

Designing a Research Project

- **Topic** (homework due)
- **Conceptualization** (in-class)
 - Specify the concepts/variables to be studied
- **Operationalization**
 - How *exactly* would you measure the variables?
- **Research Question**
- **Literature Review**
- Hypothesis & Research Method
 - Quantitative or Qualitative, Type
- Population and Sampling
 - Who?
- Measurement & Data Collection*
 - How?
- Data Analysis*
 - Type/Focus of analysis

Concepts and Conceptions

Example: Acceptance

- We have personal life experiences
 - Hear, see, learn, experiences
- “Acceptance”: a term agreed on to describe a type of social phenomena
 - Word *Acceptance* may evoke a mental image of situation
- Mental images about a phenomenon is our ***conception*** of that phenomenon
 - In social research, coming to an agreement about what terms mean is a **Conceptualization** → result is a **Concept** or **Variable**

Disagreement about Concepts

- New teammate: Alex.
- Someone asks, “What is Alex like?”
 - You reply, “Alex is controlling.”
 - Others say, “Alex is motivated.”
 - Disagreement about personality traits: controlling vs. motivated
- If we want to measure “controlling” or “motivated” we first need to stipulate what exactly counts as “controlling” or “motivated”
- In order to measure social phenomena we must first decide exactly what behaviors/events are part of that concept
 - This is called Conceptualization

Conceptualization

- Conceptualization gives definite meaning to a concept by specifying one or more **indicators** of what that concept is
 - Indicator: a sign of the presence or absence of the concept
 - Indicator for controlling: gives orders to other team mates
- Sometimes concepts can have different **dimensions**
 - **Dimension:** an aspect of a concept
 - Example: Motivated
 - **Action dimension:** gets to practice early, sets up equipment
 - **Thought dimension:** Believes winning is the most important part of playing a sport

Conceptualization

- Conceptualizations produce a specific, agreed-on meaning for a concept for the purposes of research
- Define exactly what we mean by the following concepts and variables
- Ask:
 - What is _____?
 - How do we define _____?
 - What behaviors/events are part of the concept?
- Topic:
- Topic:
- Topic:
- Topic:
- Topic:

Conceptualization & Measurement

- **Measurement**: careful, deliberate observations in order to describe objects and events in terms of the attributes composing a variable
- Most variables are made up concepts that don't have a single meaning
 - Example: Satisfaction, religiosity, prejudice, acceptance
- Though most variables are “made up” they are “real” because people use them to describe objects, events, situations IRL
- So how do we define & measure variables?

Definitions

- **Nominal Definition:** basic definition agreed upon by most people
- **Operational Definition:** specifies exactly how the concept will be measured
- **Operationalization:** the development of specific research procedures that will result in empirical observations representing those concepts in the real world
 - Need to construct precise definitions in **empirical** terms so concepts and variables can be **measured**

Operationalization

- Need to construct precise definitions in **empirical** terms so concepts and variables can be **measured**
- Ask: How do we measure each concept and variable?
 - What do we mean by _____?
 - How do we measure _____?
 - What are the variables?

- Topic:
- Topic:
- Topic:
- Topic:
- Topic:

Research Questions

- Research questions need to measurable and researchable
- Research question should include at least 2 variables
- The question should relate to your topic and narrow down your interest in the topic by ***focusing on a specific aspect of the topic***
- Topic: **Police body cameras** *and rate of violent arrests*
 - “What are the effects of body cameras?” NO.
 - “Do dash/body cameras decrease the rate of violent arrests?” OK.

Research Questions

- Topic: **Drug abuse** *and Family member outcomes*
 - *What are the negative outcomes for family members of drug abusers?*
- Topic: **Juvenile Delinquency** *and decision-making*
 - *Are individuals with a history of delinquency less likely to graduate HS?*
- Topic: **Police Presence** *and safety outcomes*
 - *Does police presence at a protest increase or decrease the number of violent offenses?*
- Topic: **Racial Profiling** *and public perception of the issue*
 - *Does media shape an individuals perception of racial profiling?*

Stating Your Hypothesis

- **Hypothesis:** A reasoned statement about the relationship between two (or more) variables, stated in terms that can be empirically tested and forms the focus for research
- 4* Characteristics
 1. Expressed as a statement (not a question)
 2. Addresses a **single** phenomenon or relationship
 3. Stated clearly and logically
 4. Is empirically testable (i.e. can be researched)
- Quantitative research requires a hypothesis while qualitative research often does not
 - Qual research allows hypothesis to emerge while Quant research is looking for specific regularities and so must postulate the relationship at the beginning of the study

Homework

- Read: Chapter 6 pages 43-49 in *Social Science Research*
- Read: Chapter 5.1 in *Research Methods in Psychology*
- Operationally define variables