S558: Advanced Research Techniques

Fall 2016 Monday 2:30PM-5:00PM

Course Information

Professor: Steve Benard Office: SISR 202

Office Hours: Monday, 12:00pm-2:00pm or by appointment

Office Phone: 812-856-7418

Email: sbenard@indiana.edu (Please put "S558" first in the subject line)

Course webpage: Available on Canvas (https://canvas.iu.edu/)

Class Location: S7 (Schuessler Institute for Social Research) Room 100

Course Description

A primary goal of graduate training in sociology is to move from being a consumer to a producer of social research. This course is designed to provide a first step in this endeavor by surveying fundamental issues that arise in the design of all types of sociological research as well as issues specific to particular types of data collection and analysis. This is a course in research design, and is meant to provide an introduction to a range of topics. The primary objectives of the course are to 1) introduce fundamental aspects of research design that transcend specific modes of data collection, 2) to provide practice in developing researchable questions and designing methods to answer those questions through a research proposal, 3) to introduce and assess common techniques for social science data collection and 4) to introduce you to some of the work of IU Sociology faculty and students through research examples.

Given the breadth and depth of research in sociology, a one-semester course can only scratch the surface of research methods, their problems, and applications. A number of interesting and useful methods (e.g. network analysis, agent-based modeling, case studies, focus groups) are not covered here. If you would like to pursue further training in a particular method, I'm happy to try and help you find it.

In Class

Each class will emphasize an in-depth discussion of the issues raised by the readings that week. Early classes focus on providing a solid grounding in the logic of theory and research design, while later classes focus on applications and particular issues or problems that researchers need to consider.

It is very important that everyone read all the assigned readings each week and come to class ready to actively participate in the discussion – to ask questions, speak to debates that arise in the literature, challenge what class members (including me) have said, and relate the material to your own projects. The more you participate, the more we will all gain from the class. I expect that

everyone will actively participate in discussions; not actively participating may reduce your final grade.

All readings and assignments will be available on Canvas.

Evaluation

Evaluation in the course will be based on three components: (1) serving as a discussion leader (30%), (2) weekly critical analysis papers (30%), and (3) a research proposal (40%).

Discussion leaders

Each week, 2-3 people will sign up to lead the discussion. You'll act as a discussion leader twice during the semester. The discussion leaders should prepare a short handout (~1-page) that summarizes each of the readings in 4-5 bullet points. Please bring a copy of this handout for each member of the class. The discussion leaders should also prepare 2-3 open-ended discussion questions on each of the readings (note this is 2-3 questions *per reading*, not per person per reading). The discussion questions should use the "orienting questions" posted on the syllabus as a starting point.

Advice on preparing discussion questions: "Open-ended" means that the answer is not obvious and reasonable people might disagree. For example, "what was the sampling strategy used by the authors?" is not open-ended, while "is the sampling strategy appropriate for the goals of the article?" or "which of these two theories better accounts for the findings?" are. Because this is a research methods class, the questions should focus touch on methodological aspects of the papers. In class, you'll pose the questions you devised, and field and respond to your classmates' answers. You will receive your classmates' critical analysis papers (see below) to help you anticipate their response to the material.

You should set up a time to meet with me on the Monday before you will lead the discussion to go over your discussion questions. I can help you revise the questions (if necessary) to elicit a better-quality discussion. I have office hours from 12-2 on Monday (chosen to avoid conflict with classes commonly taken by first-year students) but we can also meet at other times.

Critical analysis papers

In the weeks that you are not a discussion leader, you will have a critical analysis paper due. The critical analysis paper is a short (2-page, double-spaced) reflection on the readings that week. **Do not summarize the reading.** Assume your classmates and I have read the reading. Instead, address the "orienting questions" listed for each week on the syllabus.

You should post your critical analysis papers to Canvas, and <u>email them to the discussion leaders</u> by 5PM on Sunday, so we will have time to read them before class on Monday. Papers submitted after 5PM on Sunday but before class on Monday will receive half credit (and I am unlikely to read them by class time). I don't accept papers submitted after class.

A note on criticism: Conducting high-quality empirical research is challenging, and most research isn't perfect. As a result, it's not difficult to identify shortcomings with most articles.

Better criticism not only identifies shortcomings, but also identifies effective, realistic ways to address those shortcomings.

Research proposal

The purpose of this assignment is to integrate your knowledge on research methods in the form of a research proposal. This is intended to help you develop a plan that you can use for your MA thesis, a funding proposal, or another research project. You may propose research on any topic in sociology or your chosen field. While research proposals vary depending on the intended audience (e.g. grant agencies, dissertation proposals, etc.) they often to put strong emphasis on research design. There are two parts to this proposal: (1) an initial, brief pre-proposal, and (2) a more developed full proposal. This roughly corresponds to some grant proposal submission processes (i.e. a letter of intent followed by a full proposal).

We will also devote two class days to presenting and discussing your projects. The primary purpose of these presentations is to gain practice in talking about one's research in-progress (typically when research is messiest) and to learn to give others constructive feedback on their research plans.

If you are already engaged in a substantive research project as the primary investigator, completion of the actual research and writing up a paper with findings is an alternative to the proposal requirement. Talk to me in advance if you want to take this option.

Part one: Pre-proposal

In this assignment, you will propose two possible projects for your final paper. Your final paper is a research proposal, so you can think of this assignment as two mini-proposals. You will receive feedback from your classmates and me on both ideas. This feedback should help you choose which of the two projects to develop into your final proposal.

In the pre-proposal, you should consider two distinct theoretical questions (i.e., distinct enough to produce different sets of hypotheses). For each of the two projects proposed, you should include:

- 1. A clear statement of the motivating question
- 2. A brief sketch of the theoretical argument (i.e., what variables are you interested in, and how and why do you think they are related?)
- 3. A brief description of why this project makes a useful contribution and how it fits into existing literature
- 4. A brief description of the methods you plan to use

Each project proposal should be 2-3 double spaced pages (so the total length of this assignment should be about 4-6 pages). This is a <u>short</u> write-up designed to help you think through your ideas, and present them to others for feedback. It will not be graded individually, but will count towards your grade on your final paper.

Your pre-proposals are due Monday, 10/3. Please submit a copy through Canvas and bring a hardcopy to class.

Part two: Full research proposal

A research proposal is designed to convince a group of reviewers that you have identified an important research question and that you are capable of implementing a study that will answer that question. There are several "tricks" that help convince people reading a proposal that you know what you are talking about and that you are able to conduct the study you propose. First, a clear statement of your research question is essential, followed by a BRIEF discussion that develops the ideas or arguments you plan to investigate, and explains how they make a contribution to existing literature. Second, lots of detail on planned methods tells a reviewer that you know what the important issues are and you have thought through them carefully. If there are key methodological decisions you need to make, a brief explanation of why the route you have chosen is preferable is also a way to show you have carefully considered all the options. Another way to show you are knowledgeable about research is to balance good research design with practicality (consistent with your stage of training). A five-year longitudinal study or collecting national survey data on 10,000 respondents is not practical in the early stages of your career. Having successfully completed this course, you should have the tools you need to write a successful proposal.

A suggested format for your final proposal is given below. The page lengths are just general guidelines; papers should be about 15 pages, but please do not exceed 20 pages (double-spaced).

- Introduction and statement of the research question (~1 page)
- Related research (background and significance): develops your argument, drawing on past literature. This is not simply a summary of past literature, instead, discuss past literature *in the service of making your argument* (3-4 pages).
- Procedures/study design: This includes a description of the type of data you plan to collect (or use), key concepts you will measure and how you will measure them, your sampling design (or if you are planning to use existing data, the sampling design for the study), units of analysis and how you will gain access to the data or subjects. This section tells the reader what you plan to do and why you plan to do it, and the foundation of the research design for your study. The more detail, the better. If you are developing a survey instrument or interview schedule, you should include it as an appendix. If you are using existing data, you should include the items you will use from the survey in the text or as an appendix (6-10 pages).
- A discussion of any relevant ethical issues, if there are any (1 paragraph 1 page). Specifically discuss into which category you think your research would fall (exempt, expedited or full) using the definitions from IU's Office of Human Research Protection and explain why it falls into this category and why (you may find this website helpful in figuring out which category fits your research:

 http://researchadmin.iu.edu/HumanSubjects/hs_level_review.html; the link at the bottom to the "protocol decision tree" may also be useful). Also discuss whether your research requires any special considerations of informed consent and if so how you will address those.
- A discussion of limitations of the study (1-2 pages).

Note: If you propose to use secondary data you will need to find a data set that will meet your needs, explain what it is and why it best meets your needs. You would also want to describe your

main concepts and describe the measures that are available to address those questions, and also the sample design. In other words, most of the detail above still applies even if you are not collecting the data yourself.

Your full proposals are due Monday, December 12th at 2:30PM.

Course Policies

Academic Integrity: You are expected to be familiar with and adhere to Indiana University's Code of Student Rights, Responsibilities, and Conduct, available here:

http://studentcode.iu.edu/

I will assume you have read and understand this information. If you have questions about what constitutes academic integrity, please ask me. Any violations of the code – such as plagiarism – will result in, at a minimum, a grade of 0 on the exam or assignment, and may also result in further penalties. In addition, as required by Indiana University policy, academic misconduct will be reported in writing to the Dean of Students, the College of Arts and Sciences, and the College or School in which you are enrolled.

Accommodations: I am available to discuss appropriate academic accommodations that may be required for students with special needs. Requests for accommodation should include university documentation and be made within the first three weeks of the semester.

Course Outline

Week 1: Introduction to the course	8/22

Week 2: Formulating a research question 8/29

Orienting Questions: How do we generate ideas for our research? What makes an idea good, interesting, or important? Can we learn to generate better ideas? Try to develop a research idea of your own. Is it interesting? Why? Are the ideas in the Granovettor and Levin & Cross papers interesting? When we critique the work of others (or ourselves), what constitutes a fair versus unfair critique? Why do some papers publish in "big" vs. "small" journals?

Abbot, Andrew. "Ideas and Puzzles." Chapter 7 in Methods of Discovery.

Firebaugh. "Chapter 1: The First Rule." Seven Rules for Social Research.

Granovetter, Mark. 1973. "The Strength of Weak Ties." American Journal of Sociology 78:1360-1380.

Levin, Daniel Z., and Rob Cross. "The Strength of Weak Ties You Can Trust: The Mediating Role of Trust in Effective Knowledge Transfer." Management Science 50: 1477-1490.

Week 3: Labor Day – NO CLASS

9/5

Week 4: Logic of explanation in sociology, part 1 Causality & social mechanisms

9/12

Orienting Questions: How do we develop explanations for social phenomena that we are interested in? What does it mean to explain something, versus describe or relabel it? Do we need to explain social phenomena if we can reliably describe them? What is a social mechanism? Are they just for quantitative research? What is abduction? How is it different from induction or deduction? What puzzle motivates the Hamilton et. al paper? Is it interesting? How are the mechanisms tested? How would you build on this approach?

Hedström, P. and R. Swedberg. 1998. "Social mechanims: an introductory essay." In *Social mechanisms: an analytical approach to social theory*, P. Hedström & R. Swedberg, eds. Cambridge: Cambridge University Press.

Timmermans, Stefan. and Iddo Tavory. 2012. "Theory construction in qualitative research from grounded theory to abductive analysis." *Sociological Theory* 30(3): 167-186.

Hamilton, Laura, Simon Cheng, and Brian Powell. 2007. "Adoptive Parents, Adaptive Parents: Evaluating the importance of biological ties for parental investment." American Sociological Review 72:95-116.

Week 5: Logic of explanation in sociology, part 2 Scope conditions: What does your theory explain?

9/19

Orienting Questions: How context-dependent are our explanations? Do they depend on time, place, or cultural contexts? Can your theory be "future-proofed"? How big should our theories be? Are middle-range theories less interesting than grand theories? Is the Phillips and Zuckerman article an effective use of scope conditions? Are there other settings we could study that would meet their scope conditions?

Merton, Robert K. "On Sociological Theories of the Middle Range."

Walker, Henry, and Bernard P. Cohen. 1985. "Scope Statements: Imperatives for Evaluating Theory." American Sociological Review. 50:288-301.

Phillips, Damon J. and Ezra W. Zuckerman. "Middle Status Conformity: Theoretical Restatement and Empirical Demonstration in Two Markets." American Journal of Sociology 107:379-429.

Week 6: Sampling

9/26

Orienting Questions: How does our research question guide our sampling approach? How might different research questions lead us to different sampling approaches? What are some challenges

to obtaining a good-quality sample? The authors of the Iraq mortality study reviewed by Marker took on a difficult task, and received a great deal of criticism. Can we take any useful lessons from their experience?

Hibberts, Mary, R. Burke Johnson and Kenneth Hudson. 2009. "Common Survey Sampling Techniques." Pp. 53-74 in Handbook of Survey Methodology for the Social Sciences, L. Gideon (ed.). Springer.

Marker, David A. 2008. "Methodological Review of 'Mortality After the 2003 Invasion of Iraq: A Cross Sectional Cluster Sample Survey." Public Opinion Quarterly 72:345-363.

Small, Mario Luis. 2009. "How Many Cases do I Need? On Science and the Logic of Case Selection in Field-Based Research." Ethnography 10:5-38.

Magnani et. al. 2005. "Review of sampling hard-to-reach and hidden populations for HIV surveillance". *AIDS* 19:S67-S72.

Week 7: Measurement

10/3

Orienting Questions: How do we know what we are measuring? In other words, how do we know that our operational definitions fit well with our conceptual definitions? What are the challenges of measuring attitudes versus behavior? When should we focus on studying one or the other? What might explain the results of the Harris & Sims article? Harris & Sims say both that race is fluid and that we need more specific measures of race. Are these arguments consistent or contradictory?

Krosnick, John A., Charles M. Judd, and Bernd Wittenbrink. 2005. "Attitude Measurement." In Albarracin, Johnson, and Zanna (eds), Handbook of Attitudes and Attitude Change. Mahwah, NJ: Erlbaum.

Collett, Jessica L., and Ellen Childs. 2001. "Minding the Gap: Meaning, Affect, and the Potential Shortcomings of Vignettes." Social Science Research 40:513-522.

Harris, David R. and Jeremiah Joseph Sims. 2002. "Who is Multiracial? Assessing the Complexity of Lived Race." American Sociological Review 67:614-627.

Due in class: pre-proposals (see syllabus for instructions).

Week 8: In-Depth Interviewing

10/10

Orienting Questions: What kinds of questions are in-depth interviews designed to answer? In Legard et al.'s terminology, should we approach interviewees as a "miner" or a "traveller"? How might characteristics of the interviewer affect the responses that the interviewee gives? Is being demographically similar to your interviewees a help or a hindrance?

Legard, Robin, Jill Keegan, and Kit Ward. "In-depth Interviews", chapter 6 in *Qualitative Research Practice*. London: Sage Publications.

Williams, Christine L., and E. Joel Heikes. 1993. "The Importance of Researcher's Gender in the In-Depth Interview: Evidence from Two Case Studies of Male Nurses." Gender & Society 7:280-291.

Calarco, Jessica McCrory. 2014. "The Inconsistent Curriculum: Cultural Tool Kits and Student Interpretations of Ambiguous Situations." Social Psychology Quarterly 77:185-209.

Week 9: Ethnography

10/17

Orienting Questions: What kinds of challenges exist for ethnography and ethnographers? Can we draw general lessons from the reading on how to meet these challenges? What does Lareau mean when she talks about the importance of an "intellectual identity"? Interviews and ethnography are often used in tandem. Do they provide similar or different kinds of information? Is one approach preferable? How might one effectively compliment the other?

Lareau, Annette. 2000. *Home Advantage: Social Class and Parental Intervention in Elementary Education, 2nd Edition.* Lanham, MD: Rowman & Littlefield (Read CH 1, Appendix pp. 197-200 and pp. 219-229).

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

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

Hallett, Tim. 2010. "The Myth Incarnate: Recoupling Processes, Turmoil, and Inhabited Institutions in an Urban Elementary School." American Sociological Review 75: 52-74.

Week 10: Ethics 10/24

Orienting Questions: What are the key ethical principles in the Belmont report? Are they broad enough to cover most issues that researchers will face? Are they specific enough to give researchers sufficient guidance? Is deception of research participants ever justified? Are there ever cases in which informed consent is unnecessary? Of the practices described in the empirical readings, which do you see as meeting or falling short of ethical standards?

The National Commission for the Protection of Human Subject of Biomedical and Behavioral Research. 1979. The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.

Scott, Gregg. 2008. "They got their program, and I got mine": A cautionary tale concerning the ethical implications of using respondent-driven sampling to study injection drug users." *International Journal of Drug Policy* 19:42-51.

Broadbent, Robert. 2008. "Notes on a cautionary (tall) tale about respondent driven sampling: a critique of Scott's ethnography." *International Journal of Drug Policy* 19:235-237.

Debate on the use of deception in Social Psychology Quarterly 2008, Vol. 71.

- Sell, Jane: "Introduction to Deception Debate."
- Cook, Karen S. and Toshio Yamagishi: "A Defense of Deception on Scientific Grounds."
- Hertwig, Ralph, and Andreas Ortmann. Deception in Social Psychological Experiments: Two Misconceptions and a Research Agenda

Kramer, Adam D.I., Jaime E. Guillory, and Jeffery T. Hancock. 2014. "Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks." Proceedings of the National Academy of Sciences 111:8788-8790.

Week 11: Quasi, Natural, and Field Experiments

10/31

Orienting Questions: What are the differences between quasi, natural, and field experiments? What are the strengths and limitations of these approaches? For the studies of peer review, what kind of study would address these limitations? Can you think of natural experiments you could exploit for your own research interests?

Dunning, Thad. 2007. "Improving Causal Inference: Strengths and Limitations of Natural Experiments." Political Research Quarterly xx:xxx-xxx.

Kelly, Erin L. 2014. "Changing Work and Work-Family Conflict: Evidence from the Work, Family, and Health Network." American Sociological Review.

Peters, Douglas J., and Stephen J. Ceci. 1982. "Peer-Review Practices of Psychological Journals: The Fate of Published Articles, Submitted Again." *Behavioral and Brain Sciences*

Exchange on double-blind review:

- o Budden et al. 2007. "Double-blind review favours increased representation of female authors." *Trends in Ecology and Evolution* 23: 4-6.
- Webb et al. 2008. "Does double-blind review benefit female authors?" *Trends in Ecology and Evolution* 23: 351-353.
- o Budden et al. 2008. "Response to Whittaker: challenges in testing for gender bias." *Trends in Ecology and Evolution* 23: 1-2.

Week 12: Experiments **Special Guest: Cate Taylor**

11/7

Orienting Questions: What is an experiment? What kind of research questions would lead us to choose an experiment over another method? What are the strengths and limitations of experiments? Why do lab experiments often use non-random samples? Does it matter that experiments often use artificial settings?

Lovaglia, Michael. 2003. "From Summer Camps to Glass Ceilings: The Power of Experiments." Contexts 2: 42-49.

Martin, Jack K, Bernice Pescosolido and Stephen Tuch. 2000. "Of Fear and Loathing: The Role of 'Disturbing Behavior,' Labels, and Causal Attributions in Shaping Public Attitudes Towards People with Mental Illness." Journal of Health and Social Behavior 41:208-223.

Taylor, Catherine J. 2016. "'Relational by Nature?' Men and Women Do Not Differ in Physiological Response to Social Stressors Faced by Token Women." *American Journal of Sociology* 122:49-89.

Week 13: Documents and content analysis

11/14

Special Guest: Dina Okamoto

Orienting Questions: Should we think of document and content analysis as behavioral or self report data? One challenge of this method is selection bias: some events may be more likely to receive coverage than others. How can we deal with this kinds of bias? How do Michelson and Okamoto & Ebert take different approaches to understanding and addressing this issue? What other sources of content data might we examine?

Earl, Jennifer et al. 2004. "The Use of Newspaper Data in the Study of Collective Action." Annual Review of Sociology 30: 65-80.

Michelson, Ethan. 2008. "Dear Lawyer Bao: Everyday Problems, Legal Advice, and State Power in China." Social Problems 55:43-71.

Okamoto, Dina, and Kim Ebert. 2010. "Beyond the Ballot: Immigrant Collective Action in Gateways and New Destinations in the United States." Social Problems 57:529-558.

Week 14: Thanksgiving recess – NO CLASS 11/21

Week 15: Presentations 11/28

Week 16: Presentations 12/5

Your full proposals are due Monday, December 12th at 2:30PM.