Research Design
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Introduction
The goal of this workshop session is to review the current literature on issues of research design in social sciences and to allow the participants to improve on their skills in designing research. The workshop starts off with a short review of some basic principles of scientific research, before turning to two of the main goals of scientific work, namely descriptive and causal inferences.

In a second part different research designs are discussed, relying on the basic distinction between experimental and quasi-experimental work. Given that despite the important forays in experimental studies in the social sciences (see Druckman, Green, Kuklinski and Lupia, 2006) quasi-experimental designs will be discussed in more detail. Special emphasis will be put on the dangers to our inferences in such quasi-experimental designs.

The third part will consist of a discussion of a few chosen research designs to highlight their strengths and weaknesses. Finally, based on the participants own experience, in a short training session they will have to sketch possible research designs for chosen research questions.

Plan, readings and literature
Most of the literature on which this workshop will rely comes from King, Keohane and Verba (1994), a book that, from a very specific perspective, highlights the similarities between quantitative and qualitative approaches. Needless to say, this book has attracted a series of critiques (e.g., Caporaso, 1995; Collier, 1995; Rogowski, 1995; Tarrow, 1995; Brady and Collier, 2004). Other useful books to consult are the following: Cook and Campbell (1979), Achen (1986), Gerring (2001), Geddes (2003), George and Bennett (2005), Weingast and Wittman (2006), Gerring (2007), Box-Steffensmeier, Brady and Collier (2008), and Reus-Smit and Snidal (2008).

6. November 2008, morning session, 9.30h – 12.30h

1 Introduction (20’)

In the first part of the workshop, we discuss why methodology plays a central role in empirical research, highlight the different goals of descriptive studies and of studies that are interested in causal mechanisms, and discuss how hypotheses are best constructed in order to be testable with empirical data. We discuss briefly, why both quantitative and qualitative observations can help us to make empirically based conclusions.

1.1. What does scientific research mean? (15’)

Mandatory reading: King, Keohane and Verba (1994, 3-12)
1.2. Descriptive and causal inference (30’)

Mandatory readings: King, Keohane and Verba (1994, 34-99); Levitt and Dubner (2005)

Further readings: (Donohue and Levitt 2001; Holland, 1986; Pearl, 2001; Brady and Seawright, 2004; Morgan and Winship, 2007; Brady, 2008)

1.3. Where to start from: asking questions and getting the hypotheses right (30’ + 30’ exercise)

Mandatory readings: Grofman (2001, 1-11); King, Keohane and Verba (1994, 99-114)

Further readings: (Goertz, 2006, 1-67, 237-268; Goertz, 2008; Ragin, 1987)

Exercise: Hypotheses

6. November 2008, afternoon session, 14h-17.30h

2 Research designs

Before we start to investigate our cases, it is important to think about how we should structure our research so that at the end we can draw any conclusions on the cases that we are interested. In this part of the workshop, we discuss different research designs that are often applied in social sciences, and that can lead to meaningful and credible conclusions.

2.1 Introduction (10’)

Mandatory reading: King, Keohane and Verba (1994, 13-33,115-128)

2.2. Experimental designs (45’)

Experimental research is better known from natural sciences, such as chemistry, but there are important reasons why we should think about experiments in social sciences too: On the one hand, experiments are extremely expressive when we want to make causal conclusions about a mechanism. On the other hand, we will discuss the limits of experimental research in social sciences.

Mandatory reading: Druckman, Green, Kuklinski and Lupia (2006)

Further reading: (Kinder, 1993)

2.3. Quasi-experimental designs and ex-post facto designs

Usually, we have situations where experiments are not feasible or where we can only hardly conclude from experimental data on general effects. This is why most of our research is based on our observations of the empirical reality. Sometimes, we try to imitate experiments, and can draw conclusions from quasi-experiments, but often this is not possible, and then we apply ex-post facto designs for our research. We discuss how we need to chose our observations for quasi-experimental research or ex-post facto designs, and we discuss general problems that occur in this research, both when applying quantitative or qualitative methods.

2.3.1. Creating counter-factual cases; how to make conclusions out of observational data (30’)

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Mandatory reading: King, Keohane and Verba (1994, 75-91)
Further readings: (Cook and Campbell, 1979; Achen, 1986; Collier and Mahoney, 1996; Fearon, 1991; Tetlock and Berlin, 1996; Przeworski, 2008, 2008)

7. November 2008, morning session, 9.30h-12.00h

2.3.2. Typical quasi-experimental research designs (30’ + 30’ exercise)
   Mandatory reading: Card and Krueger (1994)

2.3.3. Ex-post facto designs: Comparing most-similar cases or statistical controls (30’)
   Mandatory reading: Card and Krueger (1994)

2.3.4. Populations, samples, random selection of cases (20’)
   Mandatory reading: King, Keohane and Verba (1994, 115-149)
   Further readings: (Card and Krueger, 1994)

2.3.5. Problems in ex-post facto designs: Endogeneity (20’)
   Mandatory reading: Colomer (2005)
   Further readings: (Hug, 2006; King, Keohane and Verba, 1994, 91-97; Przeworski, 2004, 2008)

2.3.6. Problems in ex-post facto designs: Selection bias, selecting on the (in)dependent variable (45’)
   Mandatory readings: Geddes (1991); King, Keohane and Verba (1994, 115-149)

2.3.7. Problems in quasi-experimental research: Multi-collinearity (15’)
   Further readings: (Wooldridge 2008)

7 November 2008, afternoon session, 13.30h-18.00h

3. Research designs in practice
In the practical part of the workshop, you will have the opportunity to elaborate a few research questions and research designs in groups, considering the aspects that we had discussed in the plenary lectures. Afterwards, we will discuss the proposed research designs jointly.

3.1. Exercises: part A (in groups)
3.2. Exercises: part B (plenum)
4. Conclusion and evaluation of the workshop

References


Grofman, Bernard. 2001. Political Science as Puzzle Solving. xxx


