Ronet D. Bachman
Russell K. Schutt

The Practice of Research in CRIMINOLOGY and CRIMINAL JUSTICE

7e

The Practice of Research in Criminology and Criminal Justice

Seventh Edition

In loving memory of two pioneer women who homesteaded on the prairie in South Dakota and instilled in me the importance of education and lifelong learning:
To my great-aunt, Martha Geiken Lund, 1912–2002
and
To my grandmother, Anna Geiken Bachman, 1907–1989
—R. B.

To Elizabeth and Julia
—R. K. S.

The Practice of Research in Criminology and Criminal Justice

Seventh Edition

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PREFACE

One of the most important aspects of teaching a research methods course is conveying to students the vital role that research plays in our discipline. After years of teaching courses in research methods, we have found that the best avenue of achieving this goal has been to link the teaching of key topics to contemporary research in the discipline. By combining discussions of research techniques with practical research examples from the field, students learn not only how to conduct research but also why it is important to do so. In the seventh edition of *The Practice of Research in Criminology and Criminal Justice*, we have drawn on comments by students in the classroom, insightful reviews by those who teach research methods, and our own continuing learning experience as scholars and teachers; we think the resulting innovations will add a great deal to your learning experience.

The purpose of this book is to introduce you to the scientific methods of research in criminology and criminal justice and show how they are actually used. Each chapter combines instructions in research methods with investigations of key research questions in our field: How do we measure offending and victimization? What are the causes of violent crime? What is the best police response to intimate partner violence? How do gang members perceive their world? Are violence prevention programs effective in reducing violence in schools? What is the impact of having a criminal record on finding a job? These are only a sample of the many research examples used to demonstrate particular research methods.

You will learn not only the skills necessary for conducting research but also the skills necessary to evaluate research done by others. You will learn to ask many questions as you consider whether research-based conclusions are appropriate and valid. What did the researchers set out to investigate? How were people or places selected for the study? What were the phenomena being studied, and how were they defined and measured? How was information analyzed? Throughout this book, you will learn what questions to ask when critiquing a research study and how to evaluate the answers.

Another goal of this book is to train you to actually do research. Substantive research examples will help you see how methods are used in practice. Exercises at the end of each chapter give you ways to try different methods alone or in a group. But research methods cannot be learned by rote and applied mechanically. It is our hope that you will realize that all research methods come with their own strengths and limitations. In fact, the underlying theme of our book is that employing a combination of methods together to answer the same research question is often preferable. You will come to appreciate why the results of particular research studies must always be interpreted within the context of prior research and through the lens of social and criminological theory.

ORGANIZATION OF THE BOOK

The way this book is organized reflects our beliefs in making research methods interesting, teaching students how to critique research, and viewing specific research techniques as parts of an integrated research strategy. Our concern with ethical issues in all types of research is underscored by the fact that we have an entire chapter devoted exclusively to research ethics in addition to sections on ethics in every methodology chapter.

This new edition is organized into five sections. The first, Foundations for Social Research, includes the first three chapters and introduces the why and how of research in general. Chapter 1 shows how research has helped us understand the magnitude of and the factors related to school shootings and youth violence. It introduces the different types of

research questions along with the contrast between positivist and interpretivist philosophies and quantitative and qualitative methods. Chapter 2 illustrates the basic stages of research with a series of experiments on the police response to intimate partner violence. This chapter emphasizes the role of theory in guiding research and describes the deductive and inductive research process that resembles more of a spiral than a circle. Chapter 3 highlights issues of research ethics by taking you inside Philip Zimbardo's prison experiment and Stanley Milgram's research on obedience to authority. It also highlights the special ethical considerations related to children and prisoners. The next three chapters, Fundamentals of Research, discuss how to evaluate the way researchers design their measures (Chapter 4), select their samples (Chapter 5), and justify their statements about causal connections (Chapter 6).

In the third section, Research Designs, we present the primary strategies used in research. Chapters 7 through 9 present the three most important methods of data collection: experiments, surveys, and qualitative methods (including participant observation, intensive interviews, and focus groups). The next section, called Topical Research Designs, begins with a revised Chapter 10 that now includes historical research methods along with secondary and comparative data analysis, as well as an expanded section on content analysis. Chapter 11 now focuses on methodologies that are often used in intelligence-led policing, including a new section on social network analysis, along with crime mapping and research techniques that utilize Big Data. Chapter 12 covers evaluation research and policy analysis and highlights the different alternatives to evaluation, along with a discussion of the most appropriate methods to use for each evaluation question (e.g., process versus impact). In this chapter, you will see how various methods have been used to investigate the effects of several programs and policies, including problem-oriented policing, boot camps, and mandatory sentencing laws. There are several examples within each of these methods chapters that use a mixed-methods approach to answer the same research question. However, because researchers are increasingly combining methods, Chapter 13 provides an overview of the philosophy and motivation for combining methods, the various techniques for doing so, and some exciting research examples to demonstrate the fruitfulness of such multiple methods projects.

The final section of the book, After the Data Are Collected, summarizes issues related to data analysis and writing. Chapter 14 describes quantitative data analysis, with an emphasis on description, while a new chapter (15) highlights the philosophies and practice of qualitative data analysis. We finish up in Chapter 16 with an overview of the process of and techniques for reporting research results, along with some ethical problems in writing.

The substantive studies in each of these chapters show how each methodology has been used to improve our understanding of criminal justice–related issues, including the factors related to violence, how question wording affects estimates of victimization in surveys, how gang members perceive their world, how community police officers describe their role in comparison to that of regular patrol officers, the perceptions of jurors who have participated in a death penalty case, the effects of inmates' classification on institutional misconduct in prison, and the effects of war on violence in a cross-national comparison, to name only a few of the examples provided. Importantly, examples are not simply used for filler; quotations from the researchers themselves illuminate the methodological decision-making process behind each case study. This not only provides knowledge related to the discipline but also highlights research decisions that were made to produce this knowledge.

DISTINCTIVE FEATURES OF THE SEVENTH EDITION

The seventh edition of *The Practice of Research for Criminology and Criminal Justice* retains the strengths of previous editions while breaking new ground with popular research methods,

enhanced tools for learning in the text and online, and contemporary, fascinating research findings. We have reorganized the chapters to better connect related techniques, and we have provided new pedagogical learning aids at the end of each chapter and on our student study website. The most distinctive feature of this text compared to others in the field continues to be the integration into each chapter of in-depth substantive research examples from the real world, highlighting researchers' decision-making processes in their own words. Examples from the literature are not simply dropped here and there to keep students' attention. Rather, each chapter presents a particular research method in the context of a substantive research story. This serves several purposes: It illustrates the process of research in the real world, it underscores why particular methods were selected over others, and it highlights the important role research plays in policy decisions in our field. This book's success is due in no small measure to the availability of so many excellent research examples in our discipline. New examples of research have been added in all data collection chapters. The following points are additional strengths of this text, along with a few innovations in this edition:

New Chapter That Incorporates Methods for Intelligence-Led Policing. Chapter 11 now includes a new section on social network analysis (SNA), which provides case studies that highlight how it was used to examine the 9/11 terrorist network and how it could be used to investigate crimes. This chapter also incorporates the sections on crime mapping with a new case study highlighting how mapping can be used to predict break and entries as well as a section on how Big Data is being used to predict both crime and recidivism.

New Chapter That Incorporates Historical Methods. Chapter 10 now includes new sections on oral histories and historical process research. These sections discuss how these methods are being used to provide a historical record of both European and American criminology as well as to document the evolution of cyber crime and how laws have been implemented to control it. This chapter also includes a revised section on comparative research as well as an expanded section on content analysis.

We Heard You! Chapter 1 Is Now More Streamlined. This chapter retains the important discussion of how the scientific method helps to ensure research devoid of everyday errors in reasoning. It also highlights different types of research questions and provides a preview of some of the specific methods that are examined in the text. The discussion of research philosophies has been streamlined, is more integrated in the discussion of the distinction between qualitative and quantitative methods, and illuminates why this distinction is becoming less visible with the increased use of mixed methods.

New Sections of Research in a Diverse Society. Several chapters now contain new sections on the importance of making sure our samples, measurements, and methods are inclusive and sensitive to the diverse nature of our society. These sections remind us that we must recognize that cultural norms impact the research process, whether it is the willingness to participate in research activities, the meaning ascribed to abstract terms and constructs, the way data are collected, or the interpretation of the findings. The failure by researchers to adequately address the cultural context impacts the research process in different ways and, ultimately, the validity and generalizability of research findings.

New Sections Throughout That Reflect Recent Developments in Research Methods. We have expanded and updated sections as needed to reflect changes in practices, including an updated discussion of how the Federal Policy for the Protection of Human Subjects has recently been revised in Chapter 3. This chapter also includes a new section on Institutional

Review Boards. Based on reviewer comments, we have also made other changes, such as expanding our discussion of content analysis in Chapter 10. We also have continued to update the text to reflect increased attention to the Internet as an avenue for research and include electronic surveys, a growing reliance on smartphones, the use of social media for social network analysis and other research, and the use of the Internet in qualitative techniques.

Updated Examples of Criminological Research as They Occur in Real-World Settings. We have incorporated contemporary and interesting studies taken from the literature on a variety of topics, including the effects of police wearing body cameras on both police and citizen injury, predicting break and entries, the relationship between alcohol consumption and homicide rates across countries, and the barriers that exist for older offenders reentering society from prison. These real-world research examples illustrate the exigencies and complexities that shape the application of research methods.

Research in the News and Careers and Research. We have retained and updated our "Careers and Research" feature that highlights the career of a researcher who has used the methods discussed in each chapter along with "Research in the News" sections that highlight a story from a reputable news source that incorporates research related to the methods and/or topics discussed in each chapter. Importantly, the researchers highlighted include those with bachelor's, master's, and doctoral degrees who are now working in the field. What better incentive to study hard and master these methods!

New Learning Tools. End-of-chapter exercises now include two questions that refer to a chapter-specific video posted on the Student Study Site, in which researchers discuss their experiences with a method presented in that chapter. New empirical datasets are now included in the Student Study Site, and each chapter contains new IBM® SPSS® Statistics[1] or Excel exercises that correspond to the chapter material. Subsets of data included in the study site are the 2013 Youth Risk Behavior Survey, 2014 General Social Survey, 2013 Monitoring the Future Data, NCVS lone offender assault data for 1992 through 2013, and a 2012 state-level dataset with social and crime indicators.

Aids to Effective Study. The many effective study aids included in the previous editions have been updated as needed. Highlights of the main points are provided as quick summaries at the end of each chapter. In addition, key terms are highlighted in boldface when first introduced and defined in the text; these terms are also listed at the end of each chapter. Definitions for these also can be found in the glossary at the end of the book.

It is a privilege to share with you the results of excellent research related to criminal justice and criminology. If this book communicates the excitement of research and the importance of evaluating carefully the methods we use in research, then we have succeeded in representing what social scientists who are interested in issues related to criminal justice and criminology do. We think it conveys the latest developments in research methodology and thereby demonstrates that researchers are committed to evaluating and improving their own methods of investigation.

We hope you enjoy learning how to investigate research questions related to criminal justice and criminology and perhaps do some research of your own along the way. We guarantee that the knowledge you develop about research methods will serve you well throughout your education, in your career, and in your community.

[1] SPSS is a registered trademark of International Business Machines Corporation.

DIGITAL RESOURCES

Instructor Resource Site

A password-protected instructor teaching site is available at edge.sagepub.com/bachmanprccj7e. SAGE edge for Instructors supports your teaching by making it easy to integrate quality content and create a rich learning environment for students.

- **Test banks** provide a diverse range of prewritten options as well as the opportunity to edit any question and/or insert your own personalized questions to effectively assess students' progress and understanding.
- **Sample course syllabi** for semester and quarter courses provide suggested models for structuring your courses.
- Editable, chapter-specific **PowerPoint slides** offer complete flexibility for creating a multimedia presentation for your course.
- EXCLUSIVE! Full-text **SAGE journal articles** have been carefully selected to support and expand on the concepts presented in each chapter.
- **Video and multimedia links** include original SAGE videos that appeal to students with different learning styles.
- **Lecture notes** summarize key concepts by chapter to help you prepare for lectures and class discussions.
- Suggested **student group projects and mini-projects** are designed to promote students' in-depth engagement with course material.
- **Tables, figures, and exhibits** from the printed book are available in an easily downloadable format for use in papers, handouts, and presentations.

Student Study Site

This web-based Student Study Site, available at edge.sagepub.com/bachmanprccj7e, provides a variety of additional resources to enhance students' understanding of the book content and take their learning one step further. SAGE edge for Students provides a personalized approach to help students complete their coursework goals in an easy-to-use learning environment.

- Mobile-friendly **eFlashcards** strengthen understanding of key terms and concepts.
- Mobile-friendly **practice quizzes** allow for independent assessment by students of their mastery of course material.
- **Web exercises** facilitate student use of Internet resources, further exploration of topics, and responses to critical thinking questions.
- EXCLUSIVE! Full-text **SAGE journal articles** have been carefully selected to support and expand on the concepts presented in each chapter.
- **Video and multimedia links** include original SAGE videos that appeal to students with different learning styles.

- **SPSS Student Datasets, SPSS Datasets, and Codebooks** to be used to answer the SPSS exercises at the end of each chapter are included at the site.
- Real crime data (including subsets of data from the National Crime Victimization Survey and the General Social Survey) and appendices on how to use a statistical package and how to use a qualitative analysis package are also available.

A NOTE ABOUT USING IBM SPSS STATISTICS[2]

To carry out the SPSS exercises at the end of each chapter, you must have SPSS installed on your computer. The Student Study Site includes several subsets of data. Appendix C will get you up and running with SPSS for Windows, as will Appendix D with Excel. You then may spend as much time as you like exploring the datasets provided, or you may even use your own data. You also may carry out analyses of the General Social Survey at the University of California, Berkeley website (http://sda.berkeley.edu/archive.htm).

[2] IBM SPSS Statistics was formerly called PASW® Statistics.

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ABOUT THE AUTHORS

Ronet D. Bachman, PhD, worked as a statistician at the Bureau of Justice Statistics, U.S. Department of Justice, before going back to an academic career; she is now a professor in the Department of Sociology and Criminal Justice at the University of Delaware. She is coauthor of *Statistical Methods for Criminology and Criminal Justice* and coeditor of *Explaining Criminals and Crime: Essays in Contemporary Criminal Theory*. In addition, she is the author of *Death and Violence on the Reservation* and coauthor of *Stress, Culture, and Aggression*; *Murder American Style*; and *Violence: The Enduring Problem*, along with numerous articles and papers that examine the epidemiology and etiology of violence, with particular emphasis on women, the elderly, and minority populations as well as research examining desistance from crime. Her most recent federally funded research was a mixed-methods study that examined the long-term desistance trajectories of drug-involved offenders who were released from prison in 1990, followed from 1990 through 1995, and interviewed again in 2010.

Russell K. Schutt, PhD, is a professor of sociology at the University of Massachusetts, Boston, and Research Associate in psychiatry at the Beth Israel Deaconess Medical Center, Harvard Medical School (Massachusetts Mental Health Center) and Research Associate at Edith Nourse Rogers Memorial Veterans Hospital, Department of Veterans Affairs. He completed his BA, MA, and PhD (1977) at the University of Illinois at Chicago and a post-doctoral fellowship in the Sociology of Social Control Training Program at Yale University (1977–1979). His other books include *Investigating the Social World: The Process and Practice of Research* and *Fundamentals of Social Work Research* (with Ray Engel), *Making Sense of the Social World* (with Dan Chambliss), *Research Methods in Psychology* (with Paul G. Nestor) and *Research Methods in Education* (with Joseph Check)—all with SAGE—as well as *Homelessness, Housing, and Mental Illness* (Harvard University Press) and *Social Neuroscience: Brain, Mind, and Society* (coedited with Larry J. Seidman and Matcheri S. Keshavan, Harvard University Press). Most of his peer-reviewed journal articles and book chapters focus on the effect of social context on cognition, satisfaction, functioning, and recidivism, the orientations of service recipients and of service and criminal justice personnel, and the organization of health and social services. He is currently a coinvestigator for a randomized trial of peer support for homeless dually diagnosed veterans, funded by the Veterans Administration, co-directs BEACON: The Boston Panel Study, and consults on a study of social relations in VA-supported housing.

Sara Miller McCune founded SAGE Publishing in 1965 to support the dissemination of usable knowledge and educate a global community. SAGE publishes more than 1000 journals and over 800 new books each year, spanning a wide range of subject areas. Our growing selection of library products includes archives, data, case studies and video. SAGE remains majority owned by our founder and after her lifetime will become owned by a charitable trust that secures the company's continued independence.

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SECTION I

FOUNDATIONS FOR SOCIAL RESEARCH

1

SCIENCE, SOCIETY, AND RESEARCH RELATED TO CRIME, CRIMINOLOGY, AND SOCIAL CONTROL

Learning Objectives

1. Describe the four common errors in everyday reasoning.
2. Define *social science* compared to *pseudoscience*.
3. Identify the four types of social research.
4. Explain the difference between each orientation in social research—positivist or interpretivist, quantitative or qualitative—and be able to identify the strengths of an integrated approach.

My research methods class was a really big help for me, and I'll be honest, I did not think that I would be using this material much because I want to work as a field officer or an agent in local and federal law enforcement, but I was wrong. My internship this summer at the attorney general's office has allowed me to work alongside law enforcement, attorneys, detectives, and investigators and I got the internship because of the knowledge I gained from my research methods class. I used these skills almost every day and even though the internship is over, they told me I did such a good job that I could come back if I ever wanted a job working with the same supervisor I previously had.

Ricky E., ***Student***

It is a sad reality that there is often a school shooting in the United States after this textbook goes to press, which means it is impossible to list the most recent school tragedy here. The population of the United States all-too-frequently mourns the deaths of young innocent lives taken in this way. The deadliest elementary school shooting to date took place on December 14, 2012, when a 20-year-old man named Adam Lanza walked into an elementary school in Newtown, Connecticut, armed with several semiautomatic weapons and killed 20 children and six adults. On April 16, 2007, Cho Seung-Hui perpetrated the deadliest college mass shooting when he killed 32 students, faculty, and staff and left over 30 others injured on the campus of Virginia Tech in Blacksburg, Virginia. Cho was armed with two semiautomatic handguns that he had legally purchased and a vest filled with ammunition. As police were closing in on the scene, he killed himself. A mass shooting at Marjory Stoneman Douglas High School in Parkland, Florida on February 14, 2018, surpassed the mass murder at Columbine High School in suburban Colorado, which killed 12 students and a teacher, to become the worst mass shooting in a high school. A 19-year-old former student named Nikolas Cruz entered the Parkland High school just before dismal and opened fire with an AR-15 style semi-automatic weapon, killing 17 students and staff members.

None of these mass murderers was a typical terrorist, and each of these incidents caused a media frenzy. Headlines such as "The School Violence Crisis" and "School Crime Epidemic" were plastered across national newspapers and weekly news journals. Unfortunately, the media play a large role in how we perceive both problems and solutions. In fact, 95% of Americans say that mass media sources such as television and newspapers are their main source of information on crime and

violence (Surrette 1998). What are your perceptions of violence committed by youth, and how did you acquire them? What do you believe are the causes of youth violence? Many factors have been blamed for youth violence in American society, including the easy availability of guns, the lack of guns in classrooms for protection, the use of weapons in movies and television, the moral decay of our nation, poor parenting, unaware teachers, school and class size, racial prejudice, teenage alienation, the Internet and the World Wide Web, anti-Semitism, and rap and rock music, and the list goes on.

You probably have your own ideas about the factors related to violence in general and youth violence in particular. However, these beliefs may not always be supported by empirical research. In fact, the factors often touted by politicians and the media to be related to violence are not always supported by empirical evidence. In the rest of this chapter, you will learn how the methods of social science research go beyond stories in the popular media to help us answer questions such as "What are the causes of youth violence?" By the chapter's end, you should understand how scientific methods used in criminal justice and criminology can help us understand and answer research questions in this discipline.

REASONING ABOUT THE SOCIAL WORLD

The story of one murderous youth raises many questions. Take a few minutes to read each of the following questions about Nikolas Cruz, the 19-year-old apprehended for killing 17 people in February 2018, at Marjory Stoneman Douglas High School in Parkland, Florida. Don't ruminate about the questions or worry about your responses. This is not a test; there are no wrong answers.

- How would you describe Nikolas Cruz?
- Why do you think Cruz wanted to kill other students?
- Was Cruz typical of other perpetrators of school shootings?
- In general, why do people become murderers?
- How have you learned about youth violence?

Now let us consider the possible answers to some of these questions. Cruz did not have an arrest record before the shooting, but he did have a troubled life. He and his brother were adopted, and when their father died in 2004, they were raised by their mother, who died in November of 2017. Many who knew Cruz said he took her death very hard. A neighbor believed that Cruz had been diagnosed with autism and had trouble controlling his temper. The neighbor said that when he was younger, Cruz had gone to a school for students with special needs and, "Kids were really picking on him and would gang up on him and beat him up a little" (Fausset and Kovaleski 2018).

Do you have enough information now to understand why he went on a shooting rampage in his school?

Cruz was expelled from Stoneman Douglas High School the year before the shootings allegedly for fighting with his ex-girlfriend's new boyfriend and for possessing a knife in school. In September of 2017, he made a post under the name "nikolas cruz" on a YouTube channel that stated, "I'm going to be a professional school shooter" (Fausset and Kovaleski 2018). The post was flagged and submitted to a local Federal Bureau of Investigation (FBI) office in Mississippi. After the shooting, the FBI reported that nothing could be done about the posting because "no other information was included in the comment which would indicate a particular time, location, or the true identity of the person who posted the comment." Now can you construct

an adequate description of Cruz? Can you explain the reason for his murderous rampage? Or do you feel you need to know more about him?? We have attempted to understand one person's behavior, and already our investigation is spawning more questions than answers.

Questions and Answers

We cannot avoid asking questions about the actions and attitudes of others. We all try to make sense of the complexities of our social world and our position in it, in which we have quite a personal stake. In fact, the more you think like a social scientist, the more questions will come to mind.

But why does each question have so many possible answers? Surely our individual perspectives play a role. One person may see a homicide offender as a victim of circumstance, while another person may see the same individual as inherently evil. Answers to questions we ask in the criminological sciences vary because individual life experiences and circumstances vary. When questions concern not only one person but many people or general social processes, the number of possible answers quickly multiplies. In fact, people have very different beliefs about the factors responsible for mass shootings. Exhibit 1.1 displays Gallup Poll results from the following question: "Thinking about mass shootings that have occurred in the U. S. in recent years, from what you know or have read, how much do you think each of the following factors is to blame for the shootings?" As you can see, a large percentage blame the mental health system; four out of ten blame easy access to guns as well, but nearly one out of five blame inflammatory language from political commentators.

Avoiding Errors in Reasoning

We all have different ideas about the factors related to things, but most of the time, these ideas are not based on evidence. It is simply too easy to make errors in logic, particularly when we are analyzing the social world in which we ourselves are conscious participants. We

Exhibit 1.1 Responses to the Question, "Thinking About Mass Shootings That Have Occurred in the U. S. in Recent Years, From What You Know or Have Read, How Much Do You Think Each of the Following Factors Is to Blame for the Shootings?"

	Great Deal	Fair Amount	Not Much	Not at All
	%	%	%	%
Failure of the mental health system to identify individuals who are a danger to others	48	32	11	8
Easy access to guns	40	21	16	20
Drug use	37	29	17	15
Violence in movies, video games, and music lyrics	32	24	23	20
The spread of extremist viewpoints on the Internet	29	28	22	15
Insufficient security at public buildings including businesses and schools	29	29	26	14
Inflammatory language from prominent political commentators	18	19	30	28

Source: Reprinted with permission from Gallup.

can call some of these *everyday errors*, because they occur so frequently in the nonscientific, unreflective discourse about the social world that we hear on a daily basis. In fact, in the last decade, tens of books have been written that focus on how and why our judgments are usually irrational and sometimes extremely biased. These errors in reasoning have been given many fancy names, including the following: *anchoring heuristic*, *base rate fallacy*, *illusory correlation*, *just-world phenomenon*, *omission bias*, *self-reference effect*, and so on (Hertenstein 2013). In this section, we more generally describe the four areas where we typically make errors: overgeneralization, selective or inaccurate observation, illogical reasoning, and resistance to change.

Overgeneralization

Overgeneralization, an error in reasoning, occurs when we conclude that what we have observed or what we know to be true for some cases is true for all cases. We are always drawing conclusions about people and social processes from our own interactions with them, but sometimes we forget that our experiences are limited. The social (and natural) world is, after all, a complex place. We have the ability (and inclination) to interact with a small fraction of the individuals who inhabit the social world, especially in a limited span of time.

Selective or Inaccurate Observation

Selective observation is choosing to look only at things that are in accordance with our preferences or beliefs. When we are inclined to criticize individuals or institutions, it is all too easy to notice their every failing. For example, if we are convinced in advance that all kids who are violent are unlikely to be rehabilitated and will go on to commit violent offenses in adulthood, we will probably find many confirming instances. But what about other youths who have become productive and stable citizens after engaging in violence as adolescents? Or the child who was physically or sexually abused and joined a gang to satisfy the need for a family surrogate? If we acknowledge only the instances that confirm our predispositions, we are victims of our own selective observation. Exhibit 1.2 depicts the difference between overgeneralization and selective observation.

Overgeneralization: An error in reasoning that occurs when we conclude that what we have observed or know to be true for a subset of cases holds true for the entire set.

Selective observation: Observations chosen because they are in accord with the preferences or beliefs of the observer.

Exhibit 1.2 The Difference Between Overgeneralization and Selective Observation

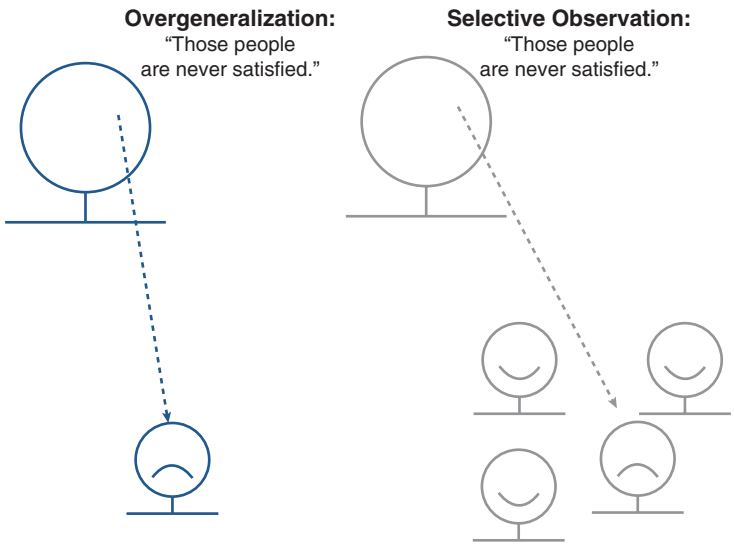
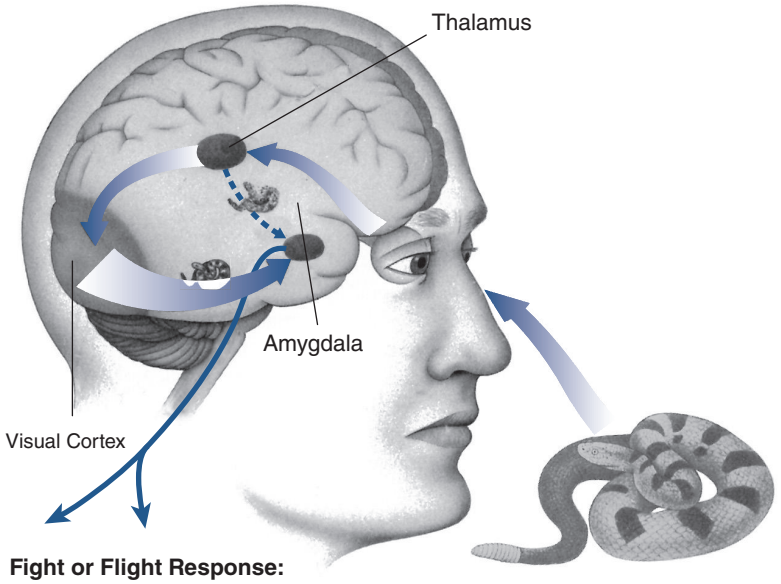


Exhibit 1.3 Anatomy of an Emotional Hijacking



Source: Adapted from "Emotion, Memory and the Brain," Joseph E. LeDoux, Scientific American, 270 (6), June 1994. 32-39. Reprinted with permission from the illustrator Roberto Osti.

Recent research on cognitive functioning (how the brain works) helps explain why our feelings so readily shape our perceptions (Seidman 1997). Emotional responses to external stimuli travel a shorter circuit in the brain than do reasoned responses (see Exhibit 1.3). The result, according to some cognitive scientists, is that "what something reminds us of can be far more important than what it is" (Goleman 1995, 294–295). Our emotions can influence us even before we begin to reason about what we have observed.

Our observations also can simply be inaccurate. If a woman says she is *hungry* and we think she said she is *hunted*, we have made an **inaccurate observation**. If we think five people are standing on a street corner when there are actually seven, we have made an inaccurate observation. Such errors occur often in casual conversation and in everyday observation of the world around us. In fact, our perceptions do not provide a direct window into the world around us, for what we think we have sensed is not necessarily what we have seen (or heard, smelled, felt, or tasted). Even when our senses are functioning fully, our minds have to interpret what we have sensed (Humphrey 1992). For example, when looking at the optical illusion in Exhibit 1.4, your visual system deceives you so that the monster in the background seems larger, even though the two monsters are exactly the same size.

Inaccurate observation: Observations based on faulty perceptions of empirical reality.

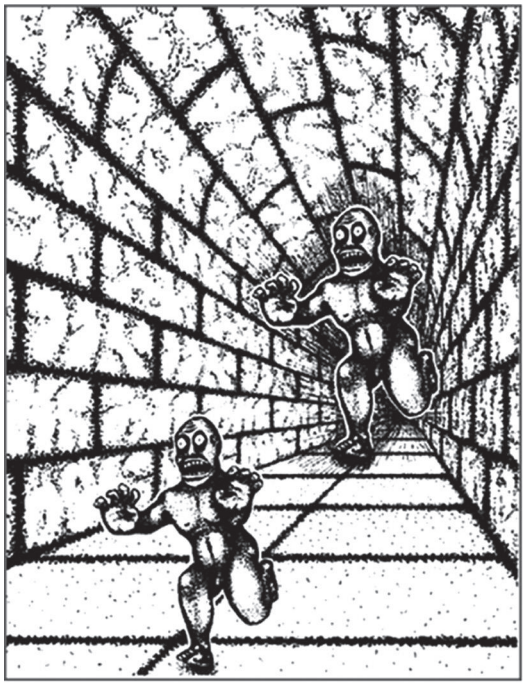
Illogical Reasoning

When we prematurely jump to conclusions or argue on the basis of invalid assumptions, we are using **illogical reasoning**. For example, it is not reasonable to propose that depictions of violence in media such as television and movies cause violence if evidence indicates that the majority of those who watch such programs do not become violent. However, it is also illogical to assume that media depictions of gratuitous violence have no effect on individuals.

Illogical reasoning: Prematurely jumping to conclusions and arguing on the basis of invalid assumptions.

Of course, logic that seems impeccable to one person can seem twisted to another; the problem usually is reasoning from different assumptions rather than failing to think straight.

Exhibit 1.4 An Optical Illusion



Resistance to Change

Resistance to change, the reluctance to change our ideas in light of new information, may occur for several reasons:

Ego-Based Commitments. We all learn to greet with some skepticism the claims by leaders of companies, schools, agencies, and so on that people in their organization are happy, that revenues are growing, that services are being delivered in the best possible way, and so forth. We know how tempting it is to make statements about the social world that conform to our own needs rather than to the observable facts. It also can be difficult to admit that we were wrong once we have staked out a position on an issue.

Excessive Devotion to Tradition: Some degree of devotion to tradition is necessary for the predictable functioning of society. Social life can be richer and more meaningful if it is allowed to flow along the paths charted by those who have preceded us. But too much devotion to tradition can stifle adaptation to changing circumstances. When we distort our observations or alter our reasoning so that we can maintain beliefs that, for instance, "were good enough for my grandfather, so they're good enough for me," we hinder our ability to accept new findings and develop new knowledge. The consequences can be deadly, as residents of Hamburg, Germany, might have realized in 1892 (Freedman 1991). Until the last part of the 19th century, people believed that cholera, a potentially lethal disease, was due to minute, inanimate, airborne poison particles (*miasmas*). In 1850, English researcher John Snow demonstrated that cholera was, in fact, spread by contaminated water. When a cholera epidemic hit Hamburg in 1892, the authorities did what tradition deemed appropriate: digging up and carting away animal carcasses to prevent the generation of more miasmas. Despite their efforts, thousands died. New York City adopted a new approach based on Snow's discovery, which included boiling drinking water and disinfecting sewage. As a result, the death rate in New York City dropped to a tenth of what it had been in a previous epidemic.

Uncritical Agreement With Authority: If we do not have the courage to evaluate critically the ideas of those in positions of authority, we will have little basis for complaint if they exercise their authority over us in ways we do not like. And if we do not allow new discoveries to call our beliefs into question, our understanding of the social world will remain limited. As we will see in Chapter 3, an extreme example of this problem is obedience to authority figures that can harm and kill others, including acts of genocide.

Now take a minute to reexamine the beliefs about youth violence that you recorded earlier. Did you grasp at a simple explanation even though reality was far more complex? Were your beliefs influenced by your own ego and feelings about your similarities to or differences from individuals prone to violence? Are your beliefs perhaps based on depictions of violence in the media or fiction? Did you weigh carefully the opinions of authority figures, including politicians, teachers, and even your parents, or did you accept or reject those opinions out of hand? Could knowledge of research methods help improve your own understanding of the

Resistance to change: Reluctance to change ideas in light of new information due to ego-based commitments, excessive devotion to tradition, or uncritical agreement with authorities.

factors related to violent behavior? By now, we hope that you will see some of the challenges faced by social scientists studying issues related to crime and the criminal justice system.

You do not have to be a scientist or use sophisticated research techniques to recognize and avoid these four errors in reasoning. If you recognize these errors for what they are and make a conscious effort to avoid them, you can improve your own reasoning. In the process, you will also be heeding the admonishments of your parents (or minister, teacher, or other adviser) to refrain from stereotyping people, to avoid jumping to conclusions, and to look at the big picture. These are the same errors that the methods of social science are designed to help criminologists avoid.

Social science: The use of scientific methods to investigate individuals, societies, and social processes, including questions related to criminology and criminal justice; the knowledge produced by these investigations.

Science: A set of logical, systematic, documented methods for investigating nature and natural processes; the knowledge produced by these investigations.

Epistemology: A branch of philosophy that studies how knowledge is gained or acquired.

Transparent: An important feature of the scientific method that requires procedures, methods, and data analyses of any study to be presented clearly for the purposes of replication.

Peer review: A process in which a journal editor sends a submitted article to two or three experts who judge whether the paper should be accepted, revised and resubmitted, or rejected; the experts also provide comments to explain their decision and guide any revisions.

Pseudoscience: Dubious but fascinating claims that are touted as "scientifically proven" and bolstered by fervent, public testimonials of believers who have firsthand experience or have claimed to have witnessed the phenomenon; however, such evidence is not based on the principles of the scientific method.

Phrenology: A now defunct field of study, once considered a science in the 19th century, that held that bumps and fissures of the skull determined the character and personality of a person.

THE SOCIAL SCIENCE APPROACH

The **social science** approach to answering questions about the social world is designed to greatly reduce these potential sources of error in everyday reasoning. **Science** relies on logical and systematic methods to answer questions, and it does so in a way that allows others to inspect and evaluate its methods. In the realm of social research, these methods are not so unusual. After all, they involve asking questions, observing social groups, and counting people, which we often do in our everyday lives. However, social scientists develop, refine, apply, and report their understanding of the social world more systematically or specifically than Joanna Q. Public does:

- Social science research methods can reduce the likelihood of overgeneralization by using systematic procedures for selecting individuals or groups to study that are representative of the individuals or groups that we wish to generalize.
- Social science methods can reduce the risk of selective or inaccurate observation by requiring that we measure and sample phenomena systematically.
- To avoid illogical reasoning, social researchers use explicit criteria for identifying causes and for determining if these criteria are met in a particular instance.
- Because they require that we base our beliefs on evidence that can be examined and critiqued by others, scientific methods lessen the tendency to develop answers about the social world from ego-based commitments, excessive devotion to tradition, and/or unquestioning respect for authority.

Science Versus Pseudoscience

In philosophical terms, the scientific method represents an **epistemology**, a way of knowing that relies on objective, empirical investigation. Its techniques must be **transparent** so that the methods, procedures, and data analyses of any study can be replicated. This transparency allows other researchers to see if the same results can be reproduced. If findings can be replicated, we have greater confidence that the findings are real and not based on bias. Transparency also relies on **peer review**, the process by which other independent researchers evaluate the scientific merit of the study. (You will learn more about this in Chapter 16.)

In contrast, if we relied on findings based on intuition, gut reactions, or our own experience, we would be open to the errors we covered above. If we based findings on these, it would not be science but instead would fall under the classification of **pseudoscience.** Pseudoscientific beliefs are not based on the scientific method but rather on claims that may be touted as "scientifically proven," only bolstered by testimonials of believers who have firsthand experience or who have claimed to have witnessed the phenomenon (Nester and Schutt 2012).

Of course, today's pseudoscience could be yesterday's science. In criminological research, phrenology is a good example. **Phrenology** is the belief that bumps and fissures of the skull determined the character and personality of a person. In the 19th century, doctors doing entry

examinations at American prisons would examine a new inmate's head for bumps or cavities to develop a criminal profile. Advances in cognitive psychology and neurology have largely discredited phrenology and placed it within the domain of pseudoscience. It didn't take a genius to question phrenology—merely a group of researchers adhering to the scientific method. When inmates' heads were compared to individual heads in the general population, they were found to be essentially the same!

Criminal Justice and Criminology Research in Practice

Let's get back to our topic of youth violence. This topic is not a new phenomenon of interest. It has always been a popular topic of social science research. However, the sharp increase in this violence in the United States that began in the late 1980s along with the increased number of school shootings in recent decades was unprecedented. Predictably, whenever a phenomenon is perceived as an epidemic, numerous explanations emerge to explain it. Unfortunately, most of these explanations are based on the media and popular culture, not on empirical research. Unlike the mass media, which has floated anecdotal information, social scientists interested in this phenomenon have amassed a substantial body of findings that have refined knowledge about the factors related to the problem and shaped social policy (Tonry and Moore 1998). These studies fall into the four categories of purposes for social scientific research:

Descriptive Research

Defining and describing social phenomena of interest is a part of almost any research investigation, but **descriptive research** is the primary focus of many studies of youth crime and violence. Some of the central questions used in these studies were "How many people are victims of youth violence?" "What percentage of adolescents have committed a violent offense?" "What are the most common crimes committed by youthful offenders?" and "How many youths are arrested and incarcerated each year for crime?" Measurement (see Chapter 4) and sampling (see Chapter 5) are central concerns in descriptive research.

CASE STUDY

How Prevalent Is Youth Violence?

Police Reports

One of the most enduring sources of information on lethal violence in the United States is the FBI's Supplementary Homicide Reports (SHR). Homicide victimization rates indicate that for those under the age of 24, vulnerability to murder increased dramatically from the mid-1980s through about 1994, when rates began a steady decline, but increased slightly in 2016 (FBI 2018). Data measuring the prevalence of nonlethal forms of violence such as robbery and assaults are a bit more complicated. How do we know how many young people become victims of assault each year? People who report their victimizations to police represent one avenue for these calculations. The FBI compiles these numbers in its Uniform Crime Reporting (UCR) system, which is slowly being replaced by the National Incident-Based Reporting System (NIBRS). Both of these data sources rely on state, county, and city law enforcement agencies across the United States to voluntarily participate in the reporting program. Can you imagine why relying on these data sources may be problematic for estimating prevalence rates of violent victimizations? If victimizations are never reported to police, they are not counted. This is especially problematic for victimizations of intimate partners and for other offenses such as rape, of which only a fraction are ever reported to police.

Descriptive research: Research in which phenomena are defined and described.

Surveys

Instead, most social scientists believe the best way to determine the magnitude of violent victimization is through random sample surveys. While we will discuss survey methodology in greater detail in Chapter 8, this basically means randomly selecting individuals in the population of interest and asking them about their victimization experiences. The only ongoing survey that does this on an annual basis is the National Crime Victimization Survey (NCVS), which is sponsored by the U.S. Department of Justice's Bureau of Justice Statistics (BJS). Among other questions, the NCVS asks questions such as "Has anyone attacked or threatened you with a weapon, for instance, a gun or knife; by something thrown, such as a rock or bottle; include any grabbing, punching, or choking?" Estimates indicate that youth aged 12 to 24 have the highest rates of violent victimization of any age group, and these rates have been declining steadily since the highs witnessed in the early 1990s, although recent increases have been observed in homicide rates for this age group in some locations.

Another large research survey that estimates the magnitude of youth violence (as well as the prevalence of other risk-taking behavior, such as taking drugs and smoking) is called the Youth Risk Behavior Survey (YRBS), which has been conducted every two years in the United States since 1990. Respondents to this survey are a national sample of approximately 16,000 high school students in Grades 9 through 12. To measure the extent of youth violence, students are asked the following questions: "During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?" "During the past 12 months, how many times were you in a physical fight?" "During the past 12 months, how many times were you in a physical fight in which you were injured and had to be seen by a doctor or nurse?" "During the past 30 days, how many times did you carry a weapon such as a gun, knife, or club on school property?" "During the past 12 months, how many times were you in a physical fight on school property?" and "During the past 12 months, how many times did someone threaten or injure you with a gun, knife, or club on school property?"

Of course, another way to measure violence would be to ask respondents about their offending behaviors. Some surveys do this, including the National Youth Survey (NYS) and the Rochester Youth Development Study (RYDS). The RYDS sample consists of 1,000 students who were in the seventh and eighth grades of the Rochester, New York, public schools during the spring semester of the 1988 school year. Staff with this project have interviewed the original respondents at 12 different times (we will discuss longitudinal research of this kind in Chapter 6); the last interview took place in 1997, when respondents were in their early 20s (Thornberry, Krohn, Lizotte, and Bushway 2008). As you can imagine, respondents are typically more reluctant to reveal their offending behavior than they are to reveal their victimization experiences. However, these surveys have been a useful tool for examining the factors related to violent offending and other delinquency. We should also point out that although this discussion has been specific to violence, the measures we have discussed in this section, along with their strengths and weaknesses, apply to measuring all crime in general.

Exploratory Research

Exploratory research: Research in which social phenomena are investigated without a priori expectations in order to develop explanations of them.

Exploratory research seeks to find out how people get along in the setting under question, what meanings they give to their actions, and what issues concern them. The goal is to answer the question, "What is going on here?" and to investigate social phenomena without expectations. This purpose is associated with the use of methods that capture large amounts of relatively unstructured information. For example, researchers investigating the emergence of youth gangs in the 1980s were encountering a phenomenon with which they had no direct

experience. Thus, an early goal was to find out what it was like to be a gang member and how gang members made sense of their situation. Exploratory research such as this frequently involves qualitative methods (see Chapter 9).

CASE STUDY

How Did Schools Avert a Shooting Rampage?

Research that is exploratory in nature is generally concerned with uncovering detailed information about a given phenomenon and learning as much as possible about particular people and/or events. While there have been far too many school shootings in the United States during the past decade, there have also been numerous incidents in which students were plotting to kill their peers or faculty members, but these plans came to the attention of authorities before they could be carried out. To examine how these incidents were stopped, Madfis (2014) selected 11 schools where a mass shooting had been diverted between 2000 and 2009 and conducted intensive interviews with people who were involved, including 11 principals and 21 other administrators, teachers, and police officers. He also corroborated the interview data with newspaper reports and, where possible, court transcripts and police incident reports.

Madfis's (2014) research was truly exploratory. You will learn much more about qualitative research in Chapter 9, but for now, we simply want to highlight how this study is different from the other research types above. He let the people he interviewed speak for themselves; he didn't come with questions that were designed before the interviews to measure concepts such as violence or delinquency. After examining all of the interview transcripts, Madfis developed themes that emerged among them all. This is what made the research *exploratory* instead of *explanatory*.

Five out of the 11 school shootings were thwarted by other students who were not directly involved or entrusted by the accused students but who came about the information indirectly. For example, one student reported the existence of disturbing posts and images on another student's network website. The second most common category of intervention involved people who had been told directly about the planned attacks by the students accused of plotting them. For example, after one student was sent threatening messages, she told her mother, who then called the police. When the accused student was questioned, he confessed, and weapons were discovered in his bedroom.

School administrators believed that students were more likely to come forward with information about their peers since the Columbine High School shootings than they had been before this catalyzing mass shooting. One school principal stated, "Columbine absolutely made kids much more vigilant about things going on around them . . . I think it made kids less afraid to speak up if something wasn't sitting right with them" (Madfis 2014, 235). Another theme that was clear from the interviews was that if school environments were going to break the "student code of silence," they must be supporting, cohesive, and trusting. For example, another principal stated, "The best mechanism we have as a deterrent for these sorts of violent acts is good relationships between kids and adults, because kids will tell you" (235).

As you can see from this discussion of Madfis's results, the goal of his research was to explore the factors related to instances where a school shooting had been successfully thwarted. He did not go into the school with a survey filled with questions, because the existing literature reveals that little is known about these factors. For this reason, the investigation was explorative in nature. It is different from a descriptive investigation, because an estimate of the prevalence of some phenomenon is not the goal. Rather, a deeper understanding of the processes and perceptions of study participants is the desired outcome in exploratory research.

Explanatory Research

Many people consider explanation to be the premier goal of any science. **Explanatory research** seeks to identify causes and effects of social phenomena to predict how one phenomenon will change or vary in response to variation in some other phenomenon. Researchers adopted explanation as a goal when they began to ask such questions as "Why do people become offenders?" and "Does the unemployment rate influence the frequency of youth crime?" Methods with which to identify causes and effects are the focus of Chapter 6.

CASE STUDY

What Factors Predict Youth Delinquency and Violence?

When we move from description to exploration and finally to explanation, we want to understand the direct relationship between two or more things. Does *x* explain *y?* Or if *x* happens, is *y* also likely to occur? What are some of the factors related to youth violence? Fontaine and her colleagues (2016) were interested in how several factors, including parental supervision and attachment to school, affected the probability of adolescents engaging in violent behavior. They used a longitudinal data set collected in Montreal, Canada, which followed boys from kindergarten until they were 17 years old. By following this sample of boys over time, the researchers could determine that parental supervision and attachments to school came before the violent offending, which is extremely important when attempting to determine factors that predict violence.

Parental supervision was assessed at ages 11, 12, 14, and 15 years and was based on the following questions: "Do your parents know where you are when you are outside the house?" and "Do your parents know who you are with when you are outside the house?" School engagement and attachments were assessed at these same ages and included six items such as "Do you feel that you do your best at school?" Self-reported violent offending was assessed at age 17 and included fist fighting, gang fighting, carrying a deadly weapon, using a deadly weapon, threatening someone to force him her to do something, attacking someone, and throwing an object at someone. Several other variables were included in Fontaine et al.'s (2016) predictive models, including whether the boys had been violent as young children, family structure, and attitudes toward legal authorities, among others. Results indicated that boys who had greater parental supervision and school engagement were less likely to engage in violent delinquency compared to their less supervised and engaged counterparts. In fact, while boys who had been aggressive as children were more likely to be violent as adolescents, the relationship between childhood and adolescent violence was virtually eliminated for those boys who had high levels of parental supervision and school engagement.

Evaluation Research

Explanatory research: Research that seeks to identify causes and/or effects of social phenomena.

Evaluation research: Research about social programs or interventions.

Evaluation research seeks to determine the effects of a social program or other types of intervention. It is a type of explanatory research because it deals with cause and effect. However, evaluation research differs from other forms of explanatory research because evaluation research considers the implementation and effects of social policies and programs. These issues may not be relevant in other types of explanatory research. Research that examines cause and effect questions is reviewed in Chapter 6, which covers experimental design, and in Chapter 12, which covers evaluation research.

CASE STUDY

How Effective Are Violence Prevention Programs in Schools?

As many school administrators will tell you, there are direct mail, e-mail, and in-person direct sales efforts to sell them programs that reduce violence, increase empathy among students, promote a positive school environment, promote other forms of mental well-being, and on and on. Unfortunately, not many of these programs have been rigorously evaluated to ensure they actually do what they promise. One program that has been the target of rigorous evaluation is Gang Resistance Education and Training (GREAT), which is a school-based gang and violence prevention program. Among other things, this program teaches students about crime and its effects on victims, gives them skills to resolve conflicts without violence, and helps them improve individual responsibility through goal setting. It addresses multiple risk factors for violent offending among three domains: school, peer, and individual. Because it is based in the school curriculum, it does not address risk factors in the family or neighborhood. It is a 13-week program taught in sixth or seventh grade and attempts to affect several risk factors, including school commitment and performance, association with conventional or delinquent peers, empathy, and self-control, among others.

Esbensen and his colleagues (2013) evaluated the long-term effects of the GREAT program in seven cities across the United States. Schools selected for the evaluation randomly assigned some seventh grade classrooms to participate in the program (experimental groups) while the other classrooms did not (control groups). As you will later learn, this is called a *true experimental design*. It is an extremely strong research method for determining the effects of programs or policies, because if groups are truly randomly assigned, there is a strong reason to believe that differences between the groups after program implementation, such as reduced violent offending, are a result of the program and not some other factor that existed before the introduction of the treatment.

Both experimental and control group students in the study (Esbensen et al. 2013) completed four follow-up surveys annually for four years. The researchers examined 33 outcome measures, including general delinquency, violent offending, gang affiliation, associations with delinquent peers, empathy, impulsivity, and problem-solving behavior, among others. The statistical methods employed by Esbensen and his colleagues are very complicated and beyond the scope of this text, so we will simply highlight the general findings. When the data for all seven sites were combined, no differences were revealed in violent offending between experimental and control group students over the four-year period. Those students who participated in the GREAT program, however, were less likely to become members of gangs, had higher levels of altruism, felt less anger, had fewer risk-taking behaviors, and had more favorable attitudes toward the police, among other differences.

With these results, would you deem the GREAT program a success? These are the important questions evaluation research must address. Esbensen et al. (2013) agree that the program did not reduce general delinquency or violent offending but note that it was effective in reducing gang membership, which is also a risk factor for violent offending

ALTERNATIVE RESEARCH ORIENTATIONS

Your preferences for particular research methods will be shaped in part by your general assumptions about how the social world can best be investigated—by your *social research philosophy*. The scientific approach reflects the belief that there is an objective reality apart from the perceptions of those who observe it. This is the philosophy traditionally associated with natural science and

with the belief that scientists must be objective and unbiased to see reality clearly (Weber 1949, 72). **Positivism** asserts that a well-designed test of a specific prediction—for example, the prediction that youth who are more attached and supervised by their parents will be less likely to engage in violent behavior—can move us closer to understanding actual social processes.

Postpositivism is a philosophy that is closely related to positivism because it also assumes an external, objective reality, but postpositivists acknowledge the complexity of this reality and the limitations and biases of the scientists who study it (Guba and Lincoln 1994, 109–111). For example, postpositivists may worry that researchers, who are heavy computer users themselves, will be biased in favor of finding positive social effects of computer use. As a result of concerns such as this, postpositivists do not think we can ever be sure that scientific methods allow us to perceive objective reality. Instead, they believe that the goal of science is to achieve **intersubjective agreement** among scientists about the nature of reality (Wallace 1983, 461). We can be more confident in the community of social researchers than in any individual social scientist (Campbell and Russo 1999, 144).

In contrast to these, **interpretivism** is a research philosophy that emphasizes the importance of understanding subjective meanings people give to reality; unlike positivism and postpositivism, it does not assume that social processes can be identified objectively. Here's the basic argument: All empirical data we collect come to us through our own senses and must be interpreted with our own minds. This suggests that we can never be sure that we have understood reality properly, that we can, or that our understandings can really be judged more valid than someone else's. Concerns like this have begun to appear in many areas of social science and have begun to shape some research methods. From this standpoint, the goal of validity becomes meaningless: "Truth is a matter of the best-informed and most sophisticated construction on which there is consensus at a given time" (Schwandt 1994, 128).

It is tempting to think of positivism and postpositivism as representing an opposing research philosophy to interpretivism. However, if we view them as completely distinct, we would be forced to choose the philosophy that seems closest to our own preferences and condemn the other as unscientific, uncaring, or perhaps unrealistic. Fortunately, contemporary researchers often understand the strengths of multiple philosophies and select their research methods accordingly. In fact, research can often be improved by drawing on insights from both positivist and interpretivist philosophies. In the words of Turner (1980), "The distinctive empirical concerns of 'interpretive' and 'statistical' research, usually thought of as antithetical or mutually irrelevant, can be made to mesh" (99). Before we move on, we also want to highlight three different orientations to research that are not so much philosophies as they are value orientations: critical theory, feminist research and participatory action research (PAR).

Similar to interpretivism, **critical theory** focuses on examining structures, patterns of behavior, and meanings but rests on the premise that power differences, often manifested by discrimination and oppression, have shaped these structures and patterns. What is observed and described at a particular moment in time is the result of differential power relationships that have solidified over time. How people are socially located in a particular situation will construct their meanings and interests (Keenan 2004). Researchers committed to this perspective see research as a way to challenge societal structures that reinforce oppression.

Feminist research also provides a critical lens to doing research and is a term that is often used to refer to research done by feminists (Reinharz 1992). Similar to critical theory, it is not a research method, as feminists utilize all types of methodologies. However, many feminist scholars share the interpretivist concern with personal experience and subjective feelings and with the researcher's position and standpoint. Feminist researchers Hesse-Biber and Leavy (2007) emphasize the importance of viewing the social world as complex and multilayered, of sensitivity to the impact of social differences, of being an "insider" or an "outsider," and of being concerned with the researcher's position. African American feminist researcher Patricia Hill Collins (1991) suggests that researchers who are sensitive to their "outside" role within a social situation may have unique advantages: "Outsiders within

Positivism:
The belief, shared by most scientists, that there is a reality that exists quite apart from our own perception of it, although our knowledge of this reality may never be complete.

Postpositivism:
The belief that there is an empirical reality but that our understanding of it is limited by its complexity and by the biases and other limitations of researchers.

Intersubjective agreement:
Agreement between scientists about the nature of reality; often upheld as a more reasonable goal for science than certainty about an objective reality.

Interpretivism:
The belief that reality is socially constructed and that the goal of social scientists is to understand what meanings people give to that reality.

Critical theory:
Focuses on examining structures, patterns, and meanings but rests on the premise that power differences have shaped these structures and patterns.

Feminist research:
Research with a focus on women's lives that often includes an orientation to personal experience, subjective orientations, the researcher's standpoint, and emotions.

occupy a special place—they become different people and their difference sensitizes them to patterns that may be more difficult for established sociological insiders to see" (53).

Whyte (1991) proposed a more activist approach to research called **participatory action research (PAR)**. As the name implies, this approach encourages social researchers to get "out of the academic rut" and bring values into the research process (285). In PAR, the researcher involves some members of the setting studied as active participants. Both the organizational members and the researcher are assumed to want to develop valid conclusions, to bring unique insights, and to desire change, but Whyte (1991) believed these objectives were more likely to be obtained if the researcher collaborated actively with the persons he studied. We will talk about PAR in Chapter 16.

MORE ON THE ROLE OF VALUES IN RESEARCH

As you may perhaps notice, there is some variation across these perspectives in the ways in which values play a role in research. The positivist and postpositivist philosophies consider value considerations to be beyond the scope of science: "An empirical science cannot tell anyone what he should do—but rather what he can do—and under certain circumstances—what he wishes to do" (Weber 1949, 54). The idea is that developing valid knowledge about how society is organized (or how we live our lives) does not tell us how society *should* be organized or how we *should* live our lives. The determination of empirical facts should be a separate process from the evaluation of these facts as satisfactory or unsatisfactory (Weber 1949, 11). The idea is not to ignore value considerations but to hold them in abeyance during a research project.

There has always been tension between this "value-free" orientation to social research and a more "value-conscious" or even activist approach such as PAR. In the 19th century, social researcher Lester Frank Ward argued that "the real object of science is to benefit man. A science which fails to do this, however agreeable its study, is lifeless" (Ward 1897, xxvii). In 1929, another researcher, William Fielding Ogburn, vehemently argued that social research should be value-free and not concerned with making the world a better place, "Science is interested directly in one thing only, to wit, discovering new knowledge" (Ogburn 1930, 300–301). Does one approach make more sense to you?

By the time you finish reading this text, we know you'll have a good understanding of the difference between these orientations, but we can't predict whether you'll decide one is preferable. Like us, we hope you will conclude that each has some merit. We believe there is value to both positivist and interpretivist philosophies and that there are good reasons to prefer an integrated philosophy. Researchers influenced by a positivist philosophy should be careful to consider how their own social background shapes their research approaches and interpretations, just as interpretivist researchers caution us to do. Researchers influenced more by an interpretivist philosophy should be careful to ensure that they use rigorous procedures to check the trustworthiness of their interpretations of data (Riessman 2008). If we are not willing to ask hard questions about our research and the evidence we collect, we are not ready to investigate the social world.

QUANTITATIVE AND QUALITATIVE METHODS

As you might expect, different research philosophies often are related to the selection of different research methods. Importantly, however, we want to make clear that the research question or purpose should *always* dictate the research method. This will become more obvious when you read each specific methodology chapter. However, in general, research methods can be divided into two somewhat different domains called **quantitative research methods** and **qualitative research methods**. Did you notice the difference between the types of data

Participatory action research (PAR): A type of research in which the researcher involves some organizational members as active participants throughout the process of studying an organization; the goal is making changes in the organization.

Quantitative research methods: Methods such as surveys and experiments that record variation in social life in terms of categories that vary in amount. Data that are treated as quantitative are either numbers or attributes that can be ordered in terms of magnitude.

Qualitative research methods: These methods typically involve exploratory research questions, inductive reasoning, an orientation to social context and human subjectivity, and the meanings attached by participants to events and to their lives. Qualitative data are mostly written or spoken words or observations that do not have a direct numerical interpretation.

the earlier case studies used? The data collected in the YRBS were counts of the responses students gave on the survey. In contrast, Madfis's (2014) exploratory study used in-depth interviews with school administrators who had helped prevent an attempted school shooting. This methodology was designed to capture the social reality of the participants as they experienced it in their own words rather than in predetermined categories. Because the researchers focused on the participants' words rather than counts and numbers, we say that this study used qualitative methods.

The distinction between quantitative and qualitative methods involves more than the type of data collected. Qualitative methods are most often used when the motives for research are description or exploration. The goals of quantitative and qualitative researchers also may differ. Whereas quantitative researchers generally accept the goal of developing an understanding that correctly reflects what is actually happening in the real world, some qualitative researchers instead emphasize the goal of developing an "authentic" understanding of a social process or social setting (Gubrium and Holstein 1997). An authentic understanding is one that reflects *fairly* the various perspectives of participants in that setting.

As important as it is, we do not want to place too much emphasis on the distinction between qualitative and quantitative methods, because social scientists often combine these methods in order to enrich their research. For example, qualitative knowing about social settings can be essential for understanding patterns in quantitative data (Campbell and Russo 1999). Qualitative data can be converted to quantitative data, for example, when we count the frequency of particular words or phrases in a text or measure the time that has elapsed between different behaviors that we have observed. Surveys that collect primarily quantitative data also may include questions asking for written responses, and these responses may be used in a qualitative, textual analysis. As noted above, researchers are increasingly electing to garner the strengths of several research methods combined and, as a result, rely on **mixed-methods research** to study one research question. This is sometimes called **triangulation**. The latter term suggests that a researcher can get a clearer picture of the social reality being studied by viewing it from several different perspectives. Each will have some liabilities in a specific research application, and all can benefit from a combination of one or more other methods (Brewer and Hunter 1989; Sechrest and Sidani 1995).

As you will see in the chapters that follow, the distinction between quantitative and qualitative data is not always sharp. We'll examine such mixed-method possibilities in each of the chapters that review specific methods of data collection.

Mixed-methods research: Research that combines qualitative and quantitative methods in an investigation of the same or related research question(s).

Triangulation: The use of multiple methods to study one research question. Also used to mean the use of two or more different measures of the same variable.

HIGHLIGHTING A FEW SPECIFIC TYPES OF RESEARCH METHODS

As you will see in this book, the data we utilize in criminological research are derived from many different sources, and the research methods we employ in criminology and criminal justice are very diverse. In this section, we are going to highlight a few of the more traditional methods that will be covered later in the book.

An **experimental approach** is used in criminological research, particularly when the efficacy of a program or policy is being evaluated. As we will see in Chapter 6, true experiments must have three things: two groups (one receiving the treatment or intervention and the other receiving no treatment or another form thereof), random assignment to these two groups, and an assessment of change in the outcome variable after the treatment or policy has been received. Quasi-experimental designs (experiments that lack one of these three ingredients) also are used in our discipline. Chapter 11 focuses exclusively on research designs used in evaluation research, which often utilizes experimental research when determining whether a policy or program had the intended effect (e.g., decreased crime, increased trust in the police).

Experimental approach: An approach in which the researcher assigns individuals to two or more groups in a way that equates the characteristics of individuals in the groups (with a certain chance of error), except for variation in the groups' exposure to the independent variable.

Asking people questions in **surveys**, as we highlighted above, is another popular method used by criminological researchers and is probably the most versatile. Most concepts about individuals can be defined in such a way that measurement with one or more questions becomes an option. These surveys can be self-administered by respondents (e.g., through the mail) or can be read by an interviewer (e.g., through a telephone survey).

Although in principle, survey questions can be a straightforward and efficient means to measure individual characteristics, facts about events, level of knowledge, and opinions of any sort, in practice, survey questions can result in misleading or inappropriate answers. All questions proposed for a survey must be screened carefully for their adherence to basic guidelines and then tested and revised until the researcher feels some confidence that they will be clear to the intended respondents (Fowler 1995). Some variables may prove to be inappropriate for measurement with any type of question. We have to recognize that memories and perceptions of the events about which we might like to ask can be limited. Specific guidelines for writing questions and developing surveys are presented in Chapter 8.

Surveys: Popular and versatile research instruments using a question format. Surveys can either be self-administered or read by an interviewer.

In other cases, a researcher may want to make her presence known and directly participate in the activity being observed. Included in this type of research design is **participant observation**, which involves developing a sustained relationship with people while they go

Participant observation: A type of field research in which a researcher develops a sustained and intensive relationship with people while they go about their normal activities.

CAREERS AND RESEARCH

Grant A. Bacon, BA, Research Associate, Center for Drug and Health Studies, University of Delaware

Source: Courtesy of Grant A. Bacon

Grant Bacon graduated with degrees in history, education, and political science from the University of Delaware in 1998. He initially aspired to give back to the community, especially by helping young people as a teacher. Although he started out teaching, he found his calling by working more directly with at-risk youth as a court liaison and eventually as a program coordinator for a juvenile drug court/drug diversion program. It was during his time working with these drug court programs that Grant first came into contact with the University of Delaware's Center for Drug and Health Studies (CDHS), which was beginning an evaluation of the drug court programs in New Castle County, Delaware. In 2001, he accepted an offer to become a research associate with CDHS, where he has continued to work on many different research projects. Two of his most recent projects include research that investigated the factors affecting the reentry experience for inmates returning to the community and another that evaluated the parole program called "Decide Your Time."

Grant is happy to be working in the field on both qualitative and quantitative research. He loves working with people who share a vision of using research findings to help people in a number of ways and to give back to the world in a meaningful manner. Every day is different. Some days, Grant and other associates are on the road visiting criminal justice or health related facilities or are trying to locate specific individual respondents or study participants. Other days, he may be gathering data, doing intensive interviewing, or administering surveys. He thinks the most rewarding part of his job is helping people who have been part of the criminal justice system and giving them a voice.

Grant's advice to students interested in research is the following:

> If doing research interests you, ask your teachers how you can gain experience through internships or volunteering. Be sure to network with as many people from as many human services organizations as possible. Being familiar with systems like GIS (geographic information systems) and data analyses is becoming important as well. If you did not receive this training during your undergraduate studies, many community colleges offer introductory and advanced classes in GIS, Microsoft Excel, Access, and SPSS. Take them!

about their normal activities. In other instances, the subject matter of interest may not be amenable to a survey, or perhaps we want more detailed and in-depth information than questions with fixed formats can answer. In these cases, we turn to research techniques such as participant observation and **intensive interviewing**. These methods are preferred when we seek in-depth information on an individual's feelings, experiences, and perceptions. Chapter 9 shows how these methods and other field research techniques can uncover aspects of the social world that we are likely to miss in experiments and surveys.

Secondary data analysis (Riedel 2000), which is the reanalysis of already existing data, is another method used by researchers. These data usually come from one of two places: official sources such as local or federal agencies (e.g., rates of crime reported to police, information on incarcerated offenders from state correctional authorities, adjudication data from the courts) or surveys sponsored by government agencies or conducted by other researchers. Virtually all the data collected by government agencies and a great deal of survey data collected by independent researchers are made available to the public through the Inter-University Consortium for Political and Social Research (ICPSR), which is located at the University of Michigan. Another type of indirect measurement is called **content analysis**. In this type of study, a researcher studies representations of the research topic in such media forms as news articles, TV shows, and radio talk shows. An investigation of the drinking climate on campuses might examine the amount of space devoted to ads for alcoholic beverages in a sample of issues of the student newspaper. Campus publications also might be coded to indicate the number of times that statements discouraging substance abuse appear. Content analysis techniques also can be applied to legal opinions, historical documents, novels, songs, or other cultural productions. Chapter 10 covers these and other research methods that typically rely on secondary data. With the advent of computer technology, **crime mapping** also has become a popular method for examining the relationship between criminal behavior and other social indicators. Chapter 11 covers this methodology, along with a few other recent methods that are increasingly being used by law enforcement agencies. Increasingly, researchers are combining methods to more reliably answer a single research question. Although examples of mixed-methods research are highlighted in several chapters, Chapter 13 provides an overview of the philosophy and motivation for combining methods, along with the various techniques for doing so.

All research begins with a research question and then a formal process of inquiry. Chapter 2 provides an overview of the research circle from both a deductive and inductive perspective using the empirical literature on arrest and intimate partner assault as a case study. All research must also grapple with conceptualization and measuring constructs, including the extent to which these measures are valid and reliable. Chapter 4 examines these issues followed by a discussion of sampling in Chapter 5. Of course, all research, regardless of the methodology selected, requires that it be carried out ethically with special protections afforded the participants under study. Although every chapter that details a specific type of research method concludes with a section on ethics related to that method, Chapter 3 is devoted exclusively to the steps required to ensure that research is conducted ethically.

Intensive interviewing: Open-ended, relatively unstructured questioning in which the interviewer seeks in-depth information on the interviewee's feelings, experiences, and/or perceptions.

Secondary data analysis: Analysis of data collected by someone other than the researcher or the researcher's assistant.

Content analysis: A research method for systematically analyzing and making inferences from text.

Crime mapping: Geographical mapping strategies used to visualize a number of things, including location, distance, and patterns of crime and their correlates.

STRENGTHS AND LIMITATIONS OF SOCIAL RESEARCH

The four case studies described earlier in this chapter are only four of the dozens of studies investigating youth violence, but they illustrate some of the questions criminological research can address, several different methods social scientists studying these issues can use, and ways

criminological research can inform public policy. Notice how each of the four studies was designed to reduce the errors common in everyday reasoning:

- The clear definition of the population of interest in each study and the selection of a broad, representative sample of that population in two studies increased the researchers' ability to draw conclusions without overgeneralizing findings to groups to which they did not apply.
- The use of surveys in which each respondent was asked the same set of questions reduced the risk of selective or inaccurate observation.
- The risk of illogical reasoning was reduced by carefully describing each stage of the research, clearly presenting the findings, and carefully testing the basis for cause-and-effect conclusions.
- Resistance to change was reduced by using an experimental design that randomly assigned classes to an experimental treatment (GREAT) and a control group to fairly evaluate the efficacy of the program.

Nevertheless, we would be less than honest if we implied that you enter the realm of beauty, truth, and light whenever you engage in research or whenever you base your opin-

RESEARCH IN THE NEWS

A SCHOOL SHOOTING EVERY WEEK?

This article investigates a quote by Senator Chris Murphy (D-CT) who said, "Since Sandy Hook there has been a school shooting, on average, every week." He made this statement on the Senate floor after the killing of nine people at a prayer meeting in Charleston, South Carolina. This is not the first time this statistic has been used, but where did it come from? The article reports it was calculated by a group called "Everytown for Gun Safety" that has counted the tally of school shootings since the Sandy Hook Elementary School shooting as 126 as of June 8, 2015. How does the group define a school shooting? Any incident in which a firearm was discharged inside a school building or on school or campus grounds, as documented by the press or confirmed through further inquiries with law enforcement, was deemed a school shooting.

For Further Thought:

1. Does this definition of school shootings capture what we typically mean by a school shooting? For example, it would include accidental shootings as well as suicides or attempted suicides.
2. What other types of incidents would be included in this definition that we don't typically associate with school shootings? What definition would you use if you were going to measure the incidence of school shootings?

Source: Lee, Michelle Y. H. 2015. "Has There Been One School Shooting per Week Since Sandy Hook?" *Washington Post*, June 29, 2015. http://www.washingtonpost.com/blogs/fact-checker/wp/2015/06/29/has-there-been-one-school-shooting-per-week-since-sandy-hook/

ions only on the best available social research. Research always has some limitations and some flaws (as does any human endeavor), and findings are always subject to differing interpretations. Social research permits you to see more, to observe with fewer distortions, and to describe more clearly to others what your opinions are based on, but it will not settle all arguments. Other people will always have differing opinions, and some of those others will be social scientists who have conducted their own studies and drawn different conclusions. Do other programs similar to the GREAT program reduce levels of aggression among students? Only a handful of studies have used randomized controlled designs to examine these programs, and the results of these studies have been mixed. Until more scientific research is conducted to evaluate these programs, it is difficult to determine whether the money poured into such programs by school districts is well spent.

But even in areas of research that are fraught with controversy, where social scientists differ in their interpretations of the evidence, the quest for new and more sophisticated research has value. What is most important for improving understanding of the social world and issues in criminology is not the result of any particular study but the accumulation of evidence from different studies of related issues. By designing new studies that focus on the weak points or controversial conclusions of prior research, social scientists contribute to a body of findings that gradually expands our knowledge about the social world and resolves some of the disagreements about it.

Whether you plan to conduct your own research projects, read others' research reports, or merely think about and act in the social world, knowing about research methods has many benefits. This knowledge will give you greater confidence in your own opinions, improve your ability to evaluate others' opinions, and encourage you to refine your questions, answers, and methods of inquiry about the social world. If that isn't enough motivation to keep reading, the skills you learn in this class will also open many doors on your career path. Virtually every career requires some level of research and data analysis skills, as we are living in an increasingly data-driven and evidence-based world.

A COMMENT ON RESEARCH IN A DIVERSE SOCIETY

Research must always strive to reflect our increasingly diverse society, including dimensions of race/ethnicity, nationality, gender, sexual orientation, age, physical abilities, and religious or political beliefs. Although there is much that we share, there is also an increased awareness that there are distinct cultural, social, structural, and historical contexts that shape group experiences. Just as criminal justice practitioners are expected to engage in culturally competent practice, we must recognize that cultural norms impact the research process, whether it is the willingness to participate in research activities, the meaning ascribed to abstract terms and constructs, the way data are collected, or the interpretation of the findings. The failure by researchers to adequately address the cultural context impacts the research process in different ways and, ultimately, the validity and generalizability of research findings.

Historically, women and race/ethnic minorities have been underrepresented in research studies. In addition, some groups may be reluctant to participate in research for different reasons, such as distrust of the motives of the researchers (Sobeck, Chapleski, and Fisher 2003), historical experiences, not understanding the research process, not seeing any benefit to participation (Beals, Manson, Mitchell, Spicer, and AI-SuperPFP Team 2003), and misuse of findings to the detriment of their communities (Sobeck et al. 2003). Inadequate

representation in research makes it more difficult to conclude that the results of this research can be generalized to the larger diverse population.

Measurement bias can result in misidentifying the prevalence of a condition and assuming that relationships exist for all subgroups of a population or in theories developed using homogeneous samples that do not hold up when more diverse samples are examined. For example, theories based on research using a sample of white males coming of age in the 1950s when well-paying industrial jobs were available and who, as a result, appear to have been amendable to changing their criminal behavior through turning points such as employment and marriage (Laub and Sampson 2003; Sampson and Laub 1993) have not always found support using diverse samples of individuals reentering society from prison today (Nguyen and Loughran 2018).

The quality of information obtained from surveys is also dependent on the questions that are asked; there is an assumption that respondents share a common understanding of the meaning of the question and willingness or unwillingness to answer the question. Yet, questions may have different meanings to different groups, may not be culturally appropriate, and, even when translated into a different language, may lack equivalent connotations (Pasick, Stewart, Bird, and D'Onofrio 2001). For example, we know from the NCVS that American Indian and Alaskan Native (AIAN) populations are at a greater risk of rape and sexual assault compared to other subgroups of the population. However, we also know that the NCVS may not be the best way to accurately measure the true nature of victimizations for this population. To get a more valid estimate the magnitude of sexual assault and other victimizations against AIAN populations, the National Institute of Justice along with the Centers for Disease Control and Prevention, in collaboration with tribal leaders, developed a new data collection instrument to ensure that the study would be "violable, culturally and community appropriate, respectful of those involved, and that the information collected would be relevant and helpful" (Crossland, Palmer, and Brooks 2013, 775).

As you can see from this brief introduction, the norms that develop within population subgroups have an impact that cuts across the research process. As you read each chapter in this book, you will learn both the kinds of questions that researchers ask and the strategies they use to ensure that their research is culturally competent.

CONCLUSION

We hope this first chapter has given you an idea of what to expect in the rest of this book. Our aim is to introduce you to social research methods by describing what social scientists have learned about concerning issues in criminology and criminal justice as well as how they learned it. The substance of social science inevitably is more interesting than its methods, but the methods also become more interesting when they are not taught as isolated techniques. We have focused attention on research on youth violence and delinquency in this chapter; in subsequent chapters, we will introduce research examples from other areas.

Chapter 2 continues to build the foundation for our study of social research by reviewing the types of problems that criminologists study, the role of theory, the major steps in the research process, and other sources of information that may be used in social research. We stress the importance of considering scientific standards in social research and review generally accepted ethical guidelines. Throughout the chapter, we use several studies of domestic violence to illustrate the research process.

KEY TERMS

➤ Review key terms with eFlashcards.

Content analysis 18
Crime mapping 18
Critical theory 14
Descriptive research 9
Epistemology 8
Evaluation research 12
Experimental approach 16
Explanatory research 12
Exploratory research 10
Feminist research 14
Illogical reasoning 6
Inaccurate observation 6
Intensive interviewing 18
Interpretivism 14
Intersubjective agreement 14
Mixed-methods research 16
Overgeneralization 5
Participant observation 17
Participatory action research 15
Peer review 8
Phrenology 8
Positivism 14
Postpositivism 14
Pseudoscience 8
Qualitative research methods 15
Quantitative research methods 15
Resistance to change 7
Science 8
Secondary data analysis 18
Selective observation 5
Social science 8
Surveys 17
Transparent 8
Triangulation 16

HIGHLIGHTS

- Criminological research cannot resolve value questions or provide answers that will convince everyone and remain settled for all time.
- All empirically based methods of investigation are based on either direct experience or others' statements.
- Four common errors in reasoning are overgeneralization, selective or inaccurate observation, illogical reasoning, and resistance to change. Illogical reasoning results from the complexity of the social world, self-interestedness, and human subjectivity. Resistance to change may be due to unquestioning acceptance of tradition or of those in positions of authority or to self-interested resistance to admitting the need to change one's beliefs.
- Social science is the use of logical, systematic, documented methods to investigate individuals, societies, and social processes as well as the knowledge produced by these investigations.
- Pseudoscience is claims that are based on beliefs and/or public testimonials, not on the scientific method.
- Criminological research can be descriptive, exploratory, explanatory, evaluative, or some combination of these.
- Positivism is the belief that there is a reality that exists quite apart from one's own perception of it that is amenable to observation.
- Intersubjective agreement is an agreement by different observers on what is happening in the natural or social world.
- Postpositivism is the belief that there is an empirical reality but that our understanding of it is limited by its complexity and by the biases and other limitations of researchers.
- Interpretivism is the belief that reality is socially constructed and that the goal of social science should be to understand what meanings people give to that reality.
- Quantitative methods record variation in social life in terms of categories that vary in amount. Qualitative methods are designed to capture social life as participants experience it rather than in categories predetermined by the researcher.
- Mixed methods, sometimes called triangulation, is the use of multiple research methods to study a single research question.
- Cultural norms impact the research process, including the willingness of individuals to participate in research, the meaning of terms, the way data are collected, and the interpretation of the findings.

EXERCISES

➤ Test your understanding of the chapter content. Take the practice quiz.

1. What criminological topic or issue would you focus on if you could design a research project without any concern for costs? What are your motives for studying this topic? List at least four of your beliefs about this phenomenon. Try to identify the sources of each belief (e.g., television, newspaper, parental influence).
2. Develop four research questions related to your chosen topic or issue, one for each of the four types of research (descriptive, exploratory, explanatory, and evaluative). Be specific.
3. Read the abstracts of several articles in a recent issue of a major criminological journal. Identify the type of research conducted for each study (you can also find articles on the Student Study Site, http://edge.sagepub.com/bachmanprccj7e).
4. Find a report of social science research in an article in a daily newspaper. What are the motives for the research? How much information is provided about the research design? What were the major findings? What additional evidence would you like to see in the article to increase your confidence in the research conclusions?
5. Continue the debate between positivism and interpretivism with an in-class discussion. Be sure to review the guidelines for these research philosophies and the associated goals. You might also consider whether an integrated philosophy is preferable.
6. Outline your own research philosophy. You can base your outline primarily on your reactions to the points you have read in this chapter, but try also to think seriously about which perspective seems more reasonable to you.

DEVELOPING A RESEARCH PROPOSAL

Will you develop a research proposal in this course? If so, you should begin to consider your alternatives.

1. What topic would you focus on if you could design a social research project without any concern for costs? What are your motives for studying this topic?
2. Develop four questions that you might investigate about the topic you selected. Each question should reflect a different research motive: description, exploration, explanation, or evaluation. Be specific.
3. Which question most interests you? Would you prefer to attempt to answer that question with quantitative or qualitative methods? Why?

WEB EXERCISES

1. You have been asked to prepare a brief presentation on a criminological topic or issue of interest to you. Go to the BJS website (https://www.bjs.gov/). Browse the BJS publications for a topic that interests you. Write a short outline for a 5- to 10-minute presentation regarding your topic, including how the data were collected, statistics, and other relevant information.
2. Go to the FBI website (http://www.fbi.gov). Explore the types of programs and initiatives sponsored by the FBI. Discuss at least three of these programs or initiatives in terms of their purposes and goals. For each program or initiative examined, do you believe the program or initiative is effective? What are the major weaknesses? What changes would you propose the FBI make to more effectively meet the goals of the program or initiative?
3. Go to the website of a major newspaper and find an article that talks about the causes of violence. What conclusions does the article draw, and what research methods does the author discuss to back up his or her claims?
4. There are many interesting websites that discuss philosophy of science issues. Read the summaries of positivism and interpretivism from "The Rhetoric of Positivism Versus Interpretivism: A Personal View" (http://ww.misq.org/misq/downloads/download/editorial/25/). What do these summaries add to your understanding of these philosophical alternatives?

ETHICS EXERCISES

Throughout the book, we will be discussing the ethical challenges that arise in research on crime and criminal justice. At the end of each chapter, we will ask you to consider some questions about ethical issues related to that chapter's focus. We introduce this critical topic formally in Chapter 3, but we will begin here with some questions for you to ponder.

1. You have now learned about the qualitative study by Madfis (2014) that investigated schools that had averted mass shootings in school shooting incidents. We think it provided important information for policymakers about the social dynamics that may help prevent these tragedies. But what would you do if you were conducting a similar study in a high school, and you learned that a student was planning to bring a gun to school to kill some other students? What if he was only thinking about it? Or talking with his friends about how neat it would be? Can you suggest some guidelines for researchers?
2. Esbensen and his colleagues (2013) found that the GREAT program did not reduce violent behavior but did reduce the likelihood that students would join gangs, felt less anger, and had higher levels of altruism. If you were Esbensen, would you announce your findings in a press conference and encourage schools to adopt this program? If you were a school principal who heard about this research, would you agree to let another researcher replicate (repeat) the study in your school, with some classrooms assigned to receive the GREAT program randomly (on the basis of the toss of a coin) and others not allowed to receive the program for the duration of the study?

SPSS OR EXCEL EXERCISES

Data for Exercise	
Dataset	**Description**
2013YRBS.sav	The 2013YRBS is a national study of high school students. It focuses on gauging various behaviors and experiences of the adolescent population, including substance use and some victimization.
Monitoring the Future 2013 grade 10.sav	This dataset contains variables from the 2013 Monitoring the Future (MTF) study. These data cover a national sample of tenth graders, with a focus on monitoring substance use and abuse.
Variables for Exercise	
Variable Name (Dataset)	**Description**
Q44 (YRBS)	This is a seven-category ordinal measure that asked how many times the respondent drank five or more beverages in one sitting in the past 30 days.
V7108 (MTF)	This is a six-category ordinal measure that asked how many times the respondent drank five or more drinks in a row in the past two weeks.

First, load the 2013 YRBS Subsample.sav file and complete the following:

1. Create a bar chart of variable *Q44* by following the following menu options graphs->legacy dialogues->bar. Select the simple bar chart option, and click the arrow to add *Q44* to the category axis text box. At a glance, what does this bar graph tell us about binge drinking among high school students? Are the data on the YRBS qualitative or quantitative? How do you know?
2. Write at least four research questions based on the bar chart you've created. Try to make one for each type of social research (descriptive, exploratory, explanatory, and evaluative). Think about the following: What stands out for you in this graph? What additional information do you need? Who should the research focus on?
3. Explain the possible reasons (policy, academic, or personal) why we might want to research binge