CompMethods2003

When a student has passed a comprehensive examination, the Department certifies that (s)he has up-to-date knowledge of a given field in Sociology. To prepare for any comprehensive examination it is advisable to gain experience by taking a graduate course and working as a research assistant in the field: working as a teaching assistant can also help, as may becoming a student member of ASA sections or ISA research committees. Students should be aware of the major US and international journals in the field and should consult recent issues of serials such as the *Annual Review of Sociology*.

## 1. Classic

Agar, Michael H. *The Professional Stranger: An informal introduction to ethnography*. Academic Press. Second Edition.

Bishop, Yvonne, Stephen Fienberg and Paul Holland. *Discrete Multivariate Analysis*. The MIT Press. 1975.

Campbell, Donald T. and Julian C. Stanley. *Experimental and Quasi-Experimental Designs for Research* Chicago : Rand McNally. 1963. Q 175 C23 1972 ROBA Combs, Clyde. *A Theory of Data*. Wiley. 1964.

Fischer, David H. *Historians' Fallacies: Towards a Logic of Historical Thought*. Harper Torchbooks. 1992.

Lakatos, Imre, and Alan Musgrave. (Eds.) *Criticism and the Growth of Knowledge*. Cambridge University Press. 1970. Q 175 I514 SIG SAM

Merton, Robert K. 1957. "The bearing of sociological theory on empirical research" and "The bearing of empirical research on sociological theory." Chapters 2 and 3 in Robert K. Merton. *Social Theory and Social Structure*. New York: Free Press.

Rosenberg, Morris. *The Logic of Survey Analysis*. New York: Free Press. 1968. Stinchcombe, Arthur L., *Constructing Social Theories*. 1968. HM 24 S76. ROBA and SIG SAM.

Sudman, S. *Applied Sampling*. New York: Academic Press, Inc. 1976. HN 29 S688 1976 ROBA

Sudman, S. and N. M. Bradburn. *Asking Questions*. San Francisco: Jossey-Bass. 1982. Tilly, Charles. *As Sociology Meets History*. New York : Academic Press. 1992. HN 13 T54 ROBA

2. The Causality Question

Baron, R. and David Kenny. 1986. The moderator-mediator variable distinction in socialpsychological research. *Journal of Personality and Social Psychology*. 51 (6): 1173-1182.

Blalock, H. M., Jr. 1991 "Are there any Constructive Alternatives to Causal Modeling?" *Sociological Methodology*, 21:325-336. Peter V. Marsden (Ed). (This is part of a debate between David A. Freedman and others). HM 24 S55 ROBA

Glenn, Norvall D., 1989. "What We Know and What We Say We Know: Discrepancies Between Warranted and Unwarranted Conclusions". In H. Eulau (Ed.) *Crossroads of* 

*Social Science*. New York: Agathon Press. Chap. 4. See also, *ICPSR Bulletin*, Sept., 1989: 1-2.

May, R. M. "Simple Mathematical Models with Very Complicated Dynamics". *Nature* vol. 261, no. 5560: 459-67.

Mooney Marini, M. and B. Singer. 1988 "Causality in the Social Sciences." *Sociological Methodology*, 347-409.

Rosenbaum, Paul R. *Observational Studies*. Springer Verlag. 1995. Sci Med Lib. QA 279 R67 195X.

3. Structural Equations Modeling (AMOS and LISREL) Check out the journal *Structural Equations Modeling*.

Bollen, Ken. A. Structural Equations with Latent Variables. Wiley. 1989.
Bollen, Ken. A. Structural Equation Models. Pp. 4363-4372 in Encyclopaedia of Biostatistics. (Eds. Peter Armitage and Theodore Colton). Wiley. 1998. Gerstein Lib. RA 409.E53

Duncan, Terry E. et al. An Introduction to Latent Variable Growth Curve Modeling: Concepts, Issues and Applications.

Muthen, B. 1997. Latent variable modeling with longitudinal and multilevel data. In A. Raftery (Ed.) *Sociological Methodology*. 453-80. Blackwell.

4. Clustered Data: (Families: also Longitudinal, Organizational and Social Network Data)

4.1 Conditional Logit Models

Allison, Paul D. Logistic Regression Using the SAS System: Theory and Applications. Cary, NC : The SAS Institute. 1999 Hosmer, David W. and Stanley Lemeshow. Applied Logistic Regression. Wiley. 1<sup>st</sup> ed. 1989. 2<sup>nd</sup> ed. 2000.

4.2 Generalized Estimating Equations

Diggle, Peter, J., K-Y Liang and S. L. Zeger. *Analysis of Longitudinal Data*. Oxford : The Clarendon Press. 1994.

Diggle, Peter J., Patrick Heagerty and Kung-Yee Liang *Analysis of longitudinal data*. Edition 2nd ed. / Peter J. Diggle ... [et al.]. Oxford ; New York : Oxford University Press, 2002

4.3 Mixed Models and Multilevel Modeling

Bryk, Anthony S. and Stephen W. Raudenbush. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Newbury Park CA : Sage. 1992. DiPrete, Thomas A. and Jerry D. Forristal. 1994. "Multilevel Models: Methods and Substance." *Annual Review of Sociology*. 20: 331-357. Singer, Judith. 1998. "Using SAS PROC MIXED to Fit Multilevel Model, Hierarchical Models and Individual Growth Models. *Journal of Educational and Behavioural Statistics*, Winter, 24, 4: 323-55.

Snijders, Tom and Roel Bosker. *Multilevel Analysis*. Sage. 1999. Verbeke, G. and G. Molenberghs *Linear Mixed Models for Longitudinal Data* 

4.4. Event Sequences and Event History Analysis

Abbot, A. 1983 "Sequences of Social Events: Concepts and Methods for the Analysis of Order in Social Processes." *Historical Methods*, 16:4.

Allison, P. D. 1982 "Discrete-Time Methods for the Analysis of Event Histories." *Sociological Methodology*, 12:61-98.

Allison, Paul D. *Event history analysis*. Sage Univ. Quantitative Applications in the Social Sciences Series #46. 1984.

Petersen, Trond. 1991 "The Statistical Analysis of Event History." *Sociological Methods and Research*, 19(3): 270-323.

Singer, J. D. and J. B. Willett. 1991 "Modeling the Days of Our Lives: Using Survival Analysis When Designing and Analyzing Longitudinal Studies of Duration and the Timing of Events." *Psychological Bulletin*, 110(2): 268-290.

5. Cohort Analysis

Firebaugh, G. 1989. "Methods for Estimating Cohort Replacement Effects." *Sociological Methodology*. 19: 243-262.

Mason, William M., and Stephen E. Fienberg. (Eds.) *Cohort Analysis in Social Research*. Springer Verlag. 1985. HB 849.47 .C63 ROBA

Maxim, Paul S. *Quantitative Research Methods in the Social Sciences*. Oxford University Press. 1999. HA 29.M2968 Robarts and St Michael's College

6. Measurement and Scaling

Bollen, Kenneth A. 2001. "Indicator methodology." In *The International Encyclopaedia of the Social and Behavioural Sciences*. (Eds. Neil J. Smelser and Paul B. Baltes). Elsevier. Robarts H41 .158

Maxim, Paul S. *Quantitative Research Methods in the Social Sciences*. Oxford University Press. 1999. HA 29.M2968 Robarts and St Michael's College

7. Practical Issues (Data Quality: Unbalanced, Missing and Otherwise Messy Data)

Bernard, H. R., Killworth, P., Kronenfeld, D., and L. Sailer. 1984. "The problem of informant accuracy: The validity of retrospective data." *Ann. Rev. Anthropol.* 13: 495-517 Jinn, J. H. and J. Sedransk. 1989. "Effect on Secondary Data Analysis of Common Imputation Methods." *Sociological Methodology*, 213-242.

Little, R. J. A. and D. B. Rubin. *Statistical Analysis with Missing Data*. Wiley. 1987. Rubin, D. and R. Little. 2002. *Statistical Analysis with Missing Data*. Revised and updated. J. Wiley and Sons, New York.

## 8. Evaluation Research

Pawson, Ray and Nick Tilley. *Realistic Evaluation*. Sage. 1997. Weiss, Carol. *Evaluation: Methods for Studying Programs and Policies*. Prentice Hall. 2<sup>nd</sup> edition. 1998.