

Methods as core of social science

- Common territory in balkanized discipline of sociology
- Link between different social sciences
- Link between social sciences and natural sciences

Social science vs. opinion

- Much of social science research focuses on the familiar
- Everybody has opinions
- Much harder to scientifically evaluate social processes/phenomena

Social science vs. natural science

- Difference in universality of relationships
 - No “laws” in social science
- Tools of analysis are largely similar
 - Broader in social science
- Sources of data differ
 - Difficulty of experimentation
 - Need cooperation of “subjects”
 - More room for bias?
- Ability to measure differs

Research process

- Define a problem of interest
- Identify empirical questions within that problem
- Use/create a general theoretical framework for understanding the problem
- Make theoretical concepts explicit
 - operationalize the variables
- Define the sample
- Collect data
- Analyze data
- Draw conclusions

Social scientific knowledge

- Very rare that one study unequivocally answers a question
- Research is incremental /cumulative
- Knowledge comes from whole body of research
- Meta analyses

What social science is not

- A source of unequivocal facts
- A source for moral guidance

Misconceptions

- “Big” questions are good research questions
- Interesting research documents relationships between x and y
- Research should confirm earlier findings
- Thinking about relationships in a deterministic way
 - Probabilistic thinking
 - Recognize both the general tendency and the variation around that tendency

Role of social science

- Advance understanding of human behavior
- Inform policy
- Evaluate policy
- Fulfill requirements

Different kinds of social science research

- Fact finding – exploratory
- Descriptive
- Explanatory
- Evaluation

**Different kinds of
social science research II**

- Quantitative analysis of survey/admin. data
- Qualitative analysis of non-survey data
 - Field research
 - Content analysis
- Comparative/historical research
- Experimental research

Key terms

- Validity
- Reliability
- Generalizability

Validity

- Measurement is valid if we are measuring what we think we are measuring
 - Examples
 - Racial prejudice
 - SAT
 - Drug use, sexual behavior
 - Depression (CES-D)
- Results/interpretations are correct

Reliability

- Measurement is reliable if the same thing is measured in the same way at different times, perhaps by different people
 - Examples
 - Age
 - Health
 - Attractiveness
- Results are reproducible

Generalizability (external validity)

- Huge issue in social science research
- Danger of out-of-sample generalization
- Motivations for representative samples
- Motivations for large samples
- Danger of within-sample generalization
 - Concerns and solutions(?)

How can social researchers make conclusions?

- Variation in characteristics and behavior
- Focus on aggregates, not individuals
- Power of random sampling and statistical inference (probabilistic view of behavior)
- **THEORY**
 - Informs questions we ask
 - Informs interpretations we make
