

Chapter 4:

Research Design

Three Purposes of Research

1. Exploration

- To satisfy the researcher's curiosity
- To test the feasibility of undertaking a more extensive study
- To develop the methods to be employed in any subsequent study

Three Purposes of Research

2. Description

- Describe situations, events
- Researcher observes and then describes what observes
 - Scientific observation is careful and deliberate
 - More accurate and precise than casual ones
- Examples:
 - U.S. Census
 - Many qualitative studies

Three Purposes of Research

3. Explanation

- Answer why
- Examples:
 - Why one gang more violent than another
 - What factors shape people's attitudes toward marijuana legalization?
 - Gender? Political orientation?

The Logic of Nomothetic Explanation

Criteria for Nomothetic Causality

- Variables must be correlated
- Time order: cause must precede the effect
- Nonspurious – effect cannot be caused by some other third variable
- Example:
 - Correlation between ice creams sales and deaths due to drowning
 - What is the third or intervening variable?

Five Types of Units of Analysis: The what or whom being studied

- Individual
- Most typical unit
- Examples: students, auto workers, voters, single parents

Four Additional Units of Analysis

- Groups: gangs as example
- Organizations: schools, corporations
- Social interactions: how couples interact
- Social artifacts: children's books

Summary: Units of Analysis

- Units of analysis are exhaustive
- Key: Figure out your unit of analysis

Faulty Reasoning and Units of Analysis

- Ecological Fallacy
- Definition: : the assumption that something learned about an ecological unit says something about the individuals making up that unit
- Examples:
 - Voting and Political Party
 - Crime and African-Americans

Time Dimension

- Cross-Sectional Studies
- Definition: involves observations of a sample or cross section of a population or phenomenon that are made at one point in time
- Exploratory and descriptive studies often cross-sectional

Time Dimension

- Longitudinal Studies
- Designed to permit observations of the same phenomenon over an extended period of time
- Example: Follow a cohort of individuals

Applicability to Us

- Unit of analysis = ??
 - Individual
- Time Dimension = ??
 - Cross-sectional

Designing a Research Project

- Begin with your idea
- Conceptualization
- Choice of Research Method
- Operationalization
- Population and Sampling
- Data Processing
- Analysis
- Application