SUBJECT INDEX

Page references followed by fig indicate an illustrated figure; followed by t indicate a table.

A

Academic Search Premier (EBSCO), 53, 56, 58t, 59
Advocacy Coalition Framework (ACF), 12
African Americans: culture of poverty and, 405–406; poverty rates of, 404; spatial concentrations of poverty and, 404–405
Alliance for School Choice, 311, 312, 314, 317, 318
American Federation of Teachers, 323
American Journal of Political Science, 55
American Political Science Association, 14
American Political Science Review, 23
ANOVA, 79
ARIMA, 80
Associated Press, 312, 317, 318
Average effect sizes: assessing the significance of, 128–129; calculated using stata, 129–131; considerations for calculating, 127; definition of, 18–19; using fixed and random effects, 128

B

Begg test, 252, 425
Behavioral life outcomes. See Economic and behavioral life outcomes
Benson, Jackson v., 316
Birge ratio (RB), 162
BLDSC, 56, 58t
British Library Document Supply Center, 61
Brookings Institution, 56, 403
Bush v. Holmes, 318

C

Campbell Collaboration, 7, 8–9
Center on Education Policy, 314, 317, 318
Charter schools, 313
Child support enforcement performance management, 589/
Cleveland Scholarship and Tutoring Program, 316–317, 320–321
Cluster robust standard errors, 199–200
Cochrane Collaboration: increased use of meta-analysis in health and education policy promoted by, 16; on meta-analyses synthesizing studies not reports, 69; meta-analysis best practices information in,
Cochrane Collaboration (continued)
51; origins and description of the, 7, 8
Cochrane Handbook of Systematic Reviews of Interventions (Higgins and Green): best practice guidelines for literature review in, 28, 51, 65–66; on best practice of recording data onto paper coding forms, 95; on description of coding effect sizes, 70; on meta-analysis used for studies rather than reports, 69
Cochrane Reviews, 8
Code books, 86
Code sheets, 86
Coded data: "low inference," 94; managing, 94–97
Coders: assessing the performance of, 93–94; qualifications of, 89–91; training, 92–93
Coding: decided what data in include, 70–85; description of, 21; elements of research design and study quality, 78–80; information for effect sizes and effect size variances, 74–76; issues to consider for, 68–70; "low inference" codes, 94; with missing data, 83–84; moderator variables from multivariate models, 81–82; process of, 85–97; scientifically interesting moderator variables, 76–78. See also Data
Coding forms: using paper vs. computerized, 95; sample, 98–101
Coding instructions: code books and code sheets, 86; iterative process to develop, 88–89; preserving a hierarchical data structure, 87; unique identifiers in, 86–87
Coding process: developing instruments, 86–89; managing coded data, 94–97; selecting and training coders, 89–94
Cohen’s kappa, 64–65
Cohrane Reviews, 8
Collinearity: performance of the FAT as \( N \), measurement error, and, 278–281; REMR (random effects meta-regression), 187–188; size of FAT, varying, 282
Colorado Congress of Parents, Owens v., 318
Combining effect sizes: calculating average effect sizes, 127–131; describing effects sizes, 131–137; issues to consider for, 124; weight effect sizes, 125–127
Complier Average Causal Effect (CACE), 91
Comprehensive Meta-Analysis (CMA), 163
Compstat program (NYC): description of and crime reduction goal of, 356–357; "hard" empirical literature on, 364–365; meta-regression results on, 386; stratified meta-regression of, 394–397
Concept-indicator problems: description of, 44; meta-analysis as requiring an adequate appreciation of, 44–45
Conceptual hypotheses: conceptual definitions developed for, 43–46; description of, 45
Conceptualizing a meta-analysis: accounting for variation in effect sizes, 46–50; hypotheses, 42–46; identifying quantity of interest/conceptual model for, 40–50; research questions, 41–42
Conference of the National Association of Schools of Public Affairs and Administration (NASPAA) [2010], 16
Conference reports, 61
Correlation coefficient \( r \), 105–109
CRVE standard errors: hypothesis tests in REMR using WCB and, 205; limitations of, 199–200; restricted manual WLS REMR in Stata with, 205
"Culture of poverty," 405–406
Cumulative meta-analysis: conducting a, 134–137; description of, 131
D

D*-based effect sizes: corrected standardized mean difference: Hedges’s \( g \),
Subject Index
113–114, 117/g; formulas for, 116; overview of, 110–111; standardized mean difference, 111–113
Data: coding with missing, 83–84; effect-level information, 72–74; search-level information, 70–71; study-level information, 71–72. See also Coding
Data structure: cross-sectional, 80; pooled cross sections, 80; time series, 80; true panel, 80
"Delta-splitting" method, 209
Dependence: choosing between GEE and CRVE in meta-regression to address, 225–226; choosing between HLM and CRVE in meta-regression to address, 214–217; delta-splitting approach for addressing, 227–229; GEE (generalized estimating equations) to address meta-regression, 218–226; HLM (hierarchical linear models) for addressing meta-regression, 208–213
Dependent variables: effect sized employed as, 20; meta-regression design using, 144–145
Difference of means, 79
Division of Program Evaluation and Methodology (GAO), 15
"Double coding," 94

E
EBSCO (Academic Search Premier), 53, 56, 58/g, 59
EconLit, 61
Economic and behavioral life outcomes: cultural theories of poverty on, 405–406; human capital approaches to poverty and, 406; poverty deconcentration policies study of impact on, 408–438; social capital theory on poverty and, 406–407
Economics research: FAMST:PET:MRM meta-analysis applied to, 268–308; poverty deconcentration policies study, 408–438; publication bias found in, 268–269
The Economist’s Voice, 56
Education performance management, 389
Educational voucher data analysis: average effect sizes for effects of vouchers, 335–337; publication bias, 337/g–339; study-level cumulative meta-analysis of effects on student achievement, 336/g
Educational voucher data: estimating
Educational voucher data analysis: accounting for variation in effect sizes, 339–342; average effects of vouchers in the baseline scenario, 343; characteristics and quality of original studies, 341–342; characteristics of outcome measures, 339–341; characteristics of the baseline scenario, 342; effects of outcome measures on effect sizes, 343–345; effects of student characteristics on effect sizes, 345–346; effects of study design and quality on effect sizes, 346–347; effects of voucher program design on effect sizes, 346; estimated effect sizes under various scenarios, 347–348; estimating the meta-regression models, 342–348; random effects results using CRVE and GEE, 344–345
Educational voucher meta-regression analysis: accounting for variation in effect sizes, 339–342; average effects of vouchers in the baseline scenario, 343; characteristics and quality of original studies, 341–342; characteristics of outcome measures, 339–341; characteristics of the baseline scenario, 342; effects of outcome measures on effect sizes, 343–345; effects of student characteristics on effect sizes, 345–346; effects of study design and quality on effect sizes, 346–347; effects of voucher program design on effect sizes, 346; estimated effect sizes under various scenarios, 347–348; estimating the meta-regression models, 342–348; random effects results using CRVE and GEE, 344–345
Educational voucher programs: alternatives to, 313; a brief history of U.S., 316–318; Cleveland Scholarship and Tutoring Program,
Educational voucher programs
(continued)
316–317, 320–321; 
considering the debate 
over, 311–312; description 
of, 313; Florida 
Opportunity Scholarship 
Program, 317–318; 
Indiana’s, 317; linking 
vouchers to student 
achievement, 313–315; 
list of search engines, 
orations, and sites 
searched for studies on, 
332; listed by state 
(2011), 314; Milwaukee 
Parental Choice Program, 
316, 319–320; as one 
element of school choice, 
312–316; searching the 
literature on, 331–334
fig; Washington, DC 
Opportunity Scholarship 
Program, 317, 321. See also 
School choice

Effect size variances: coding 
information for, 74–76; estimating random effects 
variance component, 124; explaining differences 
across original studies, 22; formulas for r-based and 
d-based, 116; in public management and policy 
effect sizes from other fields, 482–483; 
questioning what 
accounts for, 141– 
142

Effect sizes: assessing 
heterogeneity of, 
121–124; average, 18–19; 
calculating, 103–118; 
coding information for, 
74–76; combining, 
124–137; comparing 
public management and policy 
from other fields, 
482–483; data coding 
considerations of, 21; 
definitions of, 18, 69; 
differences in the goals of, 
34; fixed, 118–120; 
meta-analysis adapted for 
public management and policy, 33–34; 
meta-analysis stage of 
calculating and combining, 22; 
meta-regression models 
explaining variation in, 
20; moderator variables 
influencing magnitude of, 
19; publication bias 
consequences for 
estimates of, 296–298; 
quality of interest 
represented by, 46–50; random, 120–121; 
represented by quantities 
of interest, 46–47; 
statistical technique used 
to generate, 79–80; types, 
heterogeneity, number of, 
35–34. See also Quality of interest; specific studies

Effect sizes calculations: average 
effect sizes, 127–131; 
d-based effect sizes, 
110–114, 116; formulas for converting between 
effect sizes in 
meta-analysis, 117/g; 
issues to consider for, 
103–105; odds-based effect sizes, 114–116; outcomes a hypothetical 
experiment with binary 
treatment and outcomes, 
115/g; r-based effect sizes, 
105–110, 116; 
summarizing, 116–118

Egger test: alternative tests for 
publishation bias other than, 
250–251; criticisms for publication bias, 
245–250; critiques of 
applying it to the FAT, 
273–274; for funnel plot 
asymmetry, 245/g; Statas 
metabias command to conduct, 252

Endogeneity, REMR (random 
effects meta-regression), 
188–189

Endogenous variable, REMR 
(random effects 
meta-regression), 188

Environment tobacco smoke 
(ETS) report [EPA], 16

ERIC, 58t

Estimation: FAT-MST-PET-MRA, 
292–307; FEML 
(maximum likelihood estimator), 174; 
meta-analysis adapted for 
public management and policy, 32; MOM (method 
of moments) estimator, 
174–175, 184–187/g; 
performance 
management 
meta-analysis, 379–381; 
povrety deconcentration 
outcomes study 
meta-regression analysis, 
426–427; 
PSM-performance 
relationship study, 
462–464. See also GEE 
generalized estimating equations); WLS 
weighted least squares)

Ethnic differences. See 
Racial/ethnic differences

Evidence-Based Child Health, 8

Ex post endogeneity controls: 
differencing, 80; fixed 
effects, 80; instrumental 
variables, 80; matching, 
80; regression 
discontinuity, 80

F

Fail-safe N: description of the, 
253; Gleser and Olkins 
application of, 255–256; 
Orwins attempt to 
remedy publication 
bias using, 253–255

FAT-MST-PET-MRA: assessing 
the, 272–291; critiques of
Subject Index

the Egger test applied to, 273–274; estimating the magnitude of “true” effects using the PET, 292–307; identifying “true” effects using the MST, 291–292; increasing the quality of meta-analysis using, 9; meta-regression, 269–272

FAT-MST-PET-MRA assessments: baseline simulations estimating size of the FAT, 279; estimating the magnitude of the “true” effect using PET, 272; of FAT as test for publication bias, 272–291; of performance of the augmented FAT, 288–291; the performance of the FAT, 274–275; performance of the FAT as N, measurement error, and collinearity vary, 278–281; performance of the FAT under effect size heterogeneity, 281–283; performance of the FAT under ideal conditions, 278; of performance of the MST under conditions of effect size heterogeneity, 292; of previous assessments of the FAT, 275–277; simulation structure for assessing performance of the FAT, 277–278; size of augmented FAT with effect size heterogeneity, 290; size of FAT, varying collinearity, 282; size of FAT, varying sample sizes and measurement error in Y for, 280–281; as test for publication bias, 270–271; testing for “true” effects using MST, 271–272; why does FAT perform so poorly under effect size heterogeneity?, 283–288

FAT-MST-PET-MRA estimating: the magnitude of the “true” effects using the PET, 292–307; performance of the PET with heterogeneous effect sizes, 299–304; performance of the PET with homogeneous effect sizes, 296–299; performance of the PET with identical measurement of Y and X, 295–304; performance of the PET with varying measurement of Y and X, 304–307

FEML (maximum likelihood estimator): comparing REML to, 174; description of, 174

FEMR (fixed effects meta-regression): advantages of REMR over, 171–172; difference between SUTVA and, 172; estimating the fixed effects model in, 151–154; goodness of fit in, 161–163; hypothesis testing in, 154–157; interpreting results in Stata, 168–170; poverty deconcentration outcomes study random effects vs., 417–422; power analysis in, 160–161; prediction and, 158–159; in Stata, 163–170; WLS (weighted least squares) estimation of, 155–154, 165–168/g.

See also Meta-regression models

FileMaker Pro, 95

Fisher’s Z: calculating, 109–110; fixed effects meta-regression using, 164; formulas for converting between effect sizes, 117/g; performance management data analysis using, 372–373; PMS-performance studies use of, 455–457; Poverty deconcentration outcomes study use of, 429–430; weighting fixed effects inverse variance weights, 125. See also R-based effect sizes

Fixed effects models assessing effect size heterogeneity using random or, 121–124; definition of, 18; meta-analysis using approach of, 118–120; meta-regression, 151–170; weighting fixed inverse variance, 125

Florida Opportunity Scholarship Program, 317–318

Focal predictors, 17

Forest plots: description of, 131; fixed, 152/g; performance management data analysis, 134–137/g; poverty deconcentration outcomes study, 418, 419/g–420/g, 423–425/g; PSM-performance relationship study, 457–459; random effects, 133/g

Forward citation search, 54

Funnel plots: asymmetric funnel plot of effect size against effect size standard error, 241/g; description of, 238–240; Egger test for funnel plot asymmetry, 245/g; identifying publication bias using, 258–245; measuring effects of school vouchers on student testing, 357/g–358/g; poverty deconcentration outcomes study

publication bias, 418,
Funnel plots (continued)
421–422, 423/fg, 426/fg;
PSM-performance relationship study,
461–462/fg; of 680 effect sizes coded from environmental justice literature, 252/fg;
symmetric contour funnel plot with significance bands, 242/fg; symmetric funnel plot of effect size against effect size standard error, 240/fg;
tests for funnel asymmetry, 243–245

G
Galbraith plot. See Radial plot
Gautreaux housing program: list of search engines, organizations, and sites searched for on, 414/t;
literature review on, 409–410; policy origins of the, 399, 400, 401; poverty deconcentration policies study on impact of, 408–438
Gautreaux/poverty deconcentration outcomes study: analysis of data, 416–426/fg;
conclusions from the, 436–438; literature search on, 413–416/fg;
meta-regression analysis of, 426–436; research frame used for, 412–413
GEE (generalized estimating equations): addressing REMR dependence using,
218–226; choosing between CRVE and, 225–226; to estimate REMR, 207; for generating effect size, 80;
performance management meta-regression estimation using, 380;
poverty deconcentration outcomes study use of, 455t–456t;
PSM-performance relationship study use of, 463–464, 468; of REMR with exchangeable correlation matrix and empirical variance estimates, 225/fg; of REMR with independent correlation matrix and empirical variance estimates, 224/fg; simple introduction to, 218–222; using Stata for, 222–224. See also Estimation
GLS (generalized least squares): FEMR (fixed effects meta-regression) estimated by, 152; REMR (random effects meta-regression) estimated by, 152
Goodness to fit: FEMR (fixed effects meta-regression), 161–165; REMR (random effects meta-regression), 176–177, 181
Google Scholar, 59; number of “meta-analysis” articles by title by, 6/fg; number of publications (1990–2011) referring to meta-regression using, 143/fg
Government Performance and Results Act (GPRA), 11, 355, 357, 358–359
Government reports sources, 60
GPRA Modernization Act (2010), 16
Grey literature: archives of, 61; conference papers sources, 61; developing search strategy for, 60–61; dissertations and theses sources, 61; government reports sources, 60; preventing publication bias by including, 265–266; reports from public policy research firms or think tanks, 60; working papers, 60–61
H
Harvard University’s Program on Education Policy and Governance (PEPG), 315, 321
Head Start studies, 69
Hedges’s g, 115–114, 117/fg
Heterogeneity: assessing performance of the MST under conditions of effect size, 292/t; assessing why FAT performs so poorly under effect size, 283–288; performance of the FAT under effect size, 281–283; size of augmented FAT with effect size, 290/t; size of FAT with effect size heterogeneity in original studies, 284/t; testing REMR (random effects meta-regression) for residual, 175
Hippocratic Oath—first do no harm, 479
HLM (hierarchical linear models): comparing to OLS regression, 209; to estimate REMR, 207; estimated using restricted maximum likelihood, 209–210; for generating effect size, 80; in meta-regression, 210–213; overview of, 208
Holmes, Bush v., 318
HOPE VI (Housing Opportunities for People Everywhere): list of search engines, organizations, and sites searched for on, 414/t; literature review on, 411; origins of, 400–401; poverty deconcentration policies study on impact of, 408–438; research
Subject Index

frame of poverty  
decentration  
outcomes study on, 412–413  
HOPE VI/poverty  
decentralization study:  
analysis of data, 416–426;jg; conclusions from the, 436–438;  
literature search on, 413–416;jg;  
meta-regression analysis of, 426–436;j; research  
frame used for, 412–413  
Housing Act (1937), 399. See also  
Public housing  
Housing Choice Voucher Program. See Moving to  
Opportunity (MTO)  
HUD (U.S. Department of Housing and Urban Development), 400, 401  
Human capital theory on poverty, 406  
Hypotheses: conceptual and operational definitions in, 43–46, 45;j; meta-analysis, 42–43; operational, 43–46; performance management outcomes measures and key, 366–368. See also Null hypothesis  
Hypothesis testing: conducting REMR testing in Metareg, 181–182; fixed effects meta-regression, 154–157;  
how meta-analysis improves, 11–12; performance management, 367–368; REMR (random effects meta-regression), 175–176, 180–181  
I  
I2 statistic, 162  
IBSS, 56, 57i  
Independent variables: focal predictor label of, 17; performance  
management  
meta-regression analysis, 381–382;  
poverty deconcentration outcomes study meta-regression analysis, 427–429  
Individual parameters testing REMR, 175  
Information Retrieval Policy Brief (Rothstein, Turner, and Lavenberg), 51  
Institute of Educational Sciences, 9  
Intercoefficient (ICC), 93–94  
International City/County Management Association (ICMA), 355  
Inverse variance weight:  
estimating random effects, 124; fixed and random effects, 125; in practice, 125–127  
J  
Jackson v. Benson, 316  
Job Training Partnership Act, 365  
Job training programs: forest plot of performance management research on, 375;g; performance management meta-regression analysis on, 389; performance management of, 365  
Joint hypothesis testing: FEMR (fixed effects meta-regression), 175–176; REMR (random effects meta-regression), 175–176  
Journal of Economic Literature (JEL), 23  
The Journal of Economic Perspectives, 2  
The Journal of Economic Surveys, 23  
The Journal of Evidence-Based Medicine, 8  
The Journal of Policy Analysis and Management, 2, 55  
Journal of Public Administration Research and Theory, 2  
JSTOR (Journal Storage) database, 7t, 56, 57t, 59  
K  
Keywords: identifying natural language, 52–53; identifying search profile, 52–54  
L  
Latino/a poverty rates, 404  
Least squares regression, 79  
Legislation: Government  
Performance and Results Act (GPRA), 11, 355, 357, 358–359; GPRA Modernization Act (2010), 16; Housing Act (1937), 399; Job Training Partnership Act, 365; No Child Left Behind (NCLB), 362, 377, 380; Worker Investment Act, 365  
Lexis-Nexis Academic Universe, 56, 57i, 59  
Lipsey, Mark W., 15  
Literature search: bounding the, 54–55; comparing meta-analysis and traditional, 23–24; conducting in meta-analysis, 50–66; on educational voucher programs, 331–334; identifying original studies, 51–61; issues to consider for, 50–51; judging the acceptability of original studies, 51–66; as meta-analysis stage, 21; poverty deconcentration outcomes study, 413–416; PSM-performance relationship, 450–451; sample study flow diagram for reporting results from, 66

Log odds ratio, 117

Logit, 79

"Low inference" codes, 94

Magnet schools, 313

Management by Objectives, 353, 355

Mathematica Policy Research, 56, 60

Measurement: how meta-analysis improves scholarship, 10–11; meta-analysis adapted for public management and policy, 32. See also specific measurement

Mediater variables: meta-analysis and, 84–85; meta-regression models using, 144, 147. See also Variables

"Mega-silliness," 25

Meta-analysis: adaptation for public management and policy, 31–34, 481–484; used to aggregate knowledge of public management and policy, 485; comparing traditional literature search and, 23–24; conceptualizing a, 40–50; conducting a literature search in, 50–66; cumulative number of articles in JSTOR database since 1980 on, 71; description and uses of, 478–479; in economics, 268–308; of education voucher effects, 324–331; examining the future in public management and policy research of, 475–486; Google Scholar references to titles with, 67; greater certainly and better understanding of knowledge benefits of, 479; higher-quality original studies now available for, 480; increased practitioners requests for using, 481; institutionalization of, 5–9; introduction to, 4–5; maturation of the statistics of, 480; poverty deconcentration outcomes study, 416–426; public management and policy role for, 9–17; questions to ask on public management and policy scholarship use of, 476–478; right time for scientific research to embrace, 3–4; as topic category referenced in SSCI, 5–6; understanding the basics of, 17–31. See also Scientific research

Meta-analysis applications: adaptation for public management and policy, 31–34, 481–484; examining for public management and policy scholarship, 9–12; improving practice role of meta-analysis, 15–17; improving professional self-image, 12–15; increased practitioners requests for, 481; public management and policy scholarship future, 475–486

Meta-analysis basics: comparing meta-analysis and traditional literature reviews, 23–24; criticisms of, 25–31; the language of meta-analysis, 17–20; stages in conducting a meta-analysis, 20–23

Meta-analysis criticisms: garbage in, garbage out, 27–28; selectivity bias, 28; that it cannot be used to combine results from multivariate models, 29–31; that meta-analysis sacrifices nuance and context, 28–29; you can’t compare apples and oranges, 25–27

Meta-Analysis of Economics Research Network (MAER), origins and description of, 7, 9

Meta-analysis stages: stage 1: scoping, 21; stage 2: literature search, 21; stage 3: data coding, 21; stage 4: calculating and combining effect sizes, 22; stage 5: explaining differences in effect sizes across original studies, 22; stage 6: identifying areas for future research, 22–23

Meta-analysis vocabulary/language: average effect size, 18–19; effect size, 18; fixed and random effects models, 18; focal predictor, 17; meta-regression, 20;
Subject Index

moderator variables, 19; original studies, 17

Meta Regression Analysis (MRA): description of, 197; performance management, 379–390, 394–397; poverty deconcentration outcomes study, 426–436

Meta-regression analysis: description of, 197; performance management, 379–390, 394–397; poverty deconcentration outcomes study, 426–436

Meta-regression design: complications in, 147–151; dependent variables used in, 144–145; effect size heterogeneity in, 148–149; mediating variables in, 144, 147; moderator variables used in, 20, 144, 145–147; non-independence observations in, 149–151

Meta-regression models: alternatives for addressing dependence in, 207–229; Birge ratio ($R_B$), 162; choosing between HLM and CRVE in, 214–217; clustered robust estimation in, 193–207; definition of, 20; designing, 144–151; educational voucher evaluation, 339–348; estimating the fixed effects model, 151–154; for explaining differences in effect studies across original studies, 22; FAF-MST-PETMRA approach to, 289–292; goodness of fit, 161–163; historical development of, 142–144; hypothesis testing, 154–157; $I^2$ statistic, 162; issues to consider in, 191–193; multi-level clustering in, 206–207; number of publications referring (1990A2011) to, 145/45; performance management, 379–390; power analysis in meta-regression, 160–161; prediction and meta-regression in, 158–159; pseudo-$R^2$, 163; public management and policy application of, 191–229. See also REMR (fixed effects meta-regression); REMR (random effects meta-regression)

MetaCam command, 134–136

Meta command, 131–134

Metha command: conducting REMR hypothesis testing in, 181–182; interpreting REMR results in, 178/45–179/45; REMR using MOM (method of moments), 184–187/45; unable to estimate CRVE random effects meta-regression model, 197. See also Stata software

MetaWin, 163

Method assignment to treatment group: multiple methods, 80; nonrandom, other, 80; nonrandom, post hoc matching, 80; nonrandom, self-selection, 80; random assignment after matching, 80; simple random assignment, 80

Micronumerity, 187–188

Microsoft Access, 95

Microsoft Excel, 96

Midwest Political Science Association (MPSA), 61

Milwaukee Parental Choice Program, 316, 319–320

Milwaukee school voucher program studies, 69

Moderator variables: coding from multivariate models, 81–82; coding scientifically interesting, 76–78; definition of, 19; as explanations for effect size variance, 47–48; using in meta-analysis, 48–50; meta-analysis used to identify important, 46; meta-regression models using, 20, 144, 145–147. See also Variables

MOM (method of moments) estimator: REMR (random effects meta-regression) using Metareg, 184–187/45

Moving to Opportunity (MTO): list of search engines, organizations, and sites searched for on, 414/4; literature review on, 410–411; origins of, 399, 400; poverty deconcentration policies study on impact of, 408–438

Moving to Opportunity/poverty deconcentration outcomes study: analysis of data, 416–420/45; conclusions from the, 436–438; literature search on, 413–416/45; meta-regression analysis of, 426–436; research frame used for, 412–413

MRA. See FAT-MST-PET-MRA

MST. See FAT-MST-PET-MRA

Multilevel clustering, 206–207

Multivariate models: coding moderator variables from, 81–82; meta-analysis unable to be used to combine results from, 29–31

MySQL, 95

NAEP, 314

National Academy of Sciences, 15
Subject Index

National Association of Schools of Public Affairs and Administration (NASPAA), 16, 61
National Bureau of Economic Research (NBER), 61, 63
National Center for Environmental Economics (NCEE), 61
National Institute of Food and Agriculture, 16–17
National Performance Review (NPR), 355
National Research Council (NRC), 15
NCJRS, 58
NCSPE, 314
New York City voucher program, 322–323
New York Police Department’s Compstat: description of and crime reduction goal of, 356–357; “hard” empirical literature on, 364–365; meta-regression results on, 386; stratified meta-regression of, 394–397
No Child Left Behind (NCLB), 362, 377, 380
Null hypothesis: average effect size to test, 19; average effect sizes for impact of educational vouchers, 335–339; code sheet for information on, 75–76; Compstat-like programs tendency to reject under certain conditions, 397; Egger test over rejection of, 246, 248; estimating sample correlation coefficient R using t testing, 105–106, 107; estimating true effects using PET, 293–307; fail-size N to reverse rejection of, 253–254; FATMST:PETMRA approach to meta-regression, 270–289; FEMR used to test standard, 155–170; Gleser and Olkin’s N assumption of, 255–256; identify true effect using the MST, 291–292; implications for bootstrap trapping a regression model for testing, 302; odds-based effect sizes for testing, 114; preventing publication bias, 265–266; publication bias in original studies that reject, 253–254; Q test for random effects, 123; REMR testing of, 171, 175–206; selection bias models for remedying publication bias of, 259–262; significance of average effects sizes, 128–131; skepticism regarding true effects underlying testing of, 109; traditional literature reviews approach to, 24. See also Hypotheses

O
Observations: common data sets and dependence across, 149–150; common research teams and dependence across, 150; meta-regression design and non-independence, 149–151; multiple effect sizes per study and dependence across, 150–151; multiple treatment studies and dependence across, 149
ODBC facility, 96
Odds-based effect sizes, 114–116
Odds ratio (OR), 115
Office of Management and Budget (OMB), 357, 362
OLS (ordinary least squares) regression: fixed effects meta-regression model in Stata, 165/fg; traditional,
standard, 155–170; Gleser and Olkin’s N assumption of, 255–256; identify true effect using the MST, 291–292; implications for bootstrap trapping a regression model for testing, 302; odds-based effect sizes for testing, 114; preventing publication bias, 265–266; publication bias in original studies that reject, 253–254; Q test for random effects, 123; REMR testing of, 171, 175–206; selection bias models for remedying publication bias of, 259–262; significance of average effects sizes, 128–131; skepticism regarding true effects underlying testing of, 109; traditional literature reviews approach to, 24. See also Hypotheses

P
PAIS, 56, 58t
Papers First and Proceedings First, 61
Pay-for-Performance, 353
Percentage agreement, 64–65
Performance Assessment and Ratings Tool (PART), 355
Performance Budgeting, 353
Performance management data analysis: on effect sizes, 372–373; forest plots, 374–376/fg; test for random effects, 373–374; test for zero mean effect size, 377; tests for publication bias, 377–379

See also Publication bias; Studies
Owens v. Colorado Congress of Parents, 318
The Oxford Guide to Library Research (Mann), 51

P
PAIS, 56, 58t
Papers First and Proceedings First, 61
Pay-for-Performance, 353
Percentage agreement, 64–65
Performance Assessment and Ratings Tool (PART), 355
Performance Budgeting, 353
Performance management data analysis: on effect sizes, 372–373; forest plots, 374–376/fg; test for random effects, 373–374; test for zero mean effect size, 377; tests for publication bias, 377–379

Performance management literature search: flowchart of process and intercoder reliability, 371; intercoder reliability assessments, 372; list of search engines, organizations, and sites for, 369; methods used for, 368, 370–371

Performance management meta-regression: estimation techniques, 381–382; results of, 382–390


Perspectives on Politics, 2, 23

Policing and public safety: forest plot of performance management research on, 375/fg; New York Police Department’s Compstat on, 356–357, 364–365; performance management meta-regression analysis on, 389

Political Research Quarterly, 23

Poverty: “code of the street” behavioral response to, 406; concerns over public housing concentration of, 398–399; “culture of poverty” concept of, 405–406; human capital approaches to, 406; racial/ethnic rate comparisons, 404; social capital theory approach to, 406–407; spatial concentrations in American cities of, 404–405

Poverty deconcentration outcomes study: analysis of data, 416–426/fg; conclusions of the, 436–438; CRVE (clustered robust variance estimator) used in, 435f–436f; forest plots of the, 418, 419fg–420fg; funnel plots of the, 418, 421–422, 423fg, 426fg; GEE (generalized estimating equations) used in, 435f–436f; impact of programs on negative behaviors, 433f; literature review, 409–411, 413–416; meta-regression analysis of data, 426–436; publication bias in, 418, 421–422, 423fg; research frame used in, 412–413; research questions asked in, 408–409

Poverty deconcentration policies: Gautreaux social experiment under, 399, 400, 401; history of U.S. programs under, 399–402; HOPE VI (Housing Opportunities for People Everywhere) under, 400–401; list of search engines, organizations, and sites searched for on, 414; moving from public housing projects to mixed-income communities, 398–399; Moving to Opportunity (MTO) [Housing Choice Voucher Program or Section 8] under, 399, 400, 408–409; theoretical foundations of, 402–408. See also Public housing

Power analysis: FEMR (fixed effects meta-regression), 160–161; REMR (random effects meta-regression), 176

Prediction: FEMR (fixed effects meta-regression), 158–159; REMR (random effects meta-regression), 176

Probit for generating effect size, 79

Problem identification process, 9–10

Professional self-image: meta-analysis role in improving, 13–15; of social science contribution to policy-making, 12–13
Program Assessments and Rating Tool (PART), 355, 357–359
Program effects, 408
Program evaluation improvement, 11
Program on Education Policy and Governance (PEPG) [Harvard University], 315, 321
ProQuest, 56, 57
Pseudo-$R^2$, meta-regression, 163
PSM-performance relationship study: areas for future research, 471; data analysis of the, 455–457; descriptive analysis in the, 457–462; effect sizes in the, 455–457; estimation techniques used in, 462–464; examining the importance of possible, 443–444; findings and significance of, 468–471; flow diagram of the, 454; framing the meta-analysis of the, 447–455; intercoder reliability assessments of the, 453–455; limitations of the meta-analysis of the, 472; literature review on the, 447–450; literature search on the, 450–453; meta-regression analysis of the, 462–468; meta-regression results summary, 460; meta-regression variables of, 464–465; search venues used in literature search on, 451; testing for publication bias, 459, 461–462; testing for publication bias and funnel plots on, 459, 461–462; theoretical foundations of the, 444–455
Psych-INFO, 56, 57
Public Agenda, 315
Public health: performance management forest plot on, 376; performance management meta-regression analysis on, 389
Public housing: as federal housing policy (1937 to mid-1970s), 399; increasing concerns over concentrating poverty in, 400. See also Housing Act (1937); Poverty deconcentration policies
Public management and policy: adapting meta-analysis for, 31–34, 481–484; advanced meta-regression for, 191–230; growth of research output in, 2–3; meta-analysis role in, 9–17
Public management and policy scholarship: examining the future of meta-analysis in, 475–486; hypothesis testing and theory building, 11–12; improving measurement, 10–11; increased emphasis on evidence-based, 481; meta-analysis adaptation for, 31–34, 481–484; meta-analysis applications to, 9–12; meta-analysis used to aggregate knowledge in, 485; problem identification, 9–10; producing cumulative knowledge objective of, 476; program evaluation, 11; questions to ask on using meta-analysis in, 476–478. See also Scientific research
Public policy research firms reports, 60
Public service motivation (PSM): areas for future research on, 471; definitions of, 422–423; examining the relationship of performance to, 433–444; PSM-performance study on, 444–472
Publication bias consequences of, 253–258; description of, 251–252; economics research, 268–269; educational voucher data analysis, 337–339; as meta-analysis criticism, 28, 232; performance management analysis, 377–379; poverty deconcentration outcomes study, 418, 421–422, 423; remedying and preventing, 253–256; sources of, 233–235; types of, 232–233. See also Original studies; Selection bias models
Publication bias consequences: for estimates of effect sizes, 236–238; for scientific consensus in published literature, 235–256
Publication bias identification: alternative tests for, 250–251; Begg test for, 252, 425; criticisms of the Egger test for, 245–251; FAT-MST-PET-MRA as test for, 272–291; funnel plots and radial plots used for, 238–243, 418, 421–422, 423; poverty deconcentration outcomes study, 418, 421–422, 423; testing for bias in Stata, 251–253; tests for funnel asymmetry, 243–245
Publication bias remedies: the fail-safe N, 253–256; including grey literature,
Subject Index

265–266; preventing publication bias, 265–266; selection bias models, 259–263; trim-and-fill methods, 256–258; weighted regression models, 263–265

Publication bias sources: decisions of researchers as, 234–235; decisions of reviewers and editors as, 233–234

Q

Q statistic, 123
Q test, 122–123

Quality of interest: examples of meta-analysis, 40; identified for specific research questions, 41. See also Effect sizes

R

R-based effect sizes: correlation coefficient \( r \), 105–109; formulas for, 116; overview of, 105. See also Fisher’s Z

Racial/ethnic differences: poverty rates, 404; spatial concentrations of poverty in U.S. cities, 404–405

Radial plot: description of, 242; of precision against standardized effect size, 244/fig; radial plot of precision against standardized effect size, 243/fig

RAND Corporation, 60

Random effects models: assessing effect size heterogeneity using fixed or, 121–124; definition of, 18; estimating random effects variance component, 124; meta-analysis using approach of, 120–121; meta-regression, 171–189; performance management data analysis using, 373–374; Q statistic, 123; Q test, 122–123; weighting fixed inverse variance, 125

Reinventing Government (Osborne and Gaebler), 354, 355

REML (restricted maximum likelihood): comparing FEML to, 174; MOM (method of moments) estimator, 173–174; REMR (random effects meta-regression), 172–173; WLS (weighted least squares) to estimate, 174

REMR (random effects meta-regression): advantages over FEMR of, 171–172; with clustered standard errors in Stata, 197–200; estimating the random effects, 174; estimating the variance component, 172–174; goodness of fit, 176–177, 181; hypothesis testing, 175–176, 180–181; poverty deconcentration outcomes study fixed effects vs., 417–422; prediction and power of, 176; in Stata, 177–187; threats to inference in, 187–189; WCB implemented in, 202–204. See also Meta-regression models

Reports, 69

Research questions: meta-analysis, 41–42; quality of interest identified for specific, 41

Review Manager (RevMan), 163

Review of Policy Research, 23

Risk difference effect (RD), 115

Risk ratio (RR), 114–115

S

School choice: debate over, 311–312; public support for, 315–316. See also Educational voucher programs

School Choice Demonstration Project (SCDP), 316

Science (journal), 15

Scientific research: increases in production and dissemination of, 2–3; right time for embracing meta-analysis tools in, 3–4; two perspectives on how knowledge is generated by, 1–2. See also Meta-analysis; Public management and policy scholarship

Scoping stage of meta-analysis, 21

Search profile: applying the, 55; bounding the literature search, 54–55; description of, 51–52; identifying authors, 54; identifying keywords for, 52–54; leveraging citations, 54

Search strategy: developed for the grey literature, 60–61; developed for the published literature, 55–59; sources for published and grey research, 571–581

Sears List of Subject Headings, 53

Section 8 housing program. See Moving to Opportunity (MTO)

Selection bias models: Copas method for estimation, 261–263; effect size equation used in, 259; Hedges’s method for estimation, 260–261; limits of, 263; remedying publication bias using, 259–263; selection equation used in, 259. See also Publication bias

Simmons-Harris, Zelman v., 316–317
Simulations: estimating size of
the FAT, 279; structure
used for assessing
performance of the FAT,
277–278
Social capital theory, 406–407
Social Science Citation Index
(SSCI): no articles listed
in “meta-analysis” and
“policy” topic fields in
1990; 7; number of
“meta-analysis” articles by
category in, 5;g
Social science disciplines,
2–3
Social Science Research Network
(SSRN), 61, 63
Sociological Abstracts, 61
“Spatial mismatch,” 404
Stable Unit Value Treatment
Assumption (SUVTA): description of, 172;
difference between FEMR and, 172
Stata software: cluster robust
standard errors estimated in, 199–200;
Comprehensive Meta-Analysis (CMA), 163; description of, 96;
FEMR (fixed effects meta-regression) in,
163–170; funnel plot
generated with confunnel
fishersz sterr command, 240; GEE (generalized
estimating equations) meta-regression in,
222–224; interpreting REMR results in Metareg,
178g–179g, 181–182;
interpreting results from
fixed effects regression in, 168–170; metabias
command to conduct Egger test, 252;
metafunnel command to
produce funnel plot for
effect sizes, 251; MetaWin,
163; REMR (random effects meta-regression)
in, 177–187; REMR with clustered standard errors
in, 197–200; Review Manager (RevMan), 163;
testing for publication bias in, 251–253;
trim-and-fill using metatrin fishersz sterr,
funnel command in, 257–258g; WCB (“wild
cluster bootstrap”) implemented in,
204–206; WLS (weighted least squares) in fixed
effects meta-regression, 153–154, 165–168g;
See also Metareg command
Structural equation modeling, 80
Studies: definition of, 69;
meta-analysis recommended for, 69. See also Original studies
Study research design:
experimental with random assignment, 80;
meta-analysis adapted for public management and policy, 32; multigroup
pre-post quasi-experiment, 80;
Tetrachoric correlation
coefficient, 114
Theories: Advocacy Coalition Framework (ACF), 12;
cultural theories of
poverty, 405–406; how
meta-analysis improves
the building of, 11–12;
human capital theory on
poverty, 406; poverty
deconcentration foundational, 402–408;
PSM-performance relationship study
foundational, 444–445;
public management and
policy scholarship for
building, 11–12; social
capital theory on poverty,
406–407
Think tanks reports, 60
Threats to inference: REMR
(restricted maximum
likelihood), 187–189;
REMR collinearity and micronumerity, 187–188;
REMR endogeneity, 188–189; REMR
measurement error in the
endogenous variable, 188
Total Quality Management, 355, 359
Transportation Research Board, 15
Transportation Research Record, 15
Trim-and-fill methods: funnel
plot for “trimmed and filled” effect sizes plotted
against effect size
standard errors, 258g; remedying publication
bias using, 256–258
University Microfilms
International (University of Michigan), 61
Urban Institute, 355, 363
U.S. Administration for Children
and Families, 16
U.S. Department of Education, Institute of Educational
Sciences of, 9
Subject Index

U.S. Department of Health and Human Services (HHS), 16, 55, 358
U.S. Department of Housing and Urban Development (HUD), 400, 401
U.S. Department of Justice, 16
U.S. Department of Transportation, 16
U.S. Environmental Protection Agency (EPA), 16
U.S. Food and Drug Administration, 16
U.S. Government Accountability Office (GAO), 15–16, 55
U.S. Government Printing Office, 56
U.S. housing policies: history of poverty deconcentration programs under, 399–402; moving from public housing projects to mixed-income communities, 398–399; studies on poverty deconcentration policies impact on individual outcomes, 408–438; theoretical foundations of poverty deconcentration, 402–408
U.S. housing programs: Gautreaux social experiment, 399, 400, 401; HOPE VI (Housing Opportunities for People Everywhere), 400–401; Housing Choice Vouch Program (MTO) [Section 8], 399, 400; Moving to Opportunity, 399
U.S. Office of Management and Budget, 16

V
Variables: dependent, 20, 144–145; effect sized employed as dependent, 20; focal predictor label of key independent, 17; independent, 17, 381–382, 427–429. See also Mediator variables; Moderator variables

W
Washington, DC Opportunity Scholarship Program, 317, 321
WCB (“wild cluster bootstrap”): basics of, 200–202; comparing CRVE to, 200; hypothesis tests in REMR using clustered robust standard errors and, 205f; implementing in REMR, 202–204; implementing in Stata, 204–206; performance management meta-regression estimation using, 380; PSM-performance relationship study use of, 462–464, 466–468; REMR: in Stata with clustered robust standard errors, 198f; REMR: using MOM with manual, 186f/187; REMR in Stata with clustered robust standard errors, 205f; REMR (random effects meta-regression), 172, 174, 182–184; Stata WLS (variance weighted least squares) command, 167–168f. See also Estimation
Worker Investment Act, 365
Working papers sources, 60–61
WorldCat, 56, 61

Z
Zelman v. Simmons-Harris, 316–317
Zero-Based Budgeting, 355