

DEPARTMENT OF SOCIAL SCIENCES
Center for Doctoral Studies in the Social
and Behavioral Sciences
Prof. Thomas Gschwend, Ph.D.

UNIVERSITY OF
MANNHEIM



Visitors

D 7, 27 · Room 301/302
68131 Mannheim · Germany
Telephone +49-621-181-2087
Fax +49-621-181-3699
E-Mail: gschwend@uni-mannheim.de
www.sowi.uni-mannheim.de/gschwend

Assistant (Christel Selzer)

Telephone +49-621-181-2413
E-Mail: methods@uni-mannheim.de

Methods of the Social Sciences: Research Design

Fall 2008

Time Tuesday, 13:45 – 15:15

Place D7, room 307

Office Hours Wed. 15:15-16:15

Description: The goal of this course is to jump-start students with their dissertation proposal. Such a proposal is a research outline that delineates the doctoral thesis project, including the motivation for research question(s), the survey of the relevant theoretical and empirical contributions, the development of a theoretical framework, the specification of the methodology and planned empirical analysis. You should be prepared to address the following questions: What makes that an interesting question? Is it an important question? What contributions would this question and the answers make to the scholarly literature? What strategies are there to answer your research questions(s)?

This course should help students to see the trade-offs involved in choosing a particular research design in their research projects. Consequently students are expected to develop own ideas about potential research questions and actively participate in those seminar-style meetings that are organized within this lecture course.

Requirements: There are three different requirements for this course.

- 1) Prepare the readings in advance so that you can come to class with particular questions in mind. You will learn primarily by reading and then discussing that material with your instructor and classmates. The more actively you participate in the discussions the easier it will be to comprehend the new material and the more fun we will have working on this together. The **readings** will be provided by email well in advance and are also available on CDSS web pages.
- 2) There will be some **take-home assignments** that motivate you to put to work the material we discussed in class.
- 3) I expect you to come up with a first version of your **draft dissertation proposal**. This exercise should motivate you to start working on your proposal early on, help you to see what has and what has not sufficiently worked so far, and, finally helps you to

focus your efforts during the winter break on what has to be done next in order to write a successful dissertation proposal by the end of the next semester. Some of you might need to have a grant proposal ready even before the end of the second semester. Doing this should put less pressure on you during the second semester. For this class I will be looking for a project that is well-defined and feasible as well as methodologically sound. I suggest emphasizing methods and data more than the relevance of the research question which generally leads to long literature review and a substantive defense of the problem's importance.

A last, rather protestant, remark: No late assignments will be accepted, unless the lateness has been discussed with and cleared by me prior to or on the date that the assignment is originally due.

Preliminary schedule

9 September **Introduction: Dissertation Proposal – Formal requirement - Outline**

16 September **How to Come to New Research Questions and Other Core Issues of Research Design**

- 1) Do you believe KKV mantra that for all types of research design there is the same underlying logic of inference?

- 2) What are "observable implications" of a theory? Provide an example.

- 3) In the introduction of Gschwend/Schimmelfennig (2007) there is a 2x2-typology of research designs on page 14. Can you come up with exemplary research questions that would fit in each of these four cells?

- ☞ King, Gary et al. 1994. "The Science in Social Science." In *Designing Social Inquiry: Scientific Inference in Qualitative Research*, eds. Gary King, Robert Owen Keohane and Sidney Verba. Princeton: Princeton University Press.
- ☞ Gschwend, Thomas, and Frank Schimmelfennig. 2007. "Introduction: Designing Research in Political Science – A Dialogue." In *Research Design in Political Science: How to practice What They Preach?*, eds. Thomas Gschwend and Frank Schimmelfennig. Houndmills: Palgrave MacMillan.

23 September **Conceptualization and Measurement**

Last Tuesday we (well, mostly I) talked a lot about strategies to generate new researchable ideas. Let's practice it! As an assignment for next week you should bring one new researchable idea to class. Prepare a short (1 minute) but concise oral descriptions of it. Be

also ready to provide answers to the following questions:

- 1) How would you do that?
- 2) What makes that an interesting question?
- 3) What contributions would this question make to the scholarly literature?

☞ Wonka, Arnd. 2007 "Concept Specification in Political Science Research." In *Research Design in Political Science. How to Practice What They Preach?*, eds. Thomas Gschwend and Frank Schimmelfennig. Houndmills, Basingstoke: Palgrave.

☞ Miller, Bernhard. 2007. "Making Measures Capture Concepts: Tools for Securing Correspondence between Theoretical Ideas and Observations". In *Research Design in Political Science. How to Practice What They Preach?*, eds. Thomas Gschwend and Frank Schimmelfennig. Houndmills, Basingstoke: Palgrave.

There is one chapter on concept specification and one on measurement. Please come up with an example of a fuzzy concept in your field. Any ideas about how to specify it further to improve it and to devise a reasonable measurement strategy? Bring one new researchable idea to class.

30 September

How to write scholarly journal articles and successful grant proposals

Writing an article or a grant proposal require sufficiently similar techniques. Please start to look at the structure of articles that are published in the journals of the field you would like to submit your work sometime. How long are they? Be ready to describe their structure. Do they consist of similar sections or subsections? Are you able to delineate a structural blueprint of such an article? Bring a copy of one article you like to class.

We will read two small pieces (Hochschild, King) that are dealing with article writing and one (Przeworski/Salomon) about proposal writing. I also attach the DFG guidelines for research grants that provide you with some basic information about the DFG process of granting research money to scholars.

☞ Hochschild, Jennifer L. 2008. "Writing Introductions." In *Publishing in Political Science*, ed. Stephen Yoder. Washington, DC: American Political Science Association.

☞ King, Gary. 2006. "Publication, Publication." *Political Science and Politics* 39(1): 119-125.

☞ Przeworski, Adam, and Frank Salomon. 1988. "On the Art of Writing Proposals. Some Candid Suggestions for Applicants to Social Science Research Council Competitions."

7 October

Case Selection

I would like you to get gradually more focused on a potential topic for your dissertation proposal. As an assignment please bring one researchable topic to class. As we have done before, prepare a short (really only 2 minutes) but concise oral description of it. It is not so important that we all understand exactly what is going on in your research. It is an exercise meant for you. Try also (within the 2 minutes) to say in one sentence on how you tackle your topic and what contribution this would make to which scholarly literature?

Attached are also two chapters and an article on case selection. Read carefully the KKV Chapter and skim the other two.

- 1) What are KKV's guidelines for case-selection?
- 2) What is the problem with selection on the dependent variable?

☞ Ebbinghaus, Bernhard. 2005. "When Less is More." *International Sociology* 20(2): 133-152.

☞ King et al. 1994. "Determining What to Observe." In *Designing Social Inquiry: Scientific Inference in Qualitative Research*, eds. Gary King, Robert Owen Keohane and Sidney Verba. Princeton: Princeton University Press.

☞ Collier, David; James Mahoney, and Jason Seawright. 2004. "Claiming Too Much: Warnings about Selection Bias." In *Rethinking Social Inquiry: Diverse tools, Shared Standards*, eds. Henry E. Brady and David Collier. Lanham: Rowman & Littlefield.

14 October

Reviewing & Publishing

I would go back to rather practical issues this week. Let's focus more on "Reviewing & Publishing". I have sent you the paper trail (e.g. original paper, its reviews and a memo documenting the revisions of the resubmitted version) of one of my successful journal submissions and a straight rejection as an example.

Take a look at all the reviews and the memo in particular and prepare some comments on them.

- 1) Are the reviews helpful?
- 2) What is particularly good or bad about them?
- 3) How could they be improved?

In order to give you some insights about the reviewing and publishing business I would like you to carefully read the following:

- ☞ Polsky, Andrew J. 2008. "Seeing Your Name in Print. Unpacking the Mysteries of the Review Process at Political Science Scholarly Journals." In *Publishing in Political Science*, ed. Stephen Yoder. Washington, DC: American Political Science Association.
- ☞ Roediger, Henry L. 2007. "Twelve Tips for Reviewers." *APS Observer* 20 (4).
- ☞ Chilton, Stephen. 1999. "The Good Reviewer." *Academe* 85 (6): 54-55.

21 October

Reviewing and Publishing

As an assignment for this week I would like you to get started on your draft research proposal. Please send me by email until next Tuesday (noon) a version that includes (1) working title and name, (2) two-paragraph project summary as an abstract of your dissertation proposal, and (3) the introduction in which you should state your research question or the puzzle you are going to address and argue why your chosen topic is relevant? Please do this on less than two pages (double-spaced).

Next week we will do a last round of "2-minute oral presentation" of your dissertation topic. As before, try also (within the 2 minutes) to say something about your research design (something you need not to include in the written assignment for next Tuesday).

We also will finish up the discussion about publication strategies. Therefore I would like you to read the following:

- ☞ Roediger, Henry L. 2007. "Twelve Tips for Reviewers." *APS Observer* 20 (6).
- ☞ Senturia, Stephen D. 2003. "How to Avoid the Reviewer's Axe: One Editor's View." *Journal of Microelectromechanical Systems* 12(3): 229-232.

28 October

Causal Inference with Observational Data

We will return to research design issues for the next weeks and will discuss issues related to causal inference. Please read carefully King et al as well as the De Vaus Chapter. Also closely read Winship & Morgan until page 674 and skim the rest. Those of you working with Stata might want to try out some of these methods. The Nichols 2007 text provides a hands-on description for some of them.

Remember, we care more about research design issues than about particular methods of causal modeling. Therefore it is enough to get an intuition about these methods, their advantages and disadvantages. Think also about potential applications to questions that might be related to your research area.

1) In what sense do different conceptions of causality differ from one another and what are the consequences in terms of research design?

2) What is the problem for causal inference with non-experimental data and which solutions are there?

- 📖 King et al. 1994. "Causality and Causal Inference." In *Designing Social Inquiry: Scientific Inference in Qualitative Research*, eds. Gary King, Robert Owen Keohane and Sidney Verba. Princeton: Princeton University Press.
- 📖 Nichols, Austin. 2007. "Causal Inference with Observational Data." *The Stata Journal* 7(4): 507-541.
- 📖 De Vaus, David. 2001. "Causation and the Logic of Research Design." In *Research Design in Social Research*, ed. David De Vaus. Thousand Oaks, CA: Sage.
- 📖 Whinship & Morgan. 1999. "The Estimation of Causal Effects from Observational Data." *Annual Review of Sociology* 25: 659-706.

4 November

Causal Inference in Case Studies

We have distinguished experimental research designs from observational and case studies. I would like to motivate you thinking about "untypical" research designs in your field of interest. As an assignment for this week please bring to class for each design a research question that can be addressed with such a research design. We will spend some time discussing potential implementations of these research designs to get a sense of how to design a study to obtain an "estimate" of interesting causal effect.

Do you agree with Gerring and McDermott's claim that "[a]ll case study research is ... quasi-experimental"?

- 📖 Gerring, John, and Rose Mc Dermott. 2007. "An Experimental Template for Case Study Research." *American Journal of Political Science* 51(3): 688-701.
- 📖 Sekhon, Jasjeet S. 2004. "Quality Meets Quantity: Case Studies, Conditional Probability and Counterfactuals." *Perspectives on Politics* 2(2): 281-293.

11 November

Improving Interpretation: Graphs vs. Tables

Will be talking about ways to improve interpretation of our estimates. I suggest you read closely Kastellec & Leoni (definitely check out their project website at <http://tables2graphs.com/>) and try to get the gist of the argument in King et al. Also skim the Gelman et al piece. People working with experiments should also take a look at Cumming et al. For those of you working with Stata I

suggest to take a closer look at Cox (for graphs) as well as Xu & Long (in addition to King et al).

What do you think about the plea: making graphs instead of tables?

- 📖 Cumming, Geoff, Fiona Fidler, and David L. Vaux. 2007. "Error bars in experimental biology." *The Journal of Cell Biology* 177 (1): 7-11.
- 📖 Gelman, Andrew, Cristian Pasarica, and Rahul Dodhia. 2002. "Statistical Computing and Graphics." *The American Statistician* 56 (2): 121-130.
- 📖 Cox, Nicholas J. 2008. "Speaking Stats: Between tables and graphs." *The Stata Journal* 8 (2): 269-289.
- 📖 King et al. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44 (2): 347-361.
- 📖 Kstellec, Jonathan P., and Eduardo L. Leoni. 2007. "Using Graphs Instead of Tables in Political Science." *Perspectives on Politics* 5 (4): 755-771.
- 📖 Xu, Jun, and J. Scott Long. 2005. "Confidence intervals for predicted outcomes in regression models for categorical outcomes." *The Stata Journal* 5 (4): 537-559.

17 November	One-day workshop: Presentation of Draft Dissertation Proposal Group 1. 09:00 - 15:00 h
20 November	One-day workshop: Presentation of Draft Dissertation Proposal Group 2. 09:00 - 15:00 h
2 December	Semester Wrap-up, Draft Dissertation Proposal is due (in class)