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Fundamentals of Research in CRIMINOLOGY AND CRIMINAL JUSTICE

Ronet D. Bachman
Russell K. Schutt

Fundamentals of Research in Criminology and Criminal Justice

Fifth Edition

In memory of my mother, Jan, who was my friend, teacher, mentor in all things that mattered, and role model—from her, I learned the importance of kindness and grace.

R. D. B.

To Elizabeth and Julia

R. K. S.

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Fifth Edition

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SAGE Publications, Inc.
2455 Teller Road
Thousand Oaks, California 91320
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SAGE Publications Ltd.
1 Oliver's Yard
55 City Road
London EC1Y 1SP
United Kingdom

SAGE Publications India Pvt. Ltd.
B 1/I 1 Mohan Cooperative Industrial Area
Mathura Road, New Delhi 110 044
India

SAGE Publications Asia-Pacific Pte. Ltd.
18 Cross Street #10-10/11/12
China Square Central
Singapore 048423

Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Names: Bachman, Ronet, author. | Schutt, Russell K., author.

Title: Fundamentals of research in criminology and criminal justice / Ronet D. Bachman, University of Delaware, Russell K. Schutt, University of Massachusetts Boston.

Description: Fifth edition. | Thousand Oaks, California : SAGE Publications, Inc., [2021] | Includes bibliographical references and index.

Identifiers: LCCN 2019035164 | ISBN 9781544374055 (paperback) | ISBN 9781544374048 (epub) | ISBN 9781544374031 (epub) | ISBN 9781544374024 (pdf)

Subjects: LCSH: Criminology—Research. | Criminal justice, Administration of—Research.

Classification: LCC HV6024.5 .B32 2021 | DDC 364.072—dc23
LC record available at https://lccn.loc.gov/2019035164

Acquisitions Editor: Jessica Miller
Content Development Editor: Laura Kirkhuff
Editorial Assistant: Sarah Manheim
Marketing Manager: Jillian Ragusa
Production Editor: Veronica Stapleton Hooper
Copy Editor: Jared Leighton
Typesetter: C&M Digitals (P) Ltd.
Proofreader: Susan Schon
Indexer: Beth Nauman-Montana
Cover Designer: Scott Van Atta

This book is printed on acid-free paper.

20 21 22 23 24 10 9 8 7 6 5 4 3 2 1

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PREFACE

After years of teaching courses in research methods, we have found that the best forum for learning is 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 fifth edition of *Fundamentals 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. We have retained our unique method of "instruction by example" that is used in our more comprehensive text, *The Practice of Research in Criminology and Criminal Justice*. We believe this approach not only increases students' understanding of complex research methods but also conveys to students the vital role that research plays in our discipline.

The purpose of this book is to introduce students to the basics of scientific methods of research and to show how they are actually used. Each chapter in this book combines instruction in research methods with investigations of key research questions in our field: What are the factors related to school shootings? What is the best police response to intimate partner violence? How do gang members perceive their world? Does wearing body cameras affect police and citizen rates of injury? Do community police officers perceive their roles as different from regular patrol officers? These and many other research questions are explored through the text, in tandem with a discussion of research methods. These substantive examples will help you see how research methods are used in practice and, perhaps more importantly, why they were selected by researchers in the field.

By the end of the course, students will not only have the ability to conduct research but also be more adept consumers of knowledge claims about "truth" that bombard us on a daily basis. 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. Extensive exercises are provided at the end of each chapter that allow students to engage in different research tasks both individually and within groups.

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 a chapter devoted exclusively to research ethics, in addition to sections on ethics in every methodology chapter. The first two chapters introduce 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 youth violence. It also introduces you to different research philosophies and how these philosophies affect both our research questions and the appropriate methods for answering them. Chapter 2 illustrates the basic stages of research with a series of experiments on the police response to intimate partner violence. 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. Chapters 4 and 5

discuss how to evaluate the way researchers design their measures and draw their samples. Chapter 6 explores issues related to making causal connections and provides a summary of the strengths and limitations of various research designs in making causal conclusions. It offers a detailed discussion of how true experimental designs are the gold standard when making causal inferences.

Chapters 7 and 8 present the other important methods of data collection: surveys and qualitative methods (including participant observation, systematic observation, intensive interviews, and focus groups). Chapter 9 now focuses on methodologies that are often used in intelligence-led policing, including a new section on social-network analysis, along with crime mapping, research techniques that utilize Big Data, and content analysis. Chapter 10 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 v. 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 and the use of body cameras by law enforcement officers. You will also see why "evidence-based" policy is increasingly in demand and that applied research represents an increasing proportion of all studies conducted in the criminological sciences.

Within each of the methods chapters, there are examples of studies that have used mixed methods. However, because researchers are increasingly combining methods, Chapter 11 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. We finish up in Chapter 12 with an overview of the process of and techniques for reporting research results, along with some ethical problems in writing.

In each chapter, we have retained the substantive case studies to 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 with regular patrol officers, the effects of inmates' classification on institutional misconduct in prison, to name just a few of the examples provided.

NEW TO THIS EDITION

The fifth edition of *Fundamentals of Research in Criminology and Criminal Justice* retains the strengths of our other more comprehensive methods textbook while breaking new ground with newly 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, along with new pedagogical learning aids at the end of each chapter and on our Student Study Site. The other distinctive feature of this text, compared with 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. As such, 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 of the new innovations in this edition.

New chapter that incorporates methods for intelligence-led policing. Chapter 9 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 are being used to predict both crime and recidivism. It concludes with an expanded discussion of content analysis.

New sections on 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.

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 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 9. 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, 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.

Hearing from other students. Most chapters open with a new quote sharing real stories from students who have taken a research methods course that explains how the class has helped them in their careers.

Increased focus on international research. We have expanded our use of research conducted in countries around the globe, as well as continuing our focus on issues involving diversity in race, ethnicity, gender, and culture within the United States and in other countries.

New "Careers and Research" highlights. Each chapter highlights the career of a researcher who has used the methods discussed. Researchers include those with bachelor's, master's, and PhD degrees who are now working in the field. What better incentive to study hard and master these methods! New careers featured in this edition include a director of research compliance and a research analyst for the World Justice Project.

New "Research in the News" highlights. We have updated these boxes that highlight the research that has made headlines in the news to illustrate the impact of our research not just on researchers and practitioners in criminal justice but also on society as a whole. New topics highlighted in this feature include school shootings, an increase in reporting of rapes, changes to the Common Rule, the impact of video games on violence, violence against women, predictive policing, suicides by jail inmates, gun violence, and the opioid epidemic.

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 SPSS or Excel exercises that correspond to the chapter material. Subsets of data are posted in the study site, with the 2013 Youth Risk Behavior Survey, 2014 General Social Survey, 2013 Monitoring the Future data, National Crime Victimization Survey 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. Lists of main points and key terms provide quick summaries at the end of each chapter. In addition, key terms are highlighted in boldface type when first introduced and defined in text. 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 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.

DIGITAL RESOURCES

Companion Student Study Site

This web-based Student Study Site (available at edge.sagepub.com/bachmanfrccj5e) provides a variety of additional resources to enhance students' understanding of the book content and take their learning one step further. The site includes quizzes, eFlashcards, a "Learning From SAGE Journal Articles" feature, exercises, podcasts, videos, real data related to criminal justice and criminology (detailed previously), and appendices on how to use IBM® SPSS® Statistics* and Microsoft Excel® and how to use a qualitative analysis package. There is also an appendix on conducting descriptive data analysis.

*SPSS is a registered trademark of International Business Machines Corporation.

Instructor Teaching Site

A password-protected instructor teaching site is available at edge.sagepub.com/bachmanfrccj5e. It offers a variety of resources to supplement the book material, including lecture notes, PowerPoint slides, test questions with answers, and student project ideas. The site also contains SAGE journal articles, podcasts, videos, Web resources, and articles on teaching criminal justice research methods.

A NOTE ABOUT USING IBM® SPSS® STATISTICS*

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 that are listed previously. Appendix C will get you up and running with SPSS for Windows, as will Appendix E 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 (sda.berkely.edu/archive.htm).

*SPSS is a registered trademark of International Business Machines Corporation.

ACKNOWLEDGMENTS

We must first acknowledge our heartfelt gratitude to Jessica Miller, whose hard work and guidance on this project are unrivaled. Her supervision of the project and meticulous attention to detail and demand for perfection force us to be better teachers and writers. Importantly, her guiding hand is filled with sincere empathy and care. We also thank Veronica Stapleton Hooper for making sure the trains are running on time and shuttling the manuscript through the appropriate channels. We also want to thank Jared Leighton for his meticulous attention to detail when editing this edition.

Gratitude also goes to all the reviewers of our research methods books who have helped make this *Fundamentals* version what it is, including Brian Colwell, Stanford University; Frank Cormier, University of Manitoba; Amy Craddock, Indiana State University; Michael J. DeValve, Fayetteville State University; Gennifer Furst, The College of New Jersey; Lori Guevara, Fayetteville State University; Stephen M. Haas, Marshall University; Susan B. Haire, University of Georgia; Kristy Holtfreter, Florida State University; James R. Maupin, New Mexico State University; Ira Sommers, California State University, Los Angeles; William Wells, Southern Illinois University Carbondale; and Lisa Anne Zilney, Montclair State University. Reviewers of previous editions included Hank J. Brightman, Saint Peter's College; Cathy Couglan, Texas Christian University; Phyllis B. Gerstenfeld, California State University, Stanislaus; Stephen Haas, Marshall University; Lucy Hochstein, Radford University; Kristen Kuehnle, Salem State College; Eric Metchick, Salem State College; Wilson R. Palacios, University of South Florida; and Mark Winton, University of Central Florida.

We would also like to thank reviewers of this new version of the text, including

Emmanuel N. Amadi, Mississippi Valley State University

Kevin M. Beaver, Florida State University

Deborah Baskin, Loyola University Chicago

Ashley G. Blackburn, University of Houston-Downtown

Shannyn Botsford, Bryant and Stratton College

Dena C. Carson, Indiana University—Purdue University Indianapolis

Daniel Holstein, University of Nevada, Las Vegas

Yongsok Kim, Bemidji State University

Matthew Larson, Wayne State University

Karen McElrath, Fayetteville State University

Mark A. Perry, California State University, Stanislaus

Sarah Prior, Northern Arizona University

Melissa J. Tetzlaff-Bemiller, University of Memphis Lambuth Campus

Lisa Tichavsky, Northern Arizona University

Terri L. Watson, California State University, Sacramento

We also thank Lindsay R. Reed and Margaret Leigey for their diligence and hard work on the ancillary material for instructors, Margarita Porteyeva for the appendix on Excel, Kathryn Stoeckert, Erin Kerrison, and Heather Albertson for additional interactive exercises, and Madeline Stenger for "tidying up" as only she can. And finally, thanks to Matthew Manierre, methodologist extraordinaire, who did a heroic job matching SPSS exercises to the content of each chapter.

We continue to be indebted to the many students we have had an opportunity to teach and mentor at both the undergraduate and graduate levels. In many respects, this book could not have been written without these ongoing reciprocal teaching and learning experiences. You inspire us to become better teachers!

Ronet is indebted to her terrific colleagues in the department of sociology and criminal justice who are unwavering sources of support and inspiration. Ronet is also indebted to an amazing circle of friends who endured graduate school together and continue to hold retreats one weekend of the year (29 years and counting!) for guidance, support, therapy, chocolate, and laughter: Dianne Carmody, Gerry King, Peggy Plass, and Barbara Wauchope. You are the most amazing women in the world, and I am so blessed to have you in my life. To Alex Alvarez, Michelle Meloy, and Lori Williams, my other kindred spirits for their support and guidance; and to my father, Ron, for his steadfast critical eye in all matters of life. And heart-filling gratitude to my husband, Raymond Paternoster, whose amazing spirit and wisdom are with me always even though his body is not bound to this planet. Like always, his guidance continues to make me a better person. And to our son, John Bachman-Paternoster, and our dog, Leo, who bring me joy and laughter beyond my wildest dreams!

Russ would like to thank his wife, Elizabeth Schneider Schutt, and daughter, Julia. They have provided love, support, patience, and remarkable joy in his life.

ABOUT THE AUTHORS

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Russell K. Schutt, PhD, is a professor in the Department of Sociology at the University of Massachusetts Boston and research associate in the Department of Psychiatry (Massachusetts Mental Health Center, Beth Israel Deaconess Medical Center) at the Harvard Medical School and at the Edith Nourse Rogers Veterans Hospital. His other books include *Investigating the Social World: The Process and Practice of Research*, *Fundamentals of Social Work Research* (with Ray Engel), *Making Sense of the Social World* (with Dan Chambliss), and *Research Methods in Psychology* (with Paul G. Nestor)—all with SAGE Publications, 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). His research has included a mixed-methods study of a youth violence reduction program, a mixed-methods study of a bibliotherapy program for probationers, a randomized trial of a peer support program for homeless dually diagnosed veterans, mixed-methods investigations of public health programs, and a randomized evaluation of housing alternatives for homeless persons diagnosed with severe mental illness, with funding from the National Cancer Institute, the Veterans Health Administration, the National Institute of Mental Health, the John E. Fetzer Institute, and state agencies. Details are available at blogs.umb.edu/russellkschutt.

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SCIENCE, SOCIETY, AND RESEARCH RELATED TO CRIMINAL JUSTICE AND CRIMINOLOGY

I took a research methods class because it was required. I saw it as a hurdle I had to jump to get my BA [bachelor of arts] in criminal justice. When I first stepped into the class, I was pretty intimidated, but I'm really glad I stuck it out. I have been a detective for several years, and I know that what I learned in research methods is going to open up some career advancements in the future.

Detective W. Wentz

WHAT DO WE HAVE IN MIND?

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 took place on December 14, 2012, when a 20-year-old man named Adam Lanza walked into Sandy Hook Elementary 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 by killing 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. The deadliest high school shooting occurred on February 14, 2018, when Nikolas Cruz, a 19-year-old former student, killed 17 people at the Marjory Stoneman Douglas High School in Parkland, Florida.

None of these mass murderers were typical terrorists, 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

Describe the four common errors in everyday reasoning.

Define social science compared with pseudoscience.

Explain the motivations of social research.

Identify the four types of social research.

Explain the difference between the positivist and constructivist orientations to social research.

Understand the differences between quantitative and qualitative methods and the advantages of mixed methods.

Master the content at

news journals. Unfortunately, the media plays 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, 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.

Case Study: Why Do Kids Kill?

The story of just 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 & Kovaleski, 2018).

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

Cruz was expelled from the Marjory 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 & Kovaleski, 2018). The post was flagged and submitted to a local 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" (Fausset &Kovaleski, 2018). 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 just one person's behavior, and already, our investigation is spawning more questions than answers.

REASONING ABOUT THE SOCIAL WORLD

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 that you begin to 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 just 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 blames the mental health system—4 out of 10 blame easy access to guns as well—but nearly 1 out of 5 blames 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 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 just a small fraction of the individuals who live in the world, especially in a limited span of time.

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

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.

Selective or Inaccurate Observation

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

Selective observation is choosing to look only at things that align with our preferences or beliefs. When we are inclined to criticize individuals or institutions, it is all too easy to notice their every failing. We are also more inclined to see the failings of others who are "not like us." 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 cases confirming our beliefs. But what about other youths who have become productive and stable citizens after engaging in violence as adolescents? 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.

Inaccurate observation: Observations based on faulty perceptions of empirical reality

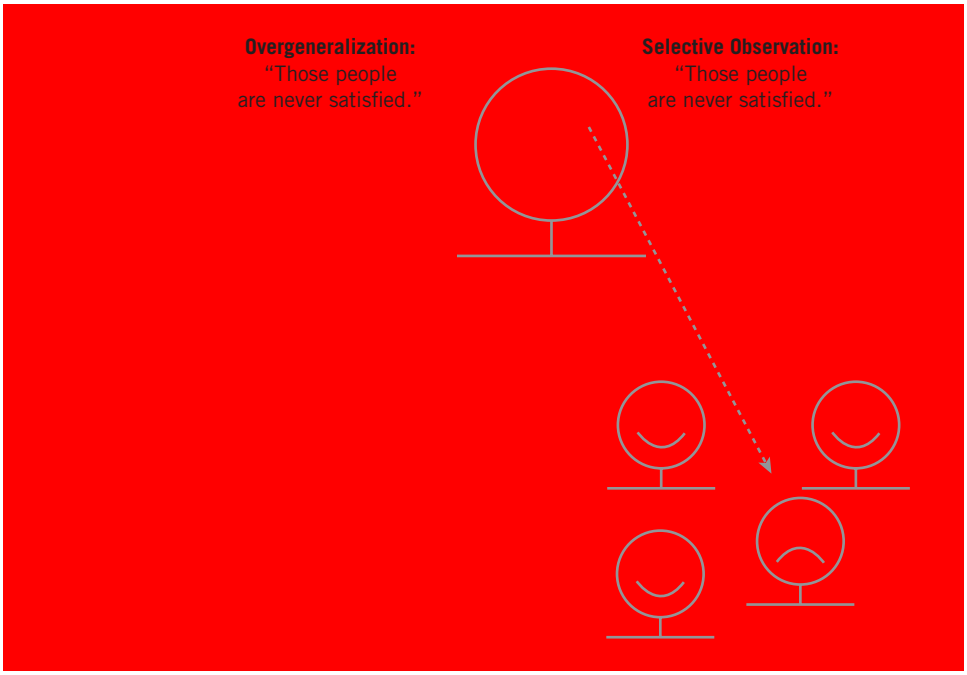
Our observations also can simply be inaccurate. If a woman says she is *hungry* and we think she said she is *hunted*, we have made an **inaccurate observation**. If we think five people are standing on a street corner when there are actually seven, we have also made an inaccurate observation. Such errors occur often in casual conversation and in everyday observation of the world around us. In fact, our perceptions do not provide a direct window to 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).

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

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

Exhibit 1.2 The Difference Between Overgeneralization and Selective Observation



illogical to assume that media depictions of gratuitous violence have no effect on individuals. Of course, logic that seems valid to one person can seem twisted or unsound to another; the problem emerges when our reasoning stems from different assumptions rather than a failure to think straight.

Resistance to Change

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

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

- *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 "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.

- *Uncritical agreement with authority.* If we lack the courage to critically evaluate 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. People often accept the beliefs of those in positions of authority without question.

Now take just a minute to reexamine the beliefs about youth violence that you recorded earlier. Did you settle on a simple explanation even though the 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 just accept or reject those opinions? Could knowledge of research methods help to improve your own understanding of the factors related to violent behavior? By now, you can see some of the challenges faced by social scientists who study 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. Simply stated, refrain from stereotyping people, avoid jumping to conclusions, and look at the big picture. These are the same errors that the methods of social science are designed to help us 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

HOW THE SCIENTIFIC APPROACH IS DIFFERENT

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 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.

- 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 about whom 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 whether these criteria are met in a particular instance.
- Scientific methods lessen the tendency to develop answers about the social world from ego-based commitments, excessive devotion to tradition, or unquestioning respect for authority.

Science Versus Pseudoscience

In philosophical terms, the scientific method represents an **epistemology**—that is, 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, then we have greater confidence that the finding is 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.

In contrast, if we relied on findings based on intuition, gut reactions, or our own experience, we would be open to the errors we just covered previously. If we based findings on this, it would not be science but instead 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" but are only bolstered by testimonials of believers who have experienced the event firsthand or who have claimed to have witnessed the phenomenon (Nestor & Schutt, 2012).

Of course, today's pseudoscience could be yesterday's science. In criminological research, **phrenology** is a good example. In the 19th century, phrenology was the belief that bumps and fissures of the skull determined the character and personality of a person. 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, just a group of researchers adhering to the scientific method. When inmates' heads were compared with individual heads in the general population, they were essentially the same!

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 experienced firsthand 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, which held that bumps and fissures of the skull determined the character and personality of a person

Criminal Justice and Criminological Research in Action

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. Despite the anecdotal information floating around in the mass media about the factors that may have contributed to increases in youth violence, social scientists interested in this phenomenon have amassed a substantial body of findings that have refined knowledge about the problem and shaped social policy (Tonry & Moore, 1998). These studies fall into the four categories of purposes for social scientific research: descriptive, exploratory, explanatory, and evaluation.

Descriptive Research

Defining and describing social phenomena of interest are 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?" "How many youth are offenders?" "What are the most common crimes committed by youthful offenders?" and "How many of the different youth are arrested and incarcerated each year for crime?" Descriptive research is not interested in explaining some phenomenon, just in describing its frequency or its qualities. Measurement (see Chapter 4) and sampling (see Chapter 5) are central concerns in descriptive research.

Descriptive research: Research in which phenomena are defined and described

Case Study: Description: How Prevalent Is Youth Violence?

Police Reports

One of the most enduring sources of information on lethal violence in the United States is the Federal Bureau of Investigation's (FBI) Supplementary Homicide Reports (SHR). Homicide victimization rates indicate that for those under the age of 24, vulnerability to murder increased dramatically during the mid-1980s through about 1994, when rates began a steady decline; they have remained relatively stable since (E. L. Smith & Cooper, 2013).

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 assault victims 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 between intimate partners and other offenses such as rape, in which only a fraction of incidents is ever reported to police.

Surveys

Instead of police reports, 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 7, this basically means randomly selecting individuals in the population of interest and asking them about their victimization experiences. The only ongoing annual survey to do this 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) or by something thrown (such as a rock or bottle)? Include any grabbing, punching, or choking." Estimates indicate that youth ages 12 to 24 have the highest rates of violent victimization. Despite the recent increases observed in homicide rates for this age group in some locations, their victimization trends have generally declined since the peak of the early 1990s mentioned earlier.

The Youth Risk Behavior Survey (YRBS) is another large research survey that estimates the magnitude of youth violence (along with other risk-taking behavior, such as taking drugs and smoking) and has been conducted every two years in the United States since 1990. To measure the extent of youth violence, students are asked questions such as "During the past 12 months, how many times were you in a physical fight?" and "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?"

Of course, another way to measure violence would be to ask respondents about their offending behaviors. Some surveys do this, including the Rochester Youth Development Study (RYDS). The RYDS sample consists of 1,000 students who were in the seventh and eighth grades in the Rochester, New York, public schools during the spring semester of the 1988 school year. This project has interviewed the original respondents at 12 different times, including the last interview that took place in 1997, when respondents were in their early 20s (Thornberry, Krohn, Lizotte, & Bushway, 2008). As you can imagine, respondents are typically more reluctant to reveal offending behavior compared with their victimization

experiences. However, these surveys have proved to be very useful in 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 types of crime.

Exploratory Research

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 of 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: Research in which social phenomena are investigated without *a priori* expectations to develop explanations of them

Case Study: Exploration—How Did Schools Avert a Shooting Rampage?

Research that is exploratory in nature is generally concerned with uncovering detailed information about a given phenomenon, 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 came to the attention of authorities before their plans could be carried out. To examine how these incidents were stopped, Eric 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 8, but for now, we simply want to highlight how this study is different from the other research types listed previously. He let the people he interviewed speak for themselves; he didn't come with questions that were designed to measure concepts such as violence or delinquency before the interviews. 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 with or entrusted by the accused students but who came about the information indirectly. For example, one student reported the existence of disturbing postings and images on another student's network website. The second most common category of intervention involved people who had been told directly by students accused of plotting the attacks. 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 have been 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,

p. 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" (Madfis, 2014, p. 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 in which a school shooting had been successfully thwarted. He did not go into the school with a survey filled with questions because little is known about these factors in the existing literature. As such, the investigation was explorative in nature. It is different from descriptive because a prevalence estimate 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

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

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 principal 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: Explanation—What Factors Are Related to Youth Delinquency and Violence?

When we move from description to exploration and finally to explanatory research, 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, Brendgen, Vitaro, and Tremblay (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 dataset 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 based on the following items: "Your parents know where you are when you are outside the house?" And "your parents know with whom you are 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 more likely to engage in violent delinquency compared with 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

Evaluation research seeks to determine the effects of a social program or other type 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 it considers the implementation and outcomes of social policies and programs. These issues may not be relevant in other types of explanatory research. The increase of youth violence in the 1980s spawned many new government programs and, with them, evaluation research to assess the impact of these programs. Some of these studies are reviewed in Chapter 11, which covers evaluation research.

Evaluation research: Research about social programs or interventions

Case Study: Evaluation—Do Violence Prevention Programs in Schools Work?

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 that they actually do what they promise. One program that has been the target of rigorous evaluation is the Gang Resistance Education And Training (G.R.E.A.T.) program, which is a school-based gang and violence prevention program. This program is a cognitive-based program intended to (among other things) teach students about crime and its effects on victims, how to resolve conflicts without violence, and how to improve individual responsibility through goal setting. The G.R.E.A.T. program addresses multiple risk factors for violent offending among three domains: school, peer, and individual. Because it is curriculum-based in the school, it does not address risk factors present 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.

Finn-Aage Esbensen and his colleagues (Esbensen, Osgood, Peterson, Taylor, & Carson, 2013) evaluated the long-term effects of the G.R.E.A.T. program in seven cities across the United States. Schools selected for the program randomly assigned some seventh-grade classrooms to get the treatment (*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 because of the program and not some other factor that existed before the introduction of the treatment.

Both experimental and control group students in the Esbensen et al. (2013) study 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. 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, there were no differences in violent offending between experimental and control group students over the four-year period. Those students who participated in the G.R.E.A.T. program were,

however, less likely to become members of gangs, had higher levels of altruism, showed less anger and risk taking, and had more favorable attitudes toward the police, among other things.

With these results, would you deem the G.R.E.A.T. 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 (M. Weber, 1949, p. 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.

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 (interpretivist philosophy): The belief that reality is socially constructed and that the goal of social scientists is to understand what meanings people give to that reality

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 & Lincoln, 1994, pp. 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, p. 461). We can be more confident in the community of social researchers than in any individual social scientist (D. T. Campbell & Russo, 1999, p. 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, p. 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 just "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 Stephen P. Turner (1980), "The distinctive empirical concerns of 'interpretive' and 'statistical' research, usually thought of as antithetical or mutually irrelevant, can be made to mesh" (p. 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).

Like interpretivism, **critical theory** similarly 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 for doing research and is a term that is often used to refer to research done by feminists (Reinharz 1992). Like critical theory, it is not a research method, as feminists utilize all types of methodologies (Reinharz 1992). However, many feminist scholars share the interpretivist concern with personal experience and subjective feelings and with the researcher's position and standpoint. Feminist researchers Sharlene Hesse-Biber and Patricia Lina 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 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" (p. 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 (p. 285). In participatory action research, the researcher involves as active participants some members of the setting studied. 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 12.

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

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

RESEARCH IN THE NEWS

Keeping Count of School Shootings

In this chapter we have talked about the different types of research, including descriptive, explanatory, exploratory, and evaluation. The *New York Times* provided a great description of the school shootings that have taken place in the United States since 1970. They examined all instances in which a gun was brandished or fired or a bullet hit school property for any reason, regardless of the number of victims. The data for the analysis came from the Center for Homeland Defense and Security.

The article highlights the fact that including those incidents where a firearm was brandished, which includes incidents in which a shooter makes threatening gestures but was stopped by a bystander or the weapon malfunctioned, are just as important as incidents where shots were actually fired. Both types of incidents can help shed light on factors that contribute to shootings. The purpose of the article, however, was description rather than explanation. With the exception of 2018, when there was a very high number of school shootings, data show that the average number of school shootings has been around 40 for the past two decades.

Do you think the definition of school shootings should have included both incidents in which there were shots fired and incidents where no shots were fired? Why, or why not?

What type of research could improve our understanding of the factors related to school shootings?

Weiyi, C., & Patel, J. (2019, May 11). A half-century of school shootings like Columbine, Sandy Hook and Parkland. *New York Times*. Retrieved from https://www.nytimes.com/interactive/2019/05/11/us/school-shootings-united-states.html?searchResultPosition=15

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 the case studies discussed at the beginning of the chapter used? The data collected in the YRBS were counts of the responses students gave on the survey. These data were numerical, so we say that this study used **quantitative methods**. 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. This inquiry is clearly consistent with the constructivist philosophy. 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 just the type of data collected. Quantitative methods are most often used when the motives for research are explanation, description, or evaluation. Exploration is the most common motive for using qualitative methods, although researchers also use these methods for descriptive and evaluative purposes. 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 & 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 to enrich their research. For example, "qualitative knowing" about social settings can be essential for understanding patterns in quantitative data (D. T. Campbell & Russo, 1999, p. 141). 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 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. Researchers using quantitative methods may engage in some exploration to find unexpected patterns in their data. Qualitative researchers may test explicit explanations of social phenomena using textual or observational data.

As noted, many researchers are increasingly electing to garner the strengths of several research methods combined and, as a result, rely on **mixed methods** 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 & Hunter, 1989; Sechrest & 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.

Quantitative 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 methods: Methods such as participant observation, intensive interviewing, and focus groups that are designed to capture social life as participants experience it rather than in categories predetermined by the researcher; data that are treated as qualitative are mostly written or spoken words or observations that do not have a direct numerical interpretation

Mixed methods: Combining both qualitative and quantitative methods to study one research question

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 10 focuses exclusively on research designs used in evaluation research.

Asking people questions in **surveys**, as we have highlighted, 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, levels 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 7.

In other cases, a researcher may want to make his or 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 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 8 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: from official sources, such as local or federal agencies (e.g., rates of crime reported to police, information on incarcerated offenders from state correctional authorities, or adjudication data from the courts), or from 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 media forms

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

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

Participant observation: Field research in which a researcher develops a sustained and intensive relationship with people while they go about their normal activities

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

such 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. Chapter 9 covers these methods.

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

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. This research technique, along with others, is increasingly being used in intelligence-based policing. Chapter 9 covers these methodologies and illustrates the importance of these unobtrusive research techniques in criminology and criminal justice. 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 11 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 research is conducted ethically.

STRENGTHS AND LIMITATIONS OF SOCIAL RESEARCH

These case studies are only four of the hundreds 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 (the G.R.E.A.T. program) and a control group to fairly evaluate the efficacy of the program.

Nevertheless, it would be misleading to suggest that simply engaging in criminological research will result in the unveiling of absolute truths! Research always has its flaws and limitations (as does any human endeavor), and findings are always subject to differing interpretations.

Social research allows us to consider and reveal more, to observe with fewer distortions, and to describe more clearly to others the basis for our opinions, but it will not settle all arguments. Other people will always have differing opinions, and some opposition will come from other social scientists who have conducted their own studies and drawn different conclusions. For example, we must ask ourselves if programs similar to G.R.E.A.T. would reduce levels of violence for younger students. Until more scientific research is conducted to evaluate these programs, it is difficult to determine whether these programs should be more widely implemented.

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 results of any one 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.

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 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 evaluating 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!

Whether you plan to conduct your own research projects, read others' research reports, or even just listen to or read claims about social reality in the media, 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.

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 racial/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, & Fisher, 2003), historical experiences, not understanding the research process, not seeing any benefit to participation (Beals, Manson, Mitchell, Spicer, & AI-SUPERPFP Team, 2003), and misuse of findings to the detriment of their communities (Sobeck, Chapleski, & Fisher, 2003). Inadequate representation in research makes it more difficult to conclude that 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 it can result 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 amenable to changing their criminal behavior through "turning points" such as employment and marriage (Laub & Sampson, 2003; Sampson & Laub, 1993) have not always found support using diverse samples of individuals reentering society from prison today (Nguyen & 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, & D'Onofrio, 2001). For example, we know from the National Crime Victimization Survey (NCVS) that American Indian and Alaskan Native (AIAN) populations are at a greater risk of rape and sexual assault compared with 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 these 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 "viable, culturally and community appropriate, respectful of those involved, and

that the information collected would be relevant and helpful" (Crossland, Palmer, & Brooks, 2013, p. 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 issues in criminology and criminal justice as well as how they tackled systematic challenges in conducting their research. For many students, the substance of social science inevitably is more interesting than the research methods used to bring those findings to light. However, in this volume, you will see that the research methods not only demand interest and merit but also are fundamental to our understanding of criminology and criminal justice. 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 reviewing generally accepted ethical guidelines. Throughout the chapter, we use several studies of domestic violence to illustrate the research process.

KEY TERMS

Content analysis 15
Crime mapping 16
Critical theory 13
Descriptive research 7
Epistemology 6
Evaluation research 11
Experimental approach 15
Explanatory research 10
Exploratory research 9
Feminist research 13
Illogical reasoning 4
Inaccurate observation 4
Intensive interviewing 15
Interpretivism 12
Intersubjective agreement 12
Mixed methods 14
Overgeneralization 3
Participant observation 15
Participatory action research (PAR) 13
Peer review 7
Phrenology 7
Positivism 12
Postpositivism 12
Pseudoscience 7
Qualitative methods 14
Quantitative methods 14
Resistance to change 5
Secondary data analysis 15
Selective observation 4
Science 6
Social science 6
Surveys 15
Transparent 6
Triangulation 14

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 is due to the complexity of the social world, self-interest, 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 involves claims based on beliefs and/or public testimonials, not on the scientific method.

Criminological research can be motivated by policy guidance and program management needs, academic concerns, and charitable impulses.

Criminological research can be descriptive, exploratory, explanatory, or 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 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 research is the use of multiple methods to study a single research question.

Cultural norms impact the research process from the willingness to participate in research, the meaning of terms, the way data are collected, or the interpretation of the findings.

EXERCISES

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—for example, television, newspaper, or parental influence.

Develop four research questions related to a topic or issue, one for each of the four types of research (descriptive, exploratory, explanatory, and evaluative). Be specific.

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 understanding of the findings in the research conclusions?

Find a CNN blog discussing some topic about crime. How do your opinions on the subject differ?

Outline your own research philosophy. You can base your outline primarily on your reactions to the points you have read in this chapter, but also try to think seriously about which perspective seems more reasonable to you.

You have been asked to prepare a brief presentation on a criminological topic or issue of interest to you. Go to the BJS website (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 statistics and other relevant information.

Go to the FBI website (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?

Go to the website of a major newspaper, and find an article discussing 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?

There are many interesting websites that discuss philosophy-of-science issues. Read the summaries of positivism and interpretivism at www.misq.org/misq/downloads/download/editorial/25. What do these summaries add to your understanding of these philosophical alternatives?

Find a story about a criminological issue in the popular press (e.g., a newspaper or periodical, such as *Time* magazine). Does the article provide a scientific basis for claims made in the story? If rates of crime are reported, does the article discuss how these rates were actually obtained?

Read an article in a recent issue of a major criminological journal or on the study site for this book (edge.sagepub.com/bachmanfrccj5e). Identify the type of research conducted for each study. Are the research questions clearly stated? Can you identify the purpose of the research (e.g., description, explanation, exploration, evaluation)?

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.

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. Chapter 3 is devoted to issues of ethics in research, but we will begin here with some questions for you to ponder.

You have now learned about the qualitative study by Madfis (2014) about schools that averted a shooting incident. We think it provided important information for policy makers about the social dynamics in these tragedies. But what would *you* do if you were conducting a similar study in a high school and you learned that another student was planning to bring a gun to school to kill some other students? What if he was only thinking about it? Or just talking with his friends about how "neat" it would be? Can you suggest some guidelines for researchers?

If you were part of Esbensen's research team that evaluated the G.R.E.A.T. violence reduction program in schools, 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 Esbensen study in your school, with some classrooms assigned to receive the 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?

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?

Develop four questions that you might investigate about the topic you just selected. Each question should reflect a different research motive: description, exploration, explanation, or evaluation. Be specific.

Which question most interests you? Would you prefer to attempt to answer that question using quantitative or qualitative methods? Why?

Data for Exercise

Dataset	Description
2013 YRBS.sav	The 2013 YRBS 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 10th graders, with a focus on monitoring substance use and abuse.

(Continued)

(Continued)

Variables for Exercise

Variable Name	Description
Q44 (YRBS)	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)	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.sav" file, and look at the following:

Create a bar chart of variable "q44" by following the 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?

Write at least four research questions based on the bar graph you've created. Try to make one for each type of social research (descriptive, exploratory, explanatory, and evaluative). Think about the following: What sticks out to you in this graph? Where do you need more information? On whom should the research focus?

Explain the possible reasons (policy, academic, or personal) for why we might want to research binge drinking or the lack thereof. What organizations might be interested in this kind of research?

Triangulation refers to using multiple methods or measures to study a single research question. Let's see if we can triangulate the results from Question 1 using a different measure in the "Monitoring the Future 2013 grade 10.sav" dataset.

Create a bar chart of variable "v7108." How do the estimates of binge drinking in the YRBS compare with these results? If there are any major differences, what do you think could explain them?

STUDENT STUDY SITE

Get the tools you need to sharpen your study skills. SAGE Edge offers a robust online environment featuring an impressive array of free tools and resources. Access practice quizzes, eFlashcards, video, and multimedia at .

2

THE PROCESS AND PROBLEMS OF RESEARCH RELATED TO CRIME AND CRIMINOLOGY

At the end of the semester, a professor asked if I would be interested in doing some research on sexual harassment in the workplace for her over the summer. For the research, I had to read research articles and summarize them for the professor. While I was reading the articles, I would come across the research methods the authors used, with data analysis tables. I thought it was incredible how I came full circle back to the research methods I learned! My research methods class set me on a course that has changed my time in college and possibly influenced my future career.

Emily G., Student

WHAT DO WE HAVE IN MIND?

Intimate partner violence is a major problem in countries around the world. In a U.S. survey of 16,507 men and women sponsored by the Department of Justice and the Centers for Disease Control and Prevention, 35.6% of women and 28.5% of men said they had experienced rape, physical violence, or stalking by an intimate partner at some time in their lives (Black et al., 2011). An international survey by the World Health Organization (WHO) of 24,000 women in 10 countries estimated lifetime physical or sexual abuse ranging from a low of 15% in Japan to a high of 71% in rural Ethiopia (WHO, 2005) (see Exhibit 2.1).

What can be done about this problem? In 1981, the Police Foundation and the Minneapolis Police Department began an experiment to determine whether immediately arresting accused spouse abusers on the spot would deter future offending incidents. For misdemeanor cases, the experimental course of

Describe the importance of theory to research.

Understand the difference between deductive and inductive reasoning.

Describe the difference between a research question and a research hypothesis.

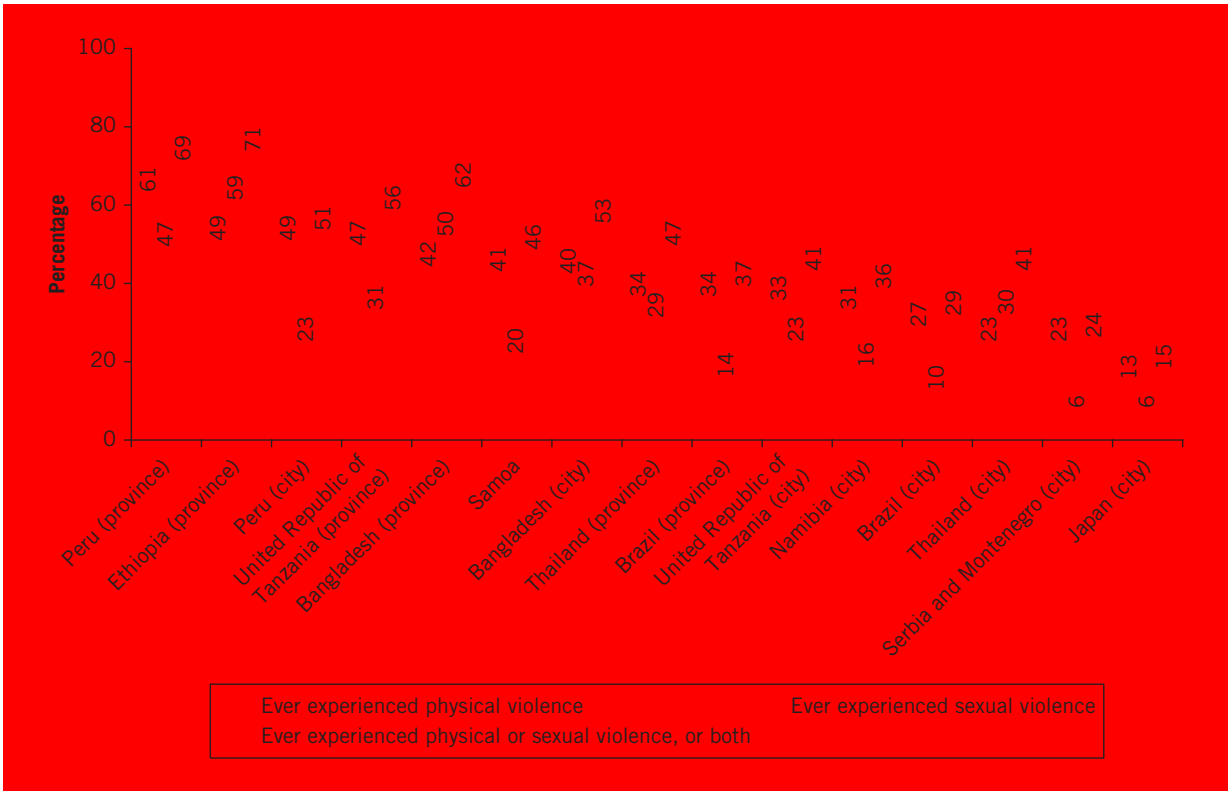
Explain how the research circle is really a research spiral.

Know the difference between an independent and dependent variable.

Define the different types of validity and generalizability.

Master the content at

Exhibit 2.1 International Prevalence of Lifetime Physical and Sexual Violence by an Intimate Partner, Among Ever-Partnered Women by Site



Source: World Health Organization 2005. Multi-country Study on Women's Health and Domestic Violence: Summary Report.

action involved the random assignment of police to respond by either arresting the suspect or giving the suspect a simple warning. The experimental treatment, then, was whether the suspect was arrested, and the researchers wanted to know whether arrest was better than not arresting the suspect in reducing recidivism. The study's results, which were widely publicized, indicated that arrest did have a deterrent effect. Partly as a result of the reported results of this experiment, the percentage of urban police departments that made arrest the preferred response to complaints of intimate partner violence (IPV) rose from 10% in 1984 to 90% in 1988 (Sherman, 1992, p. 14). Six other cities later carried out studies similar to the Minneapolis Domestic Violence Experiment (collectively, this was called the Spouse Assault Replication Program [SARP]), but from city to city, the results were mixed (Buzawa & Buzawa, 1996; Hirschel, Hutchison, & Dean, 1992; Pate & Hamilton, 1992; Sherman, 1992; Sherman & Berk, 1984). In some cities (and for some people), arrest did seem to prevent future incidents of domestic assault; in other cities, it seemed only to make matters worse, contributing to additional assault; and in still other cities, arrest seemed to have no discernible effect.

After these replications of the original Minneapolis experiment, people still wondered, "Just what is the effect of arrest in reducing IPV cases, and how should the police respond to such cases?" The answer simply was not clear. The Minneapolis experiment, the studies modeled after it, and the related controversies provide many examples for a systematic overview of the social-research process.

IDENTIFYING A RESEARCH QUESTION

The first concern in criminological research—indeed, in any research—is deciding what to study. That is, how does one go about selecting an issue, problem, or question to address? A **research question** is a question about some aspect of crime or deviance that the researcher seeks to answer through the collection and analysis of firsthand, verifiable, empirical data. The types of questions that can be asked are virtually limitless. For example, "Are children who are violent more likely than nonviolent children to use violence as adults?" "Does the race of a victim who is killed influence whether someone is sentenced to death rather than life imprisonment?" "Why do some kinds of neighborhoods have more crime than others? Is it due to the kinds of people who live there or characteristics of the neighborhood itself?" "Does community policing reduce the crime rate?" "Has the U.S. government's war on drugs done anything to reduce the use of illegal drugs?" So many research questions are possible in criminology that it is more of a challenge to specify what does *not* qualify as a research question than to specify what does.

Research question: A question that is answered through the collection and analysis of firsthand, verifiable, empirical data

That being said, specifying which research question to ask and pursuing its answer are no easy tasks. In fact, formulating a good research question can be surprisingly difficult. We can break the process into three stages: identifying one or more questions for study, refining the questions, and then evaluating the questions.

Where to Start?

How does a researcher interested in criminology and criminal justice–related issues decide what to study and research?

Formulating a research question is often an intensely personal process, in addition to being a scientific or professional one. Curiosity about the social world may emerge from your "personal troubles," as Mills (1959) put it, or personal experiences. Examples of these troubles or experiences could range from how you feel about injustices raised against you in your past or present to an awareness you may have that crime is not randomly distributed within a city but that there seem to be "good" or safe parts of town and "bad" or unsafe areas. Can you think of other possible research questions that flow from your own experience in the world?

The experience of others is another fruitful source of research questions. Knowing a relative who was abused by a partner, seeing a TV special about violence, or reading a gang member's autobiography can stimulate questions about general criminological processes. Can you draft a research question based on a relative's experiences, a TV show, or a book?

The primary source of research questions for many researchers is theory. Many theoretical domains are used to inform research questions in our discipline, including sociological, psychological, and criminological theories. Some researchers spend much of their careers conducting research intended to refine an answer to one central question. For example, you may find rational choice theory to be a useful approach to understanding diverse forms of social behavior, such as crime, because you think people seem to make decisions on the basis of personal cost–benefit calculations. So you may ask whether rational choice theory can explain why some people commit crimes and others do not or why some people decide to quit committing crimes while others continue their criminal ways.

Finally, some research questions adopt a very pragmatic rationale concerning their research design. You may focus on a research question posed by someone else because doing so seems to be to your professional or financial advantage. For instance, some researchers conduct research on specific questions posed by a funding source in what is termed a *request for proposals* (RFP). (Sometimes the acronym *RFA* is used, meaning *request for applications*.) Or you may learn that the public defenders in your city are curious as to whether they are more successful in getting their clients acquitted of a criminal charge than private lawyers.

Refining Research Questions

As you have no doubt guessed, coming up with interesting criminological questions for research is less problematic than focusing on a problem of manageable size. We are often interested in much more than we can reasonably investigate with our limited time and resources (or the limited resources of a funding agency). Researchers may worry about staking a research project (and thereby a grant) on a narrowly defined problem, so they commit to addressing several research questions at once and often in a jumbled fashion. It also may seem risky to focus on a research question that may lead to results discrepant with our own cherished assumptions about the social world.

The best way to avoid these problems is to develop the research question one bit at a time with a step-by-step strategy. Do not keep hoping that the perfect research question will just spring forth from your pen. Instead, develop a list of possible research questions as you go along. Narrow your list to the most interesting, most workable candidates. Repeat this process as long as it helps to improve your research questions. Keep in mind that the research on which you are currently working will likely generate additional research questions for you to answer.

Evaluating Research Questions

In the third stage of selecting a criminological research question, you evaluate the best candidate against the criteria for good social-research questions: feasibility given the time and resources available, social importance, and scientific relevance (King, Keohane, & Verba, 1994).

The research question in the Minneapolis Domestic Violence Experiment—"Does the formal sanction of police arrest versus nonarrest inhibit IPV?"—certainly meets the criteria of social importance and scientific relevance, but it would not be a feasible question for a student project because it would require you to try to get the cooperation of a police department.

Feasibility

You must be able to conduct any study within the time frame and with the resources you have. If time is limited, questions that involve long-term change—for example, "If a state has recently changed its law so that it now permits capital punishment for those convicted of murder, does it eventually see a reduction in the homicide rate over time?"—may not be feasible. This is an interesting and important question, but it is also one that requires years of data collection and research. Another issue is the people, groups, or files that you can expect to gain access to. Although experienced researchers may be granted access to police or correctional department files to do their research, less seasoned and less well-known researchers or students may not be granted such access.

Social Importance

Criminological research is not a simple undertaking, so you must focus on a substantive area that you feel is important and that is important either to the discipline or for public policy. You also need to feel personally motivated to carry out the study; there is little point in trying to answer a question that does not interest you.

In addition, you should consider whether the research question is important to other people. Will an answer to the research question make a difference for society? Again, the Minneapolis Domestic Violence Experiment is an exemplary case. If that study showed that a certain type of police response to IPV reduced the risk of subsequent victimization, a great

deal of future violence could be prevented. But clearly, criminology and criminal justice researchers are far from lacking important research questions.

Scientific Relevance

Every research question in criminology should be grounded in the existing empirical literature. By *grounded*, we mean the research we do must be informed by what others before us have done on the topic. Whether you formulate a research question because you have been stimulated by an academic article, because you want to investigate a current public policy problem, or because you are motivated by questions regarding your own personal experiences, you must turn to existing criminological literature to find out what has already been learned about this question. (Appendix A explains how to find information about previous research using both printed and computer-based resources.)

For example, the Minneapolis experiment was built on a substantial body of contradictory theories about the impact of punishment on criminality (Sherman & Berk, 1984). Deterrence theory predicted that because it was a more severe penalty, arresting people would better deter them from repeat offenses than not arresting them. Labeling theory, on the other hand, predicted that arrest would make repeat offenses more likely because it would stigmatize offenders. Studies among adults and nonexperimental research had not yielded consistent findings about the effects of arrest on recidivism in IPV cases. Clearly, the Minneapolis researchers had good reason to perform another study. Prior research and theory also helped them develop the most effective research design.

THE ROLE OF THEORY

We have already pointed out that criminological theory can be a rich source of research questions. What deserves more attention at this point is the larger role of **theory** in research. We have also noted that research investigating criminal justice and criminology-related questions relies on many theories, including criminological, sociological, and psychological theories. These theories do many things:

Theory: A logically interrelated set of propositions about empirical reality; examples of criminological theories include social learning, routine activities, labeling, general strain, and social disorganization theory

They help us explain or understand things, such as why some people commit crimes or commit more crimes than others, why some people quit committing crimes and others continue, and what the expected effect of good families, harsh punishment, or other factors might be on crime.

- They help us make predictions about the criminological world: "What would be the expected effect on the homicide rate if we employed capital punishment rather than life imprisonment?" "What would be the effect on the rate of property crimes if unemployment were to substantially increase?"
- They help us organize and make sense of empirical findings in a discipline.
- They help guide future research.
- They help guide public policy: "What should we do to reduce the level of IPV?"

Social scientists such as criminologists, who connect their work to theories in their discipline, can generate better ideas about what to look for in a study and develop conclusions with more implications for other research. Building and evaluating theory are therefore among the most important objectives of a social science such as criminology.

For centuries, scholars have been interested in developing theories about crime and criminals. Sometimes, these theories involve very fanciful ideas that are not well developed or

organized, whereas at other times, they strike us as being very compelling and well organized. Theories usually contain what are called **theoretical constructs**. In criminology, these theoretical constructs describe what is important to look at to understand, explain, and predict crime. Some criminological theories reflect a substantial body of research and the thinking of many social scientists; others are formulated in the course of one investigation. A few have been widely accepted, at least for a time; others are the subject of vigorous controversy, with frequent changes and refinements in response to criticism and new research.

Theoretical constructs: Parts of a theory that describe what is important to look at to understand, explain, predict, and "do something about" the subject

We can use the studies of the police response to domestic assault to illustrate the value of theory for social research. Even in this very concrete and practical matter, we must draw on social theories to understand how people act and what should be done about those actions. Consider three action options that police officers have when they confront a domestic assault suspect (Sherman & Berk, 1984, p. 263). Fellow officers might encourage separation to achieve short-term peace, police trainers might prefer mediation to resolve the underlying dispute, and some groups may advocate arrest to protect the victim from further harm. None of these recommendations is really a theory, but each suggests a different perspective on crime and legal sanctions. Remember that social theories do not provide the answers to research questions. Instead, social theories suggest the areas on which we should focus and the propositions that we should consider for a test. That is, theories suggest testable hypotheses about phenomena, and research verifies whether those hypotheses are true. In fact, one of the most important requirements of theory is that it be *testable*, or what philosophers of science call **falsifiable**; theoretical statements must be capable of being proven wrong. If a body of thought cannot be empirically tested, it is more likely philosophy than theory.

Falsifiable: Being capable of being proven wrong; that is, having the capacity to be empirically tested and falsified

The original Minneapolis experiment (Sherman & Berk, 1984) was actually a test of predictions derived from two alternative theories concerning the impact of punishment on crime: deterrence theory and labeling theory.

Deterrence theory presumes that human beings are at least marginally rational beings who are responsive to the expected costs and benefits of their actions. Committing a crime nets certain benefits for offenders; therefore, if we want to inhibit crime, there must be a compensating cost that outweighs the potential benefits associated with the offense. One cost is the criminal sanction (arrest, conviction, punishment). Deterrence theory expects punishment to inhibit crime in two ways: (1) General deterrence is operating when people believe that they are likely to be caught and punished for criminal acts. Those who are punished serve as examples for those who have not yet committed an offense but who might be thinking of what awaits them should they engage in similarly punishable acts. (2) Specific deterrence occurs when persons who are punished decide not to commit another offense so they can avoid further punishment (Lempert & Sanders, 1986, pp. 86–87). Deterrence theory leads to the prediction that arresting spouse abusers will reduce the likelihood of their reoffending compared with a less serious sanction (not being arrested but being warned or counseled).

Labeling theory distinguishes between primary deviance (the acts of individuals that lead to public sanctions) and secondary deviance (the deviance that occurs in response to public sanction) (Hagan, 1994, p. 33). Arrest or some other public sanction for misdeeds labels the offender as deviant in the eyes of others. Once the offender is labeled, others will treat the offender as a deviant, and he or she is then more likely to act in a way that is consistent with the deviant label. Ironically, the act of punishment stimulates more of the very behavior that it was intended to eliminate (Tannenbaum, 1938). This theory suggests that persons arrested for IPV are more likely to reoffend than those who are caught but not punished because the formal sanction of arrest is more stigmatizing than being warned or counseled. This prediction about the effect of formal legal sanctions is the reverse of the deterrence theory prediction.

Exhibit 2.2 summarizes how these general theories relate to the question of whether or not to arrest spouse abusers.

Does either deterrence theory or labeling theory make sense to you as an explanation for the impact of punishment? Do they seem consistent with your observations of social life?