

Research Problem, Objectives and Conceptual Framework

Lecture 3: Oct. 10 2011

Research Methodology & Writing
Swiss Federal Institute of Technology

Fall Semester, 2011

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Class overview

- Finalizing literature review assignment: individual and class work
- Researchable problem vs. problematic situation
- Problem statement
- Examples
- Objectives
- Conceptual framework
- Hypotheses
- Examples
- Assignment
- Demo of Turnitin's PeerMark assignment
- Joint class work developing research problems & hypotheses on economic topic

In-class work

- Finalizing literature review assignment: individual and class work. Please submit your revised version to 'literature review-revision 1' by Friday morning Oct. 14.'
- Handouts:
 - Booth et al. Tip-Quote + paraphrase 1
 - Booth et al. Tip-understanding your readers

Research problem

- Justification for the research
- Most critical part of research plan
- May be disciplinary, subject-matter, or problem-solving, or a combination
- Difficult to write

Researchable problem vs. problematic situation

- Researchable problem: the specific problem that the research is addressing vs.

problematic situation: broader problem area: e.g. poverty, unemployment, hunger.

- The researchable problem need not be small in scope but it must be precisely specified and addressable given the available resources (time and money).

Problem statement

- May be done iteratively or jointly with lit. review. Some data collection (and maybe synthesis) necessary before formulating research problem.
- Include description of problematic situation (background/general problem) and the specific researchable problem. Start broadly, then narrow; but other direction possible.
- For researchable problem, include what knowledge is needed, who needs it, how it is useful.
- Expect revisions.
- Don't confuse research methods with objectives.
- Examples

Example Objectives: general and specific

- **III. S. Sharp: OBJECTIVES**
- The general objective of this study is to project the impact of the AIDS epidemic on the Russian economy. This will be achieved through the following specific objectives:
 - Project the demographic impact of a hypothetically generalized HIV/AIDS epidemic on the Russian population;
 - Identify key linkages between relevant demographic and economic variables within the Russian context;
 - Define impact of the HIV/AIDS epidemic as the difference between GDP growth paths of "no AIDS" and "with AIDS" scenarios of varying degrees.

Conceptual framework ('model')

- Analysis of research problem using theory
- Indispensable to research
- Usu. formal, separate section in theses (not in R. papers)
- Needs good knowledge of relevant theory.
- Complementary to problem description, objectives, and lit. review
- Based on mental model, incl. hypotheses
- Formulated by identifying relevant theories and applying them in a conceptual analysis of the problem. May involve formulating, refining, or modifying existing theory (esp. in disciplinary research).
- Provides theoretical link between objectives and the methods and procedures.
- Identifies relevant variables and relationships between them.

Conceptual framework (cont.)

- How to develop it: 1 approach is to select relevant theories in field and adapt them.
- Modify others' models as appropriate.
- May be incomplete- acceptable in master's thesis.
- Start with simple model and add complexity over iterations.

Hypotheses

- Vital part of the conceptual framework
- Often best to state explicitly
- Hypotheses should be
 - Nontrivial
 - Testable
 - Capable of being refuted
- Quantitative hypotheses: subject to statistical hypothesis testing.
- Qualitative hypotheses:
 - Maintained hypotheses
 - Diagnostic hypotheses
- Examples of conceptual models: S. Sharp's master's thesis proposal (separate file)

Assignment

- Outline or refine your thesis' or paper's research problem, objectives, and/or conceptual framework: Due: October 18 by midnight (needs to be submitted by then to be included in the pool for PeerMark reviews).
- AND Do the PeerMark assignment based on this: Due October 24 10:00: review 2 of your classmates' work (your choice of which). Answer at least the first two peermark questions in your review.

For reference: Turnitin tutorial 'Writing a Review in PeerMark as a Student'

https://www.turnitin.com/static/helpCenter/writing_a_review_in_peermark.php

Joint in-class writing exercise: Research problem & diagnostic hypotheses on European sovereign debt crisis

- As a bridge to Prof. Rutherford's lecture next week on researching and writing in economics.
- Background paper distributed for discussion:

“Europe and Its Money: The way to save the euro is to return to its founding principles” <http://articlesofinterest-kelley.blogspot.com/2011/10/europe-and-its-money.html>