CRIJ 5331

Quantitative Methods in Criminology

Maxifield & Babbie Chapter 2 PPT

Chapter 2:

Foundations of Criminal Justice Research

LEARNING OBJECTIVES

- Summarize three fundamental features of social science: theory, data collection, and data analysis.
- Describe why social scientists are interested in explaining aggregates, not individuals.
- Understand that social scientists are primarily interested in discovering relationships that connect variables.
- Understand the difference between idiosyncratic and nomothetic explanations.
- Distinguish between inductive and deductive forms of reasoning.
- Distinguish between quantitative and qualitative approaches to research.

LEARNING OBJECTIVES, CONT.

- Recognize that intersubjective agreement, not objectivity, is a fundamental norm of science.
- Describe the traditional image of social science theory.
- Understand how scientific inquiry alternates between induction and deduction.
- Describe how observations contribute to theory development in grounded theory.
- Discuss how criminological theories draw on other social sciences, and sometimes on the natural sciences.
- Describe how theory and public policy can be closely linked.

The Creation of Social Science Theory

- Social scientific inquiry generates knowledge through logic and observation
- Theory and observation go together in science, but sometimes theory precedes observation, and other times observation precedes theory
- Three key aspects of the overall scientific enterprise: theory, data collection, and data analysis

SOCIAL SCIENCE THEORY

- Social Scientific Theory: Discovering what is, not what should be
  - Cannot settle debates on value
- Problematic Evaluators
  - Ex: What Constitutes a good Parole Officer?

REGULARITIES AND EXCEPTIONS

- Social science aims to find patterns of regularity in social life
- Norms and rules and observations in society create regularity
  - Ex: A person is not eligible for a driver's license until a certain age
- Social regularities represent probabilistic patterns
  - A general pattern does not have to be reflected in 100% of the observable cases to be a pattern

AGGREGATES, NOT INDIVIDUALS

- Social scientists study social patterns, not individual ones
- Aggregates are more often the subject of social science research
- Distinguishes the activities of criminal justice researchers from the daily routines of most criminal justice practitioners
  - Ex: Processing and classifying new inmates

VARIABLES AND ATTRIBUTES

- Theory is written in a variable language; people are the carriers of those variables
- Social science involves the study of these two concepts:
  - Attributes - Characteristics or qualities that describe some object, such as a person (Ex: "married")
  - Variables - Logical groupings of attributes (Ex: occupations)

Challenge Question 1

What if someone asked you which should be the focus of social scientists: attributes or variables? How would you respond?

VARIABLES AND RELATIONSHIPS

- Theories describe the relationships that might be logically expected among variables
- Causation: A person's attributes on one variable are expected to cause or encourage a particular attribute on another variable
- Independent Variable – "cause," "influencer"
- Dependent Variable – "effect," "depends"
  - Ex: Type of defense attorney -> prison or probation

DIFFERING AVENUES FOR INQUIRY

- Ideographic Explanation - When we attempt to explain a single situation exhaustively
  - Fully understands the causes of what happened in this particular instance; comprehensively explains one case
- Nomothetic Explanation – Seeks to explain a class of situations or events rather than a single one
  - Explains efficiently; settles for partial explanation

DEDUCTIVE REASONING

- Moves from the general to the specific
- From a logically or theoretically expected pattern to observations that test the presence of the pattern
- “Why something happens” -> “Whether it actually does”

INDUCTIVE REASONING

- Inductive – moves from the specific to the general
- From a set of observations to the discovery of a pattern among them

Qualitative and Quantitative Data

- All observations are qualitative at the outset
- Qualitative: Nonnumerical
  - Greater richness of meaning
- Quantitative: Numerical
  - Carries a focusing of attention and specification of meaning
- Both are useful and legitimate – choose based on topic or combine aspects of both

Terms Used in Theory Construction

- Theory – Systematic explanation for the observed facts & laws that relate to a particular aspect of life; propositions explaining why events occur in the manner that they do
- Objectivity – "Independent of mind"; not utilized
  - Rather, we use intersubjective agreement
  - If several of us agree that something exists, we treat it as objective

Terms Used in Theory Construction, Cont.

- Hypothesis – Specific expectations about empirical reality, derived from propositions

- Paradigm – Fundamental model or scheme that organizes our view of something; a lens through which we view a certain piece of reality in our world

THE TRADITIONAL MODEL OF SCIENCE

- Three main elements:
  - Conceptualization – Scientist use theory to develop research questions that can be examined through observations
  - Operationalization – Specification of the steps, procedures, operations to identify and measure variables
  - Observation – Look at the world systematically, develop theoretical expectations, and measure
- Shaw and McKay – Crime in Chicago – Concentric Zones

TWO LOGICAL SYSTEMS

- Deductive (general to specific)
- Inductive (specific to general) – "grounded theory"
- Role of race in police decision-making
- Theory -> Operationalize our hypotheses (method) -> Observation -> Empirical Generalizations
- Field research & survey research – used to develop theories from observations

CHALLENGE QUESTION 2

What if you were a criminal justice researcher? Which do you think would be your strength, inductive reasoning or deductive reasoning? Why?

THEORY, RESEARCH, AND PUBLIC POLICY

- Crime is a social problem; research driven by theory is linked to public policy
- Theory structures research, which, in turn, is consulted to develop policy
- Research guides the ways in which the government and public respond to crime
- Policies often take the form of if-then statements, and are subject to empirical tests

Challenge Question 3

What if the federal government gave a large grant to criminal justice professionals for applied research? Which criminal justice policy do you think should be the research focus?

CRIMINOLOGICAL EVOLUTION

- Maintains that behavior is affected by environmental forces
- Explores the link between urban design, human behavior, and crime
- Crime is more common in urban transition zones where the physical environment (crowded housing) is unpleasant and the social environment (poverty) is undesirable
- Based on ideas of Defensible Space and CPTED

ECOLOGICAL THEORIES

- Led to the development of situational crime prevention – as a policy measure
- Directed at highly specific forms of crime
- Involves the management, design, and manipulation of immediate environment to increase effort and risk of crime, reduce the perceived reward, and remove excuses and justifications
- Prevention of auto theft/vandalism in parking lots?