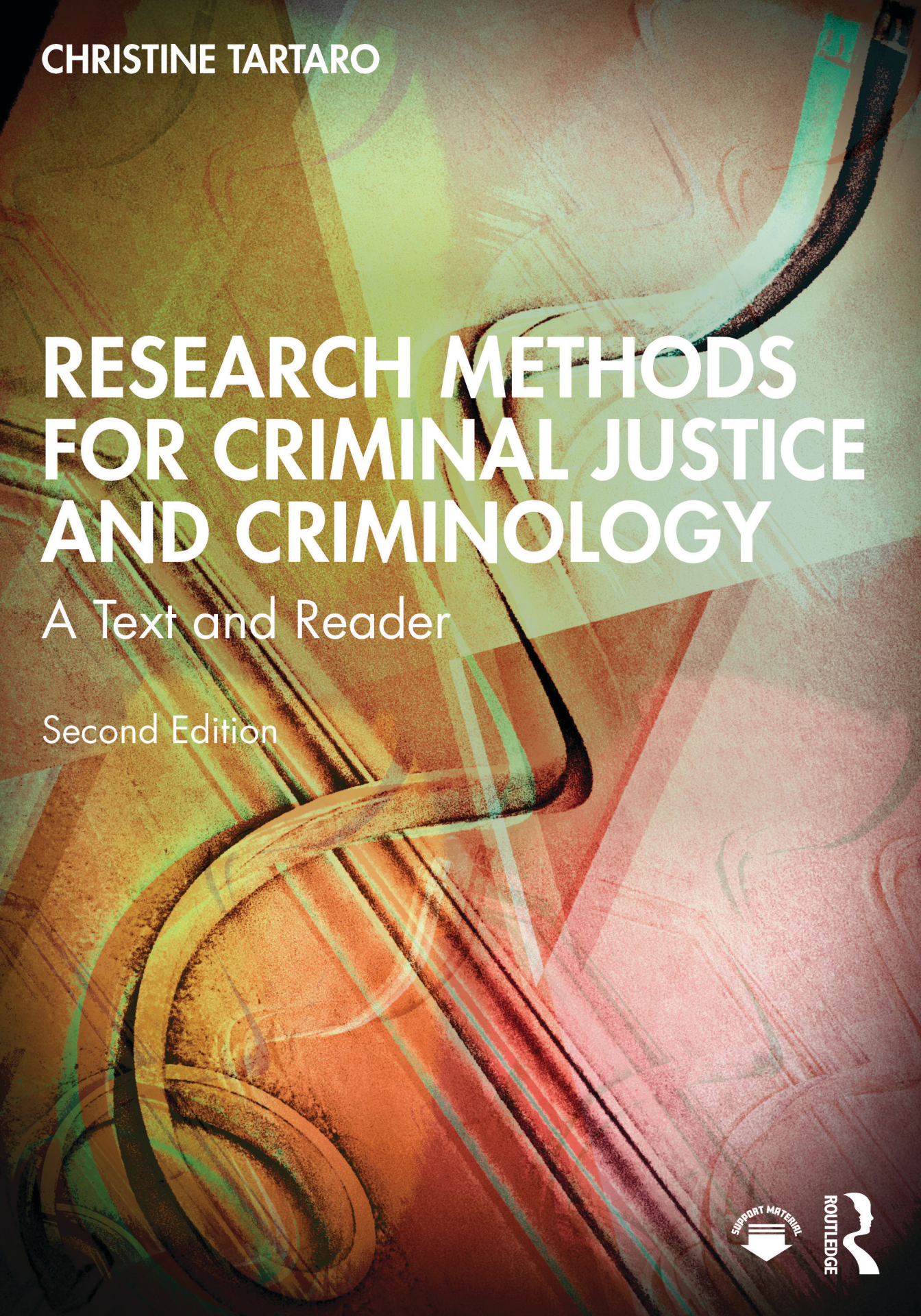
CHRISTINE TARTARO
RESEARCH METHODS FOR CRIMINAL JUSTICE AND CRIMINOLOGY
A Text and Reader
Second Edition
SUPPORT MATERIAL
ROUTLEDGE

Research Methods for Criminal Justice and Criminology

This book explains and illustrates criminal justice research topics, including ethics in research, research design, causation, operationalization of variables, sampling, methods of data collection (including surveys), reliance on existing data, validity, and reliability. For each approach, the book addresses the procedures and issues involved, the method's strengths and drawbacks, and examples of actual research using that method. Every section begins with a brief summary of the research method. Introductory essays set the stage for students regarding the who, what, when, where, and why of each research example, and relevant discussion questions and exercises direct students to focus on the important concepts.

Research Methods for Criminal Justice and Criminology: A Text and Reader features interesting and relevant articles from leading journals, which have been expertly edited (second edition) to highlight research design issues. The text offers instructors a well-rounded and convenient collection that eliminates the need to sift through journals to find articles that illustrate important precepts. The author has included new material on ethical issues, researcher safety during field work, and tips on how to communicate what works in criminal justice to the public. Articles in the second edition address issues relevant to the field today, such as crime and policing during the COVID-19 pandemic, online extremism, sextortion, mass murder, problem-solving courts, the death penalty, saturation enforcement, drug use, victimization among the LGBT community, perceptions of immigration and crime, correctional interventions, measuring theft, perceptions of safety, bullying and hate crimes, correctional staff training and attitudes, social media exposure and opinions about law enforcement, and crisis intervention team training. Ensuring a rich array, additional articles are downloadable at the Support Material tab.

The book encourages classroom discussion and critical thinking and is an essential tool for undergraduate and graduate research methods courses in criminal justice, criminology, and related fields.

Christine Tartaro is a Distinguished Professor of Criminal Justice at Stockton University. She is an expert in corrections, suicide in correctional facilities, jail design, police contact with people with mental illness, correctional treatment of individuals with mental illness, and criminal justice education. Dr. Tartaro has been teaching research methods for over 20 years, including at both the undergraduate and the graduate level. Prior to joining Stockton University, she worked at the New Jersey Department of Corrections, where she evaluated state residential community release programs. She is also the author of *Suicide and Self-Harm in Prisons and Jails*, 2nd edition (Lexington Books) and dozens of articles in several journals, including *The Prison Journal, Criminal Justice Policy Review*, *Corrections: Policy, Practice, and Research*, and the *Journal of Criminal Justice Education*. Dr. Tartaro earned her BA in history from the College of New Jersey and her MA and PhD in criminal justice from Rutgers University.

Research Methods for Criminal Justice and Criminology

A Text and Reader

Second Edition

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To my parents, and to Jen, Dena, and Abbi

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Preface

Why Use This Book?

I have been teaching research methods for over 20 years, and have experience working with both undergraduate and graduate research methods students. I believe that students at all levels learn best when they read empirical research to reinforce the lessons included in research methods textbooks. They need to see the principles of research in action to understand the strengths and weaknesses of each method.

When I started this project, I had three goals. First, I wanted to provide everything necessary for teaching research methods to criminal justice and criminology students in one book. As a professor at a state university, I am mindful of the cost of tuition, fees, and textbooks, and I wanted to offer a cost-effective option. My goal was to save students money by providing everything in one book while saving professors time by giving them both a textbook and timely articles illustrating a variety of research designs. Second, I wanted the reader portion of the book to cover an array of topics in criminal justice so that students could learn about their field while simultaneously improving their ability to read and understand empirical research. The articles that I selected include a mixture of topics, including police, courts, corrections, and victimization. I specifically chose articles that address some trending subjects, such as immigration and crime, the impact of COVID-19 on crime and the criminal justice system, public perceptions of the police, harm reduction, characteristics of mass murderers, and problem-solving courts. Third, I wanted to make assignments more manageable by editing some of the longer articles so that they are shorter while still including the essential elements of research.

I hope that you enjoy the book.

Acknowledgments

I am very grateful for the help and support of my friend, Ellen Boyne of Routledge, as I don't think I would have completed either edition of this book without her. Being a sole author can be a lonely experience at times, but while working on this project, I knew I could always lean on Ellen for help and support. Kate Taylor was vital to the production of the first edition and was very helpful getting the second edition moving in the right direction. Maia Berliner of Routledge jumped in to see this project to completion. Leigh Westerfield and Suriya Rajasekar were very helpful with moving this project to completion. This was a tough project to complete while teaching full-time, but the Routledge staff did everything they could to make it as painless as possible.

I am lucky to have some great teacher friends who have proven to be great sounding boards over the years. Deeanna Button and I have had so many conversations about teaching research methods. The reading exercises sheet that I included in the instructor materials was mostly derived from my paper and test grading checklists, but I did adopt a few of her questions. I've also spent lots of time talking about the best ways to help students learn with Kimberley Schanz and Jess Bonnan-White. Those conversations helped as I worked on finding ways to explain difficult concepts in this book.

Any time I take on a project this size, my poor family and friends have to hear about it. I know that listening to someone talk about writing a book is not exactly the most exciting way to spend one's day, but they have all done their best to be patient with me. My parents, sisters Jennifer and Dena Tartaro, niece Abbi, and friends Christopher and Lindsay DeSantis have all heard about the ups and downs of this project for the past few years. Of course, some of the best support came from my pets, who sat next to me and even occasionally jumped on my keyboard while I worked on this. Thank you, RayRay, Scruffy, Petey, Todd, and Scooter. While working on this, I had to say goodbye to Sully and Winston, and I miss both of them terribly.

Credits

Reading 3.1

Source: Conway, M. (2021). Online extremism and terrorism research ethics: Researcher safety, informed consent, and the need for Tailored Guidelines. *Terrorism and Political Violence*. http://doi/abs/10.1080/09546553.2021.1880235

Reading 4.1

Source: Hadi, S.T., & Tartaro, C. (2024). "Do immigrants cause higher crime rates?" A cumulative cross-sectional general social survey data analysis. *Journal of Ethnicity in Criminal Justice, 22*(4), 357–378. https://doi.org/10.1080/15377938.2024.2415955

Reading 4.2

Source: Stauss, K., Sparks, L., & Gallagher, J.M. (2023). Extending a letter-writing intervention developed for incarcerated mothers to incarcerated fathers: A mixed methods study. *Corrections, 8*(3), 166–186. https://doi.org/10.1080/23774657.2020.1850219

Reading 5.1

Source: Rash, J., Scott, T., Clements, P., & Strom, K. (2023). Stealing tires or copper wires? How the national incident-based reporting system changed how the Arlington, Texas, Police Department addresses larceny-thefts. *International Journal of Comparative and Applied Criminal Justice, 47*(4), 417–429. https://doi.org/10.1080/01924036.2022.2059535

Reading 5.2

Source: Boehme, H.M., Burrow, J.D., & Jung, S. (2024). An exploratory analysis examining the relationship between protective and risk factors of bullying and hate crime victimization within schools. *Journal of School Violence, 23*(3), 348–362. https://doi.org/10.1080/15388220.2023.2299974

Reading 6.1

Source: Rodriguez, N., & Usman, H. (2023). An examination of prison-based programming and recommitment to prison. *Justice Evaluation Journal, 6*(2), 219–244. https://doi.org/10.1080/24751979.2023.2170262

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Source: Harmon, T., Taylor, D., Schoepflin, T., Henning, C., & Falco, D. (2024). Does depth of information matter? An empirical test of the Marshall hypothesis. *Criminal Justice Studies, 37*(3), 241–254. https://doi.org/10.1080/1478601X.2024.2392227

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Source: Najman, J.M., Farrington, D.P., Bor, W., Clavarino, A.M., McGee, T.R., Scott, J.G., Williams, G.M., & McKetin, R. (2022). Do cannabis and amphetamine use in adolescence predict adult life success: A longitudinal study. *Addiction Research & Theory*. https://doi/abs/10.1080/16066359.2022.2032679

Reading 7.2

Source: Patterson, C., Hogan, L., & Cox, M. (2019). A comparison between two retrospective alcohol consumption measures and the daily drinking diary method with university students. *The American Journal of Drug and Alcohol Abuse, 45*(3), 248–253. https://doi.org/10/1080/00952990.2018.1514617

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Source: Jossie, M.L., Lane, J., & Cook, C.L. (2023). Attitudes about rehabilitation among jail correctional officers. *Victims & Offenders, 18*(8), 1521–1541. https://doi.org/10.1080/15564886.2023.2181250

Reading 8.2

Source: Cross, A.R., & Fine, A.D. (2022). Police-related social media exposure and adolescents' interest in becoming a police officer. *Police Practice and Research, 23*(5), 553–568. https://doi.org/10.1080/15614263.2021.2017932

Reading 8.3

Source: Webster, J.M., Dickson, M.F., Tillson, M., & Staton, M. (2024). Impaired driving and other risky drug use and sex behaviors: A cross-sectional examination of high-risk rural women incarcerated in jail. *Journal of Addictive Diseases, 42*(1), 45–54. https://doi.org/10.1080/10550887.2022.2138701

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Source: Gezinski, L.B., & Gonzalez-Pons, K.M. (2022). Legal barriers and re-victimization for survivors of intimate partner violence navigating courts in Utah, United States. *Women & Criminal Justice, 32*(5), 454–466. https://doi.org/10.1080/08974454.2021.1900991

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Reading 9.3

Source: Smylie, C., Duxbury, L., & Bennell, C. (2024). Community policing during the pandemic. *Police Practice and Research, 25*(2), 230–243. https://doi.org/10.1080/15614263.2023.2222869

Reading 10.1

Source: Santelices, C., Matsumoto, A., Boulad, M., & Stopka, T. J. (2023). Evaluating technologies to identify fentanyl and adulterants in street drug paraphernalia: Qualitative perspectives of service providers and their clientele. *Substance Use & Misuse*. https://doi/abs/10.1080/10826084.2023.2231067

Reading 10.2

Source: Brougham, P.L., Uttley, C.M., & Haley, T.M. (2023). Researcher safety: Studying social deviance or criminal behavior. *Journal of Criminal Justice Education, 34*(1), 53–70. https://doi.org/10.1080/10511253.2022.2137540

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Source: Brucato, G., Hesson, H., Dishy, G., Lee, K., Pia, T., Syed, F., Villalobos, A., Rogers, R.T., Corbeil, T., Stone, M.H., Lieberman, J.A., Appelbaum, P.S., & Girgis, R.R. (2023). An analysis of motivating factors in 1,725 worldwide cases of mass murder between 1900–2019. *The Journal of Forensic Psychiatry & Psychology, 34*(2), 261–274. https://doi.org/10.1080/14789949.2023.2208570

Reading 11.2

Source: Nee, C., White. M., Woolford, K., Pascu, T., Barker, L., & Wainwright, L. (2015). New methods for examining expertise in burglars in natural and simulated environments: Preliminary findings. *Psychology, Crime & Law, 21*(5), 507–513. https://doi.org/10.1080/1068316X.2014.989849

Reading 11.3

Source: Jalain, C.I., Lucas, P.A., & Higgins, G.E. (2024). Assessing the effectiveness of mental health courts in reducing recidivism: A systematic review with meta-analysis. *Justice Evaluation Journal, 7*(2), 212–230 https://doi-org/10.1080/24751979.2024.2373245

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Source: Cheesman II, F.L., Marlowe, D.B., & Genthon, K.J. (2023). Racial differences in drug court referral, admission, and graduation rates: Findings from two states and eight counties. *Journal of Ethnicity in Criminal Jus*tice*, 21*(1), 80–102. https://doi.org/10.1080/15377938.2023.2193952

Reading 12.2

Source: Borseth, J.L., Myer, A.J., & Makarios, M.D. (2023). Superficial adherence to EBP: An example of low fidelity to the RNR model using a halfway house. *Corrections, 8*(5), 371–390. https://doi.org/10.1080/23774657.2021.1886888

Introduction

If you are reading this, you are probably enrolled in a research methods course. You also probably aren't thrilled about it, but it will be okay. A common knock on academics is that it lacks practical application to real life. After all, how many of us regularly use the trigonometry that we learned in high school or even in college? Don't get me wrong. I believe that there is value in trigonometry, because it challenges us with higher-order thinking. Plus, I like certain types of math, but I can respect those who do not. While it might not seem so now, this class is something that you can use in your life. Knowing about research can truly help you be a better criminal justice professional and be in a stronger position to judge evidence that people use to support their arguments.

I have had enough experience working with students that I am well aware that many dread research methods and statistics courses, and the only reason why they take them is because they are mandatory. I understand the apprehension because of how challenging the classes can be. What I find frustrating is when students fail to appreciate what they stand to gain. While you might not realize it now, this class has tons of practical application to all criminal justice jobs and life outside of work. This class will help you sort through what is real and what is pseudoscience, "fake news," or a fad lacking any evidence of effectiveness. This is of vital importance to your careers. You might start out in a low-level position, such as a police officer on a regular beat or a case worker for a social service agency, but you are going to want to move up in the ranks and become someone who has a hand in making decisions. When that happens, you can either move the field of criminal justice in the right direction, using evidence to inform your decisions, or you can try to use what people think of as "common sense" and advocate for something that is probably ineffective. The "common sense" approach to criminal justice policy has brought us such failures as Scared Straight, D.A.R.E., mandatory sentences for drug possession, and correctional boot camps.

Fortunately, our field is moving in the direction of **evidence-based practice** (EBP). Gies et al. (2020) define EBP as "the use of best available scientific evidence on the effectiveness of programs, practices, and policies, to guide the decision-making process" (p. 156). What this means for criminal justice is that there is a push to learn about what types of interventions work, to implement only programs that work, and to discard those that are ineffective. As implausible as it may seem, this is *not* how criminal justice has operated for decades. While lamenting misguided efforts in the field of corrections, Latessa, Cullen, and Gendreau (2011) argued that what we have been doing qualifies as **quackery**, meaning the use of interventions that are *not* based on our knowledge of what causes crime or what we know is effective in changing behavior. Our use of ineffective programs based on flawed premises has cost us billions of dollars and has harmed victims, communities, and even people serving sentences for criminal behavior. EBP became a priority for criminal justice in 1996, when Congress required the US Attorney General to produce an "independent, comprehensive, and scientific review" of crime prevention programs funded by the Department of Justice (Gies et al., 2020, p. 156).

EBP specifically focuses on empirical research and prioritizes that over professional experience. Researchers contribute to EBP by producing methodologically rigorous program

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evaluations. Practitioners and policymakers will hopefully then use this information to guide their decisions about which policies and programs to keep, which to modify, and which to jettison (National Institute of Corrections, n.d.). Notice that this is a two-step process that requires work from both researchers and practitioners. Many students approach research methods classes with the attitude of "I am not going to be a researcher, so I don't need this." But that is not true. It might have been the case back when your parents or grandparents got jobs in this field, but not anymore. You are probably in this class because you either want to be a researcher (less likely) or a criminal justice practitioner (more likely). Either way, for evidence-based practice to work in our field, you need to be part of it. To do that, you don't have to be a researcher, but you must at least have a basic understanding of research and how to distinguish between good and bad information.

This book will also help you with life outside work. We have access to more information than previous generations could have ever imagined. That is a blessing, but it is also a curse. With this proliferation of information comes the creation of and dissemination of misinformation. Two of today's most prominent examples of how damaging misinformation can be are vaccines and climate change. An MIT professor in geochemistry reviewed 11,602 scientific articles about climate change and found that, among those articles, there was near 100% agreement that global warming is not only real but is a product of human activity (Powell, 2017). And yet, there are people, some in high-ranking positions in government and industry, who dismiss the science and insist that climate change is a hoax. This has profound implications for policy.

Given the strength of corporations, lobbyists, and politicians who promote certain industries, it is likely that climate change denial would continue to exist even without the availability of the internet to spread misinformation. The internet, however, has been vital to the spread of misinformation, leading some people to believe that vaccines cause autism (Larson, 2018). The only research conducted by an actual scientist that linked vaccines to autism was published in 1998, but the study had to be retracted due to fraud. The lead researcher took numerous steps throughout the study to make sure that the research team would find the exact results that he was seeking in order to financially benefit himself (Sathyanarayana & Andrade, 2011). Since that retraction, there has been no research conducted by any actual professional researcher that supports the autism-vaccine link. Despite the overwhelming lack of evidence, this kind of misinformation continues to spread, largely through the internet. That fraudulent autism study has been cited 1,650 times, with 940 of those citations coming *after* the misconduct was uncovered (Retraction Watch, 2023). The creation and spread of misinformation, however, is not solely the work of unethical researchers. Anyone can make a website and post claims that have no basis in fact. Sadly, "news" organizations also purposefully spread misinformation for the sake of stoking outrage, as they have learned that this leads to higher ratings and increased revenue (Shapiro et al., 2023). Additionally, the internet has empowered everyone to become "researchers," and those who are unable to differentiate good sources from bad can be easily convinced with incorrect information, especially if the misinformation feeds into their existing beliefs.

With the help of this book and your professor, you should leave this class having a much better sense of what constitutes actual research. You will also learn that all research is *not* created equal, and we must always consider how the research was conducted as we try to make sense of the findings. This will help you as you hear not only about research in criminal justice but work on all subject matters. Research methods classes for all disciplines are remarkably similar. The ethics precautions that are necessary for each discipline vary. For example, in your class, you will not be reviewing the necessary steps to ethically care for lab rats or chimpanzees, as you would in biology or even psychology. The research designs and sampling considerations, however, are the same

no matter the discipline. So, once you start to feel more comfortable understanding the basics of criminal justice research, you should feel more confident in being able to judge the quality of work elsewhere. That will make you a better consumer of information in all corners of life.

The Scientific Method

I am sure that you have already conducted some research on something. You had to do research to figure out which laptop or car you should buy. You probably did a good amount of research to choose a college. You have also done research to write papers for other classes. All of that is good. You are better off knowing that one of your top choices of cars got an excellent crash test rating, while your other choice decapitated the crash-test dummy. Reading consumer magazines and comparing laptops at a store do not involve scientific research, though. This book and your class will teach you about a more systematic way of learning.

The research that is the subject of this course is based on the **scientific method**. What sets this apart from the research you did to shop for a computer is that the scientific method requires adherence to a strict set of rules. Just as with your computer or car-buying research, we make observations, but with the scientific method we do so in a very systematic way, with the goal of generating an *unbiased* image of the world rather than an individual's personal image of it (Haig, 2018; Wallace, 1971). In his classic work on the scientific method, Wallace (1971) visualized the research process as a wheel, including theory formulation, hypothesis construction, observations, and then generalization of findings (Figure 1.1). The use of a wheel as an illustration is important here, as wheels lack a clear starting point. For research, the start- and end-points vary depending on the method the researcher adopts. The two most common approaches in criminal justice research are deductive and inductive. When determining which method you want to use, ask yourself if you want to test a current theory or see if a program works. If so, you are using the deductive approach. This method has been the favored set of steps in the natural sciences for decades, and it is commonly used in criminal justice research.

The **deductive reasoning** approach starts with theory. A **theory** is an attempt to construct a plausible explanation of reality (Hagan, 2007). Researchers then use logical deduction to take theories and write **hypotheses**, or predictions of relationships between variables based on our understanding of theory (Maxfield & Babbie, 2012; Wallace, 1971). Only after the steps for exploration of theory and development of hypotheses are completed does the researcher determine how to test the hypotheses and conduct observations. These observations must follow specific protocols to reduce the potential for bias. Once data have been collected, it is time to test the hypotheses. Based on the rigor of the research design, it may or may not be appropriate to generalize the findings to the wider population. Researchers using deductive reasoning would start at the top of the research wheel in Figure 1.1 and move clockwise.

If you are more focused on making observations and then using that experience to generate a theory, you want an **inductive reasoning** approach. Research based on inductive reasoning has a different starting point, at the bottom of the wheel and moving clockwise. Rather than beginning with a theory and then moving on to hypothesis testing, researchers taking the inductive approach use observations as their starting point. They seek to observe facts without any particular theory in mind. Those observations can be used to draw conclusions and then generate a theory based on the findings. These theories are known as **grounded theories**, since they are based on data that are grounded in researchers' observations (Glaser & Strauss, 1967; Maxwell, 1996). Researchers can then take that newly formed theory, generate hypotheses based on it, and go around the wheel again but with the deductive approach this time.

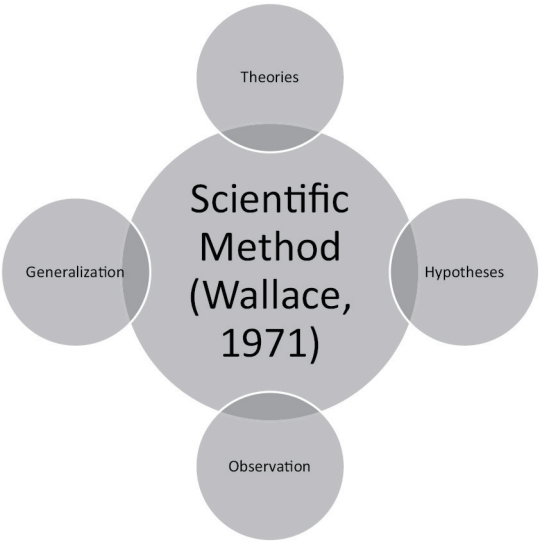

Figure 1.1 The scientific method
Source: Wallace, W. (1971). *The logic of science in sociology.* Chicago: Aldine. P. 18

Qualitative and Quantitative Research

The decision of whether to approach research with inductive or deductive reasoning might be related to the kind of study the researcher is planning. Criminal justice as an academic discipline has benefited from both quantitative and qualitative research. Quantitative research is the more common approach in criminal justice in the United States. Quantitative work tends to start with a deductive approach, with researchers using knowledge of theory to write and then test hypotheses. The primary distinguishing characteristics of quantitative research are the use of numerical values to represent concepts and the quantification of results, often involving statistical procedures. Due to the rules governing statistical analysis, quantitative studies rely on large sample sizes, but to get the necessary sample size, researchers often forego the opportunity to interact much, if at all, with potential research participants. In fact, a popular trend in criminal justice research today is to obtain access to large datasets with information collected by other researchers or practitioners, with many current researchers performing sophisticated statistical analysis but never meeting or interacting with any of the humans who were the subject of data collection.

Qualitative research largely involves observation and long interviews of smaller groups with the goal of generating a more complete understanding of a group or subculture. Qualitative research in criminal justice draws from the work of urban anthropologists and sociologists who spend extensive amounts of time and sometimes even live among those they are studying. Qualitative work could start from either the inductive or the deductive approach. Unlike quantitative studies that involve testing a specific hypothesis, some qualitative studies entail collecting data first and then focusing on theory generation based on the conclusions drawn from the observations. While quantitative research follows strict data collection plans with interview schedules or data collection checklists written out and pretested prior to data collection, qualitative researchers might begin their observations while lacking any research questions (Hagan, 2007; Maxfield & Babbie, 2012).

Both qualitative and quantitative research have helped our discipline grow, and both will be necessary to help us continue to learn why people commit crime and what we can do to stop it.

There are, unfortunately, professional rivalries that develop, and there are occasionally debates about the merits of both the qualitative and the quantitative approach. As I noted earlier, quantitative methods are more frequently used in criminal justice research in the United States, but there have been calls to increase the number of studies involving both qualitative and quantitative methods (Rodriguez, 2024). Quantitative approaches, with deductive reasoning, are synonymous with **positivism**, or the natural sciences approach to research. In its more extreme form, researchers who identify as positivists can endorse scientism and be skeptical about the value of qualitative research. Specifically, **scientism** suggests that the only research worth doing consists of concepts that are measurable, frowning upon the lack of quantitative orientation in qualitative work (Hagan, 2007; Hartley, 2011). At the other end of the research spectrum are researchers who view knowledge through the lens of **historicism**, meaning that they consider all social events as unique and as warranting chronicling. That approach avoids the quantitative practice of trying to draw generalizations from research findings and, as such, is unscientific (Hagan, 2007).

Basic and Applied Research

There are two additional categories of social science research—basic and applied. This distinction is a carryover from the natural sciences (Hammersly, 2000). **Basic research**, also known as pure research, involves seeking information for the sake of advancing theory or our knowledge base. **Applied research** aims to solve practical problems and can be divided into two categories—program evaluation and policy analysis. Applied research, according to Maxfield and Babbie (2012), seeks links between justice policy and problems. Common types of applied research involve evaluations of criminal justice programs and policies to see what kind of impact, if any, they had on the problems that they were designed to alleviate. **Program evaluation** tends to be more focused on the past in that it answers the question of what impact the program or policy had on the problem. **Policy analysis** is more forward-looking and seeks to identify possible solutions to current and future problems and then to choose the best or most feasible option. Hammersly (2000) correctly noted that basic and applied research are not necessarily mutually exclusive. There have been numerous occasions where basic research has led to practical applications, while applied research has been relevant to theory development.

Hammersly (2000) suggested that we move away from the basic/applied distinction and move toward considering social science research as either scientific or practical. Scientific inquiry, according to Hammersly,

> refers to research that is designed to contribute to a body of academic knowledge, where the immediate audience is fellow researchers—though the ultimate aim is to produce knowledge that will be a resource for anyone with interest in the relevant topic (Hammersly, pp. 223–224).

Those engaging in scientific research rely more on the research community to evaluate the validity of their research, usually resulting in slower processes of production and dissemination of knowledge. Practical research is

> geared directly to providing information that is needed to deal with some practical problem, so that here the immediate audience for research reports is people with a practical interest in the issue; notably, but not exclusively, policymakers and occupational practitioners of the relevant kinds (Hammersly, p. 224).

Practical research places an emphasis on the direct relevance of their work to current policy and practical concerns.

Whether we use the basic/applied or scientific/practical categories, it is important to appreciate the value that both types of research bring to our field and to humanity in general. Basic research may not appear to the layperson to have relevance and may be subject to criticism for appearing to be a pointless academic exercise. In fact, the late US Senator William Proxmire used to mock scientists whose research he deemed to lack relevance to the world by declaring them to be winners of the Golden Fleece award for what was, in his opinion, a waste of federal money. The negative publicity that came from Proxmire's criticism prompted some agencies to pull their grant funding from important research that Proxmire just did not understand. For example, he criticized Ohio State University researchers' work on a six-legged robot and the National Institute on Alcohol Abuse and Alcoholism's study on alcohol aggression in animals. The robotics research eventually led to the invention of computer-controlled knee joints. As for alcohol and aggression in animals, the researchers studied animals because they could not ethically ask humans to get drunk and fight (Irion, 1988). So, while you might hear about a science project that appears to have no practical value, keep in mind that we use basic research to develop theory and learn about the world, and it is that knowledge that is the basis for development of scientific advances and social programs that benefit society. Once those advances and programs are implemented, applied or practical research can assess their effectiveness.

Steps of the Research Process

When I introduced the scientific method, I presented the wheel of research with four steps: theory, hypotheses, observations, and generalization. Now that you know a bit more about research, it is time to break down the process into more detail. I am going to do this in the order that we would follow using the deductive method.

Theory: Theories are plausible explanations of reality. Criminal justice draws on theories from multiple disciplines, including criminology, sociology, psychology, economics, biology, and business, when working to explain human behavior and the way that organizations function. Theories are used to speculate about why some people commit crime while others lead law-abiding lives, why some people desist from crime as they grow older while others remain active in crime, and why some organizations are more efficient and effective at achieving their goals than others. Theories often form the basis of researchers' ideas for what they wish to study.

I want to emphasize the importance of theory as the starting point for research. In criminology, we have an abundance of theories as possible explanations for why people engage in criminal behavior (Bernard & Engel, 2001; Cooper & Worrall, 2012; Kraska, 2006). Theories for why the branches of the criminal justice system and agencies within operate the way they do are not nearly as plentiful (Bernard & Engel, 2001; Kraska, 2006), but it is important for us to seek an understanding of why something should or should not be expected to work before we set out to understand whether it does work. There's a strong argument that can be made that conducting this exercise when we initially propose any criminal justice policy or program would save us a lot of time and hardship by allowing us to discontinue work on programs that really should not be expected to be effective. Correctional boot camps, which were very popular in the 1980s and 1990s, are a good example of the failure to consider theory before implementing a program. The idea was that we would have corrections officers act like boot camp drill sergeants, but let's think about why we should have expected this to work. When confronted with the lack of a theoretical foundation, supporters argued that it was just "common sense" that the boot camps would reduce recidivism (Cullen et al., 2005; Morash & Rucker, 1990). By the time the correctional boot camps appeared, the aspects of the military model adopted by corrections departments had already been phased out of the military (Morash & Rucker, 1990). Additionally, while many of us know someone whose life was changed by joining the military, the correctional version of boot camp

graduation did not lead to job security, housing, clothing, healthcare, a full pension, and the respect of community members that came with military service. Contrast that with correctional boot camp graduates going back to the same, mostly impoverished, neighborhoods with no paycheck, housing, healthcare, or admiration from the community but with a criminal record that they needed to disclose to potential employers. There really was no theoretical justification for why correctional boot camps *should* serve as a form of rehabilitation (Latessa et al., 2020; Morash & Rucker, 1990), and the evaluation results showed that they were not associated with positive outcomes (Cullen et al., 2005; Mackenzie et al., 2001; Wilson et al., 2005). More careful consideration of the lack of viable theories for why we should have expected the boot camps to work might have prevented their proliferation.

Hypotheses: A hypothesis is a clear, measurable statement that predicts a relationship between variables. Hypotheses are usually generated based on the theory that is being used as the foundation of a particular study. Someone interested in the routine activities approach, for example, might hypothesize that the proliferation of doorbell cameras and other video security devices will reduce the incidence of porch theft. A researcher studying important events in juveniles' and young adults' lives would likely base their hypothesis about desistance from crime on life course criminological theory.

Concepts/operationalization/measurement: Researchers begin by thinking of concepts they want to study. **Concepts** tend to be rather abstract, such as "crime," "punishment," or "recidivism." All those words can have a wide variety of meanings. While they are a good starting point for determining one's research agenda, researchers need to be much more specific as they get closer to collecting the data. "Punishment" can mean a lot of different things. Do you mean legal sanctions? If so, just criminal sanctions, or do traffic violations count too? Would you prefer only to focus on the types of punishment that constitute a loss of liberty, such as incarceration? If your focus is on the loss of liberty, what about home confinement with electronic monitoring? Research that might look pretty simple at first glance tends to become much more complex when we have to move on from concepts and determine what we will actually measure. Take recidivism as an example. Recidivism is generally defined as reoffending, but it can be measured several different ways. It could be based on individuals' self-reported reoffending, but in that case are you concerned with just one specific crime type or reoffending in general? Reoffending could also mean rearrest, reconviction, and/or reincarceration. It might be helpful to measure recidivism multiple different ways. Research on the relationship between sex offender registration and offending often finds that registration is *not* associated with sex offending recidivism, but there is often a slight relationship between registration and general offending (Letourneau et al., 2010; Tewksbury et al., 2012; Zgoba et al., 2018; Zgoba & Mitchell, 2023), so you can see why it was important for the researchers to differentiate between different types of offending. In some of my own research, I found that diversion and reentry service participation for individuals with mental illness was not related to the chances of someone being reincarcerated within a certain time frame, but program participation was associated with staying in the community for longer periods of time before reincarceration (Tartaro, 2015). If you use data that already exist, you may be constrained in your choices for measurement, as you are going to have to use what is there. If you are collecting your own data, you will have to make a lot of decisions about your exact plans for measuring concepts. This process is referred to as **operationalization**, which is the development of operational definitions to specify how concepts will be measured (Maxfield & Babbie, 2012). We operationalize concepts to make them variables that are measurable.

Choice of research method and data collection plan: There are a number of ways to approach social science research. The question you must ask yourself is, what are you trying to learn by doing this? If you want to look at the effectiveness of an anti-truancy program, you might want to

compare students who are in the new program to students subjected to the old program's rules. You might also want to compare the students and their truancy levels before and after they participated. Research methods can involve looking at one group or organization at one period in time, at multiple groups at one time, or at one or multiple groups over time.

How will you collect data necessary to test the hypotheses? There are a wide variety of options for data collection in criminal justice. Before you decide on a data collection plan, you must first choose your **unit of analysis**. The unit of analysis is who or what you plan to study, such as individuals or organizations. Knowing that will help guide your decision about what kind of data to collect and from whom. Researchers have conducted observations, interviewed victims and offenders in person, mailed surveys to homes, called people at home, stationed themselves in public locations and asked people to participate in interviews, or visited prisons, jails, homes, or had people come to university offices for interviews or to take surveys. Computers can aid in data collection through deployment of internet-based surveys or the use of computer-assisted survey equipment that takes the place of human interviewers. Research can involve no human contact at all, through collection of records from criminal justice organizations, businesses, or social service agencies, or the acquisition of publicly available data. One can even collect data by logging onto a streaming service and analyzing the content of criminal justice documentaries and dramas. At the other end of the spectrum, research plans can involve extensive contact and interaction with research participants, through long interviews and periods spent observing their behavior.

Collecting the data: Once proper ethical safeguards are in place, the next step is collecting the data. This could be as easy as downloading a preexisting dataset for secondary data analysis, or it could involve months or even years of observations and interviews. If you are collecting data by doing observations or surveys in the field, this could be time-consuming, expensive, and even dangerous work.

Analysis: The necessary analysis will depend on the measurement and data collection decisions. Analysis of quantitative data will involve some statistics, but the level of sophistication will depend on the data and what is necessary to properly test the hypotheses. For qualitative projects, the focus of data analysis will likely involve coding the data into different theoretical categories and/or contextualizing the data to understand the findings in context (Maxwell, 1996).

Dissemination and application of findings: Now that the research is finished, it is time to share the results with others. If the research was conducted at the request of an agency, you will most likely provide them with a report of your findings. They may choose to use the results to make changes to their operations. Others might benefit from seeing these results, so you should consider appropriate outlets for your work. Where you share the work will depend on your preferred audience. If you would like fellow researchers to see the findings, publication in an academic journal would be the best option. If you are hoping for criminal justice practitioners to benefit from your work, then a magazine or newsletter that targets professionals might be more appropriate.

Summary

We have all done some type of research in our lives, but not all types of research are equal. Understanding what makes some types of research good and valid, and other types suspect is a powerful tool that can help you in so many aspects of life. This book is about research guided by the scientific method. Unlike research that you might do to figure out which restaurant to go to this weekend, the scientific method requires that researchers follow specific protocols to generate objective results. Researchers draw on theory to generate hypotheses and follow very specific procedures to generate observations in a manner that aims to reduce bias and allow for generalization of the findings to a larger group. There are multiple types of social science research, including quantitative work that seeks to find trends among large samples. Qualitative research

usually aims to take an in-depth look at a small number of individuals or one group or organization. Qualitative research is less concerned with patterns and generalizations than it is with fully understanding a unique set of circumstances. Research can also be divided into basic/pure versus applied categories, with the former generating knowledge for the furtherance of the discipline. Applied research consists of program evaluation and policy analysis and focuses on a specific problem or program that needs to be studied.

The exact steps one takes as part of the research process might differ depending on whether one is taking the deductive or the inductive approach. With inductive, researchers begin with observations and then use that to generate theory that can later be tested using a deductive approach. Deductive reasoning begins with theory and then moves to hypothesis generation. Following the development of hypotheses, researchers must determine who or what they are going to study and begin by turning vague concepts into items that can be measured. Researchers must also devise a research design and a data collection plan (including a sampling plan). Once we collect the data, it is time for analysis. Finally, we draw conclusions and disseminate results. The rest of this book will address exactly how to take each step in the research process.

Key Terms

Evidence-based practice	Quackery	Scientific method
Deductive reasoning	Theory	Hypothesis
Inductive reasoning	Grounded theory	Positivism
Scientism	Historicism	Basic research
Applied research	Program evaluation	Policy analysis
Concept	Operationalization	Unit of analysis

Discussion Questions

1. What are the steps of the scientific method? If someone is taking an inductive approach to research, what would the starting point be for that research process?
2. What are the differences between qualitative and quantitative research?
3. How can basic or scientific research ultimately impact the lives of everyday people?
4. Think of three topics in criminal justice that need more research. For those topics, come up with a question for each that you would like to answer through research.

References

Bernard, T. J. & Engel, R. S. (2001). Conceptualizing criminal justice theory. *Justice Quarterly, 18*(1), 1–30.

Cooper, J. A. & Worrall, J. L. (2012). Theorizing criminal justice evaluation and research. *Criminal Justice Review, 37*(3), 384–397. https://doi.org/10.1177/0734016812442940

Cullen, F. T., Blevins, K. R., Trager, J. S., & Gendreau, P. (2005). The rise and fall of boot camps: A case study in common-sense corrections. *Journal of Offender Rehabilitation*, *40*(3–4), 53–70. https://doi.org/10.1300/J076v40n03_03

Gies, S. V., Healy, E., & Stephenson. R. (2020). The evidence of effectiveness: Beyond the methodological standards, *Justice Evaluation Journal, 3*(2), 155–177. https://doi.org/10.1080/24751979.2020.1727296

Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Publishing Co.

Hagan, F. (2007). *Essentials of research methods in criminal justice and criminology* (2nd ed.). Pearson.

Haig, B. D. (2018). The importance of scientific method for psychological science *Psychology, Crime, & Law, 25*(6), 527–541. https://doi.org/10.1080/1068316X.2018.1557181

Hammersly, M. (2000). Varieties of social research: A typology. *International Journal of Social Research Methodology*, *3*, 221–229. https://doi.org/10.1080/13645570050083706

Hartley, R. D. (Ed.) (2011). *Snapshots of research.* Sage Publications.
Irion, R. (1988). What Proxmire's Golden Fleece did for – and to – science. *The Scientist.* www.the-scientist.com/profession/what-proxmires-golden-fleece-did-for--and-to--science-62408
Kraska, P. B. (2006). Criminal justice theory: Toward legitimacy and an infrastructure. *Justice Quarterly, 23*(2), 167–185. https://doi.org/10.1080/07418820600688735
Larson, H. J. (2018). The biggest pandemic risk? Viral misinformation. *Nature, 562*, 309. https://doi.org/10.1038/d41586-018-07034-4
Latessa, E. J., Cullen F. T., & Gendreau, P. (2011). Beyond correctional quackery: Professionalism and the possibility of effective treatment. In E. J. Latessa & A. M. Holsinger (Eds.), *Correctional contexts* (4th ed., pp. 290–300). Oxford University Press.
Latessa, E. J., Johnson, S. L., & Koetzle, D. (2020). *What works (and doesn't) in reducing recidivism* (2nd ed.). Routledge.
Letourneau, E., Levinson, J., Armstrong, K., & Zgoba, K. M. (2010). Failure to register as a sex offender: Is it associated with recidivism? *Justice Quarterly, 27*(3), 305–331. https://doi.org/10.1080/07418820902972399
Mackenzie, D. L., Wilson, D. B., & Kider, S. B. (2001). Effects of correctional boot camps on offending. *The ANNALS of the American Academy of Political and Social Science*, *578*(1), 126–143. https://doi.org//10.1177/000271620157800108
Maxfield, M. G., & Babbie, E. (2012). *Basics of research methods for criminal justice and criminology* (3rd ed.). Thomson Wadsworth.
Maxwell, J. A. (1996). *Qualitative research design: An interactive approach.* Applied Social Research Methods Series (Vol 41). Sage Publications.
Morash, M., & Rucker, L. (1990). A critical look at the idea of boot camp as a correctional reform. *Crime & Delinquency, 36*, 204–222.
National Institute of Corrections. (n.d.). *Evidence-based practices (EBP)*. United States Department of Justice, National Institute of Corrections. https://nicic.gov/evidence-based-practices-ebp
Powell, J. (2017). Scientists reach 100% consensus on anthropogenic global warming. *Bulletin of Science, Technology & Society*, *37*(4), 183–184. https://doi.org/10.1177%2F0270467619886266
Retraction Watch. (2023). The 10 most highly cited retracted papers. Retraction Watch ("powered" by Word Press). https://retractionwatch.com/the-retraction-watch-leaderboard/top-10-most-highly-cited-retracted-papers/
Rodriguez, N. (2024). Addressing the data gap to advance prison safety and why it matters for correctional policy. *The Criminologist, 50*(5), 1–7.
Sathyanarayana, R., & Adrande, C. (2011). The MMR vaccine and autism: Sensation, refutation, retraction, and fraud. *Indian Journal of Psychiatry, 53*(2), 95–96. https://doi.org/10.4103/0019-5545.82529
Shapiro, A., Simon, J., Jingnan, H., Folkenflik, D., & Retting, A. (2023). People working on climate solutions are facing a big obstacle: Conspiracy theories. *NPR.* www.npr.org/2023/10/05/1203893268/climate-change-conspiracies-disinformation
Tartaro, C. (2015). An evaluation of the effects of jail diversion and reentry for mentally ill offenders. *Journal of Offender Rehabilitation 54*(2), 85–102. https://doi.org/10.1080/10509674.2015.1009966
Tewksbury, R., Jennings, W. G., & Zgoba, K. M. (2012). A longitudinal examination of sex offender recidivism prior to and following the implementation of SORN. *Behavioral Sciences and the Law, 30*, 308–328. https://doi.org/10.1002/bsl.1009
Wallace, W. (1971). *The logic of science in sociology.* Aldine.
Wilson, D. B., MacKenzie, D. L., & Mitchell, F. N. (2005). Effects of correctional boot camps on offending. *A Campbell Collaboration Systematic Review*, 1(1), 1–9. www.aic.gov.au/campbellcj/reviews/titles.html
Zgoba, K. M., Jennings, W. G., & Salerno, L. M. (2018). Megan's law 20 years later: An empirical analysis and policy review. *Criminal Justice and Behavior, 45*(7), 1028–1046. https://doi-org.ezproxy.stockton.edu/10.1177/0093854818771409
Zgoba, K. M., & Mitchell, M. M. (2023). The effectiveness of sex offender registration and notification: A meta-analysis of 25 years of findings. *Journal of Experimental Criminology, 19*, 71–96. https://doi.org/10.1007/s11292-021-09480-z

2 Reading and Understanding Research

Sources of Information

We have access to so many different sources of information, but not every source is equal in its quality, accuracy, and even veracity. Knowing how to evaluate sources is a powerful tool that can help you not only learn more and excel in your classes, but it can also make you better equipped to succeed in your job and make informed decisions about other aspects of your life. Believe me when I tell you that the saying "knowledge is power" has some truth to it.

This chapter is devoted to the types of information that we might use to make decisions and the merits of each. Let me spoil it for you and tell you how it ends—research done in accordance with the scientific method is often the best source of information. This might be disappointing, because research articles can be intimidating. They seem to be written in some special language, often referred to as "researchese," include confusing statistical procedures, and have complicated tables. I will admit that they can also be a bit boring sometimes. The good news is that this book and your professor will teach you how to understand research.

Individual and Vicarious Experiences

None of us are blank slates, so we all acquire information based on personal experiences throughout our lives. Some of those experiences involve contact with actors in the criminal justice system, including police, court personnel, corrections staff, and even people who have committed crimes. Those can be powerful experiences that help to shape our perceptions. For example, you thought that the campus police were rude that time they broke up the party you were attending, so based on your experience, you have concluded that police, or at least those working on campus, are disrespectful. Additionally, our views are shaped by the experiences of other people in our lives. Research has revealed that even vicarious encounters with criminal justice professionals can have a powerful impact on our opinions (Cross & Fine, 2022; Wu et al., 2009), including hearing about friends' interactions with the police or seeing viral videos of police appearing to act rudely or otherwise improperly.

What is important to understand is that these stories and individual incidents comprise what is known as **anecdotal evidence**, or personal stories and observations. The stories may be true, but they might be quite unique and not reflective of what tends to happen in a given situation. Let's use stop-and-frisk police tactics as an example. Stop-and-frisk became popular because police hoped that it would help to remove guns from the street, plus they would be able to find and arrest people with existing warrants. You might have a friend or relative who is a police officer who was involved in some stops where police did find and arrest people with weapons. So, based on your friend's or relative's experience, you might be tempted to conclude that stop-and-frisk works. To do so, however, would mean that we are dismissing ample empirical evidence. **Empirical evidence** is derived from experimentation and the scientific method process. Stop-and-frisk has been found to be unconstitutional, because in its application, racial minorities were being stopped at a much

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greater frequency than Whites (Meares, 2014). Specifically, young Black males were stopped in 77 of every 100 stops in New York City in 2006 (Geller & Fagan, 2010). Police departments using this tactic were not able to put up an "ends justifies the means" argument in court, because research indicates that the program was not effective in achieving its goals. Out of 506,000 police stops conducted by the NYPD in 2006, fewer than 1 percent resulted in confiscation of a weapon (Geller & Fagan, 2010). The most frequent arrest resulting from stop-and-frisk was marijuana possession (Geller & Fagan, 2010) and, given that more states are legalizing or decriminalizing marijuana each year, it is difficult to justify continued infringements on rights to confiscate small amounts of marijuana. What this means is that, overall, stop-and-frisk in New York City was not successful at doing what it was intended to do.

The empirical evidence here involved analysis of over half a million of these stops to see, overall, what are the results of these police-resident interactions, whereas your friend's or relative's experiences might consist of a few arrests after some stop-and-frisk encounters. Surely, we should give more weight to the review of 500,000 incidents than stories of a handful of arrests. Your friend's or relative's experience with stop-and-frisk was atypical and not in line with what the research revealed citywide.

Media

Crime investigation, courtroom drama, and even life in prison are among the favorite subjects of television and movie directors and producers. As a criminal justice professor, I am grateful in that it generates interest in my field and encourages people to study criminal justice in college. I also find it frustrating, though, as fictitious shows often take great amounts of creative liberty, and even the nonfiction shows and documentaries can be quite misleading.

Even when the media retelling of a crime incident is correct, it could still be problematic, because the coverage of crime is not proportionate to how often it occurs. Homicides receive a disproportionate amount of media coverage, and they also get different amounts of coverage depending on the race and gender, and sometimes the age of the victim (Schildkraut & Donley, 2012; White et al., 2021). Even true crime books, while nonfiction accounts of actual crimes, are not accurate depictions of crime in society. These books focus on specific types of victims (White and affluent), usually involving unusual murder weapons (Durham, Elrod, & Kinkade, 1995), while the typical crime victim in the United States is a young, Black male, and the most common murder weapon is a gun. The media must sell content and get clicks, so they are motivated to give the most coverage to what they consider to be compelling stories for their audiences. The result is that the general public gets a very distorted view of crime, as the least common crimes tend to get the most coverage, while the most common receive little or no publicity.

The combination of reliance on anecdotal experiences and media portrayals of crime and criminal justice interventions can give people a sense that they understand crime and the criminal justice system when they actually do not. The same rarely happens in occupations such as astrophysics or molecular biology. If you have ever had the experience of telling someone at a party what you are studying, my guess is that you were on the receiving end of some unsolicited advice for reducing crime. These opinions are formulated and shared regardless of how much people know about our field. One of my most amusing professional memories was being told by a career-long toilet paper salesman that I was wrong about criminal justice reform, but not to worry because he had a three-part plan that was sure to fix the system! I cannot imagine that same person telling a rocket scientist that her planned trajectory for tomorrow's launch was incorrect and that, based on his toilet paper career, the rocket should be launched another way.

Unlike rocket science, solutions in our field often appear to be "common sense." People imagine themselves standing in a prison with a large incarcerated person yelling threats at them, and they are sure that it would "scare them straight," so that must mean that the programs that

place at-risk teens in prison as a scare tactic work. Plus, they've seen it work on television, not realizing of course, that the footage was edited, that there was no comparison group to see if any crime desistance was a part of the natural maturation process for the teens, and that many who were portrayed in those shows admitted to continuing with criminal behavior (Maahs & Pratt, 2017). Blomberg and Lucken (2010) used the term **illusion of knowledge** to explain the problem of people not being aware of how their *lack* of knowledge about a subject is interfering with their ability to come up with good solutions. Fortunately, there is lots of information out there obtained through solid research. The two challenges that we face are being able to interpret research and then to evaluate the quality of information.

Evaluating Sources of Information

Beyond what we personally know and what people around us are saying, we can search for other sources of information. The internet, cable television, streaming video services, and satellite radio have made the dissemination of information easier than ever. The quality and veracity of sources vary tremendously, so we all need to exercise caution and consider where and how we gather information. We can rank sources on their potential usefulness when we are conducting research.

First, we have sources created by an individual or individuals. The quality of these can vary tremendously. Anyone can create their own website, blog, or podcast. Keep in mind, just because someone wrote something and posted it on the internet, that doesn't mean that it has any credibility. I can wake up tomorrow and decide to start a blog on rocket science, even though I never took a physics course. Consider the author's credentials, including academic, work, and life experience. If you are doing a research paper on treatment for a specific cancer and you come across a blog written by an MD who has worked as the chief oncologist for a prestigious hospital and has a strong record of research, this could be a good source of information. I say "could" because it would be better to go with sources that were published using a process that has some quality control, and individual websites lack these safeguards. A blog or website that an individual sets up might not reveal any potential conflicts of interest that the author has, such as owning stock in the company that makes a particular drug. If the blog post is touting the effectiveness of that drug, one must ask if the author's desire to increase the stock prices is influencing their objectivity. So, the information found there might or might not be valuable. I suggest you search the name of the doctor who wrote the blog to see if you could find research they published in sources with checks and balances and use those articles instead, as many academic journals consider conflicts of interest in their publication decisions. While you might find some interesting blogs written by people who have decent credentials, you will also encounter ones written by people who have no business dispensing advice to other humans. If you find a medical blog written by someone with no formal degree in medicine and, therefore, no medical license, and this person's medical experience consists of internet research and their own personal attempt at curing a disease using sauerkraut tossed in a blender (yes, this really happened!) (Gander, 2018; Morris, 2018), you might want to think twice about following any "medical" advice that you get from there. Your digestive system will thank you for it.

Next, there are media outlets. Criminal justice issues are covered by hundreds, if not thousands, of media sources throughout the globe every day. Unfortunately, all have differing levels of bias and commitment to truthful and accurate reporting. In recent years, we have witnessed the proliferation of outlets designed to cater to certain groups by publishing biased and very inaccurate stories, and some that frequently peddle in conspiracy theories with a complete disregard for evidence. You can, and should, look to see if multiple sources are reporting on the same story. If only one or two sources have picked up what seems like very important news, you should be suspicious. There are also great websites that allow you to check the level of bias as well as the accuracy found in many media outlets. I strongly suggest you visit those sites. Figure 2.1 includes helpful suggestions for evaluating types of web sources, including those run by the media.

Is your web source credible?

Pay attention to the web domain. This can tell you where your source originated.

- Colleges and universities (.edu): These are usually reliable, with attention paid to validity and reliability of the published information.
- Government or military (.gov or .mil): These are generally reliable, but there are instances of these sites pushing certain political agendas. Examples are the federal government's insistence on equating marijuana with much more serious drugs and the government's scrubbing federal websites of climate change evidence.
- Company website (.com): There is a potential for bias here, as companies obviously have an interest in promoting their own products and services.
- Special interest (.org): These are mixed. Some are objective and reliable, while others seek to further their own agendas. Be careful and use some of the tips provided in this section.
- Other web domains (.com.co): Be suspicious of these. Some of these belong to satirical sites or ones that provide false information.

Consider the source.

- There are wonderful websites that check for bias of overall sites. Just search for media bias or fact-check sites, and you will find plenty. You should do that with all media sources that you are using for the first time. You will quickly learn which to avoid. These sites often provide information on both the level and type of bias of each source and the source's commitment to accurate reporting.
- Avoid *Wikipedia*. It is free and online, so it is convenient. It is also written entirely by volunteers, and not necessarily qualified ones. A page covering a person or topic might be credible one day, but a prankster or someone with an ulterior motive could easily go in and change what is written at any time.

Be mindful of headlines and content.

- Be concerned when you see headlines in all capital letters. How professional does that look to you?
- Beware of inflammatory headlines that try to emotionally arouse readers. Headlines that attempt to produce anger are likely attached to stories that lack objectivity and might even be factually incorrect.
- Memes are not news! You can do better than that. If something in a meme seems intriguing, research it. Try to find corroborating information on at least two different credible websites. Never, ever rely on memes for news.
- Does the article or headline appear to be purposefully misleading?
- Can you find at least two credible sources that are reporting the same story?
- Can you find this information on fact-check websites? What are those sites reporting?
- Does the article you are reading back up its assertions with either footnotes or links to supporting articles or original documents? This is very important. Credible sources include notes and hyperlinks so readers can see evidence for themselves.

Figure 2.1 Is your web source credible?

Sources: University of Maryland Global Campus (2020). *Is my source credible?* Baltimore, MD: University of Maryland Global Campus Library. https://sites.umgc.edu/library/libhow/credibility.cfm

University of Pittsburgh (2025). *Have you P.R.O.V.E.N. That this source is a good choice?* Pittsburgh, PA: University of Pittsburgh Library. https://pitt.libguides.com/ld.php?content_id=38775321

Trade publications can provide a window into some of the latest topics being discussed in various disciplines. Good examples of these in criminal justice are the *FBI Law Enforcement Bulletin* published by the FBI, *American Jails* by the American Jail Association, and *Corrections Today* by the American Correctional Association. These magazines focus on articles that are of interest to criminal justice practitioners. Readers can get information about new programs and the latest trends and controversies in the field. While there are occasional pieces written by professional researchers, most of the articles are written by practitioners, for practitioners. A drawback to these publications is their lack of peer review. Potential authors submit manuscripts to the editorial boards of these magazines, so there are checks and balances not found on websites, blogs, and podcasts run by individuals, but the articles do not undergo a rigorous review of the methods used to come up with the findings. Practitioners working for an organization that put together a new program might be motivated to highlight the good aspects of that program and ignore any drawbacks in their article. Since these magazines generally don't carefully critique the research plans that produced the results, these articles might be presenting biased findings.

Agency and government websites and reports can be an important source of information, particularly statistics to help measure the scope of a problem. Good examples are the FBI's National Incident-Based Reporting System, the Bureau of Justice Statistics, the Substance Abuse and Mental Health Services Administration, and the Office of Juvenile Justice and Delinquency Prevention. These sources are always excellent starting points for students and professional researchers. Some agency websites are also good sources of evaluations, policy pieces, and summaries of recent government activities. A few that come to mind are the Vera Institute of Justice, the Sentencing Project, the RAND Corporation, the Urban Institute, and the Pew Research Center. All these agencies employ professional researchers and provide information about the methods they used to collect their data.

Researchers often put their findings in book form or use the space allotted in books to review a large portion of existing research on a particular subject. Books can be very good, but books take a long time to write and publish. The latest research findings are less likely to appear in books than they are in peer-reviewed journal articles.

In the research world, the preferred source of information is **peer-reviewed** articles. Peer-reviewed journals, also known as refereed journals, are publications that use independent reviewers to assist the editor in determining whether a manuscript is appropriate for publication. Authors wishing to have their work considered submit their manuscripts to the journal editor. The editor typically conducts a quick review to confirm that the paper topic seems like it could be appropriate for that journal and does a cursory review of the research design before requesting assistance from peer reviewers, sometimes also called referees (Locke et al., 2009).

Editors have multiple ways of finding and choosing referees. First, journal editors are generally familiar with existing research and, therefore, know people who might be good judges of new work in that discipline. Second, editors could look to the bibliographies of the manuscripts submitted and reach out to researchers cited in the paper. A third, more recent option, is that the authors themselves are asked to identify experts in the field who would be appropriate reviewers. The editor typically contacts two researchers and asks them to review a manuscript. If the reviewers agree to provide feedback, the editor sends them a copy, frequently with the authors' names removed from the manuscript. This **blind peer-review** process is supposed to help reviewers make an unbiased judgment solely on the merits of the research rather than their opinions of the authors. Editors and reviewers might be willing to give a manuscript written by a well-regarded scholar the benefit of the doubt and accept an otherwise borderline or unacceptable paper. On the other hand, a manuscript written by a new scholar or someone who lacks a reputation might seem less attractive, even if it is of good quality.

Peer reviewers are expected to read the manuscript and then answer a few standard questions generated by the journal. These questions usually involve whether the paper topic is appropriate for the journal, whether the introduction and literature review are adequate, whether the decisions made in the research methods and statistics sections appear to be appropriate, whether the results and discussion sections add something to our knowledge base, and whether publication of this paper would provide a meaningful contribution to the discipline. Reviewers then have the following options for recommendations: accept manuscript as-is for publication, accept with minor revisions, have authors revise manuscript and resubmit it for an additional review, or reject the manuscript. The editor then considers the recommendations of the two reviewers and renders a decision. If the authors are invited to revise their manuscript and resubmit it, the editor will send the newly revised manuscript to the same reviewers, provided they are willing to review it again.

The peer-review process is designed to serve as a quality control measure to prevent substantially flawed articles from being published. Not all peer-reviewed journals are equally selective, though. Readers should be mindful of the fact that the peer-review process is no guarantee that poorly written and methodologically flawed articles will be flagged and denied publication. So, while peer review is an extra step in the attempt at quality control, it is far from perfect. There is a web page called Retraction Watch that reports on retractions of journal articles in a variety of fields. In Chapter 1, I mentioned an article that started the autism-vaccine scare and had to be retracted due to fraud. That article originally appeared in a highly regarded, peer-reviewed journal. *Criminology*, the flagship journal of the American Society of Criminology and one of the most highly regarded journals in criminal justice, was beset by controversy when one author from a multiauthored study requested that the journal retract one of his own articles, because he suspected that a coauthor manipulated the findings. The entire research team eventually agreed to ask *Criminology* to retract the article, and other highly regarded journals in the social sciences that published work from the same authors using the same dataset retracted articles (Chawla, 2019).

The point is that bad research does make its way to publication, even in journals that require peer review. While you would need to be very proficient in statistics to detect flaws in a few of these articles, a basic understanding of research methods will go a long way toward you being able to distinguish good research from bad. The good news is that most research results are obtained honestly and in an ethical manner, and peer-reviewed articles are considered the most appropriate sources to use when students and professionals are conducting literature reviews of their research topics.

There are steps that you can take to gauge the quality of the sources from which you are obtaining information. Locke et al. (2009) named four things to consider: journal selectivity, sources of funding, research or professional organization sponsorship, and reputation of the authors.

Journal Selectivity

Publishing is a requirement for most academic jobs and some professional research positions. Even if faculty secure tenure, they often need to continue to publish to be promoted and be eligible for grant money and other opportunities. The term "publish or perish" describes the pressure that researchers feel to have their work seen, preferably in the most prestigious journals possible, with the goal of promoting or even saving one's career. Since so many people want or even need to publish their work, there has been a proliferation of journals as potential outlets for research. Unfortunately, while there have been some very good journals developed by reputable publishing companies and researchers, not all journals are of equal quality, nor are all designed to be outlets to further science. Some journals are predatory.

According to 43 scholars who formed a working group to formulate a definition, **predatory journals** and publishers are "entities that prioritize self-interest at the expense of scholarship and

are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices" (Grudniewicz et al., 2019, p. 211). The term "predatory publishers" was coined in 2010, and scholars have published checklists to encourage researchers to avoid predatory journals. These journals pose a danger because they look like legitimate scientific journals but lack quality checks. That means that false and misleading information may appear in what looks like a peer-reviewed scholarly journal but is not. Grudniewicz and colleagues were inspired to research predatory journals because an author's mother-in-law was fighting cancer, and the standard treatments were no longer effective. Relatives desperately looked for a way for her to keep fighting the disease and were hopeful when they found an article about a promising treatment. That hope faded once the author realized that the evaluation of the treatment was published in a predatory journal. That means that the article was likely published without anyone vetting the quality of the work and screening for conflicts of interest.

If there are so many reputable journals available, why would researchers publish their work in a predatory journal? One possibility is that they are unaware that the journal is predatory. Researchers get emails with invitations to submit manuscripts to journals every day, and many of these journals certainly have names that make them sound reputable, such as *Advances in Biomedicine and Pharmacy*, *British Journal of Science*, and the *International Journal of Advanced Research in Applied Science and Technology* (Scholarly Open Access, 2017). Scholars have a duty to do their homework before submitting, so not knowing that a journal is or is likely predatory is not an adequate excuse. The second reason why an author might publish in a predatory journal is because they are under such pressure to have their work published, they turn to journals that will quickly publish anything for a fee. Really, some of these journals will publish any combination of words that are submitted to them. Researchers with a sense of humor have demonstrated the lack of vetting that occurs in these predatory journals by conducting "stings" with absurd papers. One scientist wrote papers that made repeated references to *Star Wars* and The Force and had them accepted for publication in four "journals" that were supposed to focus on the natural sciences, not film reviews (Predatory Journals …, 2017). A few authors wrote the sentence "Get me off your f------- mailing list" over and over again to make a 10-page paper fit, with figures and tables containing nothing but those same seven words. The "paper" was accepted and published by the *International Journal of Advanced Computer Technology* (Stromberg, 2014). Clearly, you should not trust work published in a predatory journal to be valid or reliable, as the previous stories provide evidence that some will publish absolutely anything. How can you tell if a journal is predatory? Do a simple internet search for "predatory journal list." There are a number of lists out there, including one compiled by Yale University. If you are not already familiar with a journal's reputation, check these lists first. Another option is to do an internet search of the journal name. Journals that are affiliated with established publishing companies are not predatory. Just a few examples of reputable publishers in criminal justice are Taylor & Francis, Sage, Springer, Elsevier, and Wiley.

Elmore and Weston (2020) provided a list of warning signs that an email solicitation might be from a predatory journal, including grammatical errors, aggressive targeting of authors, requirements for authors to sign away their copyright of the article, and unclear review process, among others. Another very important warning sign is that publication is contingent on the author paying the journal a significant sum of money. I had my first paper accepted for publication in 1998. There was one time I had to pay a $10 fee to a journal as part of the review process, but that is the only time I ever put out any amount of money to have my work seen. I was comfortable with that, because it was a small amount, and the journal had an excellent reputation. If a journal is seeking hundreds or even a thousand dollars, that is a big red flag.

While information in predatory journals should always be considered suspect, articles in very prestigious journals may be of poor quality, and articles in less popular journals might be very

strong and ultimately carry great weight in the field. One reason why is that the large, mainstream journals may lack interest in particular topics. A great example of this is terrorism. Prior to 9/11, terrorism was considered the domain of political scientists, so little work on terrorism was being published in mainstream criminal justice journals. Another reason is that a new idea might seem too controversial or far-fetched and be rejected by the larger journals. A mentor of mine is the father of a major crime theory. The article that proposed the new theory, which has now been cited thousands of times, was initially rejected by some of the top journals.

Sources of Funding

Researchers are expected to be unbiased and focused on advancing science. Of course, since we are also human, there are times when other priorities threaten the objectivity of work. **Conflicts of interest** are "personal, financial, professional, political, or legal interests that have a significant chance of interfering with the performance of his/her ethical or legal duties" (Resnik, 2017, p. 2). Resnik argues that conflicts of interest are concerning for two reasons. First, they have the potential to impact the integrity of research. Second, they can undermine the public's trust in science.

In the medical field, two studies from the late 1990s provided good illustrations of how conflicts of interest can harm research. Earlier in this book, I mentioned that the only scientific work to ever claim to have found evidence of a link between vaccines and autism was published in 1998 by Andrew Wakefield, MD, and colleagues. During an investigation that led to the article's retraction, it was revealed that Wakefield was secretly accepting payments from personal injury lawyers whose clients were suing the pharmaceutical companies and had an interest in generating research finding a link between vaccines and autism ("A case of junk science," 2008). During another study in 1999, a young man died during a gene therapy experiment at the University of Pennsylvania. Upon investigation, the Food and Drug Administration found that the research team withheld vital information from patients, including the risks associated with the study and the researchers' and university's financial interest in the results. The principal investigator of the study owned 30% of the gene therapy company's stock, and that same company paid the university $4 million per year. The university also owned stock in the company (Resnik, 2017).

The field of criminal justice is not immune to conflicts of interest in research. Geis, Mobley, and Shichor (1999) chronicled the work of Charles Thomas, PhD, from the University of Florida. Thomas became very closely affiliated with private corrections companies, particularly the Corrections Corporation of America (CCA). Dr. Thomas was frequently quoted in newspapers as an expert on private corrections, and he published articles in peer-reviewed journals on the success of private prisons. In his interviews and publications, Dr. Thomas failed to disclose his affiliation with a research center that received $400,000 from private prison companies. He also failed to disclose that he was a paid consultant for the Florida Correctional Privatization Commission or that he was being paid millions by CCA. Geis and colleagues concluded their paper with a recommendation that journals require authors to disclose any potential conflicts of interest. It is now customary for authors submitting manuscripts to peer-reviewed journals to have to disclose any funding that they received to conduct the research and to describe any type of possible conflict of interest. This information can then be used to make informed publication decisions.

Research or Professional Organization Sponsorship

Occasionally, a research or professional organization will choose to provide support for academic research. When I planned to survey all jails in the United States that were built using a certain design, I contacted the American Jail Association (AJA). While there had been some small

studies done on these jails, my plan was to include hundreds of facilities in my analysis. After explaining my proposal to the president of the AJA, he agreed to write a cover letter to my survey to endorse the work. This was very valuable, since I was asking jail administrators to take time out of their busy schedules to do a favor for someone they had never met. I have no doubt that the AJA's support of my study helped boost my credibility among jail administrators and increased the response rate to my survey. Given that the AJA is a professional organization that has little involvement in research, their endorsement probably did not improve the prestige of my work in the research and academic communities. Sponsorship or support of research and professional organizations, such as the American Medical Association and American Bar Association, can help to bolster the reputation of research in the scholarly community.

Reputation of Authors

Earlier, I mentioned that the reputations of authors might influence journal editors' decisions whether to accept a manuscript for publication. I want to caution against becoming too preoccupied with the names on the paper. New scholars who have not had enough years in the field to become "names" are producing excellent work every year. The most important consideration should be whether that individual's work has previously been flagged or retracted for ethical issues, such as conflicts of interest, whether there have been questions about their objectivity, and whether there have been legitimate questions about their data collection and analysis.

Steps That Editorials Boards Are Taking to Improve Research Quality

Individual researchers have a responsibility to only put forth results that are legitimate and the product of ethically and methodologically sound work. Unfortunately, between the pressure to publish and some individuals' carelessness at best and lack of a moral compass at worst, journals have recognized the need to establish rules to protect their publications against unwittingly disseminating bad research. Earlier, I mentioned an incident involving *Criminology* and other top-tier journals publishing work that at least one of the coauthors later believed to be the product of data fabrication/manipulation. In the wake of that, the editorial board for *Criminology* announced that the journal was joining the Committee on Publication Ethics (COPE) (Sweeten et al., 2024). COPE is an organization that provides guidance to editorial boards and research institutes to encourage ethical practices in publishing culture (COPE, 2024). COPE offers best practices for journals looking to establish a solid peer-review process, and they also provide guidance to member editorial boards investigating and responding to allegations of research misconduct. *Criminology* is also encouraging all authors to share not only their datasets but the specific steps that they followed to produce their results so that anyone can confirm their findings.

Elements of Published Research

Now that you know a little bit about how to judge the quality of sources, it is time to discuss what is in a typical published piece of research.

Abstract

The abstract is a very brief synopsis of the article. These are typically 100 to 300 words, depending on the rules governing the journal. This is a short summary of the article and is a good way for readers to see whether the article matches the reader's interests and whether it would be worthwhile

reading the entire article. Typical abstracts are usually a paragraph, but some journals require authors to write structured abstracts. Structured abstracts are longer and include headings for each section of the paper (research background, research procedure, findings, and conclusions). An example of a structured abstract can be found in Reading 7.2 of this book.

Introduction

The introduction is the authors' opportunity to introduce the topic to the reader. This section usually includes some statistics to give readers an understanding of the scope of the topic. For example, an article about children's separation from their incarcerated parents would likely begin with a review of the number of people in the United States who are incarcerated, the number of those people who have children under the age of 18, and estimates of how many children in the community have incarcerated parents. In this section, it is important to communicate to the reader why the topic needs to be studied. The writer should never exaggerate the extent of the problem, though. I have received several student papers where the authors seemed to believe that the only way their papers would be relevant is if they made it appear that their topic was a "growing problem" regardless of whether it actually was. This is a typical "rookie" mistake when learning to write about research. In just about all these instances, the students relied on hyperbole and assumptions instead of consulting and citing reputable sources of information.

Literature Review

In this section, the authors might discuss some theories related to the topic. Keeping with the example of children of incarcerated parents, it might be helpful to frame how incarceration could be detrimental to children's future. A number of sociological and psychological theories could be used as the theoretical framework of the research.

The literature review is an opportunity for the authors to present readers with a summary of the available research on this topic. This informs the reader about what is already known and allows the authors to highlight gaps in our current state of knowledge. After a discussion of the limitations of previous research, the authors can use the last few sentences of this section to explain the goals of their study.

Research Methods

If the research is exploratory in nature, the authors might not present any hypotheses. If the study involves hypothesis testing, the hypotheses will either appear at the end of the literature review or at the beginning of the research methods section.

Authors of research articles are expected to describe every step that they took to collect data. This includes how the sample was selected, how the concepts were operationalized to create measurable variables, the type of data collection plan, and the time frame used to collect the data. Readers should be able to understand what transpired during the data collection process, including the original plan and any issues that arose during data collection that impacted what data were ultimately available for analysis. For example, when researchers conduct surveys, they might get 1,000 responses, but once they review them, they discover that many respondents dropped out halfway through the survey, and a handful wrote sarcastic or unbelievable responses, so the number of usable surveys is actually 750. It is the author's responsibility to explain all of this to the readers so that they understand why there were 1,000 survey responses but only 750 usable for data analysis. Researchers conducting data collection inside a prison might initially believe that they will be able to ask for volunteers from all units but later discover that they cannot access those residing in

the infirmary and that another unit is inaccessible due to lockdown. The methods section is where the researchers explain these challenges.

Results

Either at the end of the research methods section or at the start of results, the researchers will explain the characteristics of the sample. If researchers sent the link to an internet survey to every chief of police in cities with at least 200,000 residents, the results section would begin by providing information about the respondents. If the unit of analysis (who or what you are studying) is the police chiefs themselves, the results section would likely begin with their demographic information, such as age, gender, education, and years of experience of the responding chiefs. If the study's unit of analysis is the organization, and researchers sent the surveys to chiefs as representatives of the organizations, then the results section might start out with a description of the agencies, such as the number of sworn staff, demographics of staff members, and number of officers who work each shift. Next, the authors would discuss whether statistical tests revealed support for their hypotheses. Here, they could either have found the type of relationship between their independent and dependent variables that they predicted, no relationship between the variables, or a relationship between them but in the opposite direction than expected.

The results section of quantitative studies usually includes tables as well as narratives to explain what is in the tables. Depending on your understanding of statistics, you might find the tables to be helpful or confusing. The more comfortable you become with statistics, the greater your appreciation will be for tables, as they are a quick way to read the findings.

Discussion/Conclusion

The results section is simply a brief presentation of the results. It is in the discussion or conclusion sections where the authors try to explain why they found what they found. In instances where the findings are the opposite of what was expected, the discussion section is where authors will have the chance to reflect on whether they think this was a product of how they framed the research question, collected the data, and analyzed the results, or whether the findings are due to some aspect of the topic that they had not previously considered. Discussion sections summarize the findings but then also try to link this work to the research conducted in this area to date. The authors will usually tie the discussion back to topics mentioned in the introduction and literature review to place the current findings into the proper context. The authors' emphasis on criminological theory and policy implications will vary depending on the journal's focus.

Researchers often summarize the limitations of their study either in the discussion section or in the research methods section. Acknowledging the study's drawbacks is an essential part of any piece of research for three reasons. First, authors' full disclosure of the strengths and drawbacks of their work is a demonstration of scientific integrity. Second, this information can help readers understand the results in the proper context. Third, future researchers can design studies that will address these limitations.

References

Authors need to cite (give credit to) all the sources of information that they used to write the article. The reference page can be very useful to readers because they can look up and read the articles that comprised the literature review.

How to Read/Take Notes

I have observed that one of the biggest difficulties my students experience is making sense of research articles after reading them. I want to provide some suggestions for how to take notes for two reasons. First, it will help if you can go back to your notes to see a quick summary of what you read rather than rereading the article. Second, as you spend more time studying criminal justice topics, you will amass more and more readings. How do you keep track of all of it? Here's what I do.

I have separate documents for each general subject that I study. So, if you take an introductory policing course and read articles for that, you can put your article notes in a "policing" document. Later in your academic career, you might have to revisit that subject in a more advanced class. It would be helpful to have a synopsis of what you have already read, as this will save you a lot of time. Then, as you read more, you can add it to this same document. This is how I have managed to keep track of notes for books, reports, and articles that I read over a decade ago.

Once you set up the document, I suggest that you start your notes by putting the full American Psychological Association (APA) citation of whatever you read as the first line. Next, use headings similar to what I provided in the previous section to make sure you handle information properly should you ever need it for a research paper. Remember that information provided in the introduction and literature review sections of the articles came from research written by people other than the authors of the current article. So, if you want to write down anything interesting from the introduction or literature review, I suggest that you have it under an "intro/lit review" heading in your notes and then put a citation of the original source in your notes. That way, if you ever want to use that information, you can go look it up in the original source and cite it properly. That's important, as you do not want to incorrectly attribute research findings to the wrong people. You might not think it's a big deal, but believe me, it is. People want to be accurately credited for their life's work, and they also do not want to be wrongly associated with less-than-stellar research that they did not do. Plus, it hurts your credibility when someone who knows the existing research reads your work and sees you mixing up study findings and the authors who reported them.

Next, under "methodology" write a few notes about what, exactly, the researchers did. This will serve as a good reminder later after your memory fades, and it will help you understand the results. In the results section, use bullet points to jot down a quick summary of the findings. For discussion, you can note interesting ideas that the researchers had as they attempted to explain their findings. Finally, remember to take notes on the limitations of their study. You are going to want this later, especially if you are thinking about proposing a study yourself for this class or some other course. You will want to remember how the limitations may have impacted the results, and you will want to see if you can design a study that addresses those drawbacks. If you find something particularly problematic in the article, you might want to make a very visible note to yourself. I like to put my own thoughts inside double parentheses or in all caps. Remember how I cautioned that poorly designed research gets published sometimes? I have read a few articles where I think that the limitations are so substantial that they really call into question the results. I still take notes on those articles so that I have a record of having read them (so I don't forget and then read them again some other time), and then I put a note to myself about my misgivings upon reading it.

You might look at this and think that it is a waste of time, but if you wind up studying a topic over a period of semesters or years, taking notes this way will be very valuable to you. Have you ever looked at a bibliography for an article or a book and wondered how the author could possibly keep all that information organized? Well, this is one way to do it.

Summary

We are incredibly fortunate that more information than ever is accessible. We should all be grateful for this development, but with it comes the proliferation of sources that are biased, inaccurate, and sometimes outright deceptive. It is our responsibility, as educated individuals, to learn to be able to see through that, determine the quality of a source, and only use valid pieces of information to draw conclusions. In this chapter, I reviewed different types of sources and outlined the advantages and disadvantages of each. There are steps that we can take, such as being suspicious of outrageous stories being reported by only one or two outlets, researching the reputation of sources before using them, and considering potential conflicts of interest. When searching for sources to use in research, remember that there is a hierarchy, with peer-reviewed journal articles offering the best, but not foolproof, outlet for objective, quality-controlled research.

In this chapter, I provided an overview of how research papers are designed and what types of information are available in each section of the articles. Research articles can be intimidating, with their specialized language, mathematical formulas, and complicated tables. The key to understanding is to break the article down by section and understand what you should gain by reading each part. It will take practice, but you should become more comfortable understanding these articles, and taking notes on them, throughout the class.

Key Terms

Anecdotal evidence	Empirical evidence	Illusion of knowledge
Peer-review	Blind peer review	Predatory journals

Discussion Questions

1. Why is research in peer-reviewed journals considered among the strongest sources of information?
2. What are some of the ways that we can evaluate a story that we find in the media?
3. What are predatory journals, and why would anyone publish in them?
4. Go grab a media article. Then analyze it and provide reasons why it is credible or why it is suspect.

References

A case of junk science, conflict and hype [Editorial]. (2008). Nature Immunology *9*, 1317. https://doi.org/10.1038/ni1208-1317

Blomberg, T. G., & Lucken, K. (2010). *American penology: A history of control* (2nd ed.). Transaction Publishers.

Chawla, D. S. (2019). Quintet of study retractions rocks criminology community. *Science.* www.sciencemag.org/news/2019/11/quintet-study-retractions-rocks-criminology-community

Committee on Publication Ethics (COPE). (2024). About COPE. https://publicationethics.org/about/our-organisation

Cross, A. R., & Fine, A. D. (2022). Police-related social media exposure and adolescents' interest in becoming a police officer. *Police Practice and Research*, *23*(5), 553–568. https://doi.org/10.1080/15614263.2021.2017932

Durham, A. M., Elrod, H. P., & Kinkade, P. T. (1995). Images of crime and justice: Murder and the "true crime" genre. *Journal of Criminal Justice, 23*(2), 143–152.

Elmore, S. A., & Weston, E. H. (2020). Predatory journals: what they are and how to avoid them. *Toxicologic Pathology*, *48*(4), 607–610. https://doi.org/10.1177/0192623320920209

Gander, K. (2018). Woman who claims cabbage juice "cures" autism and can regrow limbs to be probed by officials. *Newsweek.* www.newsweek.com/jillian-mai-thi-epperly-claims-cabbage-juice-cures-autism-homosexuality-and-909737

Geis, G., Mobley, A., & Shichor, D. (1999). Private prisons, criminological research, and conflict of interest: A case study. *Crime & Delinquency, 45*(3), 372–388. https://doi.org/10.1177/0011128799045003005

Geller, A., & Fagan, J. (2010). Pot as pretext: Marijuana, race, and the new disorder in New York city street policing. *Journal of Empirical Legal Studies*, 7, 591–633. https://doi.org/10.1111/j.1740-1461.2010.01190.x

Grudniewicz, A., Moher, D., Cobey, K. D., Bryson, G. L., Cukier, S., Allen, K., Ardern, C., Balcom, L., Barros, T., Berger, M., Ciro, J. B., Cugusi, L., Donaldson, M. R., Egger, M., Graham, I. D., Hodgkinson, M., Khan, K. M., Mabizela, M., Manca, A., … Lalu, M. M. (2019). Predatory journals: No definition, no defence. *Nature, 576*, 210–212. https://doi.org/10.1038/d41586-019-03759-y

Locke, L. F., Silverman, S. J., & Spirduso, W. W. (2009). *Reading and understanding research* (3rd ed.). Sage Publications.

Maahs, J., & Pratt, T. C. (2017). "I Hate These Little Turds!": Science, entertainment, and the enduring popularity of scared straight programs. *Deviant Behavior, 38*(1), 47–60. https://doi.org/10.1080/01639625.2016.1190619

Meares, T. L. (2014). The law and social science of stop and frisk. *Annual Review of Law and Social Sciences, 10*, 335–352. https://doi.org/10/1146/annurev-lawsocsci-102612-134043

Morris, M. (2018). Jilly Juice recipe creator claims her concoction can regrow limbs, cure homosexuality. *Metro*. www.metro.us/body-and-mind/health/jilly-juice-recipe-jillian-epperly

Predatory journals hit by "Star Wars" sting. (2017). *Discover.* www.discovermagazine.com/mind/predatory-journals-hit-by-star-wars-sting

Resnik, D. B. (2017). Conflicts of interest in scientific research related to regulation or litigation. *The Journal of Philosophy, Science, & Law*, *16*(7), 1. https://doi.org/10.1080/23294515.2018.1510859

Schildkraut, J., & Donley, A. M. (2012). Murder in black: A media distortion analysis of homicides in Baltimore in 2010. *Homicide Studies, 16*(2), 175–196. https://doi.org/10.1177/1088767912438712

Scholarly Open Access. (2017). *List of standalone journals: Potential, possible, or probably predatory scholarly open-access journals.* https://web.archive.org/web/20170111172309; https://scholarlyoa.com/individual-journals/

Stromberg, J. (2014). "Get me off your fucking mailing list" is an actual science paper accepted by a journal. *Vox*. www.vox.com/2014/11/21/7259207/scientific-paper-scam

Sweeten, G., Topalli, V., Loughran, T., Haynie, D., & Tseloni, A. (2024). Data transparency at *Criminology. The Criminologist, 50*(1), 9–11.

University of Maryland Global Campus. (2020). *Is my source credible?* University of Maryland Global Campus Library. https://sites.umgc.edu/library/libhow/credibility.cfm

University of Pittsburgh (2025). *Have you P.R.O.V.E.N. That this source is a good choice?*. Pittsburgh, PA: University of Pittsburgh Library. https://pitt.libguides.com/ld.php?content id=38775321

White, K., Stuart, F., & Morrissey, S. L. (2021). Whose lives matter? Race, space, and the devaluation of homicide victims in minority communities. *Sociology of Race and Ethnicity*, *7*(3), 333–349.

Wu, Y., Sun, I. Y., & Triplett, R. A. (2009). Race, class or neighborhood context: Which matters more in measuring satisfaction with police? *Justice Quarterly, 26*, 125–156. https://doi.org/10.1080/07418820802119950

3 Ethics in Criminal Justice Research

As the allied countries moved through Europe and defeated the Nazis in 1945, soldiers discovered the horrors of the concentration camps. The primary purpose of the camps was to carry out the "Final Solution," of murdering people deemed genetically inferior and a threat to the "Aryan race." A secondary purpose of the camps was to serve as a laboratory for horrific science experiments, using non-consenting children and adults as research subjects. The research was cruel and often resulted in slow and painful deaths. Following the war, the International Military Tribunal convened trials at Nuremburg to bring those responsible to justice. One of the defenses employed by the Nazis came as a shock to ordinary Americans—the Nazis were doing what the Americans had been doing for years (Cohen, 2016; Hornblum, 1998; Mitford, 1973; Peterson, 2024).

As stunning at that defense may sound, it was true. The United States has a long history of performing dangerous experiments on vulnerable populations, including incarcerated people and children with special needs, without adequate protections. In 1915, a doctor in Mississippi infected several men serving prison sentences with pellagra, an extremely painful and potentially deadly disease (Hornblum, 1998; Oshinsky, 1996). During the American occupation of the Philippines in the early 1900s, doctors infected incarcerated persons with cholera, killing 13 people and compensating survivors with cigars. When the United States entered World War II, incarcerated individuals in the US were enrolled in medical experiments involving malaria (Hornblum, 1998). In Iowa, people in prison were given and then cured of scurvy in the late 1960s for reasons that are unclear, since scientists were already aware of the cause and cure for that disease (Mitford, 1973).

Despite the Nazis' attempt to shift the focus to the Allies' dangerous and unethical behavior, doctors who carried out the Nazi experiments were convicted and sentenced for their crimes. Outrage stemming from the Holocaust prompted government entities and some in the scientific community to take steps to prevent unethical medical experiments from being permitted in the future. The result was the **Nuremberg Code**, consisting of 10 elements to protect human participants in research. A summary of the elements are as follows:

1. Voluntary consent of participants is absolutely essential.
2. The results of any experiment must be for the greater good of society.
3. Human experimentation should be based on previous animal experimentation and only after there is knowledge of the natural history of the disease.
4. Experimental procedures should avoid unnecessary physical or mental suffering.
5. No experiments should be conducted if there is reason to believe it will cause death or disability.
6. Risks taken should never be greater than the humanitarian importance of the problem to be solved.
7. Adequate facilities should be used to protect subjects.
8. Only qualified scientists should conduct experiments.

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9. Subjects should be able to end their participation at any time.
10. The scientist in charge must be prepared to terminate the experiment when injury, disability, or death is likely to occur (Jarmusik, 2019).

Following the development of the Nuremburg Code, the World Medical Association established the **Declaration of Helsinki** in 1964. This statement outlined ethical principles for medical research involving human subjects. As with the Nuremburg Code, the writers emphasized concern for the safety of individuals and the rights of participants to receive informed consent. Section 26 of the Declaration states:

> In medical research involving human subjects capable of giving informed consent, each potential subject must be adequately informed of the aims, methods, sources of funding, any possible conflicts of interest, institutional affiliations of the researcher, the anticipated benefits and potential risks of the study and the discomfort it may entail, post-study provisions and any other relevant aspects of the study. The potential subject must be informed of the right to refuse to participate in the study or to withdraw consent to participate at any time without reprisal. Special attention should be given to the specific information needs of individual potential subjects as well as to the methods used to deliver the information (World Medical Association, 2019).

Given the medical community's apparent commitment to adopting protections for people, one might think that harmful experiments involving humans would have ceased after publication of the Nuremburg Code and Helsinki Declaration. The problem was that neither of those were legally binding in the United States (Peterson, 2024). Harmful and unethical medical experiments continued in a few different settings, including prisons and jails. One of the longest-running and most notorious cases of using the incarcerated for human experimentation was chronicled by Allen Hornblum (1998) in his book *Acres of Skin*. Albert Kligman, a dermatologist with the University of Pennsylvania, set up a lab in Holmesburg Prison and ran dozens of medical experiments on incarcerated men for two decades. Holmesburg Prison was an overcrowded, violent county jail in Pennsylvania that held both sentenced individuals and those who were still awaiting trial. Kligman originally entered the prison at the request of the facility's pharmacist, who was seeking advice on how to deal with an athlete's foot outbreak in the facility. Once there, Kligman quickly saw an opportunity, as he was always in search of human subjects to test new dermatology products. He quickly began to recruit participants. Unfortunately for the recruits, it appears that Kligman did not necessarily view them as humans deserving of the protections outlined in the Nuremburg and Helsinki statements. Kligman explained his reaction the first time he entered Holmesburg: "All I saw before me were acres of skin. It was like a farmer seeing a fertile field for the first time" (p. 37).

But why go through the trouble of setting up a laboratory in a jail (Yes, I realize it was called Holmesburg *Prison*, but it largely held pretrial detainees, so a more apt description of the facility is jail)? The answer is simple. Just about all of us in free society would not have willingly participated in his research. The side effects ranged from skin irritation to permanent organ damage. Since Kligman had found a seemingly endless source of human subjects, private and government entities were eager to offer him funding to conduct more and more risky experiments, even if it meant branching out to fields of medicine where he was not qualified to practice. Kligman could not force anyone to participate, so he needed to find a group of people who were so desperate for money that they would tolerate pain and discomfort in exchange for a small reward and would refrain from asking questions about the dangers of the research. The people incarcerated in Holmesburg had the choice of making $0.15 per hour on a work detail, or they could do the experiments for $300 to $400 per month. Remember, most were awaiting trial, so they could use that income to post bail or to hire a private attorney. People who were already convicted could use the money for commissary

or to send money home to support their families. People who were already sentenced might participate in the medical experiments with the hope of being seen as cooperative when it came time for parole consideration. Another potential benefit to participation was that they might be moved from the general population to a special medical experimentation wing. Some who feared for their safety in the notoriously violent facility saw the experiments as a lesser of the evils, since some of the studies allowed them to stay in safer areas of the jail. This was a population that was desperate for money, fearful for their safety, eager to be seen as cooperative, and saw no other options to earn money or freedom. Still, the research ethics rules called for informed consent. Participants later reported that they really did not know what kind of chemicals were involved in the studies, nor did they have an idea of the dangers and the potential short- and long-term health ramifications. When called to testify before Congress, one of the Holmesburg research participants explained that trying to give consent forms with medical terminology to incarcerated people and expecting them to read them was the equivalent of asking them to read hieroglyphics. To make things worse, there were allegations that race played a role in selection of participants, with minorities being given the less desirable and lower-paying projects. The Philadelphia prison system's Board of Trustees shut down Kligman's program in January 1974, but some of his test subjects experienced a lifetime of health problems as a result of his work (Hornblum, 1998).

Kligman's work was not an exception, as doctors around the United States used prison populations for pools of human research subjects willing to take big risks for little compensation. As an example of the cost savings associated with using incarcerated human research subjects, Mitford (1973) interviewed a biomedical researcher who paid incarcerated research participants $12.50 to $15 per month. Had the researchers asked financially strapped, but free, people to participate in that same research, the cost would have been $100 per month. Another doctor told Mitford that incarcerated research participants were cheaper than chimpanzees, so they were especially attractive for this type of scientific research.

Kligman's actions, and those of other biomedical researchers in prisons and jails, are examples of why the US government found the need to act on behalf of human research participants in the 1970s. Around the same time that Kligman's work was being exposed to the public, Americans learned about another extremely unethical study that had been in progress for decades. In 1932, the Public Health Service and the Tuskegee Institute recruited 600 Black men, 399 of whom had syphilis, for a study to chronicle the natural progression of the disease. While the original plan was to observe participants for six months, it continued for 40 years. During that time, researchers concealed the diagnosis from participants, mostly out of fear that they would seek treatment once it became available, thereby disrupting the natural progression of the illness. Instead, participants were left to suffer and die from something that became treatable decades before the study ended. The study continued until the project was exposed by the media in 1972 (Centers for Disease Control and Prevention, 2015). Additional unethical medical procedures exposed in the 1960s and early 1970s included sterilizations of Black, Latina, and Native American women without their consent. These were so common in the South that they were nicknamed "Mississippi appendectomies" (Peterson, 2024).

In the wake of these stories, Congress passed the National Research Act, and President Richard Nixon signed it into law in 1974. This law created the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research run by the Department of Health, Education, and Welfare (HEW) (Department of Health, Education, and Welfare, 1979). The Commission worked to consider specific types of research and establish ethical guidelines for them. One of their most important documents was published in 1979 and is known as the *Belmont Report*. The ***Belmont Report*** provided researchers with a useful summary of the basic ethical principles that should guide all research involving human subjects. The first principle is **respect for persons**, meaning research participants must be treated as autonomous agents. In the case of

a person having diminished autonomy, there must be protection. Autonomous persons are able to consider whether to engage in research and make decisions to protect themselves without being coerced. The second principle is **beneficence**. Researchers must avoid harming human research participants while maximizing benefits and minimizing any possible harms. Finally, there is justice. The question of **justice** involves determining who should reap the benefits of research and who should have to bear the burdens of that work. These benefits and burdens must be equally distributed throughout society.

Harm in Social Science Research

So far, I have only discussed medical experiments, so you might be thinking to yourself right now, "That's terrible, but criminologists don't do medical experiments. We can't possibly harm people in that way." Very true. However, social scientists can still hurt people or put them in harm's way with research, and there are numerous examples as evidence.

While there is still stigma and discrimination surrounding homosexuality, we have come a long way since the 1970s, when Laud Humphreys (1970) embarked on his fieldwork to learn about anonymous male-male sexual encounters, mostly involving men who lived publicly as heterosexuals. Humphreys served as a "watch queen" in bathrooms, meaning he would guard the door in exchange for being permitted to watch the men in the bathroom having sex. While there, he would secretly write down their license plates, look up their information, and then visit their houses (this time with an altered physical appearance) to administer a survey on social health (a combination of socioeconomic and health factors with questions about marital relations and sex) (Humphreys, 1970). These men were unaware that they were selected for the health study due to their involvement in homosexual relations, nor were they informed or given the option to opt out of the part of the study that involved their sexual encounters. Being outed as a homosexual in the late 1960s and early 1970s would almost certainly ruin careers, livelihoods, marriages, and social standing. Humphreys published his research in a book titled the ***Tearoom Trade***. Critics argued that Humphreys put these men at risk without informing them of the risks and giving them the freedom to decline participation.

The **Stanford Prison Experiment** is one of the most famous psychology studies in US history. Philip Zimbardo, the researcher behind the experiment, has been criticized for several aspects of the study. Some of the problems with the research go well beyond the scope of this chapter. Of concern here are the ethical questions that surround the work. Zimbardo gathered college-age male volunteers to be randomly selected to adopt the roles of either incarcerated people or corrections officers in a simulated prison. The basement of one of the academic buildings at Stanford became the "prison," and the plan was to study dynamics between the officers and the incarcerated for two weeks. Instead, Zimbardo ended the study after six days out of concern for the participants' psychological well-being. He became worried that the "guards" were becoming so abusive and that the "prison" had become so real for the "prisoners" that continuation might produce psychological harm. Later, evidence emerged showing Zimbardo encouraging the aggressiveness exhibited by the "guards." This means that Zimbardo artificially generated what he characterized as organically occurring abusive behavior that was driving the "prisoners" to the breaking point (Blum, 2018). By now, generations of psychology and criminal justice students have seen or heard the most famous video clip of the study: a participant screaming about how he is losing it and needs to get out right now. The student who had that "breakdown" later reported that he did not want to participate in the research anymore but could not find any other way to be let out of the "prison." His request to be removed was denied, so he feigned distress to frighten Zimbardo into letting him go home. Zimbardo later claimed that he would have let any participant go home if they stated, "I quit the experiment," but no such

instructions appeared on the informed consent page outlining the participants' rights (Perlstadt, 2018). As we already learned in this chapter, by today's standards, there must be a mechanism to allow participants to withdraw from research at any time, yet multiple "prisoners" were told that they could not exit the study over the six days.

More recently, a professor of organizational behavior wanted to watch how restaurants would respond to an allegation of food poisoning from a customer. Frank Flynn, a professor at Columbia University, sent letters to 240 restaurants claiming that his wedding anniversary dinner was marred by a case of food poisoning (Kifner, 2001). Restaurant owners and managers reported feeling distraught, they berated and retrained staff, and some even fired employees over the alleged mishandling of food (Frumkin, 2002). Once they realized that this was all part of research, two dozen filed suit against both the university and the professor (Fried, 2004).

My point in providing these examples is that social science research might not harm people in the same fashion as medical research, but the potential for harm does exist. When we study crime, we observe people, with or without their knowledge, conduct interviews, and review criminal case files. Some of this work can be harmless. A student who observes a four-way intersection and counts the number of cars that do or do not come to a full stop at the stop sign can be confident that no individual driving that day will be harmed by their "participation" in that research. People who are asked in interviews or written surveys to recount past victimization or the harm their drug addiction caused their family and friends may experience emotional harm. A researcher who collects data on sensitive topics, such as criminal offending or noncriminal deviant behavior, can cost participants their jobs and reputations if the data are not properly safeguarded.

Social science researchers have just as much responsibility as our colleagues in the medical field to respect others, keep them from harm, maximize the individual and societal benefits of our research, and ensure that the risks and benefits are distributed equally across participants. There are a few steps that we can take to safeguard individuals.

Informed Consent

Informed consent is a key element in maintaining the safety of potential research participants. People should have the right to choose to be part of research, but they cannot make an informed decision without appropriate disclosure from the research team. By engaging with research participants in the informed consent process, researchers help to ensure that potential participants maintain their autonomy and can deliberate and make their own decisions (Shahnazarian et al., 2013). The authors of the *Belmont Report* identified three elements of the consent process: information, comprehension, and voluntariness (Department of Health, Education, and Welfare, 1979).

Information

In most instances, individuals are to be informed about several elements of the research process before they are asked to consent to involvement. Standard information to be shared includes the identity of the researcher(s) and their professional affiliation(s), the research procedure itself, any information about potential risks and benefits, the voluntariness of the project, the length of the project, and confirmation that the individuals are permitted to withdraw at any time. They should also be given the chance to ask questions. There are times, however, when disclosure of some of the aforementioned elements could actually damage the validity of the research. Only then should one consider deviating from the standard consent rules. The Department of Health, Education, and Welfare (1979) identified three criteria that must be present to justify a deviation from common informed consent:

> (1) Incomplete disclosure is truly necessary to accomplish the goals of the research, (2) there are no undisclosed risks to subjects that are more than minimal, and (3) there is an adequate plan for debriefing subjects, when appropriate, and for dissemination of research results to them (Department of Health, Education, and Welfare, 1979, p. 7).

Comprehension

Including all the necessary elements seems like a straightforward enough task, but the target population for a particular study may complicate matters. In criminal justice, we study people from all walks of life, including highly educated judges, attorneys, and criminal justice administrators. Setting up informed consent for these individuals is easy in that there are no concerns about their ability to understand verbal or written information. The same cannot be said for potential research participants who are justice-involved, incarcerated individuals, or people experiencing homelessness. It is the researcher's responsibility to frame informed consent in a way that they can understand. If the researcher is using a consent form, then it needs to be written to match the reading and comprehension level of the participant. In the case of people involved in the justice system, that is usually a fourth- to sixth-grade reading level. Another potential concern is whether the participants speak or read English and, if so, how well? If potential respondents speak and read in other languages, you will need to be able to communicate the consent information in the appropriate language. What if there is a severe developmental or psychological impairment? It may be appropriate to designate a third party, such as a social worker, to act as an advocate, observe the research, and help individuals who may have difficulty comprehending informed consent (Department of Health, Education, and Welfare, 1979).

Voluntariness

Are the people being asked to consent truly free to give it? HEW (1979) identified two different elements that can hinder voluntary consent. The first is coercion, meaning that there is a threat of harm for failure to comply. In the early 2010s, journalists reported that California was performing sterilizations of females incarcerated in a state prison. While some women were pleased to have gotten this medical procedure while in prison, others reported feeling violated and argued that they were coerced into consenting. Some complained that their status while incarcerated made it difficult for them to say no to any request or recommendation coming from those holding positions of authority. Others claimed that they were only asked for consent after being sedated (Chappell, 2013). The second threat to voluntariness is undue influence. This involves the offer of an excessive or improper reward or some other overture to encourage compliance. The reward might seem appropriate at first glance, but if the population happens to be especially vulnerable, viewed in that light, it could be inappropriate. As I noted earlier, people in Holmesburg Prison were frequent research participants because the financial rewards were too small to induce anyone from the general public to participate. How much money would it take to convince you to have a fingernail removed? Incarcerated men in Holmesburg did it for $50 (Hornblum, 1998). With inflation, that would be about $400 today. My guess is that no one reading this book would be willing to endure that for $400, but it is unlikely that any of us are in as desperate a situation as the inhabitants of Holmesburg Prison. Today, the United Nations Office of High Commissioner for Human Rights (OHCHR) cautions that incarcerated persons should not be offered "overwhelmingly attractive inducements" to engage in activities that can put their lives at risk while researchers make little to no effort to mitigate these risks. The OHCHR referred to such harmful behavior as "extrajudicial execution" (Office of High Commissioner for Human Rights, 2023).