Quantitative and Qualitative Approaches to Social Science Research
3x5 Card

- NAME & NICKNAMES
- MAJOR OR FIELD OF STUDY
- YEAR IN SCHOOL (FR, SO, JR, SR, GRAD)
- CONTACT INFORMATION (E-MAIL, PHONE NO.)
- REASON FOR TAKING COURSE
- OTHER PERTINENT INFORMATION
What are DATA?

Data are the empirical evidence or information that one gathers carefully according to rules or procedures.

-Neuman, p. 7
Types of Data

Quantitative:

Expressed as *numbers*.

The job of the researcher is to convert ideas to numbers, then find patterns (or relationships) in the numbers.
Types of Data

Qualitative:

Expressed as *words, text, pictures, images, objects* or other symbolic representations.

The job of the researcher is to identify important representations to a group, then discern the meaning that group members attach to these representations.
Where Do We Get Data?

Quantitative Data
Survey

Qualitative Data
Participant-Observation
Steps in the Research Process

1. Select Topic
2. Focus Question
3. Design Study
4. Collect Data
5. Analyze Data
6. Interpret Data
7. Inform Others

Theory

From W. Lawrence Neuman, 2003
*Social Research Methods*
A Simple Model of Social Research

IDEAS/SOCIAL THEORY

ANALYTIC FRAMES

IMAGES

EVIDENCE/DATA

REPRESENTATIONS OF SOCIAL LIFE

From Charles C. Ragin, 1994
Constructing Social Research
Steps in the Research Process

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From W. Lawrence Neuman, 2003
Social Research Methods
Select a Topic

What is your general *area of interest*?
What do you *know* about?
What have *others* said on this topic?
Are you interested in *theory* or *policy*?
(Basic vs. applied research)
Steps in the Research Process

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From W. Lawrence Neuman, 2003
Social Research Methods

SSC 470/570: Methods of Social Research
Focus a Research Question

What is a Research Question?

Does your question prompt an explanation?

Can your question be addressed within the parameters of an accepted approach and technique?
Steps in the Research Process

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The theory drives the research process, which is depicted in a cyclical diagram. The steps are interconnected, indicating a continuous and iterative process. The diagram is adapted from W. Lawrence Neuman, 2003, Social Research Methods.
Design Study

Is your research question inherently interpretivist or positivist in orientation?

What are your important constructs and concepts?

How will you measure these concepts?

Who will your subjects be? How will you select them?

How will you know if the information you collect is accurate?
Steps in the Research Process

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From W. Lawrence Neuman, 2003
*Social Research Methods*
Collect Data

Will you look for qualitative or quantitative data?

What questions will you ask people?

How will you record responses?

Are you treating your subjects ethically?

How will you know when you are done?
Steps in the Research Process

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From W. Lawrence Neuman, 2003
Social Research Methods

SSC 470/570: Methods of Social Research
Analyze Data

Do you want to *describe* or draw *inferences*?

Are you *building* or *testing* theory?

How are your data measured? (i.e. *level of measurement*)

What is your *theoretical model*?  
- Ideal types?  
- Controls?

What sort of *coding* scheme will you use?
Steps in the Research Process

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From W. Lawrence Neuman, 2003
Social Research Methods
Interpret Results

What do these results tell us about social life?

What is the story in your results?

What tensions or paradoxes emerge from your results?

What problems complicate your study?
Steps in the Research Process

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From W. Lawrence Neuman, 2003
Social Research Methods
Inform Others

Who will be interested in these results?
Who do you want to tell them to?

How will you present your results?
Conference, book, journal article

Where is this debate occurring?
Which field or journal is interested.
A Philosophical Conundrum

If a tree falls in the forest, and there is no one there, does it make a sound?
Methodological Paradigms: Positivism

Positivist social science is an organized method for combining deductive logic with precise empirical observations of individual behavior in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity.

- Neuman (2006), p. 82
Methodological Paradigms: Interpretivism

The interpretive approach is the systematic analysis of socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at understandings and interpretations of how people create and maintain their social worlds.

-Neuman (2006), p. 88
## Comparing Methodological Paradigms

<table>
<thead>
<tr>
<th>Purpose of Social Science Research</th>
<th>Positivism</th>
<th>Interpretivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover and document universal causal laws of social behavior</td>
<td>Understand how people construct meaning through social interaction</td>
<td></td>
</tr>
<tr>
<td><strong>Fundamental Nature of Social Reality</strong></td>
<td>Essentialist; Reality exists external to the individual</td>
<td>Constructionist; Reality exists in the human brain, based on perceptions</td>
</tr>
<tr>
<td><strong>Basic Nature of Human Beings</strong></td>
<td>Rational (self-interested); Respond to causes in predictable ways</td>
<td>Interactive, Creative; Always construct systems of meaning</td>
</tr>
<tr>
<td><strong>Role of Human Agency</strong></td>
<td>Deterministic; Conditioned by external forces, probabilistic laws</td>
<td>Voluntaristic; Conditioned by subjective perceptions</td>
</tr>
<tr>
<td><strong>Science and Common Sense</strong></td>
<td>Science is a privileged form of knowledge, better than alternatives</td>
<td>Science &amp; common sense offer alternative ways to interpret reality</td>
</tr>
<tr>
<td><strong>What Does a Theory Look Like?</strong></td>
<td>Expresses causal relationships; generalizable</td>
<td>Descriptive; Idiographic (Thick Description); Emic (Subjective)</td>
</tr>
<tr>
<td><strong>How is “Truth” Determined?</strong></td>
<td>Truth must be logical and must be consistent with observed facts</td>
<td>Truth must be consistent with the perceptions and lives of the subjects</td>
</tr>
<tr>
<td><strong>What Constitutes Good Evidence?</strong></td>
<td>Empirical (observed with senses); Measureable</td>
<td>Contextual; Fluid; Embedded within a system of meaning</td>
</tr>
<tr>
<td><strong>Utility of Social Science</strong></td>
<td>Instrumental; Allows people to control their social environment, to predict social outcomes</td>
<td>Practical; Allows people to understand hidden meanings within their social contexts</td>
</tr>
<tr>
<td><strong>Role of Values</strong></td>
<td>Science is objective and value-free</td>
<td>Science is relative and value-laden</td>
</tr>
</tbody>
</table>

Adapted from Neuman (2006)