Designing Research

Motivating your primary research question

Where does your research question come from?

a. General interest
b. Personal experience
c. A gap in the existing literature
d. Elsewhere?

Is your question a researchable question?

Can you generate testable hypotheses?

Is there evidence available to test your hypotheses?

Has your question already been asked? answered?

Can you answer the 'why' question?

Inevitably, whenever a group of senior scholars read your research paper or attend a talk that you give on the research, the first question in their minds (whether they ask it or not, and they usually do) is:

a. WHY should such an issue, topic, or question be researched?
b. Relatedly, what makes your research question interesting?

Literature Review

What does the existing literature have to say about your topic?

What does the existing literature fail to say?

Are there conflicting findings in the literature?

If so, why?

Perhaps previous studies differ on:

a. the data tested (temporal and spatial)
b. the method used
c. overall research design

Generating hypotheses

How do you generate your hypotheses?

Possibilities include:

a. reliance on existing models or theoretical frameworks
b. reliance on previous empirical findings
c. deductive reasoning (example - rational choice, game theoretic models)
d. replication studies may involve hypotheses used by original authors

Operationalizing the variables

In any research, it is critical to identify a single dependent variable. Generally speaking, the dependent variable is what you are trying to explain. You should always be able to state,

The dependent variable is: .

In addition to the dependent variable, you also want to consider potential explanations or independent variables. Generally, you will find that several independent variables will be useful in explaining the dependent variable. You might consider these independent variables to be "alternative" explanations. It is important that you clearly identify these explanatory factors.

The independent variables are: .

How are these variables measured?

Are direct measures available?

You might have to construct your own proxy measures; multi-item measures

Can you theoretically justify the inclusion of various independent variables?

Case selection

If you are doing a comparative study, why did you select the particular cases?

Are the cases theoretically justifiable?

Consider the rationale developed by Adam Przeworski and Henry Teune (1970)

Do the cases represent a "most similar systems" design or are they a "most different systems"?

If your study is time dependent, why did you choose a particular time frame?

Data collection

Where will you get the evidence to test your hypotheses?

a. Use an existing dataset
   - many are available; where will you find such a dataset?
   - will you have to supplement the data?
b. Collect your own data
   - create your own survey, direct observation, etc.

What kind of data will you need to test your hypotheses?

a. Individual level data versus aggregate data
b. Cross section data vs. panel data vs. time series data

Statistical method

The specific method is often determined by the type of data you encounter.

What type of method will best enable you to test your hypotheses?

a. crosstabulation
b. measures of association
c. linear regression
d. analysis of variance
e. time series analysis
f. other methods?

Conclusions and Interpretations

Is what you find consistent with what you expected to find?

How do you interpret your results?

What are the substantive implications of your findings?