Methods/Statistics Comprehensive Exam
Reading List
Revised May 2023

General

Abbott, Andrew (2001). *Time Matters: On Theory and Method*. Chicago: University of Chicago Press.

Stolzenberg, Ross M. (2003). "Book Review: Time Matters: On Theory and Method." *Sociological Methods & Research* 31:420-427.

Becker, Howard (1998). *Tricks of the Trade*. Chicago: University of Chicago Press.

Goldthorpe, John (2000). *On Sociology: Numbers, Narratives, and the Integration of Research and Theory.* Oxford University Press.

Leahey, Erin (2008). "Methodological Memes and Mores: Toward a Sociology of Social Research." *Annual Review of Sociology*, 34: 33-53.

Leahey, Erin (2005). "Alphas and Asterisks: The Development of Statistical Significance Testing Standards in Sociology." *Social Forces* 84(1): 1-24.

Leahey, Erin, Barbara Entwisle, and Peter Einaudi (2003). "Diversity in Everyday Research Practice: The Case of Data Editing." *Sociological Methods and Research* 32(1): 64-89.

Martin, John Levi (2017). *Thinking Through Methods*. University of Chicago Press.

Lieberson, Stanley (1992). "Einstein, Renoir, and Greeley: Evidence in Sociology." *American Sociological Review* 57:1-18.

Lieberson, Stanley (1985). *Making it Count*. Berkeley: University of California Press.

Raftery, Adrian E.(2001). "Statistics in Sociology, 1950-2000: A Selective Review." *Sociological Methodology* 31:1-45.

Royce A. Singleton and Bruce C. Straights (2005). *Approaches to Social Research* (4th edition). New York: Oxford University Press.

Steinmetz, George. 2005. *The Politics of Method in the Human Sciences*. Duke University Press.

Conceptualization & Measurement

Important foundations can be found in the chapters on measurement in Singleton & Straights (chapter depends on edition), King, Keohane, and Verba (pp 150-168), and Becker's *Tricks of the Trade.*

Becker, H. S. H. (1958). Problems of inference and proof in participant observation. *American Sociological Review*, *23*(6), 652–660.

Cicourel, A. v. (1982). Interviews, Surveys, and the Problem of Ecological Validity. *The American Sociologist*, *17*(1), 11–20.

Schaeffer, Nora Cate, and Jennifer Dykema (2020). "Advances in the Science of Asking Questions." *Annual Review of Sociology* 46:37-60.

Howard Schuman (2008). *Method and Meaning in Polls and Surveys*. Chapter 2: "The Primordial Distinction between Open and Closed Attitude Questions." Cambridge, MA: Harvard University Press.

Kitts, James A. and Diego F. Leal. (2021). "What is(n't) a Friend? Dimensions of the Friendship Concept among Adolescents" *Social Networks* 66: 161-170.

Pugh, A. J. (2013). What good are interviews for thinking about culture? Demystifying interpretive analysis. *American Journal of Cultural Sociology*, *1*(1), 42–68.

Paik, Anthony, and Kenneth Sanchagrin (2013). "Social Isolation in America: An Artifact." *American Sociological Review* 78(3): 339-360.

Lee, Byungkyu and Peter Bearman (2017). "Important Matters in Political Context." *Sociological Science* 4:1-30.

Richard Lewontin (2000). "Sex, Lies, and Social Science," pp. 229-269 in *It Ain't Necessarily So: The Dream of the Human Genome and Other Illusions*. New York: New York Review of Books (including responses/rejoinders).

Weinreb, Alex (2006). "The Limitations of Stranger-interviewers in Rural Kenya." *American Sociological Review* 71(6): 1014-1039

Jerolmack, Colin and Shamus Khan (2014). "Talk is Cheap: Ethnography and the Attitudinal Fallacy," *Sociological Methods and Research* 43: 178-209.

Lamont, M., & Swidler, A. (2014). Methodological Pluralism and the Possibilities and Limits of Interviewing. *Qualitative Sociology*, *37*(2), 153–171.

Mechanisms

Neil Gross (2009). "A Pragmatist Theory of Social Mechanisms." *American Sociological Review* 74: 358-379.

Hedstrom, Peter and Petri Ylikoski (2010). "Causal Mechanisms in the Social Sciences." *Annual Review of Sociology* 43:49-67.

Knight, Carly R., and Christopher Winship (2013). "The Causal Implications of Mechanistic Thinking: Identification Using Directed Acyclic Graphs (DAGs)." Chapter 14 (pp. 275-299) in S.L. Morgan (ed.), *Handbook of Causal Analysis for Social Research*.

Lave, Charles A., and James G. March (1993). *An Introduction to Models in the Social Sciences*. University Press of America. (Chapters 1 and 2)

Sampling & Case Selection

Robert Groves et al. (2009). *Survey Methodology*. John Wiley and Sons. Hoboken, NJ. Chps 3-4.

Mitchell Duneier (2011). "How Not to Lie with Ethnography." *Sociological Methodology*, 41:1-11.

Mario Small (2009). "How Many Cases Do I Need? On Science and the Logic of Case Selection in Field-based Research." *Ethnography* 10(1): 5-38.

Berk, Richard (1983). "An Introduction to Sample Selection Bias in Sociological Data." *American Sociological Review*, vol. 48, pp. 386-398.

Geddes, Barbara (1990). "How the Cases you Choose Affect the Answers you Get: Selection Bias in Comparative Politics." *Political Analysis* 31(4): 465-476.

Winship, Christopher and Robert Mare (1992). "Models for Sample Selection Bias." *Annual Review of Sociology* (18) 327-350.

Bader, Felix, Bastian Baumeister, Roger Berger, and Marc Keuschnigg (2019). "On the Transportability of Laboratory Results." *Sociological Methods & Research* 50(3): 1452–81.

Case-Oriented and Related Research Methods

Abramson, Corey M. and Neil Gong. 2020. "The Promise, Pitfalls, and Practicalities of Comparative Ethnography." *Beyond the Case: The Logics and Practices of Comparative Ethnography.* New York, NY: Oxford University Press.

Burawoy, Michael (1998). "The Extended Case Method." *Sociological Theory* 16(1): 4-33.

Geertz, Clifford (1973). "Deep Play: Notes on the Balinese Cockfight." Pp. 412-454 in *The Interpretation of Cultures*. NY: Basic Books.

Gans, H. J. (1999). Participant Observation in the Era of "Ethnography." *Journal of Contemporary Ethnography*, *28*(5), 540–548.

Griffin, Larry J. (1993). "Narrative, Event-Structure Analysis, and Causal Interpretation in Historical Sociology ." *American Journal of Sociology* 98:1094-1133.

Lieberson, Stanley (1991). "Small N's and Big Conclusions: An Examination of the Reasoning in Comparative Studies Based on a Small Number of Cases." *Social Forces*, *70*(2), 307–320.

Lucas, Samuel R (2014). "Rejoinder: Taking Heat and Giving Light - Reflections on the Early Reception of "Qualitative Comparative Analysis in Critical Perspective." *Sociological Methodology* 44(1): 127-158

Mahoney, James (2000). "Strategies of Causal Inference in Small-N Analysis." *Sociological Methods & Research* 28:387-424.

Ragin, Charles C. (2004). "Turning the Tables: How Case-Oriented Research Challenges Variable-Oriented Research," Chapter 8 in Brady and Collier (eds.) *Rethinking Social Inquiry*. Rowman and Littlefield.

Stryker, Robin (1996). "Beyond History versus Theory: Strategic Narratives and Sociological Explanation." *Sociological Methods and Research* 24:304-352

Survey Research

Groves, Robert et al. (2009). *Survey Methodology*. John Wiley and Sons. Hoboken, NJ.

Bradburn, Norman et al. (2004). *Asking Questions: The Definitive Guide to Questionnaire Design*. 2nd edition. Jossey-Bass. (or new edition, forthcoming in Jan. 2024).

Miller, Kristen and Gordon Willis. (2017). "Cognitive Models of Answering Processes." In *The Sage handbook of Survey Methodology* (Chapter 15).

West, Brady and Annelies Blom (2017). "Explaining Interviewer Effects: A Research Synthesis." *J. of Survey Statistics and Methodology* 5: 175-211.

Tourangeau, Roger et al. (2013). *The Science of Web Surveys*. Oxford UP. (esp. Ch. 1-4, 7).

Experimental Designs

Shadish, William R., Thomas D. Cook, and Donald T. Campbell (2001). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference.* Wadsworth.

Jackson, Michelle, and Dr. R. Cox (2013). "The Principles of Experimental Design and Their Application in Sociology." *Annual Review of Sociology* 39:27-49.

Baldassarri, Delia, and Maria Abascal (2017). "Field Experiments Across the Social Sciences." *Annual Review of Sociology* 43:41-73.

Devah Pager (2009): "Fields Experiments for Studies of Discrimination," pp 38-60 in Eszter Hargittai (ed) *Research Confidential: Solutions to Problems Most Social Scientists Pretend they Never Have*. Ann Arbor: University of Michigan Press.

Paul Sniderman (2018). "Some Advances in the Design of Survey Experiments." *Annual Review of Political Science* 21: 259-275.

Causal Inference for Nonexperimental Data

Barringer, Sondra, Scott R. Eliason, and Erin Leahey (2013). "A History of Causal Analysis in the Social Sciences." Chapter 2 (pp 9-26) in the *Handbook of Causal Analysis for Social Research*, edited by Stephen L. Morgan. Springer.

Heckman, James J. (2005). "The Scientific Model of Causality." *Sociological Methodology* 35: 1-97.

Sobel, Michael E. (2005). "Discussion: The Scientific Model of Causality." *Sociological Methodology* 35: 99-133.

Morgan, Stephen L., and Christopher Winship (2014). *Counterfactuals and Causal Inference Methods and Principles for Social Research*. Cambridge University Press. Pp. 3-14 and 29-34.

Rosenbaum, Paul R. (2002). *Observational Studies*. Springer.

Smith, Herbert L. (1997). "Matching with Multiple Controls to Estimate Treatment Effects in Observational Studies." *Sociological Methodology* 27:325-53.

Sobel, Michael E. (1996). "An Introduction to Causal Inference." *Sociological Methods and Research* 24:353-379.

Winship, Christopher and Stephen L. Morgan (1999). "The Estimation of Causal Effects from Observational Data." *Annual Review of Sociology* 25:659-706.

Statistical Modeling (for reference)

Arminger, Gerhard, Clifford C. Clogg, and Michael E. Sobel, eds. (1994). *Handbook of Statistical Modeling for the Social and Behavioral Sciences*. New York: Plenum

Eliason, Scott R. (1993). *Maximum Likelihood Estimation: Logic and Practice*. Sage.

Angrist, Joshua D., and Pischke Jörn-Steffen (2009). *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press.

Kutner, Michael, Christopher Nachtsheim, John Neter, and William Li. 2004. *Applied Linear Statistical Models*, 5th ed. McGraw-Hill.

Categorical, Longitudinal, Latent Variable, Hierarchical/Mixed Models

Agresti, Alan (2002). *Categorical Data Analysis*. Hoboken, New Jersey: John Wiley and Sons.

Bollen, Kenneth (1989). *Structural Equations with Latent Variables*. New York: Wiley.

Bryk, A. S. and S. W. Raudenbush (2001). *Hierarchical Linear Models: Applications and Data Analysis*. 2nd ed. Sage Publications.

Long, J. Scott. (1997). *Regression Models for Categorical and Limited Dependent Variables*. Sage Publications.

Singer, Judith D. and John B. Willett (2003). *Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence*. Oxford: Oxford University Press.

Yamaguchi, Kazuo (1991). *Event History Analysis*. Newbury Park, CA: Sage Publications.

Problems and Solutions

Allison, Paul (2002). *Missing Data*. Thousand Oaks, CA: Sage Publications.

Collier, David and Henry Brady (2004). *Rethinking Social Inquiry: Diverse Tools, Shared Standards*. New York: Rowman and Littlefield Publishers.

Long, J. Scott (ed.). 1988. *Common Problems / Proper Solutions: Avoiding Error in Quantitative Research*. Newbury Park: Sage.

Freese, Jeremy (2007). "Replication standards for quantitative social science: Why not sociology?" *Sociological Methods & Research* 36 (2), 153-172

Li, Z., Dohan, D., & Abramson, C. M. (2021). "Qualitative Coding in the Computational Era: A Hybrid Approach to Improve Reliability and Reduce Effort for Coding Ethnographic Interviews." *Socius*

Murphy, A. K., Jerolmack, C., & Smith, D. (2021). Ethnography, Data Transparency, and the Information Age. *Annurev-Soc-090320-124805*, *47*, 41–61.

Young, Cristobal (2018). "Model Uncertainty and the Crisis in Science." *Socius* 4.

Network Analysis

Breiger, Ronald L. "The Analysis of Social Networks" (2004) pp. 505–526 in *Handbook of Data Analysis*, edited by Melissa Hardy and Alan Bryman. London: Sage Publications.

Kadushin, Charles (2011). *Understanding Social Networks: Theories, Concepts, and Findings*. New York, NY: Oxford University Press.

Marsden, Peter. 1990. "Network Data and Measurement." *Annual Review of Sociology* (16) 435-463.

Wasserman, Stanley, and Katherine Faust. 1994. *Social Network Analysis*. Cambridge: Cambridge University Press.

Analyzing Text

Abramson, Corey M. and Daniel Dohan. 2015. "Beyond Text: Using Arrays to Represent and Analyze Ethnographic Data." *Sociological Methodology 45*: 272-319

Arseniev-Koehler, Alina (2021). "Theoretical Foundations and Limits of Word Embeddings: What Types of Meaning Can They Capture?." *Sociological Methods & Research* 00491241221140142.

Deterding, Nicole M., and Mary C. Waters (2021). "Flexible Coding of In-Depth Interviews: A Twenty-First-Century Approach." *Sociological Methods & Research* 50(2): 708–39.

Evans, Eliza D., Charles J. Gomez, and Daniel A. McFarland (2016). "Measuring Paradigmaticness of Disciplines Using Text." *Sociological Science* 3: 757-778.

Evans, James A., and Pedro Aceves (2016). "Machine Translation: Mining Text for Social Theory." *Annual Review of Sociology* 42: 21-50.

Mohr, John W. and Bogdanov, P. (2013). "Introduction—Topic models: What they are and why they matter." *Poetics*, 41(6), pp.545-569.

Nelson, Laura K. (2020). "Computational Grounded Theory: A Methodological Framework." *Sociological Methods & Research* 49(1), 3-42.

Nelson, Laura K., Derek Burk, Marcel Knudsen, and Leslie McCall (2021). "The Future of Coding: A Comparison of Hand-Coding and Three Types of Computer-Assisted Text Analysis Methods." S*ociological Methods & Research* 50(1): 202–37.

Lichtenstein, M., & Rucks-Ahidiana, Z. (2021). Contextual Text Coding: A Mixed-methods Approach for Large-scale Textual Data. *Sociological Methods and Research*.

Computational Social Science, Machine Learning, and Big Data

Bail, Christopher A. (2014) "The Cultural Environment: Measuring Culture with Big Data." *Theory and Society* 43: 465-482.

Brand, J. E., Xu, J., Koch, B., & Geraldo, P. (2021). Uncovering Sociological Effect Heterogeneity Using Tree-Based Machine Learning. *Sociological Methodology*, *51*(2), 189–223.

Breiger, R. L. (2015). Scaling down. *Big Data & Society*, *83*(7), 42–44.

Chang, J., Boyd-graber, J., Wang, C., Gerrish, S., Blei, D. M., Tea, R., How, L., & Chang, J. (2009). *Reading Tea Leaves: How Humans Interpret Topic Models*.

Lazer, David, Ryan Kennedy, Gary King, and Alessandro Vespignani (2014). "The Parable of Google Flu: Traps in Big Data Analysis." *Science* 343, no. 6176: 1203-1205.

Lazer, David, Alex Pentland, Lada Adamic, Sinan Aral, Albert-László Barabási, Devon Brewer, Nicholas Christakis et al. (2009). "Computational Social Science." *Science* 323, no. 5915: 721-723.

Lazer, David MJ, Alex Pentland, Duncan J. Watts, Sinan Aral, Susan Athey, Noshir Contractor, Deen Freelon et al. (2020). "Computational Social Science: Obstacles and Opportunities." *Science* 369, no. 6507: 1060-1062.

Macy, Michael W. and Robert Willer (2002). "From Factors to Actors: Computational Sociology and Agent-Based Modeling" *Annual Review of Sociology* 28: 143-166

McFarland, D. A., & McFarland, H. R. (2015). Big Data and the danger of being precisely inaccurate. *Big Data & Society* 2(2): 1-4.

Molina, Mario, and Filiz Garip (2019). "Machine Learning for Sociology." *Annual Review of Sociology* 45: 27-45.

Salganik, Matthew J. (2019). *Bit by Bit: Social Research in the Digital Age*. Princeton University Press. (Chapter 6: Ethics)

Stoltz, Dustin S., and Marshall A. Taylor. 2020. ""Cultural Cartography with Word Embeddings.""

Agent-based Models

Bruch, E. and Atwell, J. (2015). "Agent-based Models in Empirical Social Research." *Sociological Methods & Research*, 44(2), pp.186-221.

Schelling, Thomas C. (1971). "Dynamic Models of Segregation." *Journal of Mathematical Sociology*, 1(2), 143-186.

Mixed Methods

Abramson, Corey M., Jacqueline Joslyn, Sarah Garrett, Katharine Rendle, and Daniel Dohan. 2018. "The Promises of Computational Ethnography**:** Improving Transparency, Replicability, and Validity for Realist Approaches to Ethnographic Analysis." *Ethnography.* 19(2): 254-284

Basov, Nikita, Wouter de Nooy, and Aleksandra Nenko. 2021. "Local Meaning Structures: Mixed-Method Sociosemantic Network Analysis." *American Journal of Cultural Sociology* 9(3): 376-417.

Leahey, Erin (2007). "Convergence *and* Confidentiality? Limits to the Implementation of Mixed Methodology." *Social Science Research* 36(1): 149-158.

Mario Luis Small (2011). "How to Conduct a Mixed Methods Study: Recent Trends in a Rapidly Growing Literature." *Annual Review of Sociology* 37:57-86.

Pearce, Lisa (2002). "Integrating Survey & Ethnographic Methods For Systematic Anomalous Case Analysis." *Sociological Methodology*, 32(1): 103-132.

Tarrow, Sidney (2004). "Bridging the Quantitative-Qualitative Divide," Ch. 10 in Brady and Collier (eds.) *Rethinking Social Inquiry*. Rowman and Littlefield.