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FOR CRIMINAL JUSTICE AND CRIMINOLOGY

Michael G. Maxfield Earl R. Babbie



# Research Methods

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df	.99	.98	.95	.90	.80	.70	.50
1	.0³157	.0 <sup>3</sup> 628	.00393	.0158	.0642	.148	.455
2	.0201	.0404	.103	.211	.446	.713	1.386
3	.115	.185	.352	.584	1.005	1.424	2.366
4	.297	.429	.711	1.064	1.649	2.195	3.357
5	.554	.752	1.145	1.610	2.343	3.000	4.351
6	.872	1.134	1.635	2.204	3.070	3.828	5.348
7	1.239	1.564	2.167	2.833	3.822	4.671	6.346
8	1.646	2.032	2.733	3.490	4.594	5.528	7.344
9	2.088	2.532	3.325	4.168	5.380	6.393	8.343
10	2.558	3.059	3.940	4.865	6.179	7.267	9.342
11	3.053	3.609	4.575	5.578	6.989	8.148	10.341
12	3.571	4.178	5.226	6.304	7.807	9.034	11.340
13	4.107	4.765	5.892	7.042	8.634	9.926	12.340
14	4.660	5.368	6.571	7.790	9.467	10.821	13.339
15	5.229	5.985	7.261	8.547	10.307	11.721	14.339
16	5.812	6.614	7.962	9.312	11.152	12.624	15.338
17	6.408	7.255	8.672	10.085	12.002	13.531	16.338
18	7.015	7.906	9.390	10.865	12.857	14.440	17.338
19	7.633	8.567	10.117	11.651	13.716	15.352	18.338
20	8.260	9.237	10.851	12.443	14.578	16.266	19.337
21	8.897	9.915	11.591	13.240	15.445	17.182	20.337
22	9.542	10.600	12.338	14.041	16.314	18.101	21.337
23	10.196	11.293	13.091	14.848	17.187	19.021	22.337
24	10.856	11.992	13.848	15.659	18.062	19.943	23.337
25	11.524	12.697	14.611	16.473	18.940	20.867	24.337
26	12.198	13.409	15.379	17.292	19.820	21.792	25.336
27	12.879	14.125	16.151	18.114	20.703	22.719	26.336
28	13.565	14.847	16.928	18.939	21.588	23.647	27.336
29	14.256	15.574	17.708	19.768	22.475	24.577	28.336
30	14.953	16.306	18.493	20.599	23.364	25.508	29.336

For larger values of df, the expression  $=2x^2-=2df-1$  may be used as a normal deviate with unit variance, remembering that the probability of  $x^2$  corresponds with that of a single tail of the normal curve.

df	.30	.20	.10	.05	.02	.01	.001
1	1.074	1.642	2.706	3.841	5.412	6.635	10.827
2	2.408	3.219	4.605	5.991	7.824	9.210	13.815
3	3.665	4.642	6.251	7.815	9.837	11.341	16.268
4	4.878	5.989	7.779	9.488	11.668	13.277	18.465
5	6.064	7.289	9.236	11.070	13.388	15.086	20.517
6	7.231	8.558	10.645	12.592	15.033	16.812	22.457
7	8.383	9.803	12.017	14.067	16.622	18.475	24.322
8	9.524	11.030	13.362	15.507	18.168	20.090	29.125
9	10.656	12.242	14.684	16.919	19.679	21.666	27.877
0	11.781	13.442	15.987	18.307	21.161	23.209	29.588
1	12.899	14.631	17.275	19.675	22.618	24.725	31.264
2	14.011	15.812	18.549	21.026	24.054	26.217	32.909
3	15.119	16.985	19.812	22.362	25.472	27.688	34.528
4	16.222	18.151	21.064	23.685	26.873	29.141	36.123
5	17.322	19.311	22.307	24.996	28.259	30.578	37.697
6	18.841	20.465	23.542	26.296	29.633	32.000	39.252
7	15.511	21.615	24.769	27.587	30.995	33.409	40.790
8	20.601	22.760	25.989	28.869	32.346	34.805	42.312
9	21.689	23.900	27.204	30.144	33.687	36.191	43.820
20	22.775	25.038	28.412	31.410	35.020	37.566	45.315
21	23.858	26.171	29.615	32.671	36.343	38.932	46.797
22	24.939	27.301	30.813	33.924	37.659	40.289	48.268
23	26.018	28.429	32.007	35.172	38.968	41.638	49.728
24	27.096	29.553	33.196	36.415	40.270	42.980	51.179
25	28.172	30.675	34.382	37.652	41.566	44.314	52.620
.6	29.246	31.795	35.563	38.885	42.856	45.642	54.052
27	30.319	32.912	36.741	40.113	44.140	46.963	55.476
28	31.391	34.027	37.916	41.337	45.419	48.278	56.893
29 30	32.461 35.530	35.139 36.250	39.087	42.557 43.773	46.693	49.588 50.892	58.302 59.703

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# Research Methods for CRIMINAL JUSTICE and CRIMINOLOGY



SEVENTH EDITION

# Michael G. Maxfield

John Jay College of Criminal Justice, City University of New York

Earl R. Babbie

Chapman University





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# Dedication

To Max Jacob Fauth and Laine Ellen Fauth To Suzanne Babbie

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# 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 interesting, and he 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 pleased to see that he was a careful observer, applying some of the skills he had 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 had not recognized how much fun research could be until leaving 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 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.

# Goals and Objectives

Criminal justice has always been a fascinating topic for students, partly because it is the stuff of news stories, fiction, and much popular entertainment. Criminal justice research goes behind and beyond the headlines to address important questions of *who*, *what*, *why*, and *how*. *Who* is involved as offender, victim, and justice professional? *What* is the nature and frequency of different kinds of crime and disorder problems? *What* new problems are emerging? *Why* are incidents happening in particular places? *Why* are offenders involved in particular patterns of behavior? *How* are different kinds of offenses committed? *How* should justice agencies prevent and respond to problems of crime and safety?

Our primary goal in writing this edition is unchanged: to help students learn how to conduct research to answer these and related questions. Toward that end, certain principles have guided our revision of each edition of this text. Our intent is to:

- provide a careful description of the varied options for doing research in criminal justice.
- clarify and demystify what is traditionally a challenging subject for students at all levels.
- illustrate research methods with examples that are informative and interesting.
- incorporate new approaches that reflect methodological developments in the field.
- emphasize the application of criminal justice research to real-world problems and justice policy examples.
- bridge the gap between authors, instructors, and students by drawing on examples of our own research, especially that conducted with student colleagues.

When I began 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 presenting a rigorous treatment of social science research methods. We have sought to convey

<sup>&</sup>lt;sup>1</sup>In this Preface, the first-person singular refers to Michael Maxfield, while the first-person plural refers to Michael Maxfield and Earl Babbie.

something of the excitement of doing research that Ryan discovered as he observed pedestrians in downtown Indianapolis.

# Organization of the Text

The seventh edition of *Research Methods for Criminal Justice and Criminology* has 14 chapters:

- Chapter 1, "Crime, Criminal Justice, and Scientific Inquiry," introduces research methods. Material in this chapter describes how social scientific inquiry differs from other ways of learning things. This chapter also advises students on how to select research topics, conduct a literature review, and write a research proposal.
- Chapter 2, "Foundations of Criminal Justice Research," summarizes principles of social science research and examines different general approaches to research. This chapter also describes the important role of theory in all research. We dispel myths about theory by describing it as a logical guide to scientific inquiry. Examples illustrate how theory drives applied and basic research.
- Chapter 3, "Ethics and Criminal Justice Research," examines how research has the potential to harm subjects and the obligations of researchers to minimize the risk of such harm. Examples illustrate the range of ethical issues in justice research and steps researchers take to address them.
- Chapter 4, "General Issues in Research Design," describes basic features of all research studies that have to be considered when planning a research project.
- Chapter 5, "Concepts, Operationalization, and Measurement," considers this central topic in criminal justice research. All research requires some sort of measurement, and this chapter examines key elements of this important topic.
- Chapter 6, "Measuring Crime," focuses on a central dependent and independent variable in criminal justice research. This provides an in-depth example of measurement more generally, while describing different ways crime is

measured and why the various measures are necessary.

- Chapter 7, "Experimental and Quasi-Experimental Designs," examines how we plan research that has explanatory and applied purposes. Research design involves a collection of building blocks that can be combined in different ways. We emphasize the flexibility of research designs, drawing on interesting and creative examples.
- Chapter 8, "Sampling," describes approaches to selecting subjects for research. We cover the two general categories of probability and nonprobability sampling, describing different subtypes in each category. The basics of probability theory are introduced as key principles underlying sampling and statistical significance.
- Chapter 9, "Survey Research," explores traditional survey research and other types of interviewing. Changes in technology continue to affect how surveys are conducted.
- Chapter 10, "Qualitative Interviewing," is new to this edition. The chapter describes different applications of qualitative and specialized interviewing. Earl and I are pleased that Amber Horning has joined us in this chapter, drawing on her own work and research by others to examine this family of data gathering techniques.
- Chapter 11, "Field Observation," includes discussion of traditional approaches as well as structured environmental surveys. Examples illustrate the use of the different approaches.
- Chapter 12, "Agency Records, Content Analysis, and Secondary Data," covers data extracted from administrative records as well as data series regularly collected by researchers and government agencies. Examples illustrate the wide range of research opportunities supported by data from different secondary sources.
- Chapter 13, "Evaluation Research and Problem Analysis," focuses on applied research that aims to improve criminal justice policy. The chapter describes how problem analysis is increasingly used in justice agencies to reduce crime and related problems.

• Chapter 14, "Interpreting Data," introduces data analysis techniques widely used in criminal justice research. Descriptive and explanatory approaches are explained and illustrated with examples.

# What's New in This Edition

In preparing this seventh edition, we stayed with what has proven to be a popular formula, but also responded to suggestions from several people reviewers, colleagues, and instructors—who used earlier editions.

# **Qualitative Research**

Many reviewers and instructors who use the book have suggested expanded coverage of qualitative research techniques. While we have always included qualitative methods in our discussion of how to do research, a new chapter offers more depth in specialized interviewing and related field techniques. With contributions from Amber Horning, a PhD student at John Jay College of Criminal Justice, we present a new chapter on qualitative interviewing. Amber draws heavily on her own research studying pimps and other sex workers, mostly in New York City. Her work is fascinating and creative, offering excellent examples of how to do field work on sensitive topics with elusive subjects.

Amber's contributions also supplement our discussion of focus groups in criminological research, a topic Earl and I previously included in the chapter on survey research. What results is a new chapter that provides especially useful insights in doing field research on people engaged in illegal activities. Amber Horning's work also illustrates creative approaches to sampling and learning about hidden populations.

We are pleased that Amber Horning has joined us for this edition for many reasons. Among these is our continuing effort to include examples of student research. Amber's work involves extensive field presence in an urban environment; we feel she has conveyed much of that experience very nicely.

# **Opening Vignettes**

In the previous edition, we introduced opening vignettes that presented examples of research topics covered in each chapter. Many of these drew on my recent research with former colleague Ronald Clarke, in collaboration with graduate students at Rutgers University. This edition offers new vignettes for several chapters. We have linked these more explicitly with chapter themes and tried to add timely topics that will interest students. Other opening vignettes describe research by former Rutgers students or research on topics of recent popular interest.

Just as the running example throughout the chapters sums up many topics described in each chapter, the opening vignette introduces key issues. This serves two purposes. First, we think the vignettes present examples that will be inherently interesting to students and draw them into the material covered in each chapter. Second, the vignettes can be points of departure for class discussion. For example, the new opening vignette in Chapter 3 draws on Amber Horning's research by examining ethical questions that emerge in a study of active sex workers. In Chapter 8, we included a new box keyed to results from different polls in the 2012 presidential election.

# Expanded Examples of Student Research

Reviewers and colleagues have commented favorably on the use of examples from student research in earlier editions, a feature that serves multiple purposes. First, it amplifies what some colleagues call the "over-the-shoulder" tone of the text, in which readers feel they are experiencing more than simply words on a printed page. Second, student research examples embody the kind of collaborative supervision that exists between graduate students and faculty. Third, although I have great familiarity with the details of my students' work, such details are rarely described in published articles. Being able to report them adds behind-the-scenes information not readily available elsewhere. Finally, Earl and I believe the examples presented here are topical and inherently

interesting to readers. Among the examples in this edition are projects that address terrorism, sex workers, human trafficking, sex offenders, and crime at bus stops. The first four are well-known topics, whereas the last is an example of a seemingly humble problem that will be meaningful to most people living in large urban areas.

We have also made specific changes in each chapter of the text:

- **Chapter 1**, on the advice of reviewers, has been extensively revised to provide an overview of criminal justice research the way it is commonly taught. Basic principles of social science research are revised and moved to Chapters 2 and 4. Chapter 1 then presents material on how to plan research and how to write a research proposal. This includes guidance on how to conduct a literature review. Chapter 1 now better reflects what most instructors do in the first class or two.
- **Chapter 2** covers many of the basic principles of criminal justice research previously discussed in Chapter 1. This works rather well, as it integrates our consideration of criminal justice theory with other foundations of research.
- **Chapter 3** updates material on the institutional review boards that oversee the protection of human subjects in the course of social science research. We have also revised some discussion of ethical questions that stem for working with active offenders.
- **Chapter 4** offers a more streamlined treatment of three important principles for designing social science research: causation, units of analysis, and the time dimension. This was partly facilitated by moving the section on how to design a research project to Chapter 1.
- **Chapter 5** begins with a new opening vignette on different ways to measure neighborhood characteristics. *Ecometrics*, a term coined by Sampson and Raudenbush, has attracted more attention from criminal justice researchers. Our vignette draws on research by Shuryo Fujita to describe how high-resolution images available on the Internet provide low-cost alternatives to developing certain kinds of measures. We

have also reorganized some discussion on conceptualization in response to comments from reviewers and colleagues who have used earlier editions of the book.

- **Chapter 6** presents an updated and streamlined description of the National Incident-Based Reporting System, as more researchers are now using this measure of crime. We updated our consideration of other crime measures to reflect changes in how victim and selfreport surveys are conducted.
- **Chapter 7** includes new material on the increased use of experimental designs in criminal justice research.
- **Chapter 8** updates the continuing changes in technology that require new approaches to sampling, especially the growth in wireless-only households. At the same time, social media and web-based samples become more generalizable as Internet use approaches saturation for many groups. A new table has been added to illustrate nonprobability sampling. Finally, we moved additional discussion of snowball sampling to this chapter where we think it flows more clearly.
- **Chapter 9** streamlines discussion of inperson interviewing. Coverage of mail surveys is cut back to reflect the decline of that form of administration. However, we update information on computer-based self-administration. The chapter is shorter because specialized interviewing and focus groups are now in Amber Horning's chapter.
- **Chapter 10**, "Qualitative Interviewing," is new to this edition.
- **Chapter 11** presents a new box by Shuryo Fujita to demonstrate probability sampling for observations. Dr. Fujita's dissertation randomly sampled street blocks and used Internetbased photographs to observe conditions of streets and housing. We consider other ways of making different types of observations, partly linking to Chapter 10's treatment of qualitative research techniques.
- **Chapter 12** updates references to existing data that can be used in secondary analysis.
- **Chapter 13** further updates the section on problem analysis that was introduced in the

fifth edition. We comment on the growth of evidence-based justice policy.

• **Chapter 13** updates crime data in certain examples. We have also reworked some of the descriptive statistics discussion. The chapteropening vignette updates National Crime Victimization Survey data on another hot-button topic—identity theft.

# Learning Tools

To make this book more accessible to students with a range of interests and abilities, we have included learning tools in each chapter:

- Learning Objectives Chapters open with learning objectives that are keyed to the summaries presented later in each chapter. This feature will help students pull material together as they read through and review each chapter.
- **Marginal Key Terms** This edition includes marginal key terms accompanied by brief definitions. These marginal key terms are a subset of those pulled together at the end of each chapter, which in turn are defined fully in the glossary.
- **Chapter Summary** Adapted from different sections in earlier editions, chapter summaries are keyed to the learning objectives that open each chapter.

# **Ancillary Materials**

A number of supplements are provided by Cengage Learning to help instructors use *Research Methods for Criminal Justice and Criminology* in their courses and to help students prepare for exams. Supplements are available to qualified adopters. Please consult your local sales representative for details.

**Instructor's Resource Manual with Test Bank by Todd Scott of Schoolcraft College.** The manual includes learning objectives, key terms, a detailed chapter outline, a chapter summary, lesson plans, discussion topics, student activities, "What If" scenarios, media tools, a sample syllabus, and an expanded test bank with almost twice as many questions as the prior edition. The learning

objectives are correlated with the discussion topics, student activities, and media tools. Each chapter's test bank contains questions in multiplechoice, true/false, completion, essay, and new critical thinking formats, with a full answer key. The test bank is coded to the learning objectives that appear in the main text, and includes the section in the main text where the answers can be found. Finally, each question in the test bank has been carefully reviewed by experienced criminal justice instructors for quality, accuracy, and content coverage. Our Instructor Approved seal, which appears on the front cover, is our assurance that you are working with an assessment and grading resource of the highest caliber. The manual is available for download on the password-protected website and can also be obtained by emailing your local Cengage Learning representative.

**Cengage Learning Testing by Wesley Jennings of University of South Florida.** Powered by Cognero, the accompanying assessment tool is a flexible, online system that allows you to:

- import, edit, and manipulate test bank content from the Maxfield/Babbie test bank or elsewhere, including your own favorite test questions
- create ideal assessments with your choice of 15 question types (including true/false, multiple choice, opinion scale/Likert, and essay)
- create multiple test versions in an instant using drop-down menus and familiar, intuitive tools that take you through content creation and management with ease
- deliver tests from your LMS, your classroom, or wherever you want—plus, import and export content into other systems as needed.

**PowerPoint Lecture Slides by Tina Freiburger** of University of Wisconsin–Milwaukee. These handy Microsoft PowerPoint slides, which outline the chapters of the main text in a classroomready presentation, will help you in making your lectures engaging and in reaching your visually oriented students. The presentations are available for download on the password-protected website and can also be obtained by emailing your local Cengage Learning representative. **Cengage Learning Video Program (Courtesy BBC, CNN, and more)** CNN videos feature short, high-interest clips from current news events as well as historic raw footage going back 30 years. CBS and BBC clips feature footage from nightly news broadcasts and specials to *CBS News Special Reports, CBS Sunday Morning, 60 Minutes,* and more. Taken together, the brief videos offer the perfect discussion starters for your classes, enriching lectures and providing students with a new lens through which to view the past and present, one that will greatly enhance their knowledge and understanding of significant events and open up to them new dimensions in learning.

CourseMate Companion Website Cengage Learning's Criminal Justice CourseMate brings course concepts to life with interactive learning, study, and exam preparation tools that support the printed textbook. Each chapter opens with a brief, learning-objective-based pretest that students can use to quiz themselves in advance of reading the assignment and to identify those chapter outcomes that may be especially challenging for them personally. CourseMate also includes an integrated eBook, post-reading quizzes that are mapped to chapter learning objectives, and a firstof-its-kind tool that monitors student engagement in the course. The accompanying instructor website offers access to password-protected resources such as an electronic version of the instructor's manual and PowerPoint slides.

**Careers in Criminal Justice Website** *Can be bundled with this text at no additional charge.* Featuring plenty of self-exploration and profiling activities, the interactive Careers in Criminal Justice website helps students investigate and focus on the criminal justice career choices that are right for them. Includes interest assessment, video testimonials from career professionals, resume and interview tips, and links for reference.

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Mike Maxfield

# PART ONE

# An Introduction to Criminal Justice Inquiry

What comes to mind when you encounter the word *science*? What do you think of when we describe criminal justice as a social science? For some people, science is mathematics; for others, it is white coats and laboratories. Some confuse it with technology or equate it with difficult courses in high school or college.

For the purposes of this book, we view science as a method of inquiry—a way of learning and knowing things about the world around us. Like other ways of learning and knowing about the world, science has some special characteristics. We'll examine these traits in this opening set of chapters. We'll also see how the scientific method of inquiry can be applied to the study of crime and criminal justice.

Part One lays the groundwork for the rest of the book by examining the fundamental characteristics and issues that make science different from other ways of knowing things. Chapter 1 begins with a look at native human inquiry, the sort of thing all of us have been doing all our lives. We'll also consider research purposes and the basics of how to design a research project.

Chapter 2 deals specifically with the social scientific approach to criminal justice inquiry and the links between theory and research. The lessons of Chapter 1 are applied in the study of crime and criminal justice. Although special considerations arise in studying people and organizations, the basic logic of all science is the same.

Ethics is one of these special considerations we face in studying people. In Chapter 3, we'll see that most ethical questions are rooted in two fundamental principles: (1) research subjects should not be harmed, and (2) their participation must be voluntary.

The overall purpose of Part One, therefore, is to construct a backdrop against which to view more specific aspects of designing and doing research. By the time you complete the chapters in Part One, you'll be ready to look at some of the more concrete aspects of criminal justice research.



# **CHAPTER 1**

# Crime, Criminal Justice, and Scientific Inquiry

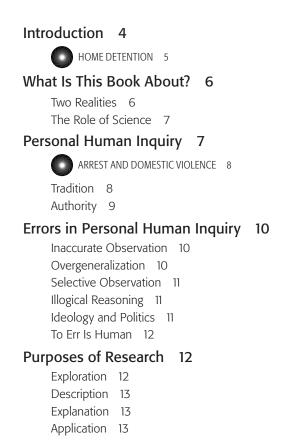
People learn about their world in a variety of ways, and they often make mistakes along the way. Science is different from other ways of learning and knowing. We'll consider errors people commonly make and how science tries to avoid them, discuss different purposes of research, and present an overview of how to design a research project.



# Learning Objectives

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

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



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# Sexual Assault in Jails and Prisons

Responding to reports of sexual assault in prisons and jails, the Prison Rape Elimination Act became law in 2003. The act enhanced penalties for sexual violence in most detention facilities and required the Department of Justice to collect systematic data on the problem. The newspaper article "County Misreports Data About Sexual Violence in Juvenile Jails" is an example of how sexual assault continues to be a problem in San Diego, California (Maass, 2012). Researchers have conducted studies to better understand the problem and assess ways to reduce sexual violence.

Allen Beck and associates (2010) describe data collected from a sample of prisons and jails by the Bureau of Justice Statistics. They report that 4 percent of prison inmates and 3 percent of jail inmates were victims of sexual assault in the previous 12 months or since being admitted to the facility. Projecting those percentages to all prisons and jails nationwide produces an estimate of 88,500 adult victims. In addition, the researchers report that approximately 3 percent of prison inmates and 2 percent of those in jail had sexual contact with facility staff, often willingly.

Nancy La Vigne and other researchers from the Urban Institute (2011) describe their research on how to prevent sexual assault in jails. Working with three facilities, they described efforts to improve supervision of inmates and corrections officers, install surveillance cameras, and train corrections officers in crisis intervention. Based on their evaluation, La Vigne and associates recommended that jail administrators use a systematic process to assess problems in specific facilities, design changes that address those problems, and collect data to assess the effects of the new actions.

This example illustrates how researchers take steps to better understand the scope of a problem and then try different approaches to reduce it. The Urban Institute analysts went one step further in their efforts to train corrections officials to do their own applied research. Jail managers were consumers of research produced by La Vigne and associates and also gained some of the skills needed to become producers of applied studies in their own facilities.

# Introduction

# Criminal justice professionals are both consumers and producers of research.

Spending a semester studying criminal justice research methodology may not be high on your list of "Fun Things to Do." Perhaps you are or plan to be a criminal justice professional and are thinking, "Why do I have to study research methods? When I graduate, I'll be working in probation (or law enforcement, or corrections, or court services), not conducting research! I would benefit more from learning about probation counseling (or police management, or corrections policy, or court administration)." Fair enough. But as a criminal justice professional, you will need to at least be a consumer of research. One objective of this book is to help you become an informed consumer of research. As we will soon see, justice professionals often produce research as well.

For example, in the section "Two Realities," we will see how findings from one of the first experimental studies of policing appeared to contradict a traditional tenet of law enforcement—that a visible patrol force prevents crime. Acting as a consumer of research findings, a police officer, supervisor, or executive should be able to understand how the research was conducted and how the study's findings might apply in his or her department. Because police practices vary from city to city, a police executive would benefit from being aware of research methods and knowing how to interpret findings.

Most criminal justice professionals, especially those in supervisory roles, routinely review various performance reports and statistical tabulations. In the past 30 years or so, thousands of criminal justice research and evaluation studies have been conducted. The National Criminal Justice Reference Service (https://ncjrs.gov) was established in 1972 to archive and distribute research reports to criminal justice professionals and researchers around the world. Many such reports are prepared specifically to keep the criminal justice community informed about new research developments. More recently, the Center for Problem-Oriented Policing (POP Center, http://www.popcenter.org) was created to share applied research on a variety of law enforcement problems. By understanding research methods, decision makers are better equipped to critically evaluate research reports and to recognize when methods are properly and improperly applied. See the box, "Home Detention," for an example of how knowledge of research methods can help policy makers avoid mistakes.

Another objective of this book is to help you produce research. In other courses you take or in your job, you may become a producer of research. For example, probation officers sometimes test new approaches to supervising or counseling clients, and police officers try new methods of addressing particular problems, or working with the community. Many cities and states have a compelling need to assess how changes in sentencing policy might affect jail and prison populations. Determining whether such changes are effective is an example of applied research. A problem-solving approach, rooted in systematic research, is being used in more and more police departments and in many other criminal justice agencies as well. Many items on the POP Center website are the product of applied research conducted by police departments. Therefore, criminal justice professionals need to know not only how to interpret research accurately, but also how to produce accurate research.



# HOME DETENTION

Home detention with electronic monitoring (ELMO) was widely adopted as an alternative punishment in the United States in the 1980s. The technology for this new sanction was made possible by advances in telecommunications and computer systems. Prompted by growing prison and jail populations, not to mention sales pitches by equipment manufacturers, criminal justice officials embraced ELMO. Questions about the effectiveness of these programs quickly emerged, however, and led to research to determine whether the technology worked. Comprehensive evaluations were conducted in Marion County (Indianapolis), Indiana. Selected findings from these studies illustrate the importance of understanding research methods in general and the meaning of various ways to measure program success in particular. ELMO programs directed at three groups of people were studied: (1) convicted adult offenders, (2) adults charged with a crime and awaiting trial, and (3) juveniles convicted of burglary or theft. People in each of the three groups were assigned to home detention for a specified time. They could complete the program in one of three ways: (1) successful release after serving their term; (2) removal due to rule violations, such as being arrested again or violating program rules; or (3) running away, or "absconding." The agencies that administered each program were required to submit regular reports to county officials on how many individuals in each category completed their home detention terms. The table below summarizes the program completion types during the evaluation study:

	Convicted Adults		Juveniles
Success	81%	73%	99%
Rule violation	14	13	1
Abscond	5	14	0

These figures, reported by agencies to county officials, indicate that the juvenile program was a big success; virtually all juveniles were successfully released.

Now consider some additional information on each program collected by the evaluation team. Data were gathered on new arrests of program participants and on the number of success-ful computerized telephone calls to participants' homes:

	Convicted Adults		Juveniles
New arrest	5%	1%	11%
Successful calls	53	52	17

As the above table shows, many more juveniles were arrested, and juveniles successfully answered a much lower percentage of telephone calls to their homes. What happened?

The simple answer is that the staff responsible for administering the juvenile program were not keeping track of offenders. The ELMO equipment was not maintained properly, and police were not visiting the homes of juveniles as planned. Because staff were not keeping track of program participants, they were not aware that many juveniles were violating the conditions of home detention. And because they did not detect violations, they naturally reported that the vast majority of young burglars and thieves completed their home detention successfully.

A county official who relied on only agency reports of program success would have made a big mistake in judging the juvenile program to be 99 percent successful. In contrast, an informed consumer of such reports would have been skeptical of a 99 percent success rate and searched for more information.

*Source:* Adapted from Maxfield and Baumer (1991) and Baumer, Maxfield, and Mendelsohn (1993).

# What Is This Book About?

This book focuses on how we know what we know.

This book focuses on how we learn and know things, not on what we know. Although you will come away from the book knowing some things you don't know right now, our primary purpose is to help you look at how you know things, not what you know.

## **Two Realities**

Ultimately, we live in a world of two realities. Part of what we know could be called our "experiential reality"-the things we know from direct experience. For example, if you dive into a glacial stream flowing down through the Canadian Rockies, you don't need anyone to tell you that the water is cold; you notice that by yourself. And the first time you step on a thorn, you know it hurts even before anyone tells you. The other part of what we know could be called our "agreement reality"the things we consider real because we've been told they're real and everyone else seems to agree they're real. A big part of growing up in any society, in fact, is learning to accept what everybody around us "knows" to be true. If we don't know those same things, we can't really be a part of the group. If you were to seriously question a geography professor as to whether the sun really sets in the west, you'd quickly find yourself set apart from other people. The first reality is a product of our own experience; the second is a product of what people have told us.

To illustrate the difference between agreement and experiential realities, consider preventive police patrol. The term *preventive* implies that when police patrol their assigned beats they prevent crime. Police do not prevent all crime, of course, but it is a commonsense belief that a visible, mobile police force will prevent some crimes. In fact, the value of patrol in preventing crime was a fundamental tenet of police operations for many years. O.W. Wilson, a legendary police chief in Chicago and the author of an influential book on police administration, wrote that patrol was indispensable in preventing crime by eliminating incentives and opportunities for misconduct (Wilson and McLaren, 1963:320). A 1967 report on policing by President Lyndon Johnson's President's Commission on Law Enforcement and Administration of Justice (1967:1) stated that "the heart of the police effort against crime is patrol.... The object of patrol is to disperse policemen in a way that will eliminate or reduce the opportunity for misconduct and to increase the probability that a criminal will be apprehended while he is committing a crime or immediately thereafter."

Seven years later, the Police Foundation, a private research organization, published results from an experimental study that presented a dramatic challenge to conventional wisdom. Known as the "Kansas City Preventive Patrol Experiment," this classic study compared police beats with three levels of preventive patrol: (1) control beats, with one car per beat; (2) proactive beats, with two or three cars per beat; and (3) reactive beats, with no routine preventive patrol. After almost 1 year, researchers examined data from the three types of beats and found no differences in crime rates, citizen satisfaction with police, fear of crime, or other measures of police performance (Kelling et al., 1974).

Researchers and law enforcement professionals alike were surprised by these findings. For the record, the Kansas City researchers never claimed to have proved that preventive patrol had no impact on crime. Instead, they argued that police should work more closely with community members and that routine patrol might be more effective if combined with other strategies that used police resources in a more thoughtful way. Subsequent research has supported that last statement. An experimental study of foot patrol in Philadelphia found that assigning foot patrol officers based on analytically identified "hot spots" of crime produced a 23 percent reduction in violent crime after 12 weeks (Ratcliffe et al., 2011).

Additional studies conducted in the 1970s cast doubt on other fundamental assumptions about police practices. A quick response to crime reports made no difference in arrests, according to a research study in Kansas City (Van Kirk, 1977). And criminal investigation by police detectives rarely resulted in an arrest (Greenwood, 1975).

We mention these examples not to attack routine law enforcement practices. Rather, we want to show that systematic research on policing has illustrated how traditional beliefs—agreement reality—can be misleading. Simply increasing the number of police officers on patrol does not reduce crime because police patrol often lacks direction. Faster response time to calls for police assistance does not increase arrests because there is often a long delay between the time when a crime occurs and when it is reported to police. Clever detective work seldom solves crimes: investigators get most of their information from reports prepared by patrol officers, who, in turn, get their information from victims and witnesses.

Traditional beliefs about patrol effectiveness, response time, and detective work are examples of agreement reality. In contrast, the research projects that produced alternative views about each law enforcement practice represent experiential reality. These studies are examples of **empirical**<sup>1</sup> research, the production of knowledge based on experience or observation. In each case, researchers conducted studies of police practices and based their conclusions on observations and experience. Empirical research is a way of learning about crime and criminal justice; explaining how to conduct empirical research is the purpose of this book.

# The Role of Science

Science offers an approach to both agreement reality and experiential reality. Scientists have certain criteria that must be met before they will agree on something they haven't personally experienced. In general, an assertion must have both *logical* and *empirical* support: it must make sense, and it must agree with actual observations. For example, why do earthbound scientists accept the assertion that it's cold on the dark side of the moon? First, it makes sense because the surface heat of the moon comes from the sun's rays. Second, scientific measurements made on the moon's dark side confirm the assertion. Scientists can accept the reality of things they don't personally experience—they accept an agreement reality—but they have special standards for doing so.

More relevant to this book, however, science offers a special approach to the discovery of reality through personal experience. Epistemology is the science of knowing; methodology (a subfield of epistemology) might be called "the science of finding out." This book focuses on criminal justice **methodology**—how social science methods can be used to better understand crime and criminal justice problems. To understand scientific inquiry, let's first look at the kinds of inquiry we all do each day.

# Personal Human Inquiry

*Everyday human inquiry draws on personal experience and secondhand authority.* 

Most of us feel more comfortable if we understand what's going on around us and are able to predict our future circumstances. We seem quite willing, moreover, to undertake this task using causal and probabilistic reasoning. First, we generally recognize that future circumstances are somehow caused or conditioned by present ones. For example, we learn that getting an education will affect how much money we earn later in life and that speeding may result in an unhappy encounter with an alert traffic officer. As students, we learn that studying hard will result in better examination grades.

Second, we recognize that such patterns of cause and effect are probabilistic in nature: the effects occur more often when the causes occur than when the causes are absent—but not always.

**Methodology** The study of methods used to understand something; the science of finding out.

<sup>&</sup>lt;sup>1</sup>Words set in boldface are defined in the glossary at the end of the book.

**Empirical** From experience. Social science is said to be empirical when knowledge is based on what we experience.



## ARREST AND DOMESTIC VIOLENCE

In 1983, preliminary results were released from a study on the deterrent effects of arrest in cases of domestic violence. The study reported that male abusers who were arrested were less likely to commit future assaults than offenders who were not arrested. Conducted by researchers from the Police Foundation, the study used rigorous experimental methods adapted from the natural sciences. Criminal justice scholars generally agreed that the research was well designed and executed. Public officials were quick to embrace the study's findings that arresting domestic violence offenders deterred them from future violence.

Here, at last, was empirical evidence to support an effective policy in combating domestic assaults. Results of the Minneapolis Domestic Violence Experiment were widely disseminated, in part due to

Thus, as students, we learn that studying hard produces good grades in most instances, but not every time. We recognize the danger of exceeding the speed limit without believing that every time we do so will produce a traffic ticket.

The concepts of causality and probability play a prominent role in this book. Science makes causality and probability explicit and provides techniques for dealing with them more rigorously than does casual human inquiry. Science sharpens the skills we already have by making us more conscious, rigorous, and explicit in our inquiries.

However, our attempts to learn about the world are only partly linked to personal inquiry and direct experience. Another, much larger, part comes from the agreed-on knowledge that others give us. This agreement reality both assists and hinders our attempts to find out things for ourselves. Two important sources of secondhand knowledge—tradition and authority—deserve brief consideration here. aggressive efforts by the researchers to publicize their findings (Sherman and Cohn, 1989). The attorney general of the United States recommended that police departments make arrests in all cases of misdemeanor domestic violence. Within 5 years, more than 80 percent of law enforcement agencies in U.S. cities adopted arrest as the preferred way of responding to domestic assaults (Sherman, 1992:2).

Several things contributed to the rapid adoption of arrest policies to deter domestic violence. First, the experimental study was conducted carefully by highly respected researchers. Second, results were widely publicized in newspapers, in professional journals, and on television programs. Third, officials could understand the study, and most believed that its findings made sense. Finally, mandating arrest in less

### Tradition

Each of us inherits a culture made up, in part, of firmly accepted knowledge about the workings of the world. We may learn from others that planting corn in the spring will result in the greatest assistance from the gods, that the circumference of a circle is approximately twenty-two sevenths of its diameter, or that driving on the left side of the road (in the United States) is dangerous. We may test a few of these "truths" on our own, but we simply accept the great majority of them. These are the things that "everybody knows."

Tradition, in this sense, has some clear advantages for human inquiry. By accepting what everybody knows, we are spared the overwhelming task of starting from scratch in our search for regularities and understanding. Knowledge is cumulative, and an inherited body of information and understanding is the jumping-off point for the development of more knowledge. serious cases of domestic violence was a straightforward and politically attractive approach to a growing problem.

Sherman and Berk (1984), however, urged caution in uncritically embracing the results of their study. Others urged that similar research be conducted in other cities to check on the Minneapolis findings (Lempert, 1984). Recognizing this, the U.S. National Institute of Justice sponsored more experiments—known as replications—in six other cities. Not everyone was happy about the new studies. For example, a feminist group in Milwaukee opposed the replication in that city because it believed that the effectiveness of arrest had already been proved (Sherman and Cohn, 1989:138).

Results from the replication studies brought into question the effectiveness of arrest policies. In three cities, no deterrent effect was found in police records of domestic violence. In other cities, there was no evidence of deterrence for longer periods (6–12 months),

At the same time, tradition may hinder human inquiry. If we seek a fresh understanding of something everybody already understands and has always understood, we may be marked as fools for our efforts. More to the point, however, it rarely occurs to most of us to seek a different understanding of something we all "know" to be true.

### Authority

Despite the power of tradition, new knowledge appears every day. In addition to our own personal inquiries, throughout life we learn about the new discoveries and understandings of others. Our acceptance of this new knowledge often depends on the status of the discoverer. For example, you are more likely to believe a judge who declares that your next traffic violation will result in a suspension of your driver's license than to believe your parents when they say the same thing. and in three cities, researchers found that violence actually escalated when offenders were arrested (Sherman, 1992:30). For example, Sherman and associates (1992:167) report that in Milwaukee "the initial deterrent effects observed for up to thirty days quickly disappear. By one year later [arrests] produce an escalation effect." Arrest works in some cases but not in others. As in many other cases, in responding to domestic assaults, it's important to carefully consider the characteristics of offenders and the nature of the relationship between offender and victim.

After police departments throughout the country embraced arrest policies following the Minneapolis study, researchers were faced with the difficult task of explaining why initial results must be qualified. Arrest seemed to make sense; officials and the general public believed what they read in the papers and saw on television. Changing their minds by reporting complex findings was more difficult.

Like tradition, authority can both help and hinder human inquiry. We do well to trust the judgment of individuals who have special training, expertise, and credentials in a matter, especially in the face of contradictory arguments on a given question. At the same time, inquiry can be greatly hindered by the legitimate authorities who err within their own special province. Biologists, after all, do make mistakes in the field of biology, and biological knowledge changes over time. Most of us assume that over-the-counter medications are safe when taken as directed, trusting the authority of drug manufacturers and government agencies. However, in the late nineteenth century, our trust might have led us to buy a bottle of Bayer Heroin, then available as an over-the-counter pain relief medication (Inciardi, 1986). The box titled "Arrest and Domestic Violence" illustrates the difficult problems that can result when criminal justice policy makers accept too quickly the results from criminal justice research.