Social Research Design
From problem statement to research project

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Course objectives and contents

The course provides a systematic introduction to social research design, with a special focus on quantitative research. After a brief summary of some fundamental questions in the philosophy of science and the basic features of scientific research, the course focuses on the phases of the research process and their possible variations. First, research problem statement and research question formulation are discussed. Second, the definition of the research conceptual framework is considered, with special attention to the notions of theory and hypothesis, as well as to literature review. Finally, three major research tasks are illustrated: definition of the target population, selection of sampling units, and data collection. Subsequently, attention is focused on the research project: possible forms, initial drafts, subsequent revisions, public presentation/defense. At the end of the course, participants should be able to design their own research, to write the corresponding research project and to present/defend it in public.

Course organization and requirements

The course consists of eight two-hour lectures, plus a final four-hour session devoted to the public presentation and discussion of participants’ research projects. Participants are required to complete a reading list before each lecture takes place, as indicated below. In addition, participants are generally expected to carry out a homework assignment for each lecture.

Course outline

Monday 2 February 2015, 10:15-12:15
1. Science and scientific research

Contents
What is this thing called science? – Scientific method – Description, explanation, prediction – Models – Scientific realism e anti-realism – Basic features of scientific research

Reading list
**MONDAY 9 FEBRUARY 2015, 10:15-12:15**

2. Phases of the research process

**Contents**
- Problem statement
- Research question formulation
- Conceptual framework definition
- Hypothesis formulation
- Observable implications of hypotheses
- Data collection
- Data analysis
- Result interpretation
- Result communication

**Reading list**

**Homework for next lecture**
None.

**MONDAY 16 FEBRUARY 2015, 10:15-12:15**

3. Problem statement and research question formulation

**Contents**
- Choosing a research problem
- Defining the research problem
- Formulating research questions
- Revising research questions

**Reading list**

**Homework for next lecture**
Choose a research area of interest, pick a relevant research problem, and formulate one of more pertinent research questions, motivating each decision.

**MONDAY 23 FEBRUARY 2015, 10:15-12:15**

4. Conceptual framework I: Theories and hypotheses

**Contents**
- What is a scientific theory?
- Theories and models
- The role of theory in the social sciences
- What is an hypothesis?
- Deductive hypothesis formulation
- Intuitive hypothesis formulation
- Observable implications of hypotheses
- Empirical test of hypotheses

**Reading list**

**Homework for next lecture**
Choose a reference theory (formal or informal) for the analysis of your research questions, formulate pertinent hypotheses, specify the observable implications of your hypotheses, and define one or more possible ways to empirically test your hypotheses.
MONDAY 2 MARCH 2015, 10:15-12:15

5. Conceptual framework II: Literature review

Contents
What is literature review for? – White and gray literature – Bibliographic sources – How to build up a reference bibliography – Kinds of literature review – Writing a literature review

Reading list

Homework for next lecture
Write a selected literature review (1,500-2,000 words) relevant to your research problem and questions.

MONDAY 9 MARCH 2015, 10:15-12:15

6. Population, sampling e data collection

Contents
Target population – Units of analysis – Sampling designs and sampling unit selection – Data collection techniques – Nobody’s perfect: stochastic and systematic errors

Reading list

Homework for next lecture
Define the target population, sampling design, and data collection techniques most relevant to the investigation of your research questions.

MONDAY 16 MARCH 2015, 10:15-12:15

7. Research project I: First drafts

Contents
What is a research project – Contents and structure of a research project – Drafting a research project – Working index

Reading list

Homework for next lecture
Participants will be divided into pairs. Each pair member is expected to (a) write the preliminary draft of their research project (2,000-2,500 words); (b) send the draft to the other pair member – as well as to the instructor – by March 21, 2015; (c) develop a critical analysis of the other pair member’s draft, and prepare to present it to the class.

MONDAY 23 MARCH 2015, 10:15-12:15

8. Research project II: Critical analysis and revision

Contents
Critical analysis of research projects – Revising the first drafts – Writing up the final project
Reading list
None.

Homework for next lecture
Write the revised and extended version of your research project (4,000-5,000 words) and prepare to present it to the class. This version of the project should be sent to the instructor and all the other participants by April 10, 2015. Each participant is expected to read all the research projects and develop critical comments on each of them.

TUESDAY 14 APRIL 2015, 14:15-18:15

9. Research project III: Public presentation and defense

Contents
How to present a research project – Receiving and responding to criticism – Logic and rhetoric in scientific argumentation

Reading list

Participants’ assessment
Participants’ will be assessed throughout the course based on class discussion, readings and homework completion.