledge gaps 105, 159, 224-8 health 228 hypothesis 220 Kolko, Jed 33, 35, 36 Koutsky, T. M. 52

Krippendorff's alpha 13 Krueger, B. S. 330 Kryszczuk, M. D. 183 labour market 182, 189-90 Lai, C.-H. 116 Lanier, C. D. 329 large-scale survey research 210 last-mile broadband Internet 54 Latour, Bruno 263 Latzer, M. 298 lay referral networks 239, 249, 251 lay referral system, theory of 239 Lazar, Jonathan 275 leapfrogging effect 115 Lee, C.-J. 227 "legal" disabilities 260 Leung, L. 133 Liberty Ventures Group 55 Lieber, E. 31 Likert 5-point scale 18 Likert-scale items 17, 119 Lin, N. 108 Lindblom, T. 224 linear regression analysis 89, 187, 331 OLS (see ordinary least squares (OLS) linear regression) of online political participation 333 Litt. E. 149. 361 Lobo, B. J. 52 local law enforcement 311, 312, 316-18, 320 logistic regression analysis 329 on availability of mobile phone features 123, 124 models 317 on specific mobile phone use patterns on weekly basis 124, 126 log-likelihood ratio tests 315 loneliness 210, 213-15 Long-Term Evolution (LTE) 47-8 Lowe, B. 213 lower communications costs 36 lower distribution costs 38 low-income college students 168 low-income families 14, 166, 167 low-income groups 236 low-income socioeconomic status 152 low-income students 166, 168, 174, 175, 177-9 low-income youth 177-8 from communities 170 engagement 150 information-seeking behavior of 166

negative discourses about Facebook (see Facebook avoidance) networks of 168 "low-involvement forms of participation" 159 LTE see Long-Term Evolution (LTE) Luke, Timothy W. 6 Lutz, C. 5, 159, 330 macro-level digital disparity 223-4 Madden, M. 300 Madell, D. 115 Maine School and Library Network (MSLN) 56 Maine Three Ring Binder middle-mile project 56 maintenance-related questions 14-15 Malhotra, N. K. 330 Marwick, A. 298 measurement item details 309 Mechanical Turk (MTurk) 344 Meckel, M. 330 mediated moderation model 292 mediation model specification 138 mediator-outcome relationships 139 "medicine and health" 225 Menon, S. 55 mental-health problems 238 mesh networks 49, 57 mHealth 224, 250-51 Micheli, M. 3, 150, 221 micro-level digital divide 223-4 middle-income trap 182 middle-mile facilities 46, 53-5 middle-mile networks 53-6 Middleton, J. H. 133 Minnesota Heart Health Program 224 mobile apps for health management 237, 238, 240, 242, 248, 250 mobile-broadband subscriptions 62 mobile communication 99, 262, 263 strategies 109 types of information resources leveraged through 104-5 mobile connections 65, 67, 72 infrastructure 71 policy-making focus on 69 and rural Chile 63 and smartphone 62 mobile data-plan adoption 34 mobile devices 128 consumer market for 262-3 rapid diffusion of 63 mobile health apps 237-40, 248, 249 interventions 238 management 237, 244, 251 mobile media in teen life

mobile phone use and social capital development 99-100 research question 102-8 social affordances, relationship management and information access 101-2social information practices and investment in social relation 100-101 teens' unequal mobile Internet access 110 mobile-only use 62, 64, 67, 68, 71, 72 mobile-only users 65-9, 71 mobile phone-based Internet 49, 50 mobile phone features availability and diversity of 127 frequency of types of 121 logistic regression on availability of 123, 124 OLS regression on diversity of 123, 125 and uses 120-21 mobile phones 98 adoption of 114-17, 127 attributes of 205 communication 209 functionalities 127 use among young adults (see young adults, mobile phone use among) use and social capital development 99-100 use patterns 115–17 mobile phone-specific skill measures 128 mobiles, digital inequality and 62 differentiated uses of the Internet 66-7, 69 digital inclusion 68 digital skills 66 Internet access type 66 methods 65 mobile access from public-policy perspective 63 - 4mobile connections and rural Chile 63 mobiles and digital inclusion 64-5 profile of users by access type 67-8 skills 68 sociodemographic variables 65-6 years of experience 66 modified resources and appropriation theory 221 Morioka, T. 175 Moss, M. L. 33 Mossberger, K. 78 M-plus 7 statistical software 139 MSEM see multilevel structural equation model framework (MSEM) MSLN see Maine School and Library Network (MSLN) multi-disciplinary research field 328 multi-indicator variables and path modeling 305 multilevel structural equation model framework (MSEM) 139 Muncer, S. 115

Index 381

municipal fiber-optic network 52 National Consumer Broadband Service Capability Survey (NCBSCS) 277 National Telecommunications and Information Administration (NTIA) 12, 21, 53 near-synchronous media 104 neighborhood-based digital inequalities 78 neighborhood effects in digital skills 75, 77-9, 83-4, 87-90 neighborhood mapping techniques 91 network-based research 77 Networked Aspects of Digital Inequalities project 75.78 networked privacy 156 network effects in digital skills 34, 77-8, 82-7 network mapping techniques 91 new media 326 Nguyen, Minh Hao 278 non-academic settings, practitioners in 23 non-Hispanic White 252 Non-Users category 201 non-verbal interactions 100 Norman, C. D. 244 Noves, J. M. 115 Obama, Barack 49 observable covariates 137-8 occasional subsidy boosts 46 offline political participation 327 older adults adoption and use of digital media 196, 198-200, 204 approach 197-8 digital skills 196-7 digital skills and online activities 200-201, 204older adults' turn to digital media 194-6 online social connectedness and well-being among (see online social connectedness and well-being among older adults) typology 202 varieties of online use 201-4 Olien, Clarice N. 220 OLS linear regression see ordinary least squares (OLS) linear regression online activities 64, 76, 152, 209-11, 215, 243, 334, 354, 358, 363 by adults 229 digital skills and 200-201, 204 skill level by 202, 203 online capital-enhancing activities 200 online communication 32, 149, 179, 205, 263

municipal broadband projects 51, 52

online experience measure 211-12 online health campaigns and interventions 228 online health information 224, 226, 227, 240 effects of 227-9 health knowledge acquisition 227-8 online health campaigns and interventions 228 searching 238, 239, 241-4, 246, 250, 251 seeking 238 social media for health promotion 228-9 online information-seeking behavior 225 online interactions and transactions 328 online political participation, inequalities in 326, 327 - 8methods 330-332 and online privacy 328-30 results 332-4 online privacy 327 attitudes 303, 304, 329 online political participation and 328-30 online privacy-protecting techniques 358-9 analysis 360 aware of and learning privacy skills 364-9 data collection 359-60 Internet experiences 361–2 participants 360-61 social and technical skills 362-4 online privacy protection 296-301, 306 amount of Internet use 303 behavior 301 data analyses 302 digital inequalities in privacy protection 299-301 general Internet skills 303 measures 302 online privacy attitudes 303 privacy breach experience 302-3 representative survey data 301-2 results 303-4 online scams 321 online social connectedness and well-being among older adults 209-10, 216 attitude toward new ICT adoption 212 data collection 211 demographic measures 211 descriptive statistics 213-14 online experience measure 211-12 online social connectedness 212 regression results for well-being outcomes 214 - 15statistical analysis procedures 213 well-being dependent variables 212-13 online well-being metrics 322 Operational and Content Creation skills 84, 85 operational definitions of variables 346

"Opportunity for All? - Technology and Learning in Lower-Income Families" 14 ordinal logistic regression model 315, 319, 320 federal agencies to personal data protection, level of trust in 319 local law enforcement to personal data protection, level of trust in 320 online scam 321 of perceived control over personal data 323 social-media providers to personal data protection, level of trust in 320 ordinal regressions on frequency of mobile health management 247.248 on frequency of online health information searching 246, 247 ordinary least squares (OLS) linear regression 19 analysis 187, 213 on diversity of mobile phone features 123, 125 of environmental quality of life 21 of GPA 20 on Internet skills 279 model 189 of perceived stress 22 of proficiency in digital skills 188-9 outsourcing firms 33 Pai, Ajit 50 Panek, E. 142 parental education 16, 118, 123, 139, 141, 190, 360 parental educational attainment 136 parental educational level 136 parental socialization 222 parents' educational attainment 132 Park, J. 298 Park, S. 225 Park, Y. J. 4 participation divide 150, 327 "participation gaps" 98 "passive participation" 159 path modeling 302, 305 PC-only users 66-9, 71, 72 Pearce, K. E. 64 peer network 203 people with disabilities 228, 255, 257-9, 261, 262, 266, 267, 275 accessibility for 263 digital equality for 264 digital technologies for 260, 261, 267 equality for 265 people without disabilities 257, 280 Percheski, C. 222 perpetual maintenance costs 55

"personal data comfort" 329 personal data protection federal agencies to 319 local law enforcement to 320 propensity to trust online entities to 316-19 social-media providers to 320 personal experiences 364-6 personal networks 98, 100-102, 108-10, 239 personal online data influence web use 311 concern about online scams 321 control over personal data 321-2 data and methods 312-14 factors influencing web-use behaviors 315-16 sample descriptives 314-15 trust online entities to protect personal data 316-19 "personal responsibility discourse" 160 Pew Internet & American Life Project Annual Gadgets Survey 15, 23 Pfenninger, T. 52 phone disruption 16 physical wireless connections 108 PIAAC data see Programme for the International Assessment of Adult Competencies (PIAAC) data Piga, A. 222 Poland, digital skills inequality in 182-3, 189-90 analytical strategy 187 dependent variable 185-6 independent variable 186 research questions 184 results 187 policy and broadband technologies 49-51 Polish labour market 184, 189 Polish Panel Survey data 183 Polish PIAAC data 189 Polish society 189 Polish working-age population 182, 184 political attitudes and online skills 333 political communication 335 political engagement 327 political interest/political milieu 334 political participation 326, 327, 329, 334 poor health conditions 196 "positivity bias" 174 post-stratification weights 345 Priestly, Mark 255 primary health information sources 237 Princeton Survey Research Associates International (PSRAI) 312 "principle of dominance" 136 privacy 293, 334 attitude 329 breach experience 302-3

concerns in online political participation (see online political participation) health 291 in health contexts 289-90 model testing and empirical evidence 289 skills and knowledge 292 as social consequence and cause 287-9 as social construct 284-6 socialization perspective 285-7 "privacy as a cause" 289 "privacy as a consequence" 288 privacy-management behavior on social 149 privacy-management skills 370 privacy paradox 298, 300, 329, 334 privacy protection 305 abilities 358 behavior 300, 305, 358, 370 digital inequalities in 299-301 online (see online privacy protection) self-help 297, 303 strategies 364 privacy-related behavior 301 privacy-related mediators 304 privacy skills 369, 370 absence of 358 institutional requirements and nudges 367-8 measures 361 personal experiences 364-6 social and technical skills 362-4 social experiences 366-7 third-party materials 368-9 private communication tools 170 private direct messaging 170 Programme for the International Assessment of Adult Competencies (PIAAC) data 182-5, 187, 189 Przybylski, A. K. 133 PSRAI see Princeton Survey Research Associates International (PSRAI) public housing communities 236, 249 public housing households, survey of 242 public information sharing 176 public policy 190, 205 perspective, mobile access from 63-4 public-private partnerships 50, 51 purposive media selection 103-4 Putnam, R. D. 77

qualitative cognitive interviews 78 qualitative research 77, 266 quality of life (QoL) 209 Quan-Haase, A. 4 quantitative digital divide research 79 Quello Search Project 345 race and ethnicity 116-19, 123-6, 246 racial and ethnic groups 252 Rader, E. 344 Rainie, L. 343, 344 random digit dial (RDD) 277 random-route sampling method 65 Räsänen, P. 224 Redmiles, Elissa M. 5 Rees. H. 115 Reisdorf, Bianca C. 5, 183, 222, 224 Reluctants category 203 representative surveys 9 alternative approaches to measuring digital inequalities 16-20 data 301-2 extant technology maintenance research 10 - 11face-to-face 71 researchers and policymakers 21-4 state of data on digital access 11-16 Resources and Appropriation Theory 221 retrospective interview technique 169 Rice, R. E. 64 rich offline communication 32 ride-sharing services 41 Rotondi, V. 133 Roulstone, Alan 255 rural communities approach alternative last-mile solutions 51-3 middle-mile networks 53-6 policy and broadband technologies 49-51 rural access challenges and connectivity alternatives 46-9 Rural Electrification Administration (REA) of the 1930s 51 Saini, A. 329 SAS see Smartphone Addiction Scale (SAS) satellite-Internet service 50 Savvy Users category 203 scholarly investigation and policy interventions 5 - 6school performance 136, 139, 141-3 smartphone usage and 133 socioeconomic background and 132 Schrubbe, Alexis 3 Science and Technology Studies (STS) 263 Scuol@ Digitale 134, 136, 143

search costs 31, 37, 39

search engine use, predicting frequency of 351

second-level digital divide 1, 76, 222–3, 343

second-level divide issues 15, 16

Section 706 of the 1996 Telecommunications Act 49

self-disclosure 299, 328, 329, 334

self-efficacy 228 self-expression 150, 328 self-help online privacy protection 301, 305 self-help privacy protection 297, 302, 303, 306 self-presentational norms 175, 176, 179 self-reported health status (SRHS) 211 self-reported skills 352 semi-skilled white-collar occupations 187 semi-structured interviews 102, 103, 148, 151, 169, 197 SES see socioeconomic status (SES) Shim, M. 225, 227 Signer, S. 223 Siłka, P. 183 skill-biased technical change 34 skills acquisition 368 skills-based second-level divide issues 15 Skinner, H. A. 244 slacktivism hypothesis 326, 328 small last-mile providers 53 Smartphone Addiction Scale (SAS) 133 smartphone-based Internet 49 smartphone pervasiveness in youth daily life 131 data 134 digital media 142 digital skills interventions on youth 143 hypotheses 134 method 138-9 results 139-41 school performance 132 smartphone overuse 133-4 smartphones and academic outcomes 133 variables 134-8 Smith, A. 116 SMS-texting 107 SNSs see social networking sites (SNSs) social affordances 101-2, 165 social attributes, product of 284 social capital 84, 87, 108, 167, 177, 239, 249 availability and use of 86 development 99-100 health-related 250, 251 relationship management for 109 role of cultural and 263 theory 77 social capital-enhancing activities 167 social contextualization 77-8 social demographics 286 social desirability 136 social digital capital 83, 85-7, 89, 91 social-digital ecologies 91 social disparities 224, 293 social experiences 366-7 social inequalities 9, 131, 132, 149, 238, 249, 292 in educational outcomes 190

privacy as cause and consequence of 291 social information 100-101, 104, 105, 108 socialization 77, 291, 292, 298 agents 174 campus culture and peer 168 parental 222 perspective 285-7 social-learning process 286 social media 326, 328 algorithms 341 contacts 170 for health promotion 228-9 Internet and 334, 335 online political participation in 328 platforms 165, 167, 333 providers 318–20 sites 328 technologies 178 use 315 "social model" of disability 259 social networking sites (SNSs) 100, 149, 150, 152, 153, 155-8, 160, 165, 166, 171, 172, 177, 179, 328 social networks 3, 87, 90-92, 99, 102, 109, 165, 239, 241, 251, 290, 318, 322 development of 108 individuals 78 social relation, social information practices and investment in 100-101 social skills 358 social stratification 2, 115 "social supernets" 100 socio-cultural-political approaches 255 socio-demographic-based inequalities 323 socio-demographics 292 attributes 304, 306 characteristics 81, 149 factors 69, 315, 322, 333, 345 groups 77 stratification 326, 330, 334 variables 65-6, 86, 149, 287, 300, 301, 304, 314, 322, 348, 352 socio-digital ecologies 90-92 socio-digital inequalities 75, 78, 79, 92 socioeconomic factors 342 socioeconomic inequalities 79 socioeconomic status (SES) 16, 142, 274, 287, 311 socioeconomic variables 314 socio-technical constraints 264 'softer' skills 76 Solove, D. J. 328 specific health-related social capital factor 250 SRHS see self-reported health status (SRHS) STAGEnet project 54

statistical analysis procedures 213 stepwise linear regression analyses 332 Stevenson, S. 150 stratification model 10 stresses divergence 34 Strover, Sharon 3 STS see Science and Technology Studies (STS) "sub-leasing" portions of connectivity 55 Suman, M. 224 "the Super-Connected Teens" 107 surveys 315 **ČPS 22** digital skills 80-83 face-to-face probabilistic 65 face-to-face representative 71 NTIA 21 of public housing households 242 queries 312 representative (see representative surveys) Syversson, C. 31 "technical skills" 358 technology maintenance 9 alternative approaches to measuring digital inequalities 16-20 policy interventions 24 research 10-11 researchers and policymakers 21-4 state of data on digital access 11-16 teen life, mobile media in mobile phone use and social capital development 99-100 research question 102-8 social affordances, relationship management and information access 101-2 social information practices and investment in social relation 100-101 technological skills 109 teens' unequal mobile Internet access 110 telecommunication 46, 54, 55 Telecommunication Development Fund 63, 71 telephone company-based Internet connections 47 telephone service disruptions 15 "Terrestrial for Every Rural Region in Alaska" (TERRA) 55 text-based media 106 theory-based aspects of Web 2.0 literacy 223 theory of lay referral system 239 "third-level digital divide" 221, 223, 227 third-party materials 368-9 third-party outsourcing firms 33 Tichenor, Phillip J. 220 Tim Berners-Lee 262 Tolbert, C. J. 78 Toleva-Stoimenova, S. 343

Townsend, A. M. 33 traditional digital access measuring 17 questions 15-16, 24 traditional manufacturing centers 35 traditional markers of inequality 4 traditional media 229 traditional mobile media practices 99 traditional patterns of digital divide 150 "traditional" socioeconomic factors 315 transportation costs 31, 38, 39 Trump, Donald 50, 341 trust 311, 322 in federal agencies 317-19 feelings of 315 levels of 312, 313 in local law enforcement 320 online entities to protect personal data 316-17 in social-media providers 320 Tufekci, Z. 300 Turkle, Sherryl 99, 131 two-step sequential model 291 UK welfare reforms 260 UN Convention on the Rights of Persons with Disabilities (CRPD) 260 "under-connectedness" 62, 64 UNESCO 260, 261 United Nation's Sustainable Development Goals (SDGs) 260 universal-service programs 46 user background and outcome variables, relationship of 122, 123 users profile by access type 67-8 uses, types of 66, 69, 71, 165, 274 Vaccaro, A. 166, 173 Vaglio, J. 212 van Deursen, A. J. 64, 133, 185, 221, 223, 274 Van Dijk, J. A. 185, 221, 263, 274, 342 van Zeebroeck, Nicolas 37 variance inflation factors (VIFs) 213

Walker, Ashley Marie 5 Web 2.0 tools 244 web-use behaviors, factors influencing 315–16 Wei, L. 223, 225 weighted least square mean and variance estimation method (WLSMV) 137, 139, 143 Weinhold, Diana 39 Weinstein, N. 133

"virtualization" networking 53

Vitak, J. 327, 328

well-being among older adults, online social connectedness and (see online social connectedness and well-being among older adults) demographics and offline 314 dependent variables 212-13 outcomes, regression results for 214-15 Wenhong Chen 4 Wentworth, D. K. 133 "white spaces" spectrum-based systems 49 Wilson, R. E. 328 wireless connection and media choice, awareness of 107 WLSMV see weighted least square mean and variance estimation method (WLSMV) women with disabilities 255 World Health Organization 18, 260 World Internet Project 301 The World is Flat (Friedman) 32 World Summit on the Information Society (WSIS) 2003-05 260-61 World Wide Web Consortium's Web Content Accessibility Guidelines 275 "WSIS 10+" agenda 261

Xiaoqian Li 4 Xu, Jiao 34

Ybarra, M. 224 Yoo, C. S. 52 young adults, mobile phone use among 114 analyses 121 dependent variables 120-21 gender, race/ethnicity, and Internet experiences 123-6 independent variables 118-20 prior work on mobile phone use patterns 115-17 youth daily life, smartphone pervasiveness in 131 data 134 digital media 142 digital skills interventions on youth 143 hypotheses 134 method 138–9 results 139-41 smartphones and academic outcomes 133 socioeconomic background and school performance 132 socioeconomic background and smartphone overuse 133-4 variables 134-8

Zook, Matthew A. 31