

## **Plan 800 Research Design**

Spring 2018, Wednesday 1:25-3:45

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[Note: Syllabus adapted from Daniel Rodriguez]

De Vaus (2001) defines the aim of research design as “ensur[ing] that the evidence obtained enables us to answer the initial question as unambiguously as possible.”<sup>1</sup> In this way, research design addresses the most fundamental issues of academic work – how can we answer the questions that interest us. The skills taught in this and other research design courses are essential to crafting our own research programs but also in reviewing and critiquing work by others.

<sup>1</sup> De Vaus, D. A. 2001. *Research design in social research*. London: SAGE.

This course is suitable for doctoral students and for advanced master’s students seeking to gain a deeper understanding of the subject. The objectives of this course are to:

- Know the logic and need for research design
- Determine the connection between research design and planning/policy prescriptions
- Identify the main research designs used in social science research
- Critique research designs used in prevailing planning and applied policy research
- Understand the research proposal writing process, including the importance of ethics/human subjects review

This course will not review the details of statistical procedures but is focused on broad concepts that can apply to multiple qualitative and quantitative approaches.

### **Course Requirements**

Although most of the classes will be in the format of a seminar, some class sessions will combine lectures and discussions. Students are expected to attend class and participate actively raising and responding to questions and issues. Please make sure you do all the required readings. Course requirements include a) oral and written critiques of papers and materials (50% of the grade), b) in-class participation (20% of the grade), and c) a research proposal and presentation (30% of the grade).

### **Readings**

Required book:

Shadish, W., Cook, T. and Campbell, D. any edition. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Wadsworth: Belmont (CA).

Recommended books:

Yin, R. 2002. *Case Study Research: Design and Methods*. Any edition Thousand Oaks, CA: Sage, ISBN: 9780761925538.

Singleton, R.A. and Straits, B.C. 2005. *Approaches to Social Research*. Any edition. New York, NY: Oxford University Press.

## Schedule

Week	Day	Topic
1	1/10	Course overview; Connections of research to planning practice and policy
2	1/17	Formulating questions and the logic of research design
3	1/24	Causality
4	1/31	Validity and Reliability
5	2/7	Writing Proposals
6	2/14	Student research ideas – individual presentations
7	2/21	Case Study Research Designs
8	2/28	Observational research design –Correlational, case-control, and natural experiment studies
9	3/7	Quasi-experimental studies --- Matching
	3/14	Spring Break
10	3/21	Randomization and controversy
11	3/28	Student research ideas – individual presentations
12	4/4	Mixed Methods
13	4/11	Data collection
14	4/18	Research Ethics and the Path Ahead
15	4/25	Proposal Presentations

### (\* Required)

#### **Week 1 Course overview; Connections of research to planning practice and policy**

a) \*Lindblom, Charles E. 1987. Who Needs What Social Research for Policymaking? *Evaluations Studies Review*, 12, 163-184.

b) \*Merton, R. K. 1949. The Role of Applied Social Science in the Formulation of Policy: A Research Memorandum. *Philosophy of Science*, 16, (3), 161-181.

c) \*Firebaugh, G. (2008). *Seven rules for social research*: Princeton University Press, Chapter 1, 1-30.

d) Hopkins, L. D. 2001. Planning as Science: Engaging Disagreement. *Journal of Planning Education and Research* 20, (4), 399-406.

e) Singleton, R.A. and Straits, B.C. 2005. *Approaches to Social Research*. 4th ed. New York, NY: Oxford University Press. Chapter 1.

f) Little, D. 1991. *Varieties of Social Explanation: An Introduction to the Philosophy of Social Science*. Boulder, CO: Westview Press.

#### **Week 2 Formulating questions and the logic of research design**

a) \*Lundberg, C., and Young, C.A. eds. 2005. "Models and Theories: Purposes and Reach." In *Foundations for Inquiry: Choices and Trade-Offs in the Organizational Sciences*. Palo Alto, CA: Stanford University Press, 163-181.

b) \*Lundberg, C., and Young, C.A. eds. 2005. "Inventing and Framing Research." In *Foundations for Inquiry: Choices and Trade-Offs in the Organizational Sciences*. Palo Alto, CA: Stanford University Press, 247-285.

c) \* Singleton, R.A. and Straits, B.C. 2005. *Approaches to Social Research*. 4th ed. New York, NY: Oxford University Press, Chapter 2.

### **Week 3 Causality**

a) \*Salmon, W. 1998. Causality and explanation, Oxford University Press, Chapter 1, pp. 13-25.

b) \*Singleton R. and Straits, B.C. 2005. *Approaches to Social Research*. 4th ed. New York, NY: Oxford University Press, Chapter 3.

c) \*Marini, M., and Singer, B. 1988. Causality in the Social Sciences" *Sociological Methodology*, 18, 347-409.

d) Martin, Joanne. 1981. A Garbage Can Model of the Psychological Research Process. *American Behavioral Scientist* 25,(2), 131-151.

### **Week 4 Validity and Reliability**

a) \*Shadish, W., Cook, T. and Campbell, D. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*: Wadsworth: Belmont (CA). Chapters 1-3, 1-102.

b) \*King, G., Keohane, R. and Verma, S. 1994. *Designing Social Inquiry, Scientific Inference in Qualitative Research*. Princeton: Princeton University Press, Chapter 3, 75-114.

c) Carmines, E. 1979. *Reliability and Validity Assessment*, Sage, Chapters 1,2, and 4.

### **Week 5 Writing Proposals**

a) Bracken, I. 1981. *Urban Planning Methods*, Methuen, NJ, Chapter 4, pp. 102-134.

b) \*Alford, Robert R. 1998. "Chapter 2: Designing a Research Project" in *The Craft of Inquiry: Theories, Methods, and Evidence*. New York, NY: Oxford University Press.

c) \*Watts, M. 2006. "Essentials for Research Design" In *A Handbook for Social Science Field Research: Essays and Bibliographic Sources on Research Design and Methods*. Edited by Ellen Perecman and Sarah Curran. Thousand Oaks, CA: Sage.

d) \*Przeworski, A., and Salomon, F. On the art of writing proposals. Social Science Research Council, 1998.

### **Week 6 Student research ideas**

### **Week 7 Case Study Research Designs**

a) \*Yin, R. 2003. *Case Study Research, 3rd ed*. Sage Publications. Chapters 1, 2. 1-56.

b) \*Schrank, A. "Case Studies: Case-Based Research" In *A Handbook for Social Science Field Research: Essays and Bibliographic Sources on Research Design and Methods*. Edited by Ellen Perelman and Sarah Curran. Thousand Oaks, CA: Sage, 2006.

c) \*Flyvbjerg, B. 2008. Five misunderstandings about case-study research, *Qualitative Inquiry*, 12, 1, 219-245.

d) Schrank, A. 2006. "Essentials for the Case Study method: The Case Study and Causal Inference" In *A Handbook for Social Science Field Research: Essays and Bibliographic Sources on Research Design and Methods*. Edited by Ellen Perelman and Sarah Curran. Thousand Oaks, CA: Sage, 2006.

### **Week 8 Observational research design –Correlational, case-control, and natural experiment studies**

a) \*Shadish, W., Cook, T. and Campbell, D. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*: Wadsworth: Belmont (CA). Chapters 4,5.

b) \*Singleton R. and Straits, B.C. 2005. *Approaches to Social Research*. 4th ed. New York, NY: Oxford University Press, Chapter 13.

c) \*Meyer, Bruce D. (1995) Natural and quasi-experiments in economics. *Journal of Business & Economic Statistics* 13, 151-161.

### **Week 9 Quasi-experimental studies --- Matching**

a) \*Shadish, W., Cook, T. and Campbell, D. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*: Wadsworth: Belmont (CA). Chapter 4,5.

b) \*Oakes, J.M., Johnson, P.J. 2006. Propensity Score Matching for Social Epidemiology in *Methods for Social Epidemiology*, Kaufman, J. and Oakes, J.M Eds, Wiley, 364-386.

c) Cook, T. 1983 "Quasi-Experimentation, Its Ontology, Epistemology, and Methodology" in G. Morgan, *Beyond Method*. Sage Publications, 74-94.

### **Week 10 Randomization and controversy**

a) \*Shadish, W., Cook, T. and Campbell, D. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*: Wadsworth: Belmont (CA). Chapter 8.

b) \*Burtless, G. 1995. The Case for Randomized Field Trials in Economic and Policy Research. *Journal of Economic Perspectives* 9, (2), 63-84.

c) \*Heckman, J.J. and Smith, J.A. 1995. Assessing the Case for Social Experiments. *Journal of Economic Perspectives* 9, (2), 85-110.

d) \*Moffitt, R.A. 2004. The Role of Randomized Field Trials in Social Science Research: A Perspective from Evaluations of Reforms of Social Welfare Programs. *American Behavioral Scientist* 47, (5), 506-540.

e) Tchetgen, E. and VanderWeele, T.J., 2012. On causal inference in the presence of interference. *Statistical Methods in Medical Research*, 21(1) 55–75.

## **Week 11 Student research ideas**

### **Week 12 Mixed Methods**

a) \*Axinn, William G. and Lisa D. Pearce. 2006. *Mixed Method Data Collection Strategies*. New York, NY: Cambridge Press. Chapter 1: Motivations for Mixed Method Social Research.

b) \*Teddlie, Charles, and Fen Yu. 2007. Mixed Methods Sampling: A Typology with Examples. *Journal of Mixed Methods Research* 1,(1), 77-100.

c) \*Piore, M. 2006. "Combining Qualitative and Quantitative Tools" In *A Handbook for Social Science Field Research: Essays and Bibliographic Sources on Research Design and Methods*. Edited by Ellen Perelman and Sarah Curran. Thousand Oaks, CA: Sage.

d) Small, Mario L. 2011. How to Conduct a Mixed Method Study: Recent Trends in a Rapidly Growing Literature. *Annual Review of Sociology*. 37, 55-84.

### **Week 13 --Data collection**

a) \*Schaeffer, N.C. and Presser, S. 2003. The Science of Asking Questions. *Annual Review of Sociology* 29, 65-88.

b) \*Park, A. 2006. Surveys and Secondary Data Sources: Using Survey data in Social Science Research in Developing Countries In *A Handbook for Social Science Field Research: Essays and Bibliographic Sources on Research Design and Methods*. Edited by Ellen Perelman and Sarah Curran. Thousand Oaks, CA: Sage.

c) \*Tourangeau, R., and Smith, T.W.. 1996. Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context. *Public Opinion Quarterly* 60, (2), 275-304.

d) \*Dillman, D. A. 2006 Why Choice of Survey Mode Makes a Difference." *Public Health Reports*, 121, (1), 11-13.

### **Week 14 Research Ethics and the Path Ahead**

a) \*Singleton, R.A. and Straits, B.C. 2005. *Approaches to Social Research*. 4th ed. New York, NY: Oxford University Press. Chapter 16.

b) \*Shadish, W., Cook, T. and Campbell, D. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*: Wadsworth: Belmont (CA), part of Chapter 9, 279-291.

c) \*Fang, F. Steen, G.R., and Casadevall, A. 2012. Misconduct accounts for the majority of retracted scientific publications, *PNAS*, 109, 42, 17028-17033.

d) \*Lundberg, Craig, and Cheri Young. 2005. Considerations for Inquiry's Journey. In *Foundations for Inquiry: Choices and Trade-Offs in the Organizational Sciences*. Palo Alto, CA: Stanford University Press, 421-466.

### **Week 15 Proposal Presentations**