

# INDEX

## A

- Abadie, A., 44, 387, 393
- Abortion acceptance; correlation ratios of, 101*fig*;  
by education and religious denomination, 131*fig*;  
factor loadings before and after rotation, 253*t*–254*t*;  
multiple-item scale on religiosity and, 250–257;  
percent by religion and education, 28*t*; percentage by  
religiosity and education, 27*t*
- Academic Technology Services (UCLA), 186
- Added-variable plots, 232–234, 234*fig*
- Additive effects; definition of, 27; example of, 27–28*fig*
- Additive scaling, 247
- Adjusted  $R^2$ , 111–112
- African Americans; distribution of religiosity and educational attainment, 13*t*–14; militancy by educational attainment, 14*t*–15; militancy by religiosity among urban, 10*t*–11; militancy distribution by religiosity among urban, 8*t*–9; militancy percent by religiosity and educational attainment, 15*t*–16, 17–18*t*; *See also* Racial differences
- Age at first marriage; binomial logistic regression of, 318–327; discrete-time hazard-rate model of, 318–327; expected probabilities of, 320*fig*–322*fig*, 326*fig*; GSS (1994) data on, 319; odds ratios for model predicting likelihood of, 323*t*–324*t*
- Age differences; curvilinear relationships of income and, 140–142; evolution beliefs by religion, sex, and, 37*t*–38*t*; expected probability of marrying by sex, mother's education, and, 326*fig*; joint probability distribution of education and, 36*t*; percentage of evolution beliefs by, 34*t*; proportion of evolution beliefs standardized for education and, 39*t*; relationship between 2003 income and, 141*fig*; religiosity association with, 17; religious denomination and, 35*t*
- Aggregation; description of, 98–99; effect on correlations, 99*fig*
- Agresti, A., 294
- Alaniz, M. L., 355
- Allison, P. D., 185, 363, 376, 380
- Almond, D., 44, 385
- Altman, D. G., 183
- Aly, H. Y., 342
- AMOS (software), 396
- An American Dilemma* (Myrdal), 397
- American Sociological Association, 202
- American Sociological Review*, 2
- American Statistical Association, 202
- Ancillary parameters, 348
- Anderson, A. B., 181
- Andrews, F. M., 164
- Angrist, A., 389
- Annals of Eugenics* (journal), 93
- Annals of Human Genetics* (journal), 93
- Ansolabehere, S., 387
- Anticomunist sentiment; expected percentage from agreement with, 276*t*; goodness-of-fit statistics for log-linear models on, 275*t*; log-linear analysis of, 273–277; predicting frequency distribution of, 272–273*t*
- Approximate Bayesian bootstrap, 185
- Arithmetic transformations, 75–76
- Armed threats prevalence; effect parameters for models of, 310*t*–314; effect parameters for probit analysis, 331*t*–334; goodness-of-fit statistics for various models on, 308*t*–310; logistic regression example of, 304–314; percentage ever threatened by gun by selected variables, 306*t*–307*t*
- Ashenfelter, O., 369, 380
- Augmented component-plus-residual plots, 235*fig*
- “Available from author” archive, 404
- ## B
- Baltagi, B. H., 384
- Barkan, S. D., 400
- Barker, D.J.P., 385
- Barnes, S. H., 97
- Baseline models, 268
- Basilevsky, A., 181
- Baum, C., 390
- Baumer, E. P., 361
- Bayesian Information Criterion (*BIC*); comparing models using, 133–135, 151, 270–271; definition of, 133, 270; log-linear analysis of crossings models and, 286
- Bayesian multiple imputation; comparing casewise deletion and, 191–193*t*; description of, 182, 185–186
- Beardon, W. O., 246
- Becker, M. P., 294
- Becker, S. O., 44, 393
- Berelson, B., 44
- Berk, R. A., 182, 393
- Bernstein, I. H., 246
- Bias; omitted variable, 106, 364–380; sample-selection, 390
- Bielby, W. T., 185, 395
- Binary outcomes; FE (fixed effects) models for, 375–376; RE (random effects) model for, 377–380

- Binomial logistic regression; algebra equivalencies to use for, 330; examples of, 304–329; introduction to, 302–303; probit analysis alternative to, 302, 330–334*fig*, 361; relation to log-linear analysis, 303–304; *See also* Dummy (dichotomous) variables; Logistic regression
- Binomial logistic regression examples; age at first marriage (hazard-rate model), 318–327; appointment to *nomenklatura* position in Russia (case-control model), 327–329; predicting prevalence of armed threats, 304–314; schooling progression ratios in Japan, 314–318
- Biometrika* (journal), 93
- Bishop, Y.M.M., 266, 294
- Black, D. A., 393
- Blau, P. M., 112, 393, 395
- Blinder, A., 175
- Blinder-Oaxaca decomposition, 175
- Bollen, K. A., 367, 371, 375, 397
- Bonferroni adjustment, 231
- Bootstrapping standard errors, 238–240
- Boshuizen, H. C., 186, 190, 191
- Boskin, M. J., 361
- Brand, J. E., 44, 367, 371, 375, 393, 397
- Breen, R., 182, 342
- Breslow, N. E., 327
- Brick, J. M., 181
- Bryk, A. S., 229, 387
- Budig, M. J., 380
- Bureau for Applied Social Research, 22
- Burgess, E., 242
- Burke, P. J., 263, 273, 278, 294
- Buttenheim, A. M., 380
- C**
- Caliendo, M., 44, 393
- California Center for Population Research (CCPR) [UCLA], 404
- California city populations, 201*t*–202
- Cameron, A. C., 361
- Cameron, L., 361
- Campbell, C., 380
- Campbell, D. T., 43, 44, 98
- Cappella, J. N., 361
- Card-image records, 72
- Carmines, E. G., 243, 246
- Case-control sampling, 327
- Casewise deletion; comparing multiple imputation and, 191–193*t*; description of, 183
- Categorical dependent variables; definition of, 335; multinomial logit analysis of, 336–342
- Censored (or truncated) dependent variables; definition of, 335; tobit regression for, 353–361
- Censored prediction, 358
- Chamberlain, G., 380
- Chattopadhyay, A., 361
- Checking for errors, 404–405
- Chen, M. D., 355, 382, 392
- Chen, S., 400
- Cheng, M.-T., 185
- Chick, G., 278
- Chinese Cultural Revolution, 158, 159, 160*t*, 163*fig*
- Chinese educational attainment; quality of education, 158–164; by size of place of residence at age fourteen, 289*t*–292
- Chinese family income; comparison of OLS and FE estimates for determinants of, 374*t*; estimating/interpreting FE and RE models for, 372–375; SES characteristics by size of place of residence, 373*t*
- Chinese Health and Nutrition Survey (1994), 397
- Chinese literacy rates; graphic representation of results on, 118–120*fig*; multiple regression equations on determinants of, 113–118; survey estimation procedures on, 215–219; urban versus rural residence and, 42*t*–43
- Chinese occupational status; frequency distribution by father's occupation, 280*t*; goodness-of-fit statistics for models of intergenerational, 284*t*; RC model used to predict mobility of, 291–293
- Clark, T. G., 183
- Clogg, C. C., 294
- Clustering; design effects and, 207; strategy to offset, 209–212
- Codebook; data organization and corresponding, 68*e*; definition of, 67
- Coefficient of determination ( $R^2$ ), 111–112
- Coefficients; constraining to zero or to equality, 132; of determinants of estimated political conservatism model, 260*t*–261; expressed as deviations from grand mean, 164–166; included in model of educational attainment by race, 177*t*; metric regression, 106–107; Pearson correlation, 91–92; standardized, 107–110; testing equality of, 147–149; testing significance of individual, 107; Zeller's seemingly unrelated regression test of, 257; *See also* Regression coefficients
- Cohen, G., 393
- Cohen, J., 166, 184
- Cohen, P., 166, 184
- Collinearity reduction, 145
- Computer software. *See* Statistical package programs
- Conditional logistic regression, 361
- Conditional mean imputation, 184
- Constant Flux* (Erikson and Goldthorpe), 304
- Contingency transformations, 76
- Contrast coding, 166, 170–171
- Control variables; combining matching with statistical, 44; definition of, 12; examples of using, 12–15; experiments vs. statistical, 43–45; propensity score matching and, 44; weighted net percentage difference of, 16

- Cook's Distance measure (Cook's D), 231–232, 237
- Correlation analysis; Bayesian alternative for comparing models, 133–135; coefficient of determination ( $r^2$ ), 91, 111–112, 308–309; for determinants of literacy in China, 113–120; dummy variables and, 120–123; independent validation of, 135–136; introduction to multiple, 104–105; metric regression coefficients for, 106–107; multicollinearity, 108; process and purpose of, 91–93; standard error of estimate (root MSE), 112–113; standardized coefficients, 107–110; strategy for comparisons across groups, 124–132; testing significance of individual coefficients, 107; variance of dichotomous variables and, 110; *See also* Variable relationships
- Correlation ratios; acceptance of abortion scale, 101*t*; description of, 99–102; testing linearity using, 102
- Correlations; factors affecting size of, 94–99*fig*; included in model of educational attainment by race, 176*t*; pairwise-present, 183; regression coefficients relationship to, 94
- Covariance structure modeling, 395
- Covariate adjustment, 29; *See also* Direct standardization
- Cronbach's alpha, 244, 246*t*
- Cross-tabulations; additive and interaction effects, 26–28*fig*; direct standardization, 28–43; logic of elaboration and, 22–25*fig*; statistical controls versus experiments and, 43–45; statistical package programs used to produce, 69–70; suppressor variables, 25–26*fig*; *See also* Data analysis
- Crossings models, 285–286
- Curran, P. J., 397
- Cut points, 348
- Czech Republic foreign-language competence; effect parameters for model of determinants on, 339*t*–340*t*; multinomial logit analysis of, 337–341; *See also* *Social Stratification in Eastern Europe after 1989* (Treiman and Szelenyi)
- D**
- Data; log-linear analysis with individual-level, 277; pooled from multiple surveys, 399–400; transformation of, 72–79; understanding the properties of your, 400–401; weighting, 212–214; *See also* Missing data
- Data analysis; -do- files used in, 30, 31; -log- files used in, 30, 31; statistical package programs used for, 65–86, 294, 396; tips on using Stata commands in, 80–86; *See also* *specific technique*
- Data files; illustration of organized, 67*e*; machine readable/computer readable, 67–68; organization of, 67–70
- Data sets; card decks and card-image computer file, 70–72; codebook on organized, 68*e*; combining multiple years of GSS, 222–223*t*
- Data transformation; analyzing surveys with missing data, 78–79; arithmetic transformations, 75–76; contingency transformations, 76; description of, 72; handling missing data during, 77–78; recoding for, 73–75
- Daula, T., 355
- Davis, J. A., 6, 294
- de Graaf, P., 40, 258, 287
- Deck ID, 72
- Deff statistics (design effect), 207–209, 210*t*–211*t*, 217–219
- Dehejia, R. H., 393
- Deng, Z., 159, 387
- Dependent variables; categorical, 335, 336–342; censored (or truncated), 335, 353–361; definition of, 11; effect-proportional scaling for metric, 257–258; multinomial logit analysis of, 336–342; ordinal, 5–6, 335, 342–353; ordinal logistic regression for, 342–353; other models for analysis of limited, 361; regression analysis of, 89*fig*–91; standardization of, 94; tobit regression for, 353–361; *See also* Variables
- Descriptive statistics, 114
- Design effect (deff); description of, 207–209, 217–219; for selected statistics, 210*t*–211*t*
- Dichotomous variables; definition and examples of, 121; variance of, 110; *See also* Dummy (dichotomous) variables
- Dickinson, P., 179
- DiPrete, T. A., 388
- Direct standardization; description of, 28–29; in earlier survey research, 31; *See also* Covariate adjustment
- Direct standardization examples; belief that humans evolved from animals, 31–39*t*; level of literacy by urban vs. rural residence in China, 42*t*–43; occupational status by race in South Africa, 39–42; religiosity by militancy among urban Blacks, 29–31
- Discrete-time hazard-rate models; binomial logistic regression of, 318–327; description of, 318; -do- files. *See* Stata -do- files
- Documentation, 403–404
- Domanski, H., 278
- Downey, D. B., 104
- Dummy (dichotomous) variables; computing discrete change for, 333; contrast coding of, 166, 170–171; definition and examples of, 121; effect coding of, 166, 167–170; mean imputation with, 183; other ways of representing, 166–172; parameterization of, 271; used within regression framework, 120–123; sequential effects of, 166, 171–172; *See also* Binomial logistic regression; Dichotomous variables
- Duncan, B., 110
- Duncan, G. J., 342, 361
- Duncan, O. D., 112, 179, 294, 393, 394–395, 395, 396
- Duncan, O. D. (father), 395

## E

Earls, F., 388

Educational attainment; abortion acceptance by religious denomination and, 131*fig*; among women, effect on income of race and, 220–222; coefficient of determination ( $R^2$ ) on, 111–112; coefficients of model on U.S. adult, 223*t*; curvilinear relationship between income and, 144*fig*; effect of cultural capital on Russian, 187–193*t*; examining standardized coefficients on, 109–110; expected income by, 145*fig*; expected probability of marrying by sex, age, and mother's, 326*fig*; factors affecting racial differences in, 174–179; joint probability distribution of age and, 36*t*; linear splines used to calculate U.S. trends in, 152–158*fig*; mean years of schooling by year of birth, 155*fig*; percent accepting abortion by religion and, 28*t*; percent by religiosity adjusting for, 30*t*; percent militant by, 14*t*–15; percent militant by religiosity and, 15*t*–16, 17–18*t*; percentage distribution of religiosity by, 13*t*–14; percentage of evolution beliefs by, 34*t*; percentage of legal abortion support by religiosity and, 27*t*; proportion of evolution beliefs standardized for age, 39*t*; relation between father's years of schooling and, 90*fig*; religious denomination and, 35*fig*; by size of place of residence at age fourteen and Chinese, 289*t*–292; as socio-economic status (SES) indicator, 304; three-year moving average years of schooling by years of birth, 155*fig*; voting by race, volunteer association, and, 278*t*; years of school completed by year of birth, 154*fig*; *See also* Years of schooling

Educational transition; binomial logistic regression on models for Japanese, 314–318; effect parameters for models of Japanese, 316*t*, 317; goodness of fit statistics for models of Japanese, 315*t*–317

Effect coding, 166, 167–170

Effect parameters; binomial logistic regression, 310*t*–314; Czech Republic foreign-language competence model, 339*t*–340*t*; derivation of, 295–297; Japanese educational transition, 316*t*, 317; log-linear analysis, 271–272; for OLS model political party identification, 353, 354*t*; for ordered logit model of political party identification, 345*t*–346*t*; probit analysis of gun threat, 331*t*–334

Effect-proportional scaling, 257–258

*Eight Nation Survey of Political Attitudes* (Barnes and Kaase), 97;

Eliason, S. R., 297, 300;

Ellison, C. G., 392

Eltinge, J. L., 207

Endogeneity, 388–389

Endogenous switching regression, 391–392

England, P., 380

Entwisle, B., 388

EQS (software), 396

Erikson, R., 283, 294, 384, 403

Errors-in-variables regression, 258–261

$\eta^2$  formula, 101

“Ethnographic present,” 398

Ettner, S., 390

Evans, M.D.R., 187

Event history models, 318

Evolution beliefs; percentage by age, 34*t*; percentage by level of education, 34*t*; percentage by religion, age, and sex, 37*t*–38*t*; percentage by religious denomination, 33*t*; percentage distribution of, 31–32*t*; proportion standardized for education and age, 39*t*

Experiments; natural, 44, 386–387; statistical controls vs., 43–45

Exploratory factor analysis (factor-based scaling), 247–250

## F

Factor scores, 250

Factor-based scaling (exploratory factor analysis), 247–250

Fair, R. C., 355

FE (fixed effects) models; allowing the slopes of the X's to vary, 366; analyzing more than two time points, 367–369; for binary outcomes, 375–380; for continuous variables, 365–370; description of, 364–365; determinants of income in China example of, 372–375; fixing effects across individuals rather than over time, 369; fundamental equation of, 365–366; interactions between time-constant and time-varying variables, 367; limitations and cautions regarding, 369–370; testing effects of time-invariant variables over time, 366–367

Featherman, D. L., 112, 394

“Fetal origins” hypothesis, 44, 385–386

Fienberg, S. E., 266, 294

Fischer, C. S., 403

Fisher, R. A., 125–126

Fitted marginals notation, 265

Fitzgerald, J. M., 400

Flu pandemic (1918), 385–386

Fodor, E., 40, 112, 179

Forristal, J. D., 388

Fox, J., 108, 166, 231

Frankenberg, E., 369, 380, 388

Freese, J., 314, 334, 342, 361

Frequency of sex; alternative estimates of model of, 358*t*; GSS (2000) data on, 356–357*t*; three estimates for U.S. married women, 359*fig*; tobit regression for, 356–361

Fu, V. K., 294

## G

Gamoran, A., 392

Ganzeboom, H.B.G., 40, 188, 258, 287, 292

- Gardeazabal, J., 387  
 Gaziano, C., 204  
 Gelman, A., 133  
 Gender equality attitudes, 150–152; *See also* Sex  
 Generalized ordered logit model, 349, 350*t*–352*t*  
 Gerber, T. P., 391  
 Geronimus, A. T., 380  
 Gilbert, G. N., 294  
 GLIM (software), 294  
 Glymour\*\*, 389  
 Goldberger, A. S., 147, 353  
 Goldthorpe, J. H., 283, 294, 384, 403  
 Goodman, L. A., 265, 291, 294  
 Goodness of fit; criterion for, 91–92; for educational  
 transition in Japan models, 315*t*–317; effect of  
 Cultural Revolution on education, 160*t*; for log-linear  
 models of anticommunist sentiment, 275*t*; model  
 selection based on, 266–271; for various armed  
 threats prevalence models, 308*t*–310  
 Gould, W. W., 156, 300, 361  
 Granger\*\*, 389  
 GRE test-items, 245  
 Greenberg, D. F., 361  
 Greene, W. H., 355, 390  
 Greenwood, S. F., 399  
 Gruenewald, P. J., 355  
 Grusky, D. B., 294, 388  
 GSS (*General Social Survey*); card-image records  
 of the, 72; combining data sets for multiple years,  
 222–223*t*; description and obtaining data sets from,  
 31; on educational attainment by Blacks  
 (1990–2004), 174; factor analysis opportunities  
 using the, 250; frequency of sex data in 2000,  
 356–357*t*; household data from, 204, 205;  
 independent validation using, 135–136; making  
 cross-temporal comparisons using the, 304; occupa-  
 tion/education effect on vocabulary data in 2004,  
 166–167; questions about acceptability of abortion  
 in 2006, 100; SAMPCODE variable included by,  
 218–219, 220; sample incomes used in 2006, 96;  
 stratified sample strategy used by, 212; subset of  
 respondents excluded in, 150; survey estimation  
 using the, 215; treatment of dummy variables using  
 data from, 120–121; weighting procedure used by,  
 212; *See also* National Opinion Research Center  
 (NORC)  
 Guilkey, D. K., 400  
 Gupta, S., 392  
 Guseva, A., 392
- H**
- Hagan, J., 391  
 Halaby, C. N., 44, 380, 393  
 Haller, A. O., 395  
 Hamerle, A., 380  
 Harding, D., 44  
 Hardy, M. A., 166, 391  
 Hauser, R. M., 112, 133, 202, 283, 294, 395, 403  
 Hausman, J., 342, 371  
 Haynes, S. E., 342  
 Heckman correction procedure, 391  
 Heckman, J. J., 391, 403  
 Heckman selection model, 391  
 Henderson, G., 397  
 Hendrickx, J., 274, 295  
 Herrnstein, R. J., 403  
 High leverage points, 91  
*High School and Beyond* study, 387–388  
 Hildebrand, D. K., 6  
 Hodge, R. W., 396  
 Hoffman, S. D., 342, 361  
 Hofmeyr, J. F., 392  
 Holding constant variables, 45  
 Holland, P. W., 266, 294, 389  
 Hollerith, H., 70  
 Hosmer, D. W., 304, 361  
 Hotdeck imputation, 185  
 Hotz, V. J., 380  
 Household random samples, 203–205  
 Hout, M., 288, 294, 403  
 Hsiao, C., 384  
 Huang, M.-H., 403  
 Hum, D.P.J., 181  
 Human Relations Area Files (HRAF), 399
- I**
- IBM card data set, 70–72  
 IBM (International Business Machine Company), 70  
 IBM punch card, 71*fig*, 72  
 Ichino, A., 44, 393  
 IIA (independence of irrelevant alternatives),  
 341–342  
 Income differences; curvilinear relationship between  
 education and, 144*fig*; curvilinear relationships  
 of age and, 140–142; effect on education and race  
 among women on, 220–222; relationship between  
 2003 age and, 141*fig*; semilog transformations of,  
 142–146; years of school and expected, 145*fig*  
 Independent (or predictor) variables; definition of, 11;  
 suppressor effect of two or more, 21  
 Independent validation, 135–136  
 Influence statistics, 231–232  
 Institute for Social Research, 208  
 Instrumental variable (IV) regression, 389–390  
 Interaction effects; definition of, 26; examples of,  
 26–27*t*  
 International Socioeconomic Index of Occupations  
 (ISEI), 40, 258, 288  
 Interval variables; definition of, 6; ordinal variables  
 treated as, 6

Intervening variables; description of, 22, 24; examples of, 24*fig*–25*fig*

**J**

Jacobs, D., 342, 355

Jahoda, M., 22

Japanese educational transition; binomial logistic regression on models of, 314–318; effect parameters for models of, 316*t*, 317; goodness of fit statistics for models of, 315*t*–317

Jasso, G., 75

Johnes, G., 361

Jones, F. L., 173, 179

Jonsson, J. O., 342

Jöreskog, K. G., 396

**K**

Kaase, M., 97

Kahn, J. R., 75

Kalton, G., 181

Kaufman, R. L., 179, 272

Keating, N. L., 393

Keeley, M., 355

Kelley, J., 173, 179

Kelly, J. M., 400

Kelly, N. J., 400

Kenney, D. A., 98

Kim, J.-O., 109

King, G., 297

Kish, L., 204, 208, 209

Kish table, 204

Kitagawa, E., 175

Knoke, D., 263, 273, 277, 278, 294

Knook, D. L., 186, 190, 191

Korenman, S., 380

Kraus, V., 179

Krueger, A., 369, 380

**L**

$L^2$  (likelihood ratio  $\chi^2$ ); definition of, 267; goodness of fit testing using, 266–271; likelihood function of, 297–298; maximum likelihood estimation, 297–300, 302; *See also* Maximum likelihood estimation

Lab notebook record, 405

Lassen, D. D., 387

Lazarsfeld, P. F., 22, 26

Least squares criterion, 91

Least-squares regression lines, 92*fig*

Lee, H.-K., 146, 179

Lee, J. Z., 380

Lemeshow, S., 304, 361

Leverage points; description of, 94–96; effect of single deviant high, 95*fig*

Levin, S. G., 355

Lewin, A., 39

Li, Q., 42

Liang, Z., 361, 382

Lichter, D., 392

Likelihood function. *See*  $L^2$  (likelihood ratio  $\chi^2$ )

Linear prediction, 358

Linear splines; alternative specifications of functions, 156; demonstration that inclusion of linear term does not affect predicted values, 153*t*; description of, 152; U.S. trends in educational attainment example of, 152–158*fig*

Linear-by-linear association models, 287–288

LISREL (Linear Structural Relations), 396

Listwise deletion, 183

Literacy rates. *See* Chinese literacy rates

Little, R.J.A., 181, 184, 185

Log Multiplicative (or RC) model, 291–293

-log- files. *See* Stata -log- files

Log-linear analysis; of anticommunist sentiment distribution, 273–277; binomial logistic regression relationship to, 303–304; effect parameters testing, 271–272, 295–297; with individual-level data, 277; interaction vs. association terminology in, 264; introduction to, 264–265; parsimonious models and, 277–294; with polytomous variables, 277; software available for, 294–295; using Stata for, 272–273

Logic of elaboration; description of, 22; intervening variables, 24*fig*–25*fig*; spurious association, 22–23*fig*

Logistic regression, 302; *See also* Binomial logistic regression

Logit analysis, 304

Long, J. S., 297, 304, 314, 334, 342, 348, 355, 361, 392, 397

Lovell, P. A., 355

“Low R-squares,” 112

Lu, B., 393

Lu, Y., 39, 104, 187, 377, 380, 387

Lucas, R. E., 392

Luijckx, R., 292

Lundquist, J. H., 393

**M**

McFadden, D., 341, 342

Machine-readable data set, 4

McIvery, J., 246

McKeever, M., 40, 112, 179

McLaughlin, D., 392

Mail surveys, 198–199

Male disability, 385–386*fig*

Manning, W. D., 392

Manski, C. F., 391, 392

MAR (missing at random) data, 182

Maralani, V., 104, 187

Mare, R. D., 157, 278, 294, 314, 342, 355, 391, 392

Marriage age. *See* Age at first marriage

Martin, B., 243

- Marx, G., 2, 3, 6
- Marx, K., 93
- Mason, W. M., 204, 369, 380, 388
- Maximum likelihood estimation, 297–300, 302
- MCAR (missing completely at random) data, 182, 184
- Mean substitution, 184–185
- Means; decomposing the difference between two, 172–179; decomposition of difference in years of school by race, 178*t*; expressing coefficients as deviations from grand, 164–166; included in model of educational attainment by race, 176*t*; ISEI by level of education, 258, 259*t*
- Meff statistics, 208, 217
- Metric regression coefficients, 106–107
- Militancy; control variables for, 12; decision regarding search for additional variables on, 16–17; direction to percentage the table on, 11–12; distribution by religiosity among urban Negroes, 8*t*–9; Marx's construction of, 6–7; percent by religiosity among urban Negroes, 10*t*–11; percent militant by educational attainment, 14*t*–15; percent militant by religiosity and educational attainment, 15*t*–16, 17–18*t*; percentage distribution of religiosity by educational attainment, 13*t*–14; *See also* "Religion: opiate or inspiration of civil rights militancy among Negroes?" (Marx)
- Miller, G., 402
- Mincer, J., 142
- Missing data; analyzing surveys with, 78–79; data transformation and, 77–78; defining, 75, 77; MAR (missing at random) type of, 182; MCAR (missing completely at random) type of, 182, 184; MNAR (missing not at random) type of, 182; NI (nonignorable) type of, 182; outliers and, 75; problem of, 182; *See also* Data
- Missing data strategies; casewise deletion, 183; full Bayesian multiple imputation, 182, 185–186; hotdeck imputation, 185; mean substitution, 184–185; weighted casewise deletion, 183–184
- Missing values, 79
- Mixed models, 361
- MNAR (missing not at random) data, 182
- Mobility effects, 147
- Model selection; anticommunist sentiment example of, 272–273; effect parameters factor in, 271–277, 295–297; goodness of fit basis for, 266–271; theory-based, 271–277
- Models; acceptance of abortion, 127*t*–131*fig*; armed threats prevalence, 304–314; baseline, 268; Bayesian Information Criterion (BIC) for comparing, 133–135, 151, 270–271, 286; coefficients of educational attainment of adults, 223*t*; conditional logistic regression, 361; description and components of, 7; determinants of Chinese characters identified on ten-item test, 116*t*; determinants of estimated political conservatism, 260*t*–261; determinants of income of U.S. women, 221*t*–222; determinants of strength of occupation-education connection, 236*t*–237; discrete-time hazard-rate, 318–327; estimating cultural capital effect on education attainment in Russia, 187–193*t*; expected percentage from anticommunist sentiment, 276*t*; generalized ordered logit model, 349, 350*t*–351*t*; goodness-of-fit statistics for log-linear anticommunist sentiments, 275*t*; Heckman selection, 391; L<sup>2</sup> (likelihood ratio  $\chi^2$ ) of, 266–271, 297–300; linear splines, 152–158*fig*; mixed, 361; nested logistic regression, 361; parsimonious, 277–294; poisson regression, 361; predicting abortion acceptance, 256*t*; predicting knowledge of Chinese characters by year of birth, 161*t*; probit analysis, 302, 330–334, 361; saturated, 130, 265–266; SEM (structural equation modeling), 393–397; of technology, political integration, stratification level relationships, 269*t*–271; tobit regression, 355–361; tolerance of atheists coefficients, 165*t*–166; vocabulary knowledge, 169*t*–170*t*
- Monette, G., 108
- Morgan, S. L., 389, 393
- Moving average, 325
- MPlus (software), 396
- Mueller, C. W., 109
- Müller, W., 235
- Mullin, C. H., 380
- Multicollinearity, 108
- Multilevel analysis importance, 387–388
- Multinomial logit analysis; description of, 336–337; foreign-language competence in Czech Republic example of, 337–341; IIA (independence of irrelevant alternatives) in, 341–342
- Multiple classification analysis, 164–166
- Multiple imputation; Bayesian method of, 182, 185–186; comparing casewise deletion and, 191–193*t*
- Multiple-item scale construction; additive scaling, 247; factor-based scaling, 247–250; from incomplete information, 249
- Multiple-item scales; construction methods for creating, 246–258; description and function of, 242; effect-proportional scaling, 257–258; errors-in-variables regression and, 258–261; Marx's questionnaire constructing, 6–7; reliability through, 243–245; religiosity and abortion attitudes example of, 250–257; validity of measures through, 242–243; values of Cronbach's alpha for, 244, 246*t*; Zeller's seemingly unrelated regression procedure for, 257
- Multiple-punched columns, 71
- Multiple-regression equations; Bayesian Information Criterion (BIC) for comparing models, 133–135, 151; coefficient of determination ( $R^2$ ), 111–112; for comparisons across groups, 124–131*fig*; description

- Multiple-regression equations (*continued*) of, 105;  
 for determinants of literacy in China, 113–120*fig*;  
 dummy variables and, 114, 120–123; independent  
 validation of, 135–136; metric regression coeffi-  
 cients, 106–107; multicollinearity, 108; reexpressing  
 variables as deviations from the means, 131–132;  
 standard error of estimate (root MSE), 112–113;  
 standardized coefficients, 107–110; testing additional  
 hypotheses by constraining coefficients to zero or  
 to equality, 132; testing significance of individual  
 coefficients, 107; three-dimensional representation  
 of, 105*fig*
- Multiple-regression techniques; decomposing the  
 difference between two means, 172–179; expressing  
 coefficients as deviations from grand mean (multiple  
 classification analysis), 164–166; linear splines,  
 152–164; nonlinear transformations, 140–147; other  
 ways of representing dummy variables, 166–172;  
 testing assumption of linearity, 149–152; testing  
 equality of coefficients, 147–149
- Multistage probability samples; description of, 196,  
 197–202; GSS (1994) use of, 220
- Murdock, G. P., 268, 398–399
- Murray, C., 403
- Myrdal, G., 398
- N**
- National Institutes of Health (NIH), 401
- National Opinion Research Center (NORC), 401; *See*  
*also* GSS (*General Social Survey*)
- National Science Foundation (NSF), 401
- Natural experiments, 44, 386–387
- Natural log, 144
- Nee, V., 385
- Nested logistic regression, 361
- Net regression coefficients, 106
- Netemeyer, R. G., 246
- Newton, P. J., 393
- NI (nonignorable) missing data, 182
- Nobles, J., 380
- Nomenclatura* memberships (Russia); binomial logistic  
 regression analysis of, 327–329; coefficients for  
 model of determinants of, 328*t*
- Nominal variables, 4
- Nonlinear transformations; curvilinear relationships:  
 age and income, 140–142; description of, 140; mobil-  
 ity effects, 147; semilog transformations: income,  
 142–146
- Nonresponse sources, 207
- Nord, R., 355
- Nordholt, E. S., 181
- Notes on Social Measurement* (Duncan), 395
- Nuisance effects, 214
- Nunnally, J., 246
- O**
- Oaxaca decomposition, 175
- Oaxaca, R., 175
- O'Brien, R. M., 355
- Occupational status; frequency distribution by  
 father's, 280*t*; goodness-of-fit statistics for models  
 of intergenerational, 284*t*; by race in South Africa,  
 39–42
- Odds ratios; antilogs of the *bs* interpreted as contribu-  
 tions to, 311; constructing, 348; for predicting likeli-  
 hood of age at first marriage, 323*t*–324*t*;  $\tau$ s defined  
 as functions of, 264
- OLS (ordinary least-squares) regression; comparing FE  
 estimates for Chinese family income determinants  
 with, 374*t*; description of, 90; to determine best-fit-  
 ting line, 91; errors-in-variables regression extension  
 of, 258–261; limitations of, 370; linear relationship  
 between two variables using, 92*fig*; misleading  
 results of, 319; ordinal logistic regression alterna-  
 tive to, 353; regression diagnostics of underlying  
 assumptions of, 225–240; relation between years of  
 schooling and father's years of school, 90*fig*
- Omitted variable bias; description of, 106, 364–365;  
 fixed effects (FE) modeling for binary outcomes,  
 375–376, 377–380; fixed effects (FE) modeling  
 for coping with (continuous outcomes), 364–370,  
 372–375; handling continuous variables of income  
 in China, 372–375; random effects (RE) modeling  
 for coping with (binary outcomes), 377–380; random  
 effects (RE) modeling for coping with (continuous  
 outcomes), 365, 370–375
- Open-ended questions, 3
- Ordinal dependent variables; definition of, 5–6, 335;  
 ordinal logistic regression for, 342–353; treated as  
 interval variables, 6
- Ordinal logistic regression; comparisons to other  
 estimating procedures, 348–353; constructing odds  
 ratios, 348; converting logits to  $Y^*$ -standardized  
 form, 347; description of, 342–343; getting predicted  
 percentages, 348; OLS model as alternative to, 353;  
 political party identification example of, 343–353
- Ordinal logit equation, 342
- Oster, E., 387
- Outliers; description and effect of, 94–96; missing  
 values and, 75; regression diagnostics and, 231
- P**
- Pairwise-present correlations, 183
- Park, H., 294
- Parker, P., 391
- Parsimonious models; crossings, 285–286; extensions  
 of, 293–294; linear-by-linear association, 287–288;  
 log-linear analysis of, 277–281; quasi-independence,  
 283–284*t*; quasi-symmetry, 285; row-effects (and

- column-effects), 288–293; topological or levels, 281–283; uniform association, 286–287
- Partial-regression leverage plots, 232
- Partial-regression plots, 232
- “Passively imputed” variables, 191
- Path analysis, 394–395
- Paul, C., 181, 183, 185
- Pearson correlation coefficient, 91–92
- Pearson, K., 93
- Pearson’s  $r$ ; computational formula for, 93; origins of, 93; *See also*  $R^2$  (coefficient of determination)
- Petersen, T., 334
- Peterson, R., 391
- Pierce, G. L., 278
- Pisati, M., 294, 295
- Poisson regression, 361
- Polachek, S., 142
- Political conservatism estimates, 260*t*–261
- Political party identification; effect parameters for OLS model of, 353, 354*t*; effect parameters for ordered logit model of, 345*t*–346*t*; generalized ordered logit model of, 349, 350*t*–352*t*; ordinal logistic regression of, 343–353
- Population Association of America, 202
- Population register samples, 203
- Population Working Paper archive, 404
- Population/population subgroup issues, 383–386
- Portes, A., 394
- Powers, D. A., 263, 285, 294, 297, 300, 304, 334, 342, 361, 392
- Powers, E. T., 400
- PPS (probability proportional to size) sampling, 200
- predictor variables. *See* independent (or predictor) variables
- Principal factor analysis with iterations, 248
- Probability samples; case-control sampling, 327; design effects of, 207–209; downweighting sample size in Stata, 219; household, 203–205; importance of, 397–400; multistage, 196, 197–202; population register, 203; quota, 206; random walk, 206; simple random samples, 196–197; stratified, 196, 206–207; stratifying to offset effect of clustering, 209–223*t*; superior sampling procedure for, 205–206; weighting, 212–214
- Probit analysis; effect parameters for gun threat, 331*t*–334; introduction to, 330–334*fig*; as logistic regression alternative, 302, 361; marginal effect of, 331–333; probabilities associated with values of coefficients of, 334*fig*; Stata commands used to create model for, 334
- Professional practices; conducting sensitivity analysis, 402–403; documenting your work, 403–404; doing a last check for errors, 404–405; exploring alternatives to your a priori hypotheses, 402; understanding the properties of your data, 400–401; *See also* Research design issues
- Progression ratios, 314
- Propensity score matching, description of, 44, 392–393
- Proportional odds assumption, 348–349
- Prouteau, L., 392
- Provost, C., 268, 398, 399
- Pseudo  $R^2$ , 308–309
- Pseudo-log likelihood, 308
- PSUs (primary sampling units), 200
- ## Q
- Quality of Employment Survey*, 403
- Quasi-independence models, 283–284*t*
- Quasi-symmetry models, 285
- Qvester, A., 355
- Questionnaires; Marx’s construction of militancy concept using, 6–7; nonresponse to, 207; open-ended questions used in, 3; pooling data from multiple, 399–400; probability sampling for, 35, 196–224; sources of nonresponse in, 207; *See also* Survey estimation procedures; Surveys
- Quota samples, 206
- ## R
- $r$ ; computational formula for, 93; formula for calculating, 91; origins of, 93
- $R^2$  (coefficient of determination); formula for computing from correlations, 111
- Racial differences; armed threats prevalence and, 304–314; factors affecting education attainment by, 174–179; South African occupational groups of males by, 41*t*; South African occupational status by, 39–42; tips on studying, 175; voting by education, volunteer association, and, 278*t*; women’s income by education and, 220–222; *See also* African Americans; South African Blacks
- Radelet, M. L., 278
- Raftery, A. E., 133, 317
- Ragin, C., 355
- Random walk samples, 206
- Rasler, K., 361
- Ratio variables, 6
- Raudenbush, S. W., 229, 387, 388
- Raw (or metric) regression coefficients, 106–107
- Ray, S. C., 182
- RC (or Log Multiplicative) model, 291–293
- RE (random effects) models; for binary outcomes, 377–380; for continuous variables, 370–372; determinants of income in China example of, 372–375
- Recoding variables, 73–75
- Reducing excessive collinearity, 145

- Regression coefficients; Bayesian alternative for comparing models and, 133–135; constraining coefficients to zero or to equality, 132; correlation relationship to, 94; dichotomous (dummy) variables used in, 110, 120–123; factors affecting the size of, 94–99*fig*; independent validation of, 135–136; metric, 106–107; multicollinearity and, 108; multiple-regression equations, 105*fig*; standardized, 107–110; strategy for comparisons across groups and, 124–132; testing significance of difference between, 129; testing significance of individual, 107; *See also* Coefficients
- Regression diagnostics; bootstrapping and standard errors, 238–240; definition of, 227; four scatter plot illustrating problems requiring, 225–228*fig*; robust regression estimates, 237*fig*–238; societal differences in status attainment example of, 228–237
- “Regression toward the mean,” 97–98
- Reliability; definition of, 243; multiple-item scales to enhance, 243–245; ways to assess, 244
- “Religion: opiate or inspiration of civil rights militancy among Negroes?” (Marx), 2–4; *See also* Militancy
- Religiosity; age association with, 17; correlating militancy relationship to, 10*t*–11, 13*t*–14, 15*t*–16, 17–18*t*; by militancy among urban Blacks, 29–31; multi-item scale on abortion acceptance and, 250–257; percent accepting abortion by education and, 28*t*; percentage of legal abortion support by education and, 27*t*
- Religious denomination; abortion acceptance by education and, 131*fig*; age differences and, 35*t*; educational attainment and, 35*fig*; evolution beliefs by, 33*t*; evolution beliefs by age, sex, and, 37*t*–38*t*
- Relles, D. A., 182
- Research design issues; comparisons, 382–388; endogeneity, 388–389; endogenous switching regression, 391–392; Heckman selection model, 391; instrumental variables regression, 389–390; multilevel analysis, 387–388; natural experiments, 386–387; population subgroups, populations, and historical periods, 382–386; propensity score matching, 392–393; sample-selection bias, 390; structural equation modeling (SEM), 393–397
- Residual-versus-fitted plots, 233–234*fig*
- Response category, 4
- Ribar, D. C., 392, 400
- Roberts, J. M., Jr., 278
- Robust regression, 237*fig*–238
- Rona-Tas, A., 392
- Roncek, D. W., 355
- Ronning, G., 380
- Roos, P. A., 179, 383, 403
- Root MSE (standard error of estimate), 112–113
- Rosen, H., 355
- Rosen, S., 392
- Rosenbaum, P. R., 44, 392
- Ross, H. L., 44
- Rossi, A., 27
- Rossi, P., 401
- Rotated factor matrix, 248
- Row-and-column-effects models; log-linear analysis of, 288–290; Row-and-Column-Effects Model I version of, 290–291; Row-and-Column-Effects Model II (RC or Log-Multiplicative) version of, 291–293
- Royston, P., 185, 186
- Rubin, D. B., 44, 133, 182, 185, 389, 392
- Rubin’s rules, 185
- Russian educational attainment, 187–193*t*
- Russian *nomenklatura* membership; binomial logistic regression analysis of, 327–329; coefficients for model of determinants of, 328*t*
- ## S
- Sakamoto, A., 392
- Saltzman, G. M., 355
- SAMP CODE variable, 218–219, 220
- Sample-selection bias, 390
- Samples. *See* Probability samples
- Sampling frame, 202
- Sampson, R. J., 388
- SAS; data file organization in, 67–70; description of, 66–67
- SAT test-items, 245
- Saturated models; description of, 130, 265–266; interaction parameters for, 282*t*
- Sayrs, L. W., 384
- Scale construction. *See* Multiple-item scale construction
- Schafer, J. L., 185
- Schenker, N., 185
- Schervish, P. G., 272
- Scholz, J. K., 380
- Schwartz, C. R., 278
- Scribney, W., 300
- SEM (structural equation modeling), 393–397
- Semilog transformations, 142–146
- Sensitivity analysis, 402–403
- Sequential effects, 166, 171–172
- Sewell, W. H., 395
- Sex; evolution beliefs by age, religion, and, 37*t*–38*t*; expected probability of marrying by age, mother’s education, and, 326*fig*; frequency distribution of graduate course program by, 265*t*; frequency of sex by marital status and, 360*fig*–361; South African occupational groups by race and, 41*t*; *See also* Gender equality attitudes
- Sex (frequency of); alternative estimates of model of, 358*t*; expected by gender and marital status,

- 360fig–361; GSS (2000) data on, 356–357t; three estimates for U.S. married women, 359fig; tobit regression for, 356–361
- Sharma, S., 246
- Shavit, Y., 234
- Shields, M. P., 342
- Simple random samples, 196–197
- Skaggs, S., 342
- Sloan, J. H., 44
- Smith, D. A., 355
- Smith, H. L., 44, 392
- Smith, J. A., 393
- Smith, P. L., 156
- Smith, T. W., 205
- Smits, J., 294
- Smock, P. J., 392
- Smoothing distributions, 315
- Simple selection bias, 182
- Snyder, J. M., Jr., 387
- Sobel, M. E., 294
- Social Sciences Research Council, 399
- Social Stratification in Eastern Europe after 1989* (Treiman and Szelenyi), 327, 337; *See also* Czech Republic foreign-language competence
- Socio-economic status (SES); of Chinese adults by size of place of residence, 373t; creating a scale for, 247; education as indicator of, 304
- Sociological Abstracts* (journal), 295
- Sociological Methodology* (journal), 133
- Sociological Methods and Research* (journal), 133
- Software. *See* Statistical package programs
- Soopramanien, D., 361
- Sorokin, P. A., 149
- Sousa-Poza, A., 392
- South African Blacks; binary outcome of effect of migration on school enrollment among, 377–380; occupational status by race, 39–42; OLS and FE estimates for effect of migration on school enrollment, 379t; *See also* Racial differences
- South, S. J., 361
- Spearman rank order correlation, 6
- Specification error, 106
- Specifications, 26
- SPSS; data file organization in, 67–70; origins and development of, 66
- SPSS-X, 66
- Spurious associations, 22–23fig
- Sribney, W. M., 207
- Standard deviations; calculating, 94; included in model of educational attainment by race, 176t
- Standard error of estimate (root MSE), 112–113
- Standard errors, 238–240
- Standardized coefficients, 107–110
- Standardized variables, 94
- Stanley, J. C., 43
- “Started logs,” 143
- Stata; commands to create probit model in, 334; for comparing goodness-of-fit of regression models, 125; converting household samples to person samples in, 205; cross-tabulation using, 69–70; data file organization in, 67–70; decomposition in, 175; description of, 67; documenting your work using, 403–404; dummy variable parameterization in, 271; estimating generalized ordered logit models with, 349; frequency distributions command in, 401; getting *p*-values via, 125; getting predicted percentages, 348; Heckman selection model command, 391; how to downweight sample size in, 219; incorporating side computations using, 405; IV estimation command in, 390; log-linear analysis using, 272–273; “moving average” function in, 325; multiple-imputation procedures written for, 186; particularly useful commands in, 84–86; survey estimation procedures in, 207, 214–215, 216–217; time-series data features in, 384; tips on doing analysis using, 80–84; weighting data in, 213; *See also* Statistical package programs
- Stata -do- files; binomial logistic regression analysis using, 319–320; calculating mean difference using, 42; definition of, 30; on evolution beliefs, 31–32t; on occupational status by race in South Africa, 39–42; tips on using, 80–84
- Stata -log- files; definition of, 30; on evolution beliefs, 31–32t; on occupational status by race in South Africa, 39–42
- Statistical controls vs. experiments, 43–45
- Statistical package programs; AMOS (software), 396; command syntax differences of, 66; description of, 66; EQS, 396; GLIM, 294; historical development of, 66–67; how data files are organized using, 67e–72; LISREL (Linear Structural Relations), 396; MPlus, 396; transforming data using, 72–79; *See also* Stata
- Status attainment regression diagnostics case; added-variable plots, 232–234; background information on, 229–230; leverage, outliers, and influence statistics used in, 231–232; plots for assessing influence, 232fig, 233fig; preliminaries of, 230; residual-versus-fitted plots and formal tests for patterns in the data, 233–237
- Steele, C., 98
- Steiger, J., 396
- Stephan, P. E., 355
- Stewart, C., III, 387
- Stoltzenberg, R., 147, 182
- Stone, R. A., 393
- Stouffer, S. A., 6
- Stratification levels; Blau and Duncan’s basic model of, 393–394fig; distribution by political

- integration/technology level, 268*t*; models of relationship between technology, political integration, and, 269*t*–271; political integration, level of technology, and expected, 272*t*
- Stratified probability samples; construction of Chinese, 212; description of, 196, 206–207
- Stratifying samples, 209–212
- Studentized residual, 231
- Sudman, S., 197
- Superpopulation concept, 267, 398–400
- Suppressor effect, 21
- Suppressor variables, 25–26*fig*
- Survey of Economic Opportunity and Achievement in South Africa* (Treiman, Lewin, and Lu), 39
- Survey estimation procedures; alternative to, 219; on Chinese literacy rates, 215–219; Stata, 207, 214–215, 216–217; *See also* Questionnaires
- Survey Sampling* (Kish), 208
- Surveys; mail, 199; multistage probability samples, 196, 197–202; simple random samples for, 196–197; stratified probability samples, 196, 202–207; telephone, 198; web, 199; *See also* Questionnaires
- Szelényi, I., 327, 337
- T**
- Tavits, M., 400
- Telephone surveys, 198
- Terrell, K., 257
- Theory; importance of using, 45; model selection and role of, 271–277
- Theory-based model selection; description of, 271; effect parameters testing as part of, 271–272, 295–297
- Thomas, D., 388
- Tienda, M., 392
- Time-series procedures, 384
- Tobin, J., 353, 354
- Tobit model; description of, 355–356; frequency of sex example of, 356–361
- Tolerance of atheists coefficients, 165*t*
- Tomaskovic-Devey\*\*, 342
- “Too many degrees of freedom” problem, 385
- Topological (or levels) models, 281–283
- Treiman, D. J., 39, 40, 42, 112, 113, 146, 147, 158, 159, 179, 185, 187, 188, 202, 204, 208, 229, 234, 235, 257, 258, 287, 292, 314, 327, 328, 337, 377, 380, 383, 385, 387, 388, 390, 402
- Trend analysis, 149–152
- Treno, A. J., 355
- Trimming the regression equation, 107
- Trivedi, P. K., 361
- Truncated variables. *See* Censored (or truncated) dependent variables
- Truncation; correlations reduced by, 97*fig*; description of, 96–97; “real data” example of effect of, 97
- Tsai, S.-L., 395
- Tukey, J. W., 143
- U**
- Udry, J. R., 75
- Uniform association models, 286–287
- Upton, G.J.G., 294
- U.S. Census Bureau, 184, 185, 202
- U.S. Census pretest (1970), 78
- U.S. panel studies, 368–369
- V**
- Validity; balancing sampling with, 35; definition of, 242; multiple-item scales to measure, 242–243
- Value labels, 69
- Van Buuren, S., 186, 190, 191
- Variable labels, 69
- Variable names, 69
- Variable relationships; additive and interaction effects, 26–28; between standardized and unstandardized, 94; correlation ratios of, 99–102; direct standardization for establishing, 28–43; linear, 92*fig*; logic of elaboration, 22–25; regression analysis of, 89*fig*–91; spurious associations, 22–23*fig*; suppressor effects, 21; zero-order association, 24, 26*fig*; *See also* Correlation analysis
- Variables; categorical, 335; control, 12–15, 16, 43–45; definition of, 4; descriptive statistics for, 114; dichotomous, 110, 121; dummy, 120–123, 166–172, 183, 271; holding constant, 45; interval, 6; intervening, 22, 24*fig*–25*fig*; nominal, 4; ordinal, 5–6, 335, 342–353; “passively imputed,” 191; ratio, 6; recoding, 73–75; SAMPCODE, 218–219, 220; standardizing, 94; “started logs,” 143; suppressor, 25–26*fig*; truncated (or censored) dependent, 335; unstandardized, 94; variance of dichotomous, 110; *See also* Dependent variables
- Varimax rotation, 248
- Vermunt, J., 294
- Vocabulary knowledge; coefficients for model of determinants of, 169*t*–170*t*; contrast coding used for, 166, 170–171; design matrices for coding categorical variables of, 168*t*; effect coding used for, 166, 167–170; GSS (2004) data on, 166–167; sequential coefficients used for, 166, 171–172
- von Bortkewitsch\*\*, 361
- Voting determinants, 278*t*
- W**
- Wahba, S., 393
- Wald tests, 309–310

- Walder, A. G., 42, 385  
Walton, A. G., 355  
Weakliem, D. L., 135  
Web surveys, 199  
Weighted casewise deletion, 183–184  
Weighting data, 212–214  
Weitoff, G. R., 361  
Weldon, W.F.R., 93  
White, M. J., 361  
Willis, R. J., 392  
Wilson, F. F., 392  
Winsborough, H. H., 179  
Winship, C., 135, 342, 389, 391, 392, 393  
Wise, D. A., 391  
Witte, A., 355  
Wolff, F.-C., 392  
Wood, C. H., 355  
Wooldridge, J. M., 334, 363, 370, 380, 384, 390  
Wright, E. O., 243  
Wright, S., 396  
Wu, X., 287, 292, 390
- X**  
Xiao, M., 380  
Xie, Y., 285, 294, 263, 297, 300, 304,  
334, 342, 361
- Y**  
Yamaguchi, K., 294, 314; Yanovitzky, I., 361;  
Years of schooling. *See* Educational  
attainment  
Yip, K.-B., 229, 234, 235, 388
- Z**  
Zatz, M. S., 391  
Zeisel, H., 22, 26, 27  
Zellner, R. A., 243  
Zellner's seemingly unrelated regression  
procedure, 257  
Zero-order association; definition of, 24; suppressor  
variable effect on, 26*fig*  
Zhang, J., 342  
Zone punches, 71









