

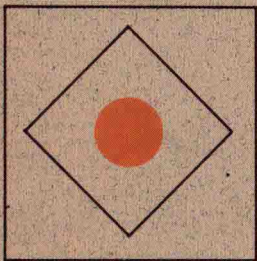
*Research Methods  
Criminal Justice  
And Criminology*

Michael G.

Maxfield

Earl

Babbie



# Research Methods for Criminal Justice and Criminology

Michael G. Maxfield

*School of Public and Environmental Affairs  
Indiana University*

Earl Babbie

*Department of Sociology  
Chapman University*



Wadsworth Publishing Company

**I<sup>T</sup>P<sup>TM</sup>** An International Thomson Publishing Company

---

Belmont • Albany • Bonn • Boston • Cincinnati • Detroit • London • Madrid • Melbourne  
Mexico City • New York • Paris • San Francisco • Singapore • Tokyo • Toronto • Washington

*Assistant Editor:* Susan Shook  
*Editorial Assistant:* Julie McDonald  
*Production:* Ruth Cottrell  
*Permissions Editor:* Jeanne Bosschart  
*Designer:* Harry Voigt  
*Copy Editor:* Elizabeth Judd  
*Technical Illustrator:* G&S Typesetters, Inc.  
*Cover:* Harry Voigt  
*Compositor:* G&S Typesetters, Inc.  
*Printer:* Fairfield Graphics

**COPYRIGHT © 1995 by Wadsworth Publishing Company**  
A Division of International Thomson Publishing Inc.

**ITP** The ITP logo is a trademark under license

Printed in the United States of America

For more information, contact Wadsworth Publishing Company.

Wadsworth Publishing Company  
10 Davis Drive  
Belmont, California 94002  
USA

International Thomson Publishing Europe  
Berkshire House 168 173  
High Holborn  
London, WC1V 7AA  
England

Thomas Nelson Australia  
102 Dodds Street  
South Melbourne 3205  
Victoria, Australia

Nelson Canada  
1120 Birchmount Road  
Scarborough, Ontario  
Canada M1K5G4

International Thomson Editores  
Campos Eliseos 385, Piso 7  
Col. Polanco  
11560 México D.F. México

International Thomson Publishing GmbH  
Königswinterer Strasse 418  
53227 Bonn  
Germany

International Thomson Publishing Asia  
221 Henderson Road  
#05-10 Henderson Building  
Singapore 0315

International Thomson Publishing Japan  
Hirakawacho Kyowa Building, 3F  
2-2-1 Hirakawacho  
Chiyoda-ku, Tokyo 102  
Japan



*This book is printed on  
acid-free recycled paper*

All rights reserved. No part of this work covered by the copyright hereon may be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems—without the written permission of the publisher.

4 5 6 7 8 9 10—01 00 99 98 97 96

Library of Congress Cataloging-in-Publication Data  
Maxfield, Michael G.

Research methods for criminal justice and criminology / Michael G. Maxfield, Earl Babbie.

p. cm.

Includes bibliographical references and index.

ISBN 0-534-23154-3

1. Criminal justice, Administration of—Research—Methodology. 2. Criminology—Research—Methodology. I. Babbie, Earl R. II. Title.  
HV7419.5.M38 1994  
364'.072—dc20

94-37944

# **Research Methods for Criminal Justice and Criminology**

---

## **Dedication**

Mary and Molly Maxfield  
Sheila Babbie

# Preface

---

One of my<sup>1</sup> most oddly rewarding teaching experiences took place not in the classroom but on the streets of downtown Indianapolis. On my way to a meeting with staff from the Indiana Department of Correction, I recognized a student from the previous semester's research methods class. Ryan was seated on a shaded bench, clipboard in hand, watching pedestrians make their way down the sidewalk. After we had exchanged greetings, I learned that Ryan had landed a summer internship with the city's planning department and was currently at work conducting a study of pedestrian traffic.

"Ha!" I exclaimed, recalling student complaints about how research methods are not relevant (what I have since referred to as "Ryan's lament"), "and you whined about how you were never going to use the stuff we talked about in class."

Ryan responded that the systematic study of pedestrians was very interesting and admitted that some course topics did in fact relate to his work as an intern. He also said something about not really knowing what actual research involved until he began his current project. Ryan remained attentive to people passing by while we chatted for a few minutes. I was very pleased to see that he

had become a careful observer, applying some of the skills he learned in my course only a few weeks after the semester's end.

Later, thinking more about the encounter, I recognized the need to change my approach to teaching the course. Ryan clearly enjoyed his experience in doing research but he had not recognized how much fun research could be until after he had left the classroom. As a result, I restructured the course to involve students more actively in the research process. I resolved to be more diligent in linking fundamental concepts of research methods to a broad spectrum of examples, and I became determined to show students how they, like Ryan, could apply systematic inquiry and observation techniques to a wide variety of situations in criminal justice and other policy areas.

In collaborating with Earl Babbie to produce this textbook, I joined a colleague whose writing embodied my efforts to engage students in the learning process. Earl's classic text, *The Practice of Social Research*, has always been an enviable model of clarity—generating student interest while still presenting a rigorous treatment of social science research methods.

Our text, *Research Methods for Criminal Justice and Criminology*, retains much of the raw material from *Practice*, revised and otherwise adapted for students in criminology

---

<sup>1</sup>In this preface, first person singular is Maxfield while first person plural is Maxfield and Babbie.

and criminal justice. As has always been the case with *Practice*, our text illustrates principles of doing research with examples specifically selected to appeal to students. We have sought to convey something of the excitement in doing research that Ryan discovered for himself, observing pedestrians in downtown Indianapolis.

### **A Familiar, Comfortable Approach**

As a result, this text has several distinctive features. Anyone who has taught with or learned from *The Practice of Social Research* will recognize much in our collaborative effort. This will enable instructors of criminal justice research methods to organize their course around a familiar approach, capitalizing on the strengths and popularity of Earl Babbie's superb text. At the same time, we have designed our book to address the particular needs of research methods for criminal justice and criminology.

### **Measurement**

Many people believe that measurement presents the greatest challenge in doing social science research. I feel this is especially true for criminal justice. In my experience students frequently alternate from being shrewd skeptics about measurement to being uncritical consumers of media reports about crime, violence, drug use, or whatever havoc happens to be in fashion. Although one chapter is devoted to this topic (Chapter 5), throughout the text we remind students to be careful but creative when it comes to measurement.

### **Design Building Blocks**

Research methods seems to be one of those courses where students feel driven to memorize the book, lectures, practice questions, last semester's notes purchased from a friend, or whatever. The strange vocabulary of the subject probably encourages this tendency,

which seems to be especially troublesome when teaching research design. All those Xs and Os must be faithfully recorded, memorized, and associated with the right label.

Although the X O diagrams in Chapter 6 will be familiar to many instructors, we encourage students to become engaged in learning research methods by describing how common research designs represent creative uses of design building blocks. In Chapter 6 and elsewhere we describe how the fundamentals of subject selection, making observations, and administering or withholding a treatment represent basic building blocks of design. Rather than trying to shoe-horn a research problem into some pattern of Xs and Os that appears in their books, we urge students to learn what these building blocks represent and what different building blocks can be expected to accomplish.

### **Agency Records As Data Sources**

Criminal justice, perhaps more than any other social science, commonly draws on a bewildering variety of information produced by public agencies. Reported crimes represent only the most well-known example. In my experience students too readily accept data produced by some government organization as reliable if not valid. Following our general maxim "be careful but be creative," Chapter 11 guides students through the promises and pitfalls of agency records. We describe some of the more common problems researchers encounter in using such data, common sources of those problems, how to detect them, and how to deal with them. Several examples illustrate the important lessons in Chapter 11.

### **Survey Research and Sampling**

One of the strengths of *The Practice of Social Research* has always been a comprehensive but eminently readable treatment of sampling and survey methods. The current text

(in Chapters 8 and 9) retains Babbie's general approach, but it also points to some of the more specialized criminal justice applications. These range from victim and self-report surveys to specialized interviews with nonprobability samples. Again, our approach focuses on arming students with the principles of survey methods so that they can adapt these general tools to a variety of uses.

### **Applied Research and Policy Experiments**

We have devoted a chapter to applied criminal justice research; Chapter 12 examines program evaluation and policy analysis. Additionally, we link policy and management applications to virtually every stage of the research process, from theory in Chapter 2 through data interpretation in Chapter 13. We feel this approach is crucial for two complementary reasons. First, students whose interests center on criminal justice policy must understand that applied research is as dependent on theory and reasoned expectations as is basic research. Second, basic research in criminology or criminal justice is usually conducted in some applied context, so the researcher interested in some causal proposition about, say, drug use and violence must recognize that these are not simply abstract constructs. Most measures of drug use and violence will be operationalized with legal or policy definitions of those constructs in mind.

Randomized field experiments have become the designs of choice for many applied studies. In our chapters on experimental and quasi-experimental designs (Chapter 6) and applied research (Chapter 12), we have much to say about the advantages of randomized designs. However, we take care to caution students that all designs have weaknesses and no design is well-suited for all research purposes. Unfortunately, the weaknesses of randomized experiments are some-

times overlooked by their champions and by many textbooks. Our treatment of this topic, encouraging students to think carefully and creatively, is more balanced and will enable students to better recognize appropriate and inappropriate uses of experiments.

### **Ethics**

Among the social sciences, criminology and criminal justice probably present the widest array of questions about research ethics. Our treatment of this important topic (Chapter 7) again combines discussion of general principles with emphasis on the particular problems encountered by criminal justice researchers.

### **Statistics**

Chapter 13 guides students through fundamental principles of descriptive and inferential statistics. Our coverage of this topic is conceptual and brief, reflecting our view that criminal justice research design, measurement, and data collection require the concerted attention of students for a full semester. Future producers and consumers of criminal justice research must understand how concepts become observations and how observations become data before they learn the details of data analysis.

### **Suggestions for Instructors**

All instructors have their own preferences in teaching research methods—topics to emphasize, pedagogical styles, course requirements, and so forth. Here are a few tips on how to incorporate certain distinctive features of this text into different approaches to teaching the course.

### **An Example of the Case Method**

Chapter 14 reflects my experience teaching in a public affairs program where I learned something of the case method, which is stan-

dard pedagogy in law schools and business schools. While the chapter is not a true case study, it represents a mirror image of much of the book. Other chapters center on concepts and principles, introducing examples to illustrate various points. Chapter 14 presents two examples in detail, referring readers to earlier chapters for conceptual treatment of points that are illustrated.

You may wish to use Chapter 14 as something of a model to develop your own extended examples (cases) that students can then consult throughout the course. In this way, cases can feed into course projects. They can also form the basis for exercises or exam questions at various points in the course. Or you can work up cases that more closely reflect your own substantive interests, perhaps even your own research.

In either case, we suggest that instructors read Chapter 14 carefully when planning the course. The examples may suggest other ways you can use case studies.

## Appendixes

Many instructors in research methods courses have their students prepare a research design or a complete proposal as a term project. Chapters 4 and 14 provide general guidelines for preparing research proposals. Four of the appendixes will be especially valuable for such projects; you may wish to point them out early in the semester.

Appendix A includes examples and general information about evolving library and information technology. Depending on the availability of tools and resources on your campus, we suggest you supplement Appendix A with guides or manuals that document campus facilities and routines.

Appendix B describes the National Criminal Justice Reference Service (NCJRS), a specialized library and information tool for criminal justice research and policy development. Students might contact NCJRS to ob-

tain bibliographies or other publications. If so, you should have them read Appendix B early in the term.

Appendix C presents guidelines on writing research reports. If your course will require a proposal or research report, we recommend that students review this appendix early in the term. See also Chapters 4 and 14 for further information on proposals. You may wish to either supplement or modify our suggestions to reflect your own preferences.

Appendix D describes major sources of secondary data, most notably the Inter-university Consortium for Political and Social Research (ICPSR) and the National Archive of Criminal Justice Data. Following one of the examples presented in Chapter 14, students might prepare a proposal that uses data obtained from ICPSR. It would also be useful to supplement Appendix D by having a copy of ICPSR and Criminal Justice Data Archive holdings available for students. Or, if suitable computing resources are accessible, students can retrieve information about ICPSR holdings through the Internet. We describe one way to do this in Appendix D.

## Acknowledgments

Several reviewers made perceptive and useful comments on various drafts of the book. We are especially grateful to them for their insights and suggestions: Tom Barker, Jacksonville State University; Robert Bursik, University of Oklahoma; William Cole, University of Kentucky; Scott Decker, University of Missouri—St. Louis; Larry Gould, Northern Arizona University; James Marquart, Sam Houston State University; Joan McDermott, Southern Illinois University—Carbondale; Steve Meagher, Ball State University; Terry Miethe, Virginia Polytechnic Institute; Rob Mutchnick, Indiana University of Pennsylvania; Barbara Owen, California State University—Fresno; Britt Patterson, Florida State University; Doug Pryor, Wake

Forest University; Jeffrey Walker, University of Arkansas at Little Rock; Vince Webb, University of Nebraska; and Tom Winfree, New Mexico State University.

A group of special people at Indiana University's School of Public and Environmental Affairs provided indirect support in many ways, not the least of which was getting the job done in splendid fashion while I worked on the book. Many thanks to Team 260: Kine Anderson, Cheryl Blackerbee, Gina Crowe, Michele Diamond, Jeanne

Heeb, Mary Kennedy, Carol Melvin, Roger Parks, and Donna Pritchett.

Finally, Earl and I are grateful for patient, professional assistance from people at Wadsworth: Jeanne Bosschart, Ruth Cottrell, Elizabeth Judd, Jason Moore, Marla Nowick, Susan Shook, and especially Serina Beuparlant.

North River, New York  
September 1994

# Contents in Brief

---

---

## Part 1

### An Introduction to Criminal Justice Inquiry / 1

- 1 Crime, Criminal Justice, and Scientific Inquiry / 2
- 2 Theory and Criminal Justice Research / 24
- 3 Causation and Validity / 44

---

## Part 2

### Structuring Criminal Justice Inquiry / 67

- 4 General Issues in Research Design / 68
- 5 Concepts, Operationalization, and Measurement / 93
- 6 Experimental and Quasi-Experimental Designs / 121
- 7 Ethics and Criminal Justice Research / 151

---

## Part 3

### Modes of Observation / 171

- 8 Overview of Data Collections and Sampling / 172

### 9 Asking Questions:

Survey Research / 211

### 10 Field Research / 242

### 11 Agency Records, Content Analysis, and Secondary Data / 269

---

## Part 4

### Pulling It All Together / 299

### 12 Program Evaluation

and Policy Analysis / 300

### 13 Interpreting Data / 333

### 14 Pulling It All Together:

Annotated Examples / 371

---

## Appendixes / A1

A: Using the Library: Traditional and Computer-Based Information Sources / A2

B: National Criminal Justice Reference Service / A12

C: The Research Report / A16

D: Sources of Secondary Data / A23

E: Distribution of Chi Square / A28

Glossary / G1

References / R1

Index / I1

# Contents in Detail

---

---

## Part 1

### An Introduction to Criminal Justice Inquiry / 1

#### Chapter 1

##### Crime, Criminal Justice, and Scientific Inquiry / 2

Introduction / 3

Two Realities / 3

Research Producers and Consumers / 5

Native Human Inquiry / 6

Tradition / 8

Authority / 8

Errors in Personal Human Inquiry / 8

Inaccurate Observation / 9

Oversgeneralization / 9

Selective Observation / 9

Ex Post Facto Hypothesizing / 11

Illogical Reasoning / 12

Ego Involvement in Understanding / 12

Ideology and Politics / 12

The Premature Closure of Inquiry / 13

To Err Is Human / 13

The Foundations of Social Science / 13

Theory, Not Philosophy or Belief / 14

Social Regularities / 16

What About Exceptions? / 16

Aggregates, Not Individuals / 17

A Variable Language / 17

Variables and Relationships / 18

Knowing Through Experience: Summing

Up and Looking Ahead / 21

Main Points / 21

Review Questions and Exercises / 22

Additional Readings / 22

#### Chapter 2

##### Theory and Criminal Justice Research / 24

Introduction / 25

The Creation of Social

Science Theory / 25

The Traditional Model of Science / 25

Two Logical Systems / 29

Terms Used in Theory Construction / 34

Theory in Criminal Justice / 37

Law Breaking / 37

Policy Responses / 39

Theory, Research, and Public Policy / 39

Ecological Theories of Crime and  
Crime Prevention Policy / 40

Main Points / 42

Review Questions and Exercises / 42

Additional Readings / 42

#### Chapter 3

##### Causation and Validity / 44

Introduction / 45

Determinism and Social Science / 45

Causation in the Natural Sciences / 45

Finding Causes in Social Science / 46

Reasons Have Reasons / 46

Determinism in Perspective / 47

Idiographic and Nomothetic Models of  
Explanation / 48

Criteria for Causality / 49

Necessary and Sufficient Causes / 50

Molar, Not Micromediation, Causal Statements / 51	
Errors of Reasoning / 51	
Validity and Causal Inference / 54	
Statistical Conclusion Validity / 55	
Internal Validity / 56	
Construct Validity / 56	
External Validity / 58	
Validity and Causal Inference Summarized / 58	
Does Drug Use Cause Crime? / 59	
Linking Measurement and Association / 60	
The Traditional Deductive Model / 60	
The Interchangeability of Indexes / 62	
Main Points / 64	
Review Questions and Exercises / 65	
Additional Readings / 65	

## Part 2

### Structuring Criminal Justice Inquiry / 67

#### Chapter 4

##### General Issues in Research Design / 68

Introduction / 69	
Purposes of Research / 70	
Exploration / 70	
Description / 71	
Explanation / 71	
Application / 72	
Units of Analysis / 73	
Individuals / 73	
Groups / 74	
Organizations / 74	
Social Artifacts / 75	
Units of Analysis in Review / 76	
The Ecological Fallacy / 77	
Reductionism / 78	
The Time Dimension / 78	
Cross-Sectional Studies / 79	
Longitudinal Studies / 79	
Approximating Longitudinal Studies / 81	
Ethics and Criminal Justice Research / 82	

##### How to Design a Research Project / 82

The Research Process / 83	
Getting Started / 85	
Conceptualization / 85	
Choice of Research Method / 86	
Operationalization / 86	
Population and Sampling / 87	
Observations / 87	
Data Processing / 87	
Analysis / 87	
Application / 88	
Review / 88	
The Research Proposal / 89	
Elements of a Research Proposal / 89	
Main Points / 91	
Review Questions and Exercises / 92	
Additional Readings / 92	

#### Chapter 5

##### Concepts, Operationalization, and Measurement / 93

Introduction / 94	
Conceptions and Concepts / 94	
Conceptualization / 95	
Indicators and Dimensions / 96	
Confusion Over Definitions and Reality / 97	
Creating Conceptual Order / 97	
Operationalization Choices / 99	
Measurement / 100	
Levels of Measurement / 101	
Implications of Levels of Measurement / 104	
Criteria for Measurement Quality / 106	
Reliability / 106	
Validity / 108	
Measuring Crime / 111	
Crimes Known to Police / 112	
Uniform Crime Reports / 114	
Measuring Crime Through Surveys / 114	
National Crime Victimization Survey / 115	
Surveys of Offenders / 116	
Multiple Methods for Measuring Crime / 117	
Measuring Crime: Summary / 118	

Main Points /	118
Review Questions and Exercises /	120
Additional Readings /	120
<b>Chapter 6</b>	
<b>Experimental and</b>	
<b>Quasi-Experimental Designs /</b>	<b>121</b>
Introduction /	122
Topics Appropriate to Experiments /	122
The Classical Experiment /	123
Independent and	
Dependent Variables /	123
Pretesting and Posttesting /	124
Experimental and Control Groups /	124
Double-Blind Experiment /	126
Selecting Subjects /	127
Randomization /	127
Experiments and Causal Inference /	128
Experiments and Threats to Validity /	128
Threats to Internal Validity /	128
Generalizability /	133
Threats to Construct Validity /	133
Threats to External Validity /	134
Threats to Statistical	
Conclusion Validity /	135
Variations in the Classical	
Experimental Design /	136
Quasi-Experimental Designs /	137
Nonequivalent-Groups Designs /	138
Cohort Designs /	141
Time-Series Designs /	142
Variations in Time-Series Designs /	143
Gun Control, Homicide, and Suicide /	146
Experimental and Quasi-Experimental	
Designs Summarized /	148
Main Points /	149
Review Questions and Exercises /	150
Additional Readings /	150
<b>Chapter 7</b>	
<b>Ethics and Criminal</b>	
<b>Justice Research /</b>	<b>151</b>
Introduction /	152
Ethical Issues in Criminal	
Justice Research /	152

No Harm to Participants /	153
Voluntary Participation /	154
Anonymity and Confidentiality /	155
Deceiving Subjects /	156
Analysis and Reporting /	157
Legal Liability /	157
Special Problems /	158
Promoting Compliance	
with Ethical Principles /	160
Institutional Board Reviews /	160
Institutional Review Board Requirements	
and Researcher Rights /	163
Two Ethical Controversies /	165
Trouble in the Tearoom /	165
Simulating a Prison /	166
Discussion Examples /	168
Main Points /	169
Review Questions and Exercises /	169
Additional Readings /	170

## Part 3

---

### Modes of Observation / 171

<b>Chapter 8</b>	
<b>Overview of Data</b>	
<b>Collection and Sampling /</b>	<b>172</b>
Introduction /	173
Three Sources of Data /	174
Asking Questions /	174
Making Observations /	175
Examining Written Records /	175
Sources of Data Compared /	176
General Issues in Data Collection /	177
Measurement Validity and Reliability /	177
Obtrusive and Unobtrusive Measures /	180
Be Careful, But Be Creative /	181
The Logic of Sampling /	182
The Logic of Probability Sampling /	182
Conscious and Unconscious	
Sampling Bias /	183
Representativeness and Probability of	
Selection /	184
Sampling Concepts	
and Terminology /	185

Probability Sampling Theory and Sampling Distribution / 187	
Probability Sampling Theory / 187	
The Sampling Distribution of Ten Cases / 188	
Binomial Sampling Distribution / 189	
Populations and Sampling Frames / 195	
Review of Populations and Sampling Frames / 196	
Types of Sampling Designs / 196	
Simple Random Sampling / 197	
Systematic Sampling / 197	
Stratified Sampling / 198	
Disproportionate Stratified Sampling / 199	
Multistage Cluster Sampling / 199	
Multistage Cluster Sampling with Stratification / 201	
Illustration: Two National Crime Surveys / 203	
National Crime Victimization Survey / 203	
British Crime Survey / 204	
Probability Sampling in Review / 205	
Nonprobability Sampling / 206	
Purposive or Judgmental Sampling / 206	
Quota Sampling / 207	
Reliance on Available Subjects / 208	
Snowball Sampling / 208	
Main Points / 209	
Review Questions and Exercises / 210	
Additional Readings / 210	

## **Chapter 9**

### **Asking Questions: Survey Research / 211**

#### Introduction / 212

#### Topics Appropriate to

Survey Research / 213

Counting Crime / 213

Self-Reports / 213

Perceptions and Attitudes / 214

Policy Proposals / 214

Targeted Victim Surveys / 215

Other Evaluation Uses / 215

General-Purpose Crime Surveys / 215

#### Guidelines for Asking Questions / 215

Open-ended and Closed-

ended Questions / 216

Questions and Statements / 216

Make Items Clear / 217

Short Items Are Best / 217

Avoid Negative Items / 217

Avoid Biased Items and Terms / 217

Tips on Self-Report Items / 218

#### Questionnaire Construction / 219

General Questionnaire Format / 220

Contingency Questions / 220

Matrix Questions / 221

Ordering Questions in  
a Questionnaire / 223

#### Self-Administered Questionnaires / 224

Mail Distribution and Return / 224

Warning Mailings, Cover Letters / 225

Monitoring Returns / 226

Follow-up Mailings / 226

Acceptable Response Rates / 227

#### In-Person Interview Surveys / 227

The Role of the Interviewer / 227

General Rules for Interviewing / 228

Coordination and Control / 229

#### Telephone Surveys / 230

Computer-Assisted Interviewing / 231

#### Comparison of the Three Methods / 232

#### Strengths and Weaknesses of Survey Research / 233

#### Other Ways of Asking Questions / 236

Specialized Interviewing / 236

Focus Groups / 237

#### Should You Do It Yourself? / 238

#### Main Points / 239

#### Review Questions and Exercises / 240

#### Additional Readings / 241

## **Chapter 10**

### **Field Research / 242**

#### Introduction / 243

#### Topics Appropriate to Field Research / 244

#### The Various Roles of the Observer / 245

#### Asking Questions / 247

#### Preparing for the Field / 248

Access to Formal Organizations / 249

Access to Subcultures / 251

Selecting Cases for Observation / 252

Sampling in Field Research /	253
Recording Observations /	255
Field Notes /	256
Linking Field Observations and Other Data /	258
Illustrations of Field Research /	259
Shoplifting /	259
How Many People Wear Seat Belts? /	261
Drinking and Disorder in Newcastle-upon-Tyne /	263
Strengths and Weaknesses of Field Research /	264
Validity /	265
Reliability /	266
Generalizability /	266
Main Points /	267
Review Questions and Exercises /	268
Additional Readings /	268

## **Chapter 11**

### **Agency Records, Content Analysis, and Secondary Data /**

Introduction /	270
Topics Appropriate for Agency Records /	271
Types of Agency Records /	272
Published Statistics /	272
Nonpublic Agency Records /	275
New Data Collected by Agency Staff /	279
Units of Analysis and Sampling /	281
Units of Analysis /	281
Sampling /	282
Reliability and Validity /	282
Sources of Reliability and Validity Problems /	283
Content Analysis /	286
Units of Analysis and Sampling in Content Analysis /	287
Coding in Content Analysis /	290
Illustrations of Content Analysis /	291
Secondary Analysis /	293
Sources of Secondary Data /	294
Advantages and Disadvantages of Secondary Data /	295
Main Points /	295

Review Questions and Exercises /	296
Additional Readings /	296

## **Part 4**

### **Pulling It All Together /**

## **Chapter 12**

### **Program Evaluation and Policy Analysis /**

Introduction /	301
Topics Appropriate for Evaluation Research and Policy Analysis /	301
The Policy Process /	302
Linking the Process to Evaluation /	303
Getting Started /	305
Evaluability Assessment /	306
Problem Formulation /	307
Measurement /	309
Designs for Program Evaluation /	312
Randomized Evaluation Designs /	312
Quasi-Experimental Designs /	317
Nonexperimental Evaluation Studies /	321
Other Types of Evaluation Studies /	322
Policy Analysis /	322
Modeling Prison Populations /	323
Political Context of Applied Research /	327
Evaluation and Stakeholders /	327
Politics and Objectivity /	328
Main Points /	330
Review Questions and Exercises /	331
Additional Readings /	331

## **Chapter 13**

### **Interpreting Data /**

Introduction /	334
Descriptive Statistics /	334
Univariate Analysis /	334
Subgroup Comparisons /	342
Bivariate Analysis /	343
Multivariate Analysis /	346
Measures of Association /	351
Inferential Statistics /	357
Univariate Inferences /	358

Tests of Statistical Significance / 359  
 The Logic of Statistical Significance / 359  
 Chi Square / 364  
 Cautions in Interpreting Statistical  
 Significance / 366  
 Main Points / 368  
 Review Questions and Exercises / 369  
 Additional Readings / 370

## **Chapter 14**

### **Pulling It All Together:**

#### **Annotated Examples / 371**

##### Introduction / 372

##### National Institute of Justice

Program Plan 1994–1995 / 373

Writing Your Grant Proposal / 374

##### Juvenile Victimization and Offending / 376

Research Program Statement / 376

Proposal: Longitudinal Design

Using Available Data / 377

The Research Report / 381  
 Crime Commission Rates / 383  
 Research Program Statement / 383  
 Proposal: Inmate Self-Report Survey / 383  
 The Research Report / 390  
 Conclusion / 394

## **Appendixes / A1**

A: Using the Library: Traditional  
 and Computer-Based  
 Information Sources / A2

B: National Criminal Justice Reference  
 Service / A12

C: The Research Report / A16

D: Sources of Secondary Data / A23

E: Distribution of Chi Square / A28

Glossary / G1

References / R1

Index / I1