CRIJ 5331

Quantitative Methods in Criminology

Maxifield & Babbie Chapter 1 PPT

Chapter 1:

Crime, Criminal Justice, and Scientific Inquiry

LEARNING OBJECTIVES

- Understand why knowledge of research methods is valuable to criminal justice professionals.
- Describe the different ways we know things.
- Distinguish inquiry as a natural human activity from inquiry through systematic empirical research.
- Recognize that much of our knowledge is based on agreement rather than on direct experience.
- Explain how tradition and authority are important sources of knowledge.

LEARNING OBJECTIVES, CONT.

- Understand the role of experience and systematic observation in criminal justice research.
- Recognize that social science guards against, but does not prevent, political beliefs from affecting research findings.
- Distinguish the different purposes of research.
- Understand how to design a research project.
- Be able to conduct a review of research literature.
- Describe how to write a research proposal.

WHY STUDY RESEARCH METHODS?

- Criminal Justice professionals are both consumers and producers of research
- It is important for Criminal Justice professionals to be informed consumers of research
- Need to understand findings and how to apply those findings to his or her department

TWO REALITIES

- Experiential reality – The things we know from direct experience (e.g., learning that a burner is hot by touching a stove)
- Agreement reality – Things we consider real because we have been told they are real, and everyone agrees (e.g., sun sets in the West)
- Kansas City Preventive Patrol Experiment revealed the agreement reality that simply increasing patrols decreased crime was misleading

THE ROLE OF SCIENCE

- Empirical research - Knowledge produced based on experience or observation
- Scientists have certain criteria to be met when accepting experiential and agreement realities
  - An assertion must have both logical and empirical support
- Methodology - The science of finding out

PERSONAL HUMAN INQUIRY

- Future circumstances are caused or conditioned by present ones
- We use causal and probabilistic reasoning
- The goal is to understand why certain things are related, why patterns occur, to enable us to make more accurate predictions

SECONDHAND KNOWLEDGE

- Tradition – Things that "everybody knows"
  - Ex: Driving on the left side of the road in the US is dangerous
- Authority – Trusting the judgment of someone with special expertise
  - Ex: You are more likely to believe a judge regarding your driver's license suspension than your parents
- Both provide us with a starting point for our own inquiry

CHALLENGE QUESTION 1

Tradition and Authority are two ways in which people ascertain knowledge. Discuss the possible biases or shortcomings that may be associated with each method of conveying knowledge.

SAFEGUARDING AGAINST ERRORS

- Inaccurate Observation – Overcome by using measurement devices
- Overgeneralization – Overcome by replicating the study to see if you get the same results
- Selective Observation – Specify in advance the number and types of observations

Safeguarding Against Errors, Cont.

- Illogical Reasoning – Use systems of logic, consciously and explicitly
- Ideology and Politics – Guard against its influence
- To Err is Human – Take precautions to avoid error

Challenge Question 2

What are some ways to safeguard yourself from common errors in human inquiry while you are conducting research?

PURPOSE OF RESEARCH: EXPLORATION

- Examine an issue or policy about which little is known
- Might also collect data on some measure to serve as a baseline for later comparisons
- Appropriate when some type of policy change is being considered
- May be simple or complex and can use a variety of methods

PURPOSE OF RESEARCH: DESCRIPTION

- Observe and describe the scope of a problem or policy response
- Make more accurate and formal observations
- Often concerned with counting or documenting observations; exploratory studies focus more on developing a preliminary understanding
  - Example: US Census, UCR
- Following exploration, we want to know the problem's frequency/prevalence/degree/scope

PURPOSE OF RESEARCH: EXPLANATION

- Explain things – answers "why?"
- Why have we seen a certain change in scope?
- Why does a certain problem exist?
  - Ex: Why do some people write computer viruses?, Why do some people assault their spouses?

PURPOSE OF RESEARCH: APPLICATION

- Applied research is often used to evaluate the effects of specific criminal justice programs

- Two major types of applied research:
  - Evaluation research – Comparing program goals to results
  - Policy analysis – Prospective – Anticipate future consequences of alternative actions

Challenge Question 3

Name four studies that can be examples of each purpose of research: exploration, description, explanation, and application.

THINKING ABOUT THE RESEARCH PROCESS

- One of the most difficult parts of the research process is framing your interest into a research question.
- Researchers often have to rework or clarify research problems as they learn more about a topic
- Researchers should begin with their own experiences and observations and then learn more about the existing research

THE RESEARCH PROCESS

- Conceptualize: specify what is to be studied
- Operate: perform concrete steps to measure specific concepts
- Observe: collect empirical data
- Analyze: draw conclusions from the data
- Apply: apply conclusions to original inquiries

Reviewing the Literature

- Tells you what is know and what is unknown
- Keep notes of articles as you review them
- Begin with a book or article on your topic
- This is your source document
- Find sources that are cited in the source document and find other sources that have cited your source document

HOW TO READ SCHOLARLY RESEARCH

- Reading an article
  - Start with the abstract - It will tell you if the article is relevant to your study
  - Next, read the summary and conclusions
  - Skim the article paying attention to headings, tables and graphs
  - Carefully read the entire article
  - Ask for help if you do not understand the article

How to Read Scholarly Research, Cont.

- Reading a book-length report
  - Start with the preface — It will tell you if the article is relevant to your study
  - Skim the book paying attention to the organization, headings, tables, graphs, and major findings
  - Read it closely while taking notes
  - If you decide to read the book, repeat the process with each chapter

THE RESEARCH PROPOSAL

- Research proposals describe the activities planned and include a budget and timeline
- Certain agencies might have specific requirements for a proposal
- Almost every proposal include some basic elements

BASIC ELEMENTS OF A RESEARCH PROPOSAL

- Problem or Objective — Describes what will be studied
- Literature Review — Summarizes the prior research on the topic
- Research Questions — Specifies what the research will answer
- Subjects for Study — Whom or what will be studied
- Measurement — Identifies the key variables of the study

Basic Elements of a Research Proposal, Cont.

- Data Collection Methods — Explains how observations will be collected
- Analysis — Specifies how the observations will be analyzed
- References — List of materials consulted and cited in the proposal
- Schedule — A timeline for the various stages of the proposal
- Budget — Specifies where money to support the research will be spent