Varieties of Research

AN OVERVIEW

People in many disciplines research human beings:

- Anthropology
- Sociology
- Psychology
- Medicine
- Nursing
- Political Sciences
- Communication Sciences

A Wide Variety of Research Methods are Useful

- Observation
- Self-report
- Experiments
- Censuses
- Historical
- Archaelogical

- Every research topic will prompt a researcher to decide what kinds of methods would be useful.
- Each method requires a researcher to make several more decisions about how to conduct a study.

Sources of Data

- Data (systematically measured observations) can be gleaned from:
- Trash and graveyards
- Marriage records and death certificates
- Traffic patterns and store hours
- Medical visits and Library Circulation Records
- What is written in newspapers, letters, and books
- *Can you figure out what is common among the sources in each row?*

Units of Analysis

- Studies can use different **units of analysis** – what each measure came from.
- Examples – a study could observe/measure something about each:
- Individual person (s)
- Era
- Family
- Nation
- Company
- Team

Naturalistic or Experimental?

- Finding out what people do, what they change, without (much) researcher interference is important – just as Linnaeus' classifying living creatures helped invent comparative biology. Otherwise, we couldn't know what is common or rare, problematic or helpful (and to whom).

- Testing hypotheses about *why* and *how* people do things requires doing experiments, or at minimum, measuring during natural experiments (e.g., when somebody besides the researcher changes the conditions, like a new government policy or workplace procedure).

Kinds of Measures

- Do you count it, or do you quantify it, or do you qualify it?
- Is the measure something we inherently care about (e.g., life expectancy) or is it something that *indicates* something we do care about (e.g., health).
- Is the measure objective as seen by an outside observer, or is it something subjective, that people judge for themselves?
- Can people tell you about what you are measuring (e.g., their unconscious thoughts)?

Common terms for various kinds of studies

- Field experiment: A true experiment that a researcher conducts in a "natural" setting like a school.
- Lab experiment: A true experiment that a researcher conducts in a special setting just for doing that study.
- Comparative study: A comparison on some measures of many nation (nation is the case).
- Corpus study: An analysis of a body of words.
- Case study: A very detailed description of one case (e.g., one person, one incident)

Ways of measuring people

- Interviews
- Questionnaires
- Discussion groups
- Performance on tasks
- Coding observations of face, behaviors, explanations, etc.
- Long-term observation
- Physiological

Learn lots!

- The research I describe, and the readings I assign students, use a variety of methods, deliberately. I believe it is important for science to figure out whether one gets the same results across methods and across researchers and across measures.
- In this set, there are other materials to help you learn, such as how to read a review paper (one that summarizes and critiques a lot of other studies), and how to interpret statistics as reported in research articles.