

Y580: Research Design
Spring, 2014
Thursday, 2:00-4:00 PM, Room: Sycamore 100

Instructor: Professor Matthew Hayes, Woodburn Hall, RM 308, Email: mh34@indiana.edu

Office Hours: 11:00 AM -12:00 PM MW

Course Description:

Successful political science research requires many things: asking an interesting question, creating a sound research design, using appropriate methods, and writing clearly and effectively. No amount of statistical training can compensate for a poorly designed study, and even the best research design cannot generate compelling answers to an uninteresting question. This course focuses on asking interesting questions in political science and devising good research designs to answer them. Since good research requires good storytelling, there will be a heavy emphasis on writing in this course. And although this is not a quantitative (or qualitative) methods course, many of the concepts and readings require you to be conversant in the dominant methods in modern political science. The course will cover topics such as asking and answering questions in political science, defining and measuring concepts, threats to validity and reliability, and causal inference and the logic of experiments.

Required texts:

The following books are required for this course and should be purchased from the vendor of your choosing. No book order was placed with the IU Bookstore, as online options are almost always more cost-effective.

- King, G., Keohane, R. O., and Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton University Press.
- Brady, H. E. and Collier, D. (2004). *Rethinking social inquiry: Diverse tools, shared standards*. Rowman & Littlefield.
- Angrist, J. D. and Pischke, J.-S. (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press.

Course Expectations:

Evaluations from this course will be drawn from two sources. The first is a substantial research project to be completed by the end of the semester. This work should be original research and should be suitable for a second-year paper. For students who have yet to complete any original

research projects (e.g., first year graduate students), a research design may be a suitable alternative, after consultation with the instructor.

The other half of evaluation will be based on participation during in-class discussions. Students are expected to come to each seminar having read the material and prepared to discuss. If you are not prepared to discuss, you need not attend class. Students are also expected to submit 8 response memos over the course of the semester for weeks of the student's choosing.

Research paper

Students are expected to complete a substantial (e.g., 15-25 page) empirical research paper by the end of the semester. There is no topical requirement for this paper; students are strongly encouraged to apply the topics covered in this course to an existing seminar paper or a paper you are currently writing for another class. This final paper should be a polished draft that would be a suitable early version of a second-year paper. The final draft of this paper is due on the last day of class, **May 1, 2014**.

Participation

Students are expected to come to each seminar prepared to discuss the readings in depth and how they apply to political science research more generally. This means you will be expected to go deeper than a simple summary of the readings. You are also expected to read your colleagues' response memos (see below), as they will be part of in-class discussion.

Response essays

To help students engage with the readings and improve in-class discussion, several students will be responsible for writing an essay on each week's readings. You will be expected to write a total of 5 short essays during the course of the semester. Each essay should be absolutely no more than 2 single spaced pages. Essays should be emailed to me and the class by **5 PM on Wednesday**. Please submit essays in PDF format.

Good response essays will provide a *brief* overview of one or more of the issues in research design for that week, and discuss how they apply to empirical research. Excellent essays will discuss potential solutions to challenges of research design, critique solutions posed by the readings, or directly apply concepts of research design to ongoing controversies within the literature.

Grading

- 40% – Research paper
- 30% – Participation
- 30% – Response essays

Course Schedule and Readings

In many weeks, we will read work addressing research design directly as well as original political science applications that demonstrate the importance of that week's topic. We will read some, but not all, of these applied readings. These applications are meant to "bridge the gap" between a theoretical discussion of research design and the actual practice of producing research. As such,

they will be of the most benefit if they are on topics of interest to students. I welcome any suggested changes to the applied readings for any and all weeks in this course.

- **01/16 - Asking questions and making arguments, part I**

- Angrist, J. D. and Pischke, J.-S. (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press. **Chapter 1**.
- Abelson, R. P. (1995). *Statistics as principled argument*. Psychology Press. **Chapter 1**.

- **01/23 - Asking questions and making arguments, part II**

- Garfinkel, A. (1981). *Forms of explanation: Rethinking the questions in social theory*. Yale University Press New Haven. **Introduction & chapter 1**.
- Abelson, R. P. (1995). *Statistics as principled argument*. Psychology Press. **Chapters 4 – 6**.

- **01/30 - Theory and evidence**

- Sutton, R. I. and Staw, B. M. (1995). What theory is not. *Administrative science quarterly*, pages 371–384. **Pages 371-378**.
- Lieberman, S. (1992). Einstein, renouir, and greeley: Some thoughts about evidence in sociology. *American Sociological Review*, 57(1):5.
- Rogowski, R. (2004). How inference in the social (but not the physical) sciences neglects theoretical anomaly. In Brady, H. and Collier, D., editors, *Rethinking Social Inquiry*. Rowman and Littlefield.
- Applications:
 - Svobik, M. W. (2009). Power sharing and leadership dynamics in authoritarian regimes. *American Journal of Political Science*, 53(2):477–494.
 - Carter, D. B. (2010). The strategy of territorial conflict. *American Journal of Political Science*, 54(4):969–987.
 - Achen, C. H. and Snidal, D. (1989). Rational deterrence theory and comparative case studies. *World Politics*, 41(2):143–169.

- **02/06 - Models in political science**

- Lave, C. A. and March, J. G. (1975). *An introduction to models in the social sciences*. Harpercollins College Div. **Chapters 1-3**.
- Clarke, K. A. and Primo, D. M. (2012). *A model discipline: Political science and the logic of representations*. Oxford University Press. **Chapters 1 & 3**.
- Schelling, T. C. (2006). *Micromotives and macrobehavior*. WW Norton & Company. **Chapter 4**.
- Applications:
 - Baron, D. P. and Ferejohn, J. A. (1989). Bargaining in legislatures. *The American Political Science Review*, pages 1181–1206.

- Lewis-Beck, M. S. and Rice, T. W. (1984). Forecasting presidential elections: A comparison of naive models. *Political Behavior*, 6(1):9–21.
- Brady, H. E., Verba, S., and Schlozman, K. L. (1995). Beyond ses: A resource model of political participation. *American Political Science Review*, pages 271–294.
- Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge Univ Pr.
- Rasler, K. (1996). Concessions, repression, and political protest in the iranian revolution. *American Sociological Review*, pages 132–152.

● 02/13 - Concepts and measurement

- Sartori, G. (1970). Concept misformation in comparative politics. *The American Political Science Review*, 64(4):1033–1053. **Optional**.
- Goertz, G. (2006). *Social science concepts: A user's guide*. Princeton University Press. **Chapters 1 & 2**.
- Collier, D. and Mahon Jr, J. E. (1993). Conceptual “stretching” revisited: Adapting categories in comparative analysis. *American Political Science Review*, pages 845–855.
- Adcock, R. (2001). Measurement validity: A shared standard for qualitative and quantitative research. *American political science review*, 95(03):529–546.
- Applications:
 - Elkins, Z. (2000). Gradations of democracy? empirical tests of alternative conceptualizations. *American Journal of Political Science*, 44:193–200.
 - Munck, G. L. and Verkuilen, J. (2002). Conceptualizing and measuring democracy evaluating alternative indices. *Comparative political studies*, 35(1):5–34.
 - Pemstein, D., Meserve, S. A., and Melton, J. (2010). Democratic compromise: A latent variable analysis of ten measures of regime type. *Political Analysis*, 18(4):426–449.
 - Kinder, D. and Sears, D. (1981). Prejudice and politics: Symbolic racism versus racial threats to the good life. *Journal of personality and social psychology*, 40(3):414.
 - Sniderman, P. M. and Tetlock, P. E. (1986). Symbolic racism: Problems of motive attribution in political analysis. *Journal of social issues*, 42(2):129–150.

● 02/20 - Levels of analysis

- Robinson, W. (1950). Ecological correlations and the behavior of individuals. *American Sociological Review*, 15(3).
- King, G. (1997). *A solution to the ecological inference problem: Reconstructing individual behavior from aggregate data*. Princeton University Press. **Chapter 1**.
- Cho, W. K. T. and Gaines, B. J. (2004). The limits of ecological inference: The case of split-ticket voting. *American Journal of Political Science*, 48(1):152–171.
- Applications:
 - Seligson, M. A. (2002). The renaissance of political culture or the renaissance of the ecological fallacy? *Comparative Politics*, pages 273–292.

- Inglehart, R. and Welzel, C. (2003). Political culture and democracy: Analyzing cross-level linkages. *Comparative Politics*, pages 61–79.
- Baek, M. (2009). A comparative analysis of political communication systems and voter turnout. *American Journal of Political Science*, 53(2):376–393.
- Steenbergen, M. R. and Jones, B. S. (2002). Modeling multilevel data structures. *American Journal of Political Science*, pages 218–237.

- **02/27 - Potential outcomes and causal inference**

- Morgan, S. L. and Winship, C. (2007). *Counterfactuals and causal inference: Methods and principles for social research*. Cambridge University Press. **Chapters 1 & 2.**
- Holland, P. W. (1986). Statistics and causal inference. *Journal of the American statistical Association*, 81(396):945–960.
- Braumoeller, B. F. and Goertz, G. (2000). The methodology of necessary conditions. *American Journal of Political Science*, pages 844–858.
- Bennett, A. and Elman, C. (2006). Complex causal relations and case study methods: the example of path dependence. *Political Analysis*, 14(3):250–267.
- Applications:
 - Ashworth, S., Clinton, J. D., Meirowitz, A., and Ramsay, K. W. (2008). Design, inference, and the strategic logic of suicide terrorism. *American Political Science Review*, 102(2):269.
 - Pape, R. A. (2008). Methods and findings in the study of suicide terrorism. *American Political Science Review*, 102(2).

- **03/06 - Methodological divisions within political science**

- King, G., Keohane, R. O., and Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton University Press. **Chapters 1-3.**
- Brady, H. E. and Collier, D. (2004). *Rethinking social inquiry: Diverse tools, shared standards*. Rowman & Littlefield.
- Freedman, D. A. (2008). On types of scientific inquiry: The role of qualitative reasoning. In *The Oxford Handbook of Political Methodology*, pages 300–318. Oxford: Oxford University Press.

- **03/13 - Quantitative observational research in political science and its challenges I**

- Freedman, D. A. (1991). Statistical models and shoe leather. *Sociological methodology*, 21:291–313.
- King, G., Keohane, R. O., and Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton University Press. **Chapters 4-5.**
- Angrist, J. D. and Pischke, J.-S. (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press. **Chapter 3.**
- Achen, C. H. (2002). Toward a new political methodology: Microfoundations and art. *Annual Review of Political Science*, 5(1):423–450.

- Lieberman, S. (1985). *Making it count: The improvement of social research and theory*. Univ of California Press. **Chapters 2-4 (optional)**.

- **03/27 - Quantitative observational research in political science and its challenges II**

- Heckman, J. J. (1976). The common structure of statistical models of truncation, sample selection and limited dependent variables and a simple estimator for such models. In *Annals of Economic and Social Measurement, Volume 5, number 4*, pages 475–492. NBER.
- LaLonde, R. J. (1986). Evaluating the econometric evaluations of training programs with experimental data. *The American Economic Review*, pages 604–620.
- Rosenbaum, P. R. and Rubin, D. B. (1984). Reducing bias in observational studies using subclassification on the propensity score. *Journal of the American Statistical Association*, 79(387):516–524.
- Applications:
 - Von Stein, J. (2005). Do treaties constrain or screen? selection bias and treaty compliance. *American Political Science Review*, 99(04):611–622.
 - Lemke, D. and Reed, W. (2001). War and rivalry among great powers. *American Journal of Political Science*, pages 457–469.
 - Gilligan, M. J. and Sergenti, E. J. (2008). Do UN interventions cause peace? using matching to improve causal inference. *Quarterly Journal of Political Science*, 3(2):89–122.

- **04/03 - Quantitative observational research in political science and its challenges III**

- Angrist, J. D. and Pischke, J.-S. (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press. **Chapter 4**.
- Sovey, A. J. and Green, D. P. (2011). Instrumental variables estimation in political science: A readers guide. *American Journal of Political Science*, 55(1):188–200.
- Campbell, D. T. (1969). Reforms as experiments. *American psychologist*, 24(4):409.
- Abadie, A., Diamond, A., and Hainmueller, J. (2010). Synthetic control methods for comparative case studies: Estimating the effect of californias tobacco control program. *Journal of the American Statistical Association*, 105(490).
- Applications:
 - Savun, B. and Tirone, D. C. (2011). Foreign aid, democratization, and civil conflict: how does democracy aid affect civil conflict? *American Journal of Political Science*, 55(2):233–246.
 - Lewis-Beck, M. S. and Alford, J. R. (1980). Can government regulate safety? the coal mine example. *American Political Science Review*, 74:745–756.

- **04/10 - Qualitative observational research in political science and its challenges I**

- Gerring, J. (2004). What is a case study and what is it good for? *American Political Science Review*, 98(02):341–354.
- Kritzer, H. M. (1996). The data puzzle: The nature of interpretation in quantitative research. *American Journal of Political Science*, pages 1–32.
- Bennett, A. (2004). Case study methods: Design, use, and comparative advantages. In Sprinz, D. F. and Wolinsky-Nahmias, Y., editors, *Models, numbers, and cases: Methods for studying international relations*, pages 19–55. University of Michigan Press.
- Brady, H. E. and Collier, D. (2004). *Rethinking social inquiry: Diverse tools, shared standards*. Rowman & Littlefield. **Chapters 10 & 12.**
- Applications:
 - Harding, D. J., Fox, C., and Mehta, J. D. (2002). Studying rare events through qualitative case studies lessons from a study of rampage school shootings. *Sociological Methods & Research*, 31(2):174–217.
 - Walsh, K. C. (2012). Putting inequality in its place: Rural consciousness and the power of perspective. *American Political Science Review*, 1(1):1–16.
 - Fujii, L. A. (2010). Shades of truth and lies: Interpreting testimonies of war and violence. *Journal of Peace Research*, 47(2):231–241.

- **04/17 - Qualitative observational research in political science and its challenges II**

- Dion, D. (1998). Evidence and inference in the comparative case study. *Comparative Politics*, pages 127–145.
- Geddes, B. (1990). How the cases you choose affect the answers you get: Selection bias in comparative politics. *Political analysis*, 2(1):131–150.
- Lieberman, E. S. (2005). Nested analysis as a mixed-method strategy for comparative research. *American Political Science Review*, 99(03):435–452.
- Rohlfing, I. (2008). What you see and what you get pitfalls and principles of nested analysis in comparative research. *Comparative Political Studies*, 41(11):1492–1514.
- Lustick, I. S. (1996). History, historiography, and political science: Multiple historical records and the problem of selection bias. *American Political Science Review*, pages 605–618.
- Applications:
 - Snyder, R. and Bhavnani, R. (2005). Diamonds, blood, and taxes a revenue-centered framework for explaining political order. *Journal of Conflict Resolution*, 49(4):563–597.

- **04/24 - Experimental research in political science and its challenges I**

- Druckman, J. N., Green, D. P., Kuklinski, J. H., and Lupia, A. (2006). The growth and development of experimental research in political science. *American Political Science Review*, 100(04):627–635.

- Shadish, W. R., Cook, T. D., and Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin Boston. **Chapter 8**.
- Green, D. P. and Gerber, A. S. (2002). The downstream benefits of experimentation. *Political Analysis*, 10(4):394–402.
- Applications:
 - Iyengar, S. (1987). Television news and citizens' explanations of national affairs. *The American Political Science Review*, pages 815–831.
 - Orbell, J. and Dawes, R. M. (1991). A "cognitive miser" theory of cooperators' advantage. *The American Political Science Review*, pages 515–528.
 - Lyall, J., Blair, G., and Imai, K. (2013). Explaining support for combatants during wartime: A survey experiment in afghanistan. *American Political Science Review*, 107(4):679–705.
- **05/01 - Experimental research in political science and its challenges II**
 - Berkowitz, L. and Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American psychologist*, 37(3):245.
 - Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, 51(3):515.
 - Druckman, J. N. and Kam, C. D. (2011). Students as experimental participants. In Druckman, J. N., Green, D. P., Kuklinski, J. H., and Lupia, A., editors, *Cambridge Handbook of Experimental Political Science*, pages 41–57. Cambridge University Press.
 - Barabas, J. and Jerit, J. (2010). Are survey experiments externally valid? *American Political Science Review*, 104(2):226–242.
 - Druckman, J. N., Fein, J., and Leeper, T. J. (2012). A source of bias in public opinion stability. *American Political Science Review*, 106(2):430–454.
 - Sinclair, B., McConnell, M., and Green, D. P. (2012). Detecting spillover effects: design and analysis of multilevel experiments. *American Journal of Political Science*, 56(4):1055–1069.

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