

S655: Experimental Methods

Fall 2012

Wednesday

1:45-3:45 PM

Course Information

Professor: Steve Benard

Office: Ballantine Hall 750

Office Hours: Monday 1:30-3:30 or by appointment

Office Phone: 812-856-7418

Email: sbenard@indiana.edu (Please put "S651" first in the subject line)

Course webpage: Available on OnCourse (<http://oncourse.iu.edu>)

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

Course Description

This class provides an in-depth introduction to the theory and practice of designing and conducting experimental research in sociology. The course will focus on practical issues in the design of laboratory and non-laboratory experiments. The course will also address motivations for conducting experimental research, the relationship between theory, experiments, and the "real world," the ethics of experiments, and writing up experiments for publication.

In Class

Class will include a mix of short lectures, discussion, group work, and presentations. Early classes focus providing a solid grounding in the basics of designing experiments, while later classes focus on applications and particular issues or problems that experimental researchers need to consider. Discussions and group work will be aimed at synthesizing and applying topics covered in the readings and in class. I expect that everyone will actively participate in discussions and group work, *not* actively participating may reduce your final grade.

All readings, assignments, and lectures will be available on onCourse.

Evaluation

Evaluation includes weekly assignments, a pre-proposal for your final paper due in week 7, and a final paper due on December 11th, 2012 (the final exam date for the course) at 5PM.

The weekly assignments will generally be short (3-4 pages) responses to the reading. They are designed to help you think through a particular problem or work towards your final paper. Check the syllabus for the specific assignment each week. The weekly assignments are due at 5PM the Monday before class. You may skip one weekly assignment without penalty. We will not have response papers due the same week as pre-proposals or final papers. Late assignments will not be accepted. Weekly assignments will count for 40% of your grade in the course.

Your final paper will be a proposal for a set of experiments, styled along the lines of an NSF grant. That is, it should include (1) an introduction that clearly motivates the project, (2) a theory section that develops a set of hypotheses, (3) a methods section that describes two experiments designed to test your hypotheses, (4) an analysis section that describes the analyses you will use, and (5) a conclusion that discusses the potential contributions of your proposed studies. I will provide more detail on the final assignment in class. You will also write a short pre-proposal, in which you will propose two possible directions for your final paper. The pre-proposal and final paper will jointly count for 60% of your grade.

Course Policies

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

8/20

Readings

None

Assignments

None

Week 2: Introduction to Experiments

8/29

Readings

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

Aronson et al: Introduction and Chapter 1

Thye, Shane R. 2007. "Logical and Philosophical Foundations of Experimental Research in the Social Sciences." In *Laboratory Experiments in the Social Sciences* (Eds. Murray Webster and Jane Sell).

Zelditch Jr., Morris. 1969. "Can You Really Study an Army in the Laboratory?" In *A Sociological Reader on Complex Organizations*, 2nd Edition.

Asch, Solomon E. 1951. "The Effects of Group Pressure Upon the Modification and Distortion of Judgments." In *Classic Contributions to Social Psychology*, Edwin P. Hollander and Raymond G. Hunt, Editors. New York: Oxford University Press.

Assignment

Weekly assignment: What kinds of questions or hypotheses (in general) are laboratory experiments usually good at answering? What kinds of questions are they *not* designed to answer? Compared to another method you are familiar with, what are their relative strengths and weaknesses?

Week 3: Designing Experiments

9/5

Readings

Aronson et al: Ch 2, 4, 6

Assignment

Weekly assignment: Find a paper that establishes a correlation between two variables. What causal relationship might underlie this correlation? Try to design a 2-4 condition experiment to test at least one possible causal relationship that could explain the correlation you chose. Include the citation for the paper you chose in your response.

Week 4: Independent Variables

9/12

Readings

Aronson et al: Ch 7

Baron, Ruben M. and David A. Kenny. 1986. The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology* 51: 1173-1182.

Spencer, Steven J., et al. 2005. "Establishing a Causal Chain: Why Experiments Are Often More Effective Than Mediational Analyses in Examining Psychological Processes." *Journal of Personality and Social Psychology* 89: 845-851.

Deutsch, Morton and Harold B. Gerard. 1955. "A Study of Normative and Informational Social Influences Upon Social Judgment." *Journal of Abnormal Psychology* 51:629-36.

Assignment

Weekly assignment: What is the difference between a mediator and a moderator? In the Deustch and Gerard paper, how do the researchers include mediators and/or moderators? If you were conducting a replication of this study today, could you improve its ability to check for mediation or moderation?

Week 5: Dependent Measures

9/19

Readings

Aronson et al: Ch. 8

Collett, Jessica L. and Ellen Childs. Forthcoming. "Minding the Gap: Meaning, Affect, and the Problematic Nature of Vignettes." *Social Science Research*.

Baumeister, Roy F., Kathleen D. Vohs, and David C. Funder. "Psychology as the Science of Self-Reports and Finger Movements: Whatever Happened to Actual Behavior?" *Perspectives on Psychological Science* 2: 397-403.

Assignment

Weekly assignment: Choose a concept in the social sciences that you are interested in investigating as an outcome. Suggest specific behavioral and non-behavioral measures that you could employ to measure this outcome in a laboratory experiment. What are the strengths and weaknesses of these approaches? If you were limited to choosing one, which would you choose, and why?

Week 6: Developing Ideas and Theories

9/26

Readings

McGuire, William J. 1997. "Creative Hypothesis Generation in Psychology: Some Useful Heuristics." *Annual Review of Psychology* 48:1-30.

Cohen, Bernard P. 1989. "Ideas, Observations, and Knowledge Claims." Chapter 4 in *Developing Sociological Knowledge: Theory and Method, 2nd edition*, Nelson-Hall: Chicago.

Robb Willer, Ko Kuwabara, and Michael W. Macy. 2009. "The False Enforcement of Unpopular Norms." *American Journal of Sociology*: 115:451-90.

Whitson, Jennifer A. and Adam D. Galinsky. 2008. "Lacking Control Increases Illusory Pattern Perception." *Science* 322:115-117.

Supporting Materials online at:

<http://www.sciencemag.org/cgi/content/full/322/5898/115/DC1>

Assignment

Weekly assignment: Brainstorming study ideas! Come up with five distinct hypotheses and short sketches of experiments that you could use to test them. Each hypothesis should be one sentence, and each experiment sketch should be 4-5 sentences.

Week 7: Pre-Proposal Workshop

10/3

Readings: None.

Assignments

Pre-proposals (present in class). We will discuss the details of the pre-proposal assignment in class.

Week 8: Avoiding (and Detecting) Bias

10/10

Readings

Aronson et al: Ch 9, 10

Gaertner, Samuel L., and John. F Dovidio. 1977. "The Subtlety of White Racism, Arousal, and Helping Behavior." *Journal of Personality and Social Psychology* 35: 691–707.

Assignment

Weekly assignment: Choose one of the studies from your pre-proposal. Write about possible sources of bias in your design, and ways to eliminate that bias.

Week 9: Ethics

10/17

Readings

Aronson et al: Ch 3

Milgram, Stanley. 1963. "Behavioral Study of Obedience." *Journal of Abnormal and Social Psychology*.

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

Assignments

Take the IRB certification training and test online, if you have not already:
http://researchadmin.iu.edu/HumanSubjects/IUB/cert_req.html

Complete the “Summary Safeguards Statement” portion of the IRB application, for one of the studies in your pre-proposal.

The forms are available at:

http://researchadmin.iu.edu/HumanSubjects/IUB/hs_forms.html

Click the “New Research Submission” link, and use the “expedited” form.

Week 10: Field Experiments

10/24

Readings

Blank, Rebecca M., Marilyn Dabady, Constance F. Citro. 2004. “Experimental Methods for Assessing Discrimination.” Pp. 90-117 in *Measuring Racial Discrimination*.

Pager, Devah. 2003. “The Mark of a Criminal Record.” *American Journal of Sociology*.

Eastwick, Paul W., and Wendi L. Gardner. 2009. “Is it a game? Evidence for social influence in a virtual world.” *Social Influence* 4: 18-32.

Gerber, Alan S., James G. Gimpel, Donald P. Green, Daron R. Shaw. 2011. “How Large and Long-lasting Are the Persuasive Effects of Televised Campaign Ads? Results from a Randomized Field Experiment.” *American Political Science Review* 105:135-150.

Assignment

Weekly assignment: Choose a laboratory study. It can be a study we have discussed in class, from your proposal, or another experiment you are interested in. Outline an idea for a field study to test the same hypothesis in a different setting. Discuss advantages and disadvantages of each approach.

Week 11: Quasi- and Natural Experiments

10/31

Readings

Aronson et al: Ch 5

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*.

Goldin, Claudia and Cecilia Rouse. 2000. “Orchestrating impartiality: The impact of ‘blind’ auditions on female musicians.” *The American Economic Review* 90: 715-741.

Exchange on double-blind review:

- 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.
- Budden et al. 2008. “Response to Whittaker: challenges in testing for gender bias.” *Trends in Ecology and Evolution* 23: 1-2.

Assignments

Weekly assignment: Consider the question of whether the status of author affect the likelihood that an article is published in a scientific journal. How well do the readings this week answer this question? Is it possible to conduct a study that does a better job? What methodological or ethical challenges would need to be addressed?

Week 12: “Individual” differences and experimental manipulations 11/7

Readings

Hunt, Matthew O., et al. 2000. “Color-blind: the treatment of race and ethnicity in social psychology.” *Social Psychology Quarterly* 63: 352-364.

Simpson et al. 2007. “Are Blacks Really Less Trusting than Whites? Revisiting the Race and Trust Question.” *Social Forces* 525-552.

Yamagishi et al. 1998. “Uncertainty, Trust, and Commitment Formation in the United States and Japan.” *American Journal of Sociology* 104: 165-194.

Henrich, Joseph, Steven J. Heine, Ara Norenzayan. 2011. “The Weirdest People in the World?” *Behavioral and Brain Sciences* 33:61-83.

- *Note: The commentaries included with this article are not assigned*

Assignments

Weekly assignment: Choose one of the experiments in your pre-proposal. Think about possible individual-level traits that might *interact* (not simply have a main effect) with your experimental manipulation. What type of interactions might you predict? How prevalent do you think this trait is in the population under study? How might your findings be affected if you do not account for this trait?

Week 13: Common Issues/
Thinking and Writing About Data 11/14

Readings

Kuipers, Kathy J. and Stuart J. Hysom. 2007. “Common Problems and Solutions.” In *Laboratory Experiments in the Social Sciences* (Eds. Murray Webster and Jane Sell).

Spellman et al. "Making Claims in Papers and in Talks."

Bem, Darryl. 2003. "Writing the Empirical Journal Article." in Darley, J. M., Zanna, M. P., & Roediger III, H. L. (Eds) (2003). *The Compleat Academic: A Practical Guide for the Beginning Social Scientist*, 2nd Edition. Washington, DC: American Psychological Association.

Kerr, Norbert. 1998. "HARKing: Hypothesizing After the Results are Known." *Personality and Social Psychology Review* 2: 196-217.

Assignment

Weekly assignment: Choose one of the studies in your pre-proposal. Consider two possible outcomes other than those hypothesized: (1) a null result, with no substantive differences across conditions, and (2) a strong, significant result in the opposite of the predicted direction. How would you interpret each finding? Would each finding cause you to question your theory, your experiment, or both? Choose one of these two outcomes and explain what kind of follow-up might be appropriate to understand the finding.

Week 14: 11/21

NO CLASS – THANKSGIVING BREAK

Week 15: Proposal Presentations 11/28

Readings

None

Assignments

Final paper presentation. We will discuss final papers and presentations in class.

Week 16: Proposal Presentations 12/5

Readings

None

Assignments

Final paper presentation. We will discuss final papers and presentations in class.