PART I

GETTING STARTED

Welcome to research methods! Before getting into the meat of the material, it is important to make clear why research methods are important, what research methods are, and the role of ethics in conducting research. Whether you recognize it or not, you use research findings every day, so understanding what goes into that research so you use it well is imperative. We want you to learn how to conduct research well for the same reasons. This begins by making clear why research methods are important, not only for the purposes of the class but also in your everyday life. Once you learn why, you will better grasp the material presented in the rest of the text. If you do not understand why research methods matter, then learning the rest of this material is going to be more difficult (and less fun) than it should be. So let's get started with a basic question: What are research methods?

1

WHY STUDY RESEARCH METHODS?

LEARNING OBJECTIVES

After finishing this chapter, you should be able to:

1.1 Define knowledge, social science, research, and research methods.

1.2 Summarize why understanding research methods is important.

1.3 Evaluate and describe each of the major steps taken to conduct research as well as the importance of each step.

1.4 Develop research questions that would describe, associate, and predict variables. Compare the different types of research questions.

1.5 Assess what makes ethics an important consideration during research by summarizing examples from classic cases of unethical research.

1.6 Describe the impetus and purpose of the Nuremberg Code and the Belmont Report. Evaluate the guidelines and requirements of ethical research according to these foundational documents.

INTRODUCTION

You are enrolled in a class on research methods (probably because you are required to), and you likely have no idea what research methods are. Don't worry; you are not alone. We will get into it more deeply, but for now, know that research methods help you become a better consumer and creator of information and knowledge. In addition, understanding and using research methods can help you get a job and be successful in a career.

To understand what research methods are about, it is useful to place them into a larger context of knowledge. What is **knowledge**? There is no universally agreed definition of knowledge, but

Knowledge: In this context, it is defined as information believed to be true and reliable. Knowledge can come from a variety of sources both scientific and nonscientific. This text is focused on assessing and creating scientific knowledge.

for the purposes of this text, knowledge is defined as information believed to be true and reliable. Knowledge can be gained in many ways, one of which is via science. **Science** (another challenging and much-debated definition) is a branch of knowledge that uses **research** to develop that knowledge. Research is conducted in many fields, and in this text, we focus specifically on **social science research.** Social science research is focused on society and human relationships in society. Criminal justice, criminology, and sociology are some disciplines within the social sciences.

Research in criminal justice and criminology is guided by the goal of answering a specific research question. Once you have a research question, you then systematically gather observable, and falsifiable, evidence or **data** that are used to answer this research question. Answering this research question requires a specific method—a set of procedures, frameworks, processes, or steps. **Research methods** outline the systematic processes, frameworks, steps, or procedures a person uses to conduct social science research. It is useful, therefore, to view research methods as a how to guide or as a basic recipe for conducting research.

Science: A challenging and much debated definition that is defined here as a branch of knowledge derived from observable and falsifiable information, data, or evidence gathered in a systematic fashion.

Research: According to the Common Rule, it refers to a systematic investigation or examination that will contribute to generalizable knowledge.

Social science research: An area of science focused on society and human relationships in society. Criminal justice, criminology, and sociology are a few disciplines within the social sciences.

Data: Information that takes a variety of forms, such as words, observations, measurements, descriptions, and numbers. The individual pieces of information or evidence gathered, analyzed, and used to answer the research question. Data can be numeric and non-numeric in nature.

Research methods: Methods, processes, or steps used to conduct social science research.

Ethics: Norms for behavior that distinguish between what is and is not acceptable. Ethics are not necessarily what our feelings or laws direct us to do but what the common norms of moral behavior in society dictate.

Research methods identify the systematic steps used by scholars to gather data, analyze it, and reach findings and a conclusion used to answer a research question. Just like there are many recipes for making enchiladas, margaritas, or pies, there are many research methodologies that can be used when conducting scientific research in criminology and criminal justice. Research methods offer the tools needed to solve the puzzle of how best to conduct research of interest, given many acceptable options. Learning about the suitable options available in research methods, the logic behind each, and the advantages and disadvantages of each is the purpose of this book.

With an understanding of *what* research methods are, you can get the most out of the material offered in this book. Understanding that research methods are simply the process used to conduct social science research places the material that follows in that larger context. In doing this, research methods should make greater sense. Not only that, with an understanding of what research methods are, you might find that you enjoy the material in this course. Even better, you will learn that you can apply this material to parts of your everyday life as you become not only an intelligent and critical *creator* of knowledge but also an intelligent and critical *consumer* of knowledge. Importantly, these skills are easy to translate in the real world to find a job and build a career.

This chapter begins your journey into research methods by first introducing why methods are important. We then move to a brief description about the typical stages of research, including developing a research question, gathering data, and selecting an analytic approach. The chapter then turns to an important discussion of the role of **ethics** in life and in research. From this point, we discuss the principles of ethical research. We conclude the chapter by introducing you to six researchers and a piece of research each conducted. We will discuss their research throughout the text to provide real world examples of how they conducted their research from the beginning to the end.

WHY ARE RESEARCH METHODS IMPORTANT?

In addition to understanding what research methods are, it is equally important to understand *why* research methods are important. More bluntly, why should you use your valuable

time learning about research methods? The answer is that understanding research methods influences what you know by offering you a systematic way to assess and gain knowledge. Understanding research methods provides you with practical skills that allow you to produce, and to consume, findings, facts, and information with the assurance that it was arrived at systematically. These skills are not only useful in college but also in private businesses, nonprofits, government agencies, and other places you can get a job.

Knowledge and Ways of Knowing

How do you know what you know? Throughout your life, you have been exposed to knowledge in a variety of forms such as information available on the internet, research findings, documentaries, writings, opinions, and your own observations and experiences. You have taken some of that knowledge, and it has become a part of what *you* know. Some of the information you were exposed to was scientifically generated, and some of it was not. Available knowledge based on well-executed scientific processes (i.e., systematic gathering of observable and falsifiable data that are carefully analyzed to reach a conclusion) comes from sources such as legitimate peer-reviewed research journals, academic books, and information from substantive experts (to name a few). Available knowledge generated in nonscientific ways includes information you have been told by people you trust, things you have personally observed, intuition, or information gleaned from social and mass media (to name a few). Thinking about all the types of available information you have been exposed to, what has guided you to accept or reject any piece of information? How did you assess that information before accepting or rejecting it? Is what you know based on the knowledge that was carefully assessed and created? Or was it accepted for other reasons?

One approach to deciding whether to accept knowledge is to carefully assess or evaluate it. A means of assessing it is to examine the methods used to generate that knowledge. When exposed to knowledge, you might ask: "What evidence was used to generate this knowledge?" "How was this evidence gathered?" "Do the conclusions and findings follow from the evidence presented?" By using this approach, you can make an informed choice about that knowledge and then offer evidence to support your choice to accept it or reject it. Learning research methods provides you with the tools needed to ask and answer these questions and, in turn, to assess and create meaningful knowledge.

Another commonly used (and not recommended) approach in accepting knowledge is to assess it based on characteristics unrelated to the actual knowledge. This type of noncritical assessment means that knowledge was accepted without considering *how* the knowledge was created. Perhaps the decision to accept the knowledge was based on where it was obtained (e.g., local news or blogs), from whom it came (e.g., celebrity, priest, person wearing a white coat, family member, or guy in a bar), or a general gut feeling about that information (e.g., instinct, it just sounds good, or it agrees with what I already believe). Obtaining knowledge in this way is fast and easy, but this approach can come at the price of accepting erroneous and, at times, dangerous knowledge.

The focus of this book is to understand how to create and assess the knowledge that is scientifically sound using social science research methods. Some examples of the usefulness of thinking critically about research methods follow.

Information From Everyday Life

Each day we are bombarded with a lot of new information—some of it seemingly contradictory—and yet most people are confident they "know" about these topics. For example, most people, especially those who watch local nightly news, "know" that crime is at an all-time high and out of control. How did they reach that conclusion? What evidence do they have to support that conclusion? (Crime is not at an all-time high. Rather, crime rates continue to be relatively low.) It is the responsibility of a savvy consumer never to merely accept what you are told, read, or observe but instead to critically assess the evidence and steps used to reach that conclusion. The next sections offer actual examples in the popular media that have gained a lot of traction. When reading about them, ask whether you believe this information or not and why that is.

Sample: Subset of a population of interest from which information or data is gathered. Samples often comprise people, but they can also be other things, including geographic areas (e.g., cities or organizations) or documents (e.g., newspaper reports).

Definition: Clarifying the precise meaning of a particular concept when used in research. For example, in one piece of research, an injury may be defined as physical harm perpetrated to another person against their will. In some other pieces of research, an injury may be defined as physical, emotional, psychological, and financial harm perpetrated against another person against their will.

Measurement: Process of quantifying a concept. Measurement can be conducted in a variety of ways such as through survey questions (e.g., on a scale from 1 to 10, how happy are you today? How many cigarettes have you smoked this week? What is your current GPA?), counting behaviors during observation, taking blood pressure measurements, or recording one's age.

Behaviorally specific question: In research, a question that tends to be more graphic in nature, which leaves little doubt in the mind of the respondent about the type of information the research is after.

College Student Victimization

Krebs et al. (2007) published conclusions from their research titled "The Campus Sexual Assault (CSA) Study." The goal of this investigation was to estimate how much sexual assault was experienced by university students to develop targeted intervention strategies. This research sat in relative obscurity from the public until recently. In fact, findings from the CSA research are the source for what is perhaps the most widely cited contemporary statistic regarding sexual violence against college women: the "1-in-5" statistic. Headlines and other modes of popular media frequently report that one in five women are raped on campus (or some similarly stated variant). In fact, you may have seen this type of information posted around your campus. What is your assessment about the 1-in-5 statistic? Do you find it to be accurate? Why? Why not?

The appropriate way to assess this and any information is to access the original research and learn about the research methodology used to conduct the research. By doing so, you might be surprised to learn that Krebs and his collaborators never concluded that one in five college women were raped on campus or anywhere. Reading their clearly articulated methodology, you would learn about the actual research rather than relying on poor and incomplete descriptions of it found in the media and elsewhere. You would learn that this research was based on a **sample** or a subset of 18- to 25-year-old college students attending two large public universities in the United States. Students who were eligible to participate in the research had to be enrolled at least three-quarters time. Data from the survey were gathered from 5,466 women and 1,375 men. An examination of the methodology would make clear the particular **definitions** and **measurement** used to estimate rape and sexual assault perpetrated against those college students in any location. You would also see that **behaviorally specific questions** were used to identify who had been victimized. These questions are more graphic in nature and leave little doubt in the mind of the respondent about what rape and sexual assault mean in this specific research.

One of the many conclusions from the Krebs and colleagues research was that 19% of female college seniors had experienced an attempted or completed rape or sexual assault (which includes forced kissing or unwanted groping of sexual body parts) since entering college. Furthermore, you would learn by examining the research methodology that in contrast to

the name of the study, only one question was asked about whether the event happened on campus. The 19% statistic represents rapes and sexual assaults perpetrated against these college women in any location. Another very important piece of information available in the published research study is that these findings apply only to the two universities that participated in the study and that findings do not reflect any other university or any other student outside of those two universities. This research has been so frequently misstated that Krebs and Linquist (2014) wrote a second piece titled "Setting the Record Straight on '1 in 5,'" where they stressed that

> [f]irst and foremost, the 1-in-5 statistic is *not* a nationally representative estimate of the prevalence of sexual assault, and we have never presented it as being representative of anything other than the population of senior undergraduate women at the two universities where data were collected—two large public universities, one in the South and one in the Midwest. (para. 3)

How does understanding a bit about the research methodology of the CSA study alter your view of the "1-in-5" statistic? How might you view newer headlines with similar claims? Hopefully, this example encourages you to find the original research *and* consult the methodology before making an assessment. With the information you'll learn in this text, you will be a savvier consumer of material and hold informed views on topics that are based on scientific research.

About 8 years after Krebs and his collaborators finished their work on the CSA, the *New York Times* (Perez-Pena, 2015) ran a headline proclaiming that "1 in 4 Women Experience Sexual Assault on Campus." What is your assessment about this headline? Is it your experience that 25% of the women you know were sexually assaulted on campus? Do you believe it to be accurate? Why? Why not? How might you investigate this claim to ascertain whether you find it credible?

To assess this information, you should examine the specific research methods from the Association of American Universities (AAU) study by Cantor and colleagues that led to that conclusion (Cantor et al., 2015). If you accessed the original research by Cantor and his colleagues, you would learn more—a lot more. In the case of the *New York Times* headline, you would learn that this study came from a nonrepresentative sample or subset of students attending 27 institutes of higher learning (IHEs) in the United States. You would learn that males and females enrolled at these IHEs who were at least 18 years of age or older were surveyed. In total, about 150,000 students participated. Furthermore, you would learn about the particular definitions and measurement used in this study, specifically that they are not the same as those used in the Krebs et al.'s (2007) research. In addition, contrary to the headline, there were no estimates or statistics provided regarding how many students, or women, were sexually assaulted *on campus* in Cantor and colleagues' research. There is no question in the survey asking where victimization took place. There is one question in the survey asking about *perceptions* of risk of sexual assault on versus off-campus (students perceived no difference in risk: 5.0% on campus and 5.3% off campus).

Perhaps the most important information about this study available in the methodology is that the researchers state that the estimates of sexual victimization differ greatly across campuses

and that the findings from this research are not generalizable to any other university in the nation. The findings from this research cannot and do not tell anyone about the risk of sexual assault against women on (or off) campus for any place other than the 27 IHEs included in this research. In fact, Cantor and his colleagues (2015) stated this clearly on page v:

> The wide variation across IHEs puts in stark perspective prior discussions of single-IHE rates as representing a "standard" against which to compare results. For example, many news stories are focused on figures like "1 in 5" in reporting victimization. As the researchers who generated this number have repeatedly said, the 1 in 5 number is for a few IHEs and is not representative of anything outside of this frame. The wide variation of rates across IHEs in the present study emphasizes the significance of this caveat.

The descriptions of Krebs and colleagues' CSA research and Cantor and colleagues' AAU research show that each of these studies used different samples, definitions, measurements, and other means to gather the data. Neither used a sample that allows them to generalize the findings to other universities or university students. Still, now that you are aware of the research methods used in both studies, you can see that findings from both are frequently misreported as providing estimates of sexual violence on campus. Given what you know now about the methodologies used in these two studies, what is your assessment about the "1-in-4" and the "1-in-5" statistics that are so widely reported? Are people being unnecessarily frightened about college campuses given this widely reported information? Or are they using these misreported findings to feel safe in situations when it is not warranted? The material in this text offers information that will make clearer the importance of research methodology for consuming knowledge (or rejecting it), proposing and conducting studies, and creating knowledge.

Violent Crime in the United States

Let's consider another example. Every year, the Department of Justice (DOJ) releases annual crime statistics for the United States. One set of crime rates is disseminated by the DOJ's Federal Bureau of Investigation (FBI). A second set of crime statistics is disseminated by the DOJ's **Bureau of Justice Statistics (BJS)**. In 2014, the FBI estimated that the national violent crime rate was 3.66 offenses per 1,000 people (FBI, 2014).[1] In contrast, for the same year, BJS estimated that the national violent crime rate was 20.1 violent victimizations per 1,000 people (Truman & Langton, 2015). Note that the BJS estimate is six to seven times greater than the FBI estimate. There was also a lack of agreement between the two sources regarding violent crime rates over time: BJS found that the violent crime rate was stable from 2013 to 2014, whereas the FBI found that violent crime had declined over that same period.

Bureau of Justice Statistics (BJS): Part of the Office of Justice Programs (OJP), it is responsible for collecting, analyzing, and publishing data related to crime in the United States, which is gathered from the 50,000 agencies that comprise the U.S. justice system.

Generally, FBI and BJS crime estimates are released and reported in the media at about the same time, leading to a series of predictable questions and comments such as "statistics lie," "government researchers are biased, idiots, or lying," "an idiot must have made those numbers up because crime is bad where I live," and "my cousin was robbed so these numbers are not right." What are your thoughts about comments such as these? Do you agree with any of

them? How can you account for the fact that BJS violent crime estimates are so much greater than the FBI crime rates? How might you explain that BJS finds that violent crime was stable over the year, yet the FBI concluded it was declining?

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The FBI considers arson a violent crime, but the National Crime Victimization Survey (NCVS) does not. How might this affect violent crime rates published by each organization?

Hopefully, this chapter prompts you to recognize that research differences in the research methodology used by each federal agency to generate these crime rates account for these differences in estimates. This is exactly the case. BJS violent crime estimates are based on data from the **National Crime Victimization Survey (NCVS)** on nonfatal violent criminal victimization. This survey defines violent crime as including rape, sexual assault, robbery, aggravated assault, and simple assault. It does not include murder because NCVS data are gathered directly from the victims of violence (victims of murder cannot be interviewed). The NCVS gathers data from a sample of people (not every person in the United States is interviewed), and the published NCVS violent crime rate tells us how many *violent victimizations* (not how many victims or how many incidents or offenses) occurred per 1,000 people age 12 or older.[2] That the NCVS crime rate focuses on victimizations (and not on victims or incidents) is an important piece of methodological information in understanding these figures because there can be multiple victims in each incident, and each victim could experience multiple victimizations in each incident or offense.

The FBI produces violent crime estimates using a completely different approach or methodology. First, FBI crime data are gathered from police agencies who submit crime information to the FBI voluntarily. This means if a victim of a crime does not report the incident to the police, or if the police do not record an incident or report crime data to the FBI, it will not be reflected in the FBI numbers or estimates. The FBI defines violent crime as including murder, rape, robbery, aggravated assault, and arson. Note that sexual assault along with simple assault (the most common form of violence in the United States according to the NCVS) are not included in FBI violent crime estimates. Also, as noted, murder, the least common form of violence in the United States according to the FBI, is included in FBI violent crime estimates. Moreover, the FBI includes arson, which is not recorded in the NCVS. FBI crime estimates describe crime committed against all people in the United States, regardless of their age (the NCVS focuses only on victims age 12 or older) and regardless of where they live (recall that the NCVS focuses only on persons in a housing unit—people living in institutional housing or the homeless are not included), and includes commercial crimes (the NCVS does not count crimes against a business). Also, FBI crime rates refer to offenses, and offenses are counted differently depending on the specific violent crime considered. According to the FBI, when considering assault and rape, an offense is equal to the number of victims. For robbery, an offense equals the number of incidents. This means that a single robbery counted by the FBI could include numerous victims. These are only some of the differences in the methodologies used to generate violent crime estimates by the NCVS and the FBI. See Table 1.1 for some UCR and NCVS methodological differences.

National Crime Victimization Survey (NCVS): Nationally representative survey sponsored by the Bureau of Justice Statistics (BJS) that gathers data about property and violence victimization occurring in the United States to persons age 12 or older living in housing units. NCVS data are one of the nation's sources of crime data, which includes both crimes that is and is not reported to the police. NCVS data demonstrate a drop in violent and property crime since the early 1990s.

TABLE 1.1 ⬢ Differences in Construction of Violent Crime Rates—FBI's UCR and BJS's NCVS

	Uniform Crime Reports—FBI	National Crime Victimization Survey—BJS
Purpose	The UCR Program's primary objective is to provide a set of criminal justice statistics for law enforcement administration, operation, and management.	The NCVS was implemented to provide previously unavailable information about crime (including crime not reported to police), victims, and offenders.
Source of Data	Administrative data. The FBI compiles data from monthly law enforcement reports or individual crime incident records transmitted directly to the FBI or to centralized agencies that then report to the FBI. It includes only crimes that were reported to the police and estimates data when they are either incomplete or not submitted.	Data directly from crime victims. On an ongoing basis, BJS interviews a nationally representative sample of approximately 169,000 people age 12 or older living in U.S. households. Households remain in the sample for 3.5 years. New households and persons rotate into the sample monthly.
Exclusions	Excludes crimes reported to the police against any person of any age occurring in any location that can be used in FBI crime rates. Does not include crime not reported to the police.	Excludes persons younger than age 12 and institutionalized persons not living in a housing unit (e.g., military barracks, prisons, homeless). Violence against a person that occurred outside the United States is not included.
Differences in Violent Crimes Covered for Annual Estimates Released (both data collection systems gather other additional information)	Murder, rape, robbery, aggravated assault, and arson. The UCR includes, but the NCVS excludes, homicide, arson, commercial crimes, and crimes against children younger than age 12.	Rape, sexual assault, robbery, aggravated assault, and simple assault. The NCVS includes, but the UCR excludes, sexual assault (completed, attempted, and threatened), attempted robberies, verbal threats of rape, simple assaults, and crimes not reported to law enforcement.
Differences in Violent Crime Definitions	Although names of crimes may be the same, definitions differ. For example, until January 1, 2013, rape in the FBI's UCR did not include male victims. Consult the methodology of each for more details.	Although names of crimes may be the same, definitions differ. For example, until 2013, rape in the FBI's UCR did not include male victims. Consult the methodology of each for more details.
Counting Differences	The basic counting unit for the UCR is the offense. For some crimes, such as assault and rape, the frequency of offenses is equal to the number of victims. For other crimes, such as burglary or robbery, the number of offenses equals the number of incidents.	The basic counting unit of the NCVS is victimization. A victimization is a specific criminal act that affects a single victim. A victim may experience multiple victimizations in an incident.
Rates Reported	The UCR reports violent crime rates using "per 100,000 people in the United States."	The NCVS reports violent crime rates using "per 1,000 people age 12 or older in the United States."

Source: Adapted from Planty, M. G., Langton, L., & Barnett-Ryan, C. (2014, September). The nation's two crime measures. Bureau of Justice Statistics. http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5112; and Rand, M. R., & Rennison, C. M. (2002). True crime stories? Accounting for differences in our national crime indicators. *Chance, 15*(1), 47–51.

The NCVS and FBI estimates are based on different approaches, definitions, measurements, and ways to count violent crime. Now with a better understanding of differences in methodologies used by BJS and the FBI, do you have a more informed understanding about the extent of violent crime in the United States? Can you now articulate some reasons why the NCVS suggests stability in crime rates over the year, whereas the FBI measures a decline? Can you offer evidence for why you know this? Can you better understand why NCVS estimates might be higher than FBI estimates? Can you see why stating that statistics and researchers are biased or that "statistics lie" is not only intellectually lazy but also incorrect? Given all of these differences, is it at all surprising to you that the two pieces of research reach different conclusions? It should not be.

Other Sources of Knowledge

Chances are that each of us has knowledge we hold dear that is not based on a scientific approach. In fact, having only knowledge from the scientific inquiry would make day-to-day living impossible. Imagine requiring scientific evidence to determine how to best cook, eat, bathe, drive, read, study, interact with others, converse, or any number of other daily activities. This section identifies common sources of nonscientific knowledge and notes some limitations of these sources.

- **Tradition, customs, and norms.** Tradition, customs, and norms are used to pass on knowledge or beliefs from person to person over time. This knowledge is thought to be true and valuable because people have always believed them to be true and valuable. Examples include how strangers are to be greeted, treatment of the U.S. flag, manners used while eating, and what is viewed as appropriate food sources (e.g., no horse or dog for dinner [or breakfast either]). A limitation of this type of knowledge is that it is subjective, nonresearch based, and not concluded from systematically collected data. Also, this information is often not falsifiable or reproducible. The knowledge is simply accepted as fact.

- **Personal experience**. Personal experience is a powerful source of nonscientific and nonresearchbased knowledge. This knowledge is believed to be valuable and true because you have personally experienced it. For example, you may have the personal experience that babies in restaurants are loud and messy (based on seeing one or two loud and messy babies; you probably didn't notice the clean and quiet babies, although they were there too). Or you may hold particular stereotypes of others based on a few personal experiences. This may be your experience; your experience is subjective, however, and does not necessarily accurately reflect the larger truth. This knowledge also suffers from not being concluded from systematically collected data. It is not falsifiable, and it is not reproducible.

Tradition, customs, and norms: Knowledge or beliefs passed on from person to person over time. This knowledge is thought to be true and valuable because people have always believed it to be true and valuable.

Personal experience: Knowledge accepted based on one's own observations and experiences.

Authoritative sources: Knowledge based on information accepted from people or sources that are trusted such as parents, clergy, news sources, bloggers, social media, or professors.

Some find babies to be poor restaurant patrons based on personal experience. Does this mean that all babies are unruly at restaurants, or might that knowledge be based on personal experience only?

- **Authoritative sources.** Knowledge also can include information taken from authoritative sources including parents, clergy, news sources, bloggers, social media, professors, or others. For some, if a source is trusted, the information they share is trusted. Examples can include knowledge such as that prayer is useful, the president is a jerk, crime is out of control, and research methods are useful. Although knowledge gathered in these ways can be valuable (and even be based on scientific research), you should research that information to assess its value because it too can be imperfect or incorrect.
- **Intuition**. Knowledge based on intuition is believed and valued because you have a feeling, sense, or gut instinct it is "good" information. Examples include initial perceptions about others or feelings about particular places or situations. Imagine meeting an individual at a party where your intuition immediately suggests they are a shyster and not to be trusted. This is your intuition talking, and what it is saying may or may not be true. It is also the case that this information is not research-based or scientific (even if you have been correct in other initial assessments). Like the other categories described here, this knowledge is not falsifiable, not reproducible, and not scientifically based.

TYPICAL STAGES OF RESEARCH

Subsequent chapters provide greater detail about the foundational elements and stages important for conducting scientific research. For now, this section briefly outlines these major steps and things used in research, including developing a research question, conducting a literature review, selecting appropriate research methods (e.g., samples and ways of gathering data such as surveys and observations), selecting analytic techniques, and developing and disseminating findings and conclusions.

Developing a Research Question

Intuition: Knowledge developed based on a feeling or gut instinct.

Research question: Question that guides research designed to generate knowledge. This question guides the research endeavor.

Research begins with, and is guided by, a **research question.** The research question when answered increases our understanding and knowledge about a topic. Research is never guided by a statement of fact. As basic as this distinction between question and statement seems, students new to research methodology frequently offer a statement rather than a question when asked to pose possible research questions. Every step that is taken to accomplish research is informed by that research question. There is an endless number of possible research questions. Some examples include the following:

- Is violence against college students more likely to occur on or off campus?
- What role does reporting violence to the police play on a victim's likelihood to access victim services?
- What are the differences between the perceptions and experiences of Black and White youth with police officers?
- How do female police officers serving as prostitution decoys view this work?
- What are the rates of dating violence by Latino victim gender?
- How do police perceptions of their own organization influence their views of the public, specifically their trust of people in the areas they patrol?
- What impact does notification of increased risk have on actions taken by residents and their perception of safety?

Do you have a research question in mind that you would like to explore? If not, you are not alone. Many students are anxious and feel that they cannot possibly think of a research question. Happily, all students can pose research questions once they recognize that they can be developed in many ways, including listening to others speak, reading a text and research literature, learning about theories, reading and watching the media, going to professional meetings, and so on. Sometimes it takes practice to see that one's innate curiosity or a desire to develop information can lead to research questions. Imagine you are in class listening to a police officer identifying the ways you can distinguish a police impersonator from a legitimate police officer. This officer discusses subtle characteristics in an officer's uniform or personal appearance (e.g., facial hair) that can be used to identify an impersonator. The officer's presentation gets you wondering more broadly about police impersonators, which leads to several questions:

- What is the gender, race, and age of most police impersonators?
- What types of victims do most police impersonators target?
- What are the main motivations of police impersonators?
- Are police impersonators more likely than other types of criminals to brandish or use a weapon? To injure the victim?

These are all interesting questions, and all are suitable research questions.

Imagine now that you taking a university-required training about college student sexual violence. You find that the material in the training is focused on sexual violence against female students only. This raises several questions in your mind:

- Are college women victims of nonsexual violence such as robbery? If so, to what extent?
- What is the extent to which male college students are sexually and nonsexually victimized?

RESEARCH IN ACTION

POSTRELEASE BEHAVIOR: DOES SUPERMAX CONFINEMENT WORK?

From 1970 to the early 2000s, the incarceration rates in the United States exploded, as did the amount of research focused on incarceration. That research overwhelmingly shows that incarceration does not effectively reduce a person's odds of recidivating compared with other approaches that include probation or shorter prison sentences. What has not received much attention, however, is how the type of incarceration affects recidivism and other post-release behaviors. Specifically, it is unclear how supermax confinement influences odds of recidivism and other postrelease behaviors. Supermax facilities are costly to operate, and confinement typically involves confinement to a cell for 23 hours a day with few or no opportunities for socialization with staff or other inmates. Butler et al. (2017) found two studies that examined the influence of supermax confinement on recidivism. Neither study found that supermax confinement had an effect on offenders' odds of recidivism. To build on that research, the current examination by Butler et al. compares recidivism rates of offenders exposed to supermax confinement in Ohio with those derived from a matched sample of offenders not exposed to supermax confinement. In addition, this research considers both short- (1 year) and longterm (7 years) effects of exposure to supermax confinement. Finally, Butler et al. consider the influence of supermax confinement on other postrelease behaviors such as employment and treatment completion.

To address these research purposes, the researchers used a randomly selected sample of 1,569 men taken from a list of all men released under postrelease supervision in Ohio from about 2003 to 2005. Data about each offender were collected from several official sources such as case files, and offenders were followed for a full year after release. Measures of whether each offender was reincarcerated for any reason or reincarcerated for a new crime within 7 years of his release were also obtained and used in the analysis. The analysis comprised finding a similar sample of incarcerated men who differed from the supermax sample only in terms of having not spent time in a supermax facility. By comparing their outcomes with the supermax sample, the researchers can now point to the effects of supermax exposure.

Findings from Butler et al. (2017) show that exposure to supermax confinement had no effect on recidivism in the short term. Similar to the findings from the analysis of recidivism in the short term, the odds of recidivism over the long term were nonsignificant. Thus, supermax confinement did not affect offenders' odds of recidivism over the long term either. When considering other postrelease behaviors, findings show that exposure to supermax confinement does not affect other postrelease outcomes for offenders released under postrelease supervision. In sum, supermax exposure leads to equivalent outcomes when compared with offenders not exposed to supermax.

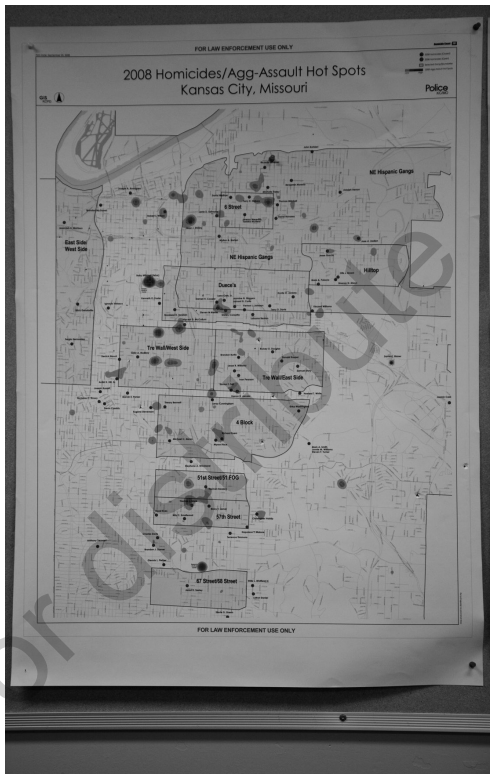
The policy implications of this work by Butler et al. (2017) point to the costs versus the benefits of supermax. The cost of operating a supermax facility is far greater than the cost of operating a typical maximum security prison. If outcomes are equivalent, this suggests the need to consider the feasibility of running expensive supermax operations. It appears cheaper and equally effective alternatives exist.

Butler, H. D., Steiner, B., Makarious, M. D., & Travis, L. F. (2017). Assessing the effects of exposure to supermax confinement on offender postrelease behaviors. *The Prison Journal, 97*(3), 275–295.

- Does violence against college students differ from violence against noncollege students in terms of rates and characteristics?
- Are bystanders more likely to be present during a college versus a noncollege student victimization? Is this the same for male versus female college students?

These are all suitable research questions. With the skills learned in this book, each of these research questions can be answered by you. Once a research question (or questions) has been

identified, the next step is to learn what is already known about that topic. That is accomplished via a literature review.



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Crime mapping is the source of much criminology and criminal justice knowledge. How do you think it added to our understanding about where crime occurs?

Conducting a Literature Review

A research question is the foundation of the proposed research. Once you have identified a research question (or questions), the next step is to conduct a review of scientific literature on that research topic. A **literature review** serves many purposes. It

- summarizes and synthesizes existing understanding on the topic of interest,
- identifies limitations and gaps in existing research,
- offers justification for the proposed study, and
- places the new study in context of the existing literature.

Although you may develop a creative and fascinating research question, it might be that others have already addressed it. That is okay! Reading about existing studies focused on the same question will assist in refining your research question. Understanding details about the methodology used in prior research offers the opportunity to identify possible improvements on that methodology in your project. Perhaps the existing studies are old. This means a new look at this old question using newer or improved data can increase our understanding of the topic. Or perhaps the older study used basic analytic approaches because computer power was not available at the time that research was conducted. It may be that the research question can be reexamined with more powerful analytic approaches and technology available today. This means the new study can provide an enhanced understanding of the issue.

Designing the Research

Designing the research study is the next major step in conducting research. Designing the research is where you identify the precise steps that will be used to answer the research question. Some of those steps may be identifying concepts of interest, making them measurable (operationalization), measuring those concepts, and selecting a sample. It is imperative that the precise steps taken to conduct research be thoroughly considered and documented. Documentation of your methodology is needed for consumers of your work to critically assess it and so future researchers who want to replicate your study can do so exactly.

Literature review: Review, summary, and synthesis of extant knowledge on a topic. Literature review sections in journal articles review, present, organize and synthesize existing understanding on a topic at the time the research was conducted. They are used to place the published research into context and to demonstrate how it adds to our understanding of a topic.

Collecting Data

Once the research methodology has been identified, the next step is to gather the data or information that will be analyzed to answer the research question. Researchers gather data that are most effective, efficient, and affordable to answer the research question. Data may

be gathered in any number of ways, including survey research, in-person interviews, focus groups, observations, experiments, quasi-experiments, document analysis, and so on. At the conclusion of data gathering, a researcher has the data needed to answer their research question. The next step is to analyze those data.

Selecting an Analytic Approach

To answer the research question posed, a researcher takes the systematically gathered data and analyzes it. How the data are analyzed depends on the nature of the research question and the data gathered. If a researcher wishes to explore or describe a topic using numeric data, they might use percentages or rates. If a researcher is working with non-numeric data in the form of text, interviews, or observations, they might use an approach that identifies themes, concepts, or core meanings. If a researcher wishes to identify associations among variables, then correlations might be an appropriate approach. If the researcher is interested in investigating causal relationships using numeric data, a statistical technique such as regression might be the most suitable approach. Many considerations including whether the data sought are numeric or non-numeric in nature go into selecting the appropriate analytic technique, but all ultimately are selected based on the best way to answer the research question.

Generating Findings, Conclusions, and Policy Implications

Answering the research question to create knowledge is the goal of the research. Nevertheless, answering the question is not enough. You as a researcher must also make sense of the findings. This can be accomplished by placing the findings in the context of the existing literature (again, the literature review is useful during this step). Do your findings support what was found in other literature? Do findings in the current research deviate from the findings in the literature? What are possible reasons for this support of, or deviation from, existing literature? How might this new knowledge be used to affect policy and improve everyday life? This step requires thinking about the research and what it means in the larger context of the issue.

ESSENTIAL ROLE OF ETHICS IN RESEARCH

In everyday life, and especially in the fields of criminal justice and criminology, ethical behavior is imperative. This includes the practice of criminal justice and criminology research. Attention to ethics must occur *throughout* the research process, not only in the planning stages. Ethics are norms for behavior that distinguish what is and is not acceptable. Ethics are not necessarily what feelings or laws direct us to do but what the common norms of moral behavior in society dictate. The next section offers information on some classic unethical studies conducted in the name of research. Understanding them places into context why ethical considerations must be constant and why oversight in research is imperative.

Unethical Research Examples

You might believe that an intentional and constant attention to ethics is unnecessary because researchers would not act unethically. If you believe this, you are incorrect (and there is a lot of evidence demonstrating that). It is shocking the sheer number and nature of unethical research that has been undertaken all in the name of science. Even more surprising is that many researchers engaged in these studies did not view their research as unethical while it was ongoing. Clearly, humans require additional oversight than that provided by self-reflection alone.

Nazi Research on Concentration Camp Prisoners

During World War II, German doctors conducted research experiments on prisoners held in concentration camps. These grisly experiments included altitude experiments in which prisoners were put in low-pressure chambers to determine the effects of altitude on the body as well as experiments in which prisoners were submerged in freezing water to test the effects of, and effective treatment for, hypothermia. Other concentration camp prisoners were exposed to diseases such as tuberculosis, typhoid fever, yellow fever, and hepatitis to allow doctors to conduct experiments on possible vaccines. Some prisoners were subjected to bone-grafting experiments, others were shot to learn about blood clotting, and still, others were exposed to mustard gas that provided data used to identify possible antidotes to poisons. Millions of concentration camp prisoners were subjected to forced sterilization experiments as German doctors tried to discern inexpensive and efficient ways to sterilize those deemed inferior. It hardly needs to be stated, but this type of research is absolutely unethical, yet it was conducted by many researchers in the name of science and *it continued for years.*

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The Tuskegee Syphilis Experiment is an example of highly unethical research that cost many unsuspecting Black men their health and their lives. What benefit was gained from conducting this research?

Tuskegee Syphilis Experiment

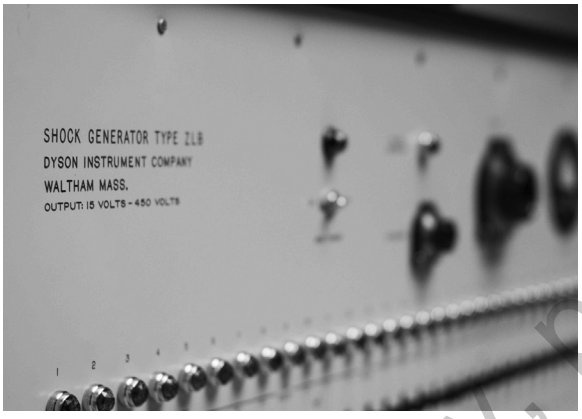
If you are thinking that researchers in the United States would not engage in such savage, unethical research, think again. Consider the U.S. Public Health Service's **Tuskegee Syphilis Experiment**, which took place in Macon County, Alabama. The purpose of this study was to identify the natural course of syphilis in Black men. Syphilis is a severe disease that leads to damage to body parts including the brain, heart, eyes, liver, bones, joints, and nerves. It can also lead to paralysis, blindness, mental illness, and death. Six hundred impoverished Black men "volunteered" for the study, but they were not told they had volunteered for research on syphilis. Rather, they were told they would be treated for "bad blood." Bad blood was understood to mean an assortment of medical issues including anemia and fatigue. In return for volunteering for this study, the men were offered free medical examinations, transportation

Tuskegee Syphilis Experiment: Unethical research sponsored by the U.S. government in which impoverished Black males infected with syphilis were prevented from obtaining penicillin as a cure. Many participants died but not before infecting spouses and children with syphilis.

to and from the clinic, meals while at the clinic, treatment for minor problems, and burial stipends paid to their families after their death. These were highly valuable incentives for such impoverished individuals.

At the beginning of the experiment, 399 of the 600 participants were known to be infected with syphilis (the remaining 201 were considered the comparison group). None of the infected men were told they had syphilis, however. When the Tuskegee Syphilis Experiment began in 1932, there was no cure for syphilis. In an astoundingly unethical turn of events, when penicillin was identified as a cure to treat syphilis in 1947, penicillin was withheld from the infected participants in the study. In fact, efforts were made to obstruct study participants from receiving penicillin anywhere so as not to jeopardize the study. In contrast, although these men were denied available treatment for syphilis, the study's sponsor was establishing "rapid treatment centers" to treat syphilis in the general population.

This ghastly experiment was finally halted in 1972, more than 20 years after the discovery of penicillin. Many had called for the study's termination earlier given its unethical nature, but those demands were ignored. Only when a whistle-blower, Peter Buxtun, leaked information regarding the experiment to journalists was the research halted. At the time the experiment was stopped, only 74 of the original 399 infected men were still living. Twenty-eight had died from syphilis, 100 had died from related complications, and 40 spouses and 19 children had been infected. In 1997, President Bill Clinton formally apologized for this government-sponsored study. In attendance at this formal presidential apology were five of the eight surviving experimental research subjects.



In one iteration of the Milgram experiments, the teacher and learner sat next to one another. In this case, the learner had to place his own hand on the shock plate. When he refused to do so at 150 volts, the teacher was ordered to physically force the learner's hand on the shock plate. Thirty percent of teachers forced the learner's hand onto the plate all the way up to the maximum of 450 volts. Would you have done so? Why or why not?

Milgram's Obedience to Authority

Unethical research in the United States has not been confined to federal government sponsors either. Consider the infamous work of Stanley Milgram (1963). The purpose of his 1961 research was to identify the willingness of people to obey authority figures even when that requested behavior conflicts with a person's conscience. The impetus for the study was the death of millions of people killed in gas chambers in concentration camps during the Holocaust. Milgram (1975, p. 1) noted that "[t]hese inhumane policies may have originated in the mind of a single person, but they could only have been carried out on a massive scale if a very large number of people obeyed orders." To conduct the study, Milgram advertised for volunteers to participate in an experiment about learning. Forty male volunteers were selected to participate. The experiment began as two men showed up as volunteers. The first order of business was to determine who would be the teacher and who would be the learner in the research on "learning." These roles were determined by drawing slips of paper out of a

hat. Both men drew a slip of paper, and each announced his role. Both slips of paper in the hat had "teacher" written on them. In reality, one volunteer was a confederate working with the research team. Although the confederate drew a slip that stated "teacher," he stated he was the learner. The true volunteer would serve as the teacher, and his behavior was the focus on the actual experiment.

After identifying roles, the teacher watched the fake learner get strapped into a chair where the learning would take place. The teacher was then seated in front of a board with 30 switches, each of which would deliver a shock to the learner. Shock intensities began at 15 volts and increased at 15-volt increments to a maximum of 450 volts across the 30 switches. In addition to identifying the voltage of each switch, each switch was labeled using a phrase such as "Slight shock" to "Danger: Severe Shock." At that time, the teacher was administered a small shock to demonstrate what the learner would feel in the beginning. In reality, the learners were not shocked during the experiment.

After the subjects were situated, the teacher was instructed to read a series of word pairs. The learner was required to recall one of these word pairs. If the learner failed to identify the correct word, the teacher was required to announce the voltage level he was administering and then administer the shock (although a shock was not administered). With each incorrect answer, the level of shock was increased. As the severity of shocks increased, the learner increased his vocalization of distress from pleas, cries, begs, and moans, ultimately culminating with silence. If the teacher hesitated or refused to administer the required shock, the researcher (wearing a white laboratory coat) urged the teacher to continue using four demands delivered in sequence (Milgram, 1963, p. 374):

1. Please continue, or please go on.
2. The experiment requires that you continue.
3. It is absolutely essential that you continue.
4. You have no other choice; you must go on.

If the teacher asked the researcher about his own liability for harm to the learner, the researcher stated, "Although the shocks may be painful, there is no permanent tissue damage, so please go on." If the teacher told the researcher that the learner did not want to continue, the researcher responded, "Whether the learner likes it or not, you must go on until he has learned all the word pairs correctly. So please go on." If at any time during the experiment the teacher refused to continue after hearing four demands from the researcher, the experiment was halted. Milgram found that the earliest a teacher stopped the experiment was at 300 volts (five teachers). Sadly, 26 teachers (65% of the teachers) administered the maximum 450-volt severe shock even when they were visibly shaken while doing so. Milgram offered two important conclusions from this research. First, the strength of obedient tendencies demonstrated by teachers in the experiment was unexpectedly and surprisingly high. The second conclusion was that although the experiment generated extraordinary tension in the teachers, it was not enough for them to disengage from the experiment.

Most believe they would not administer shocks and suffering to humans, but Milgram's results suggest differently. How about administering painful voltage to a puppy? Would you do this? What sort of information would make doing this worthwhile in your opinion? Why?

Many erroneously believe Milgram conducted this famous experiment only once. In fact, he conducted 19 experiments in which characteristics of the experiment varied. Variations in the subsequent experiments included the physical location of the experiment, the physical closeness of the learner to the teacher, the ability of the teacher to see the learner, the gender of the learner, whether the teacher had to physically place the learner's hand on a shock plate to receive the shock, and so on. All iterations of the experiment concluded the same: A large percentage of people obeyed authority even when it was stressful and conflicted with their personal beliefs.

Milgram's work prompted others to conduct similar experiments, including some that did not involve human subjects. Thinking that perhaps teachers in Milgram's research did not believe the learner was being shocked, Sheridan and King (1972) designed an experiment in which a "cute, fluffy, puppy" was shocked. In this research named "Shock the Puppy," undergraduate psychology students volunteered to act as teachers to the puppy. The students were told that the puppy was learning to stand to the left or the right of his cage depending on whether he saw a steady or a flickering light. When the puppy failed to respond correctly to the light stimulus, the student was directed to shock the dog. For each incorrect action by the dog, the level of the shock was increased by 15 volts. When shocked, the puppy initially barked, then jumped, and finally howled in pain. This demonstrable show of pain deterred a few students from administering the painful shocks. Although the 13 female and 13 male student volunteers were visibly upset during the experiment, each continued administering and increasing the shock level when instructed by an authority figure. In fact, all 13 of the women and 7 of the men shocked the puppy using the maximum 450 voltage.

Stanford Prison Experiment

In part, in response to Milgram's work, Haney, Banks, and Zimbardo (1973) designed the **Stanford Prison Experiment**, which investigated identification conformity and the role of social situations on behavior. An additional purpose of this work, sponsored by the U.S. Office of Naval Research, was to better understand the conflict between military guards and prisoners. After placing an advertisement for college student volunteers in 1971, 24 males judged to be psychologically stable and healthy were selected to participate. The study was designed to last for 2 weeks and took place on the Stanford University campus in a basement makeshift prison complete with a solitary confinement cell. Volunteers acting as guards were instructed not to physically harm or withhold sustenance from the prisoners. Still, guards were reminded that they had all the power, whereas the prisoners had none. Guards were issued mirrored sunglasses, khaki uniforms, and wood batons.

Stanford Prison Experiment: Haney et al.'s (1973) classic example of unethical research in which participants took on the roles of guards or prisoners in a makeshift jail. Guards quickly became abusive, and prisoners quickly exhibited clear signs of trauma. Although they were told they could leave the experiment at any time, participants were prevented from doing so.

Those volunteers serving as prisoners were not told when the experiment would begin. They left the university and resumed their normal lives. To their surprise (and humiliation), they

were unexpectedly taken into custody in front of friends and loved ones in public places. Prisoners were placed in a police car and taken to the "jail," where they were fingerprinted, strip-searched, deloused, photographed (mug shots), issued poorly fitted smocks and stocking caps, and had a chain placed around their right ankle. Each prisoner was then given a new prisoner number and not referred to by name again.

Courtesy of Philip G. Zimbardo, Inc.

Guards actively humiliated several Stanford prisoners using sadistic and authoritarian means. Do you believe you would have been a sadistic guard? Zimbardo concluded anyone in that position would. Do you agree? Why or why not?

Almost immediately, guards and prisoners internalized their roles. Prisoners responded in a variety of ways. Some began resisting guard demands, whereas some passively accepted the psychological abuse heaped on them. Some acted insane. Five prisoners exited the experiment before its conclusion as a result of the trauma they experienced. Guards exhibited dehumanizing authoritarian behaviors and attitudes and forced prisoners to engage in degrading tasks, subjecting prisoners to psychological torture. Findings indicated that one-third of the guards exhibited sadistic tendencies; guards even began controlling prisoner access to the toilet.

Even Zimbardo, the principal investigator of the study, failed to recognize the unethical nature of this experiment until it was pointed out to him by a graduate student. Only then did he see the escalating brutality of the situation as well as his own contribution to it. Zimbardo recognized that he had begun acting as the executive leader of the prison rather than as an objective researcher conducting an experiment. It was then, 6 days after beginning the experiment, that it was ended. Zimbardo concluded that a brutal environment leads to brutal behavior.

Foundational Ethical Research Principles and Requirements

These few examples of unethical research point to the need for research oversight to prevent abuses of human subjects. Two historical and important documents provided the initial moral framework that continues to guide researchers today. After the research atrocities perpetrated in Nazi Germany, the **Nuremberg Code** (Ivy, 1948), outlining ethical principles to guide research, was created in 1947. It identifies 10 points of guidance:

1. Required is the voluntary, well-informed, understanding consent of the human subject in a full legal capacity.
2. The experiment should be aimed at positive results for society that cannot be procured in some other way.
3. It should be based on previous knowledge (like an expectation derived from animal experiments) that justifies the experiment.
4. The experiment should be set up in a way that avoids unnecessary physical and mental suffering and injuries.

Nuremberg Code: After the research atrocities perpetrated in Nazi Germany, the Nuremberg Code was enacted in 1947 to outline 10 ethical principles to guide research.

5. It should not be conducted when there is any reason to believe that it implies a risk of death or disabling injury.
6. The risks of the experiment should be in proportion to (i.e., not exceed) the expected humanitarian benefits.
7. Preparations and facilities must be provided that adequately protect the subjects against the experiment's risks.
8. The staff members who conduct or take part in the experiment must be fully trained and scientifically qualified.
9. The human subjects must be free to immediately quit the experiment at any point when they feel physically or mentally unable to go on.
10. Likewise, the medical staff must stop the experiment at any point when they observe that continuation would be dangerous.

National Research Act of 1974: Created by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. The purpose of this act was to develop human subjects research guidelines.

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research: Also known as "The Commission." The purpose of The Commission was to develop policies related to human subject research guidelines.

Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects and Research: Report that outlined the principles of human subjects research including respect for persons, beneficence, and justice.

Respect for persons: First principle of ethical research outlined in the Belmont Report. It states that individuals should be treated as autonomous agents and that autonomy must be acknowledged. Persons with diminished autonomy are entitled to protection, and protection is required of those with diminished autonomy.

A limitation of the Nuremberg Code (Office of History, National Institutes of Health, n.d.) is that it offered no mechanism for compliance or enforcement. The Code relied on the researchers themselves to govern themselves, which as the past shows is not effective:

> The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another with impunity. (item 1)

Sadly, the Nuremberg Code did not end unethical research. Note that the Tuskegee Syphilis Experiment described earlier began before the Nuremberg Code was established, yet that experiment continued for almost 30 years after the introducing of the Code. Given the Nazi experiments, the Tuskegee Syphilis Experiment, and many more examples of unethical research than this book can cover, the **National Research Act of 1974** was passed by Congress. This law created the **National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research** (referred to as The Commission), which was charged with developing human subject research guidelines. A document from the 1974 Commission was the ***Belmont Report*: *Ethical Principles and Guidelines for the Protection of Human Subjects and Research*** (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979), which was published in the U.S. Federal Register in 1979. The Belmont Report identifies three core ethical principles and three requirements that all researchers must adhere to when researching human subjects (unfortunately, the cute, fluffy puppies were not protected by the Belmont Report, which focuses on humans).[3] The following are three fundamental *principles* outlined in the Belmont Report:

1. **Respect for persons.** Individuals should be treated as autonomous agents, and that autonomy must be acknowledged. Persons with diminished autonomy are entitled to protection, and protection is required of those with diminished autonomy.

2. **Beneficence.** Researchers are obligated to do no harm, to maximize possible benefits, and to minimize possible harms to all participants in a study. Study participants include respondents, researchers, and bystanders.

3. **Justice.** Research subjects must be treated reasonably and fairly. Selection of participants should not be conducted in which some due to their easy availability, their compromised position, or their manipulability are taken advantage of, shoulder the bulk of the costs of the research. Selection of subjects in research should be related directly to the problem being studied. Costs and benefits of the research should be shouldered fairly.

Beneficence: Second principle of ethical research outlined in the Belmont Report. It states that researchers are obligated to do no harm, to maximize possible benefits, and to minimize possible harms to all participants in a study. Study participants include respondents, researchers, and bystanders.

Justice: Third principle of ethical research outlined in the Belmont Report. This principle indicates that research subjects must be treated reasonably, justly, and fairly. Selection of participants should not be conducted in which some, due to their easy availability, their compromised position, or their manipulability are taken advantage of or shoulder the bulk of the costs of the research. Selection of subjects in research should be related directly to the problem being studied, and the costs and benefits of the research should be shouldered fairly.

The following three *requirements* for human subjects research are indicated by the principles of respect for persons, beneficence, and justice in the Belmont Report:

1. **Informed consent.** Research participants can choose what shall or shall not be done to them. To provide informed consent, **voluntary participation** requires that participants choose to engage in the study after having been given sufficient **information** about the study. In addition, information about the research must be provided in a way that is **comprehensible** to the participant.

2. **Assessment of risk and benefits.** It is required that all parties engaged in research examine whether the benefits outweigh the risks. It is the researcher's responsibility to properly design a study and to ensure the selection of subjects is fair and just. It is a review committee's responsibility to identify if risks, if any, to the participants are justified. Participants must assess whether they will or will not participate.

3. **Selection of subjects.** This requirement calls for the fair selection of, and fair distribution of, outcomes associated with the selection of research subjects for research conducted.

Informed consent: First requirement of ethical research stated in the Belmont Report. Informed consent indicates participants can choose what shall or shall not be done to them. To obtain informed consent, the research participant must be given comprehensible information about the study, from which he or she can volunteer to participate.

Voluntary participation: Required in ethical research. A participant's engagement in a study must be grounded in having received comprehensible information about the study. Only after receiving this can a participant voluntarily agree to engage in the study.

Today, **institutional review board (IRB)** committees frequently serve as the review committees identified in the second requirement for human subjects research.

Role of Institutional Review Boards (IRBs)

IRBs that review behavioral human subjects research today resulted from two primary sources. First, in 1966. the U.S. Public Health Service (USPHS, 1966) issued a memorandum requiring all proposed research using PHS grant funds be reviewed by a board of institutional associates:

> No new, renewal, or continuation research or research training grant in support of clinical research and investigation involving human beings shall be awarded by the Public Health Service unless the grantee has indicated in the application the manner in which the grantee institution will provide prior review of the judgment of the principal investigator or program director by a committee of his institutional

associates. This review should assure an independent determination: (1) of the rights and welfare of the individual or individuals involved, (2) of the appropriateness of the methods used to secure informed consent, and (3) of the risks and potential medical benefits of the investigation. A description of the committee associates who will provide the review shall be included in the application. (p. 351)

Great improvements in terms of research oversight stemmed from this memorandum because independent reviewers were required and enforcement was tied to funding.

The second cornerstone document leading to IRB committees was that the ideas in the 1966 USPHS memorandum were expanded to include a broader group of federal agencies and departments with the work of the National Research Act of 1974. This law prompted the establishment of IRB committees to review almost all federally funded behavioral human subject research at the local level (generally in universities). IRBs are tasked with reviewing, approving, and monitoring health and social science research involving humans in the United States. With few exceptions, all research that is supported by the U.S. federal government requires IRB oversight. Exceptions include research in which the only involvement of human subjects include research (National Research Act of 1974, 2009)

- conducted on normal educational practices in established or traditional educational settings;
- involving cognitive, diagnostic, aptitude, or achievement educational tests (exceptions to this exemption are provided in the original source);
- involving the collection or investigation of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available, or if the information does not contain means to identify the subjects'
- including demonstration projects that are conducted by or subject to the approval of department or agency heads, which are designed to study, evaluate, or examine public benefit or service programs, or the procedures used in these programs; or
- including taste and food quality evaluation and consumer acceptance.

For the full text of the exceptions, see http://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/index.html

IRB committees are required to ensure that the requirements and obligations outlined in the Belmont Report are followed and that the rights of humans participating in research are honored. Nevertheless, IRB committees are not without controversy, especially when social science research is considered. Finding a frustrated social scientist who has tangled with an IRB committee is not difficult. These frustrations often stem from the burdens placed on social science researchers trying to satisfy IRB regulations that grew out of medical and health research. Furthermore, the frustration stems from changing requirements based on changes in the committee membership. Attempts to ameliorate this friction are ongoing. Although IRB committees can be challenging to work with at times, review of research procedures and an

Information: Required by the Belmont Report for ethical research. Those considering participating in research must be provided information about the study they are considering.

Comprehensible: Requirement from the Belmont Report of the information given possible study participants. That the information be comprehensible is required before the participant can offer informed consent.

Assessment of risk and benefits: Second requirement of ethical research stated in the Belmont Report. It is required that all parties engaged in research examine whether the benefits of the study outweigh the risks. It is the researcher's responsibility to properly design a study and to ensure that the selection of subjects is fair and just. It is a review committee's responsibility to identify whether any risks to the participants are justified. Participants must assess whether they will or will not participate.

Selection of subjects: Third requirement in the Belmont Report requires that subjects in research should be fairly selected and that the benefits and risks of the research should be fairly distributed.

Institutional review boards (IRBs): Committee convened and tasked with reviewing, approving, and monitoring health and social science research involving humans in the United States. With few exceptions, all research that is supported in any fashion by the U.S. federal government requires IRB oversight; other funding sources may also require IRB approval for human subjects research.

independent body to ensure human subject treatment is ethical to have proven necessary given past research shenanigans. As Carlos Cuevas of Northeastern University, a featured researcher who is introduced in more detail in this chapter, noted, "IRB is like the IRS. No one likes them, but they are very much needed."

RESEARCHER CASE STUDIES AND A ROAD MAP

One limitation of existing research methods books is that they often present research as a static, dry, boring, and linear process in which a researcher completes step one, then step two, then step three without every circling back to improve or refine parts of the process. In addition, too often, research methods books do not demonstrate how much fun research is! They do not share the anticipation of what the results show or when the results show something completely unexpected. This is fun! Unfortunately, the fun is often neglected because research is an investigation, an exploration, and the answer that the researcher ultimately uncovers can come as a great surprise. It is similar to opening a wrapped gift while excitedly anticipating what is inside.

To illustrate the dynamic and fun nature of research and research methods, several engaging researchers will be sharing stories about their own research experiences in this text. These accomplished researchers have studied a range of criminal justice and criminology topics, gathering a variety of types of data and using a variety of research methodologies. Throughout the remainder of the book, they share, often in their own words, stories about successes and hurdles they have encountered as they have attempted to answer important and interesting research questions. This information was gathered in a series of personal interviews conducted via videoconference, many of which were recorded.

The next section introduces each researcher we follow throughout the research process in the text. This section also introduces one piece of research each researcher published in an academic journal. We will discuss the process each engaged in throughout the text to illustrate research methods in action. Table 1.2 follows and offers the full citation for each researcher's work. For additional information about each researcher, consult the corresponding academic web pages that are available in the Web Resources section at the end of this chapter.

Featured Researchers

Rod Brunson, PhD

Rod Brunson, Ph.D., is the Thomas P. O'Neill Jr. Chair of Public Life, professor of criminology and criminal justice and political science, and director of graduate mentoring and diversity initiatives in the College of Social Sciences and Humanities at Northeastern University. His research examines youth experiences in neighborhood contexts with a specific focus on the interactions of race, class, and gender and their relationship to criminal justice practices. He has authored or coauthored more than 50 articles, book chapters, and essays using a variety of research methods, including gathering and analysis of qualitative data and evaluation research.

Courtesy of Rod Brunson

Brunson was first exposed to research when he was in graduate school and got invited to participate in a professor's research project. In this capacity, he went into a juvenile detention center and spoke to juveniles involved with gangs. Brunson was surprised and intrigued by the willingness of people to share intimate details of their lives. The purpose of that project was gangs, but Brunson learned so much about the living conditions that these young people faced every day that it made him more curious. From this experience, a researcher emerged. Since then, Brunson has studied myriad topics in the field (and behind the computer) that demonstrate the practical benefits of his work.

To learn more about Brunson's research, we consider a piece of research he was once told by a senior faculty member had no relevance: police relations with urban disadvantaged males. It turns out that the critic was wrong and that understanding how disadvantaged male adolescents view and interact with the police is timely and relevant. In particular, Brunson examines whether there are differences between those experiences and perceptions between Black and White youth living in similarly disadvantaged urban neighborhoods. Like others, Brunson collaborated on this research. His collaborator was Ronald Weitzer, Ph.D., a sociologist at George Washington University (Brunson & Weitzer, 2009). Although Weitzer's contribution is important (in this piece and in his body of research more generally), we focus on Brunson throughout this text.

James C. Carr

James D. Carr is a doctoral candidate in the School of Criminal Justice at Michigan State University. He is also an assistant editor for the *Journal of Comparative and Applied Criminal Justice*. Carr has always been fascinated by what people believe, why they believe it, and where those beliefs come from. In the criminal justice context, this fascination has led him to conduct research in police–community relations—specifically on issues regarding the perceptions of trust, justice, and risk in the relationship. His secondary interests lie in genocide, state crime, and criminological theory. He also boasts unhealthy obsessions with Cherry Coke, Pink Floyd, and Calvin & Hobbes.

Courtesy of James C. Carr

Carr did not intend to become a criminologist. He started college back in the 1990s, planning on becoming a child psychologist, but financial and personal challenges prevented him from completing his degree. After 15 years in retail, he was finally able to return to college, and he remained in psychology, but a spur-of-the-moment undergraduate class choice for a summer semester changed his trajectory. The class was called Understanding Violence, an interdisciplinary study of why people engage in violent acts. From that point on, he was hooked on the "dark side" of human behavior, and he devoted his graduate studies to criminology.

Carr views research as a project that is intended to tell a story . . . and hopefully a *true* story. Everything has a story—from the shirt someone wears to the old guitar sitting in the corner to a shooting on an isolated street corner. Research attempts to unearth that story in all its different perspectives, lay it out in precise,

easy-to-understand terms, and present it to the world. The most talented researchers are the ones who can make the story interesting and—most importantly—accurate.

Carlos Cuevas, PhD

Carlos Cuevas, Ph.D., is a professor of criminology and criminal justice and the co-director of the Violence and Justice Research Lab at Northeastern University. His research interests are in the area of victimization and trauma, sexual violence and sexual offending, family violence, and psychological assessment. He focuses on victimization among Latino women, youth, and understudied populations, and how it relates to psychological distress and service utilization, as well as the role cultural factors play on victimization. In addition, he is studying the impact of psychological factors on the revictimization of children and how it helps explain the connection between victimization and delinquency. He uses a variety of methodologies to conduct his research, including secondary data analysis and original data collection.

Courtesy of Carlos Cuevas

Cuevas never intended to be a researcher but instead started his program in clinical psychology to become a clinician. From early on in his graduate program, Cuevas recognized that he was good at research, and he found himself admiring the creative research conducted by his mentor. He graduated and began doing the opposite of what he originally intended. Today he spends about 90% of his time conducting research and publishing and the remainder working as a clinician. We will learn more about the research Cuevas conducts by considering his research using data from a large national survey focused on adolescent Latino victimization. Surprisingly, research on victimization of Latinos in this nation has lagged, although the work of Cuevas and several others is changing that. In the research, we'll consider throughout the text, Cuevas and his colleagues examined the rates of victimization and the risk factors and cultural influences on dating violence experienced by Latino teens. Collaboration among researchers is common. This research is no exception because Cuevas worked with an excellent team, including Chiara Sabina, Ph.D., and Heather M. Cotignola-Pickens (Sabina, Cuevas, & Cotignola-Pickens, 2016). Sabina is an associate professor in the department of women and gender studies at the University of Delaware and the lead author on this research. The third author, Heather Cotignola-Pickens, was a student at the time this research was conducted. Cotignola-Pickens earned an M.S. and is a doctoral candidate at Loyola University Maryland in clinical psychology. She expects to earn her Ph.D. in 2022.

Mary Dodge, PhD

Mary Dodge, Ph.D., is a professor in the School of Public Affairs at the University of Colorado Denver. Her research focuses on women in the criminal justice system, white-collar crime, policing, prostitution, and courts. Most of her work focuses on qualitative data to gain a deep

Courtesy of Mary Dodge

understanding of the topics she examines. Dodge uses a variety of approaches, including gathering original data and evaluation research.

She was first exposed to research as an undergraduate when she began working as an assistant to a professor where she gathered data in a geriatric unit in a hospital. As a doctoral student, Dodge recognized how interesting research was when researching a project involving a university, alleged illegal acts by doctors, cover-ups, and whistle-blowers. Anyone who thinks research cannot be fun should give a good look at the research Dodge has conducted. For our purposes, we focus on research she conducted with two of her former students: Donna Starr-Gimeno and Thomas Williams (Dodge, Starr-Gimeno, & Williams, 2005). Donna Starr-Gimeno is a member of the Denver Police Department, and Thomas Williams is a member of the Aurora (Colorado) Police Department. This particular piece of research explores the perspectives of female police officers who serve as decoys in prostitution stings. Her work offers insight into how these women feel about themselves and others involved in the stings. Prior to this research, researchers had only speculated about how women view this type of work. In general, that speculation viewed these roles as further evidence of the subjection and degradation of women in law enforcement.

Elizabeth Groff, PhD

Elizabeth "Liz" Groff is a professor in the Criminal Justice Department at Temple University. Her research interests include the relationship between place and crime. She also conducts research examining crime prevention and policing. Her work emphasizes the application of innovative methodologies such as geographic information systems (GIS), agent-based models (ABMs), and randomized experiments to explore difficult questions.

Courtesy of Elizabeth Groff

Groff wanted to be a vet when she entered college at 18, but her aversion to dissection in freshman biology put the nix on that career. When she returned to college after a decade in retail management, she thought she wanted to major in organizational psychology. But my first geography course hooked her. She found the issues geographers study were fascinating (desertification, climate change, clean water, etc.). As she took more courses, she became hooked on the subfield of behavioral geography (the cognitive processes underlying how people understand and use space, spatial decision-making, and behavior). She also became hooked on GIS to support studies of human activity and decision-making. Finally, she was interested in urban places and how they change over time—more specifically the physical, social, and cultural characteristics that made an area vulnerable to crime.

Groff has always loved school. In fact, the more time she spent in school, the more she enjoyed it. She found herself a researcher after she went to work at the National Institute of Justice (NIJ) for a few years. This work made her realize that what she wanted to do was figure out how to prevent or reduce crime. As she pursued her Ph.D., she

realized how much satisfaction she got from the research process from the intellectual challenge of identifying gaps in what we know and figuring out how to design research studies to the implementation of the research, overcoming obstacles that arose, analyzing the data, and interpreting the results in the context of what we already know.

Heather Zaykowski, PhD

Heather Zaykowski, Ph.D., is an associate professor in the Department of Sociology in the College of Liberal Arts, and the director of the Criminal Justice Program at the University of Massachusetts Boston. Her research interests include victimization, youth violence, the intersection of victimization and offending, police–community relationships, and help seeking among victims. Her research uses both qualitative and quantitative data as well as a variety of approaches, including analysis of secondary data, evaluation research, and collection of original data.

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Although Zaykowski was always interested in learning new things, she did not fully understand what research was or that she could do it as a job until the end of her undergraduate education. She had a senior thesis project that required the collection of original data. In completing this work, she realized how much she appreciated the opportunity to move beyond a research methods/statistics class to try to answer a question of her own. The ability to address her own curiosity by conducting research is a consistent thread in Zaykowski's work. We see this when we review her research addressing the puzzling question about what it takes for victims of violence to access and use victim services (Zaykowski, 2014). Zaykowski's work examines the factors associated with accessing victim services for male and female victims (most research only considers female victims), including characteristics such as whether the violence was reported to the police and victim demographics. Unlike our other case studies, this research was conducted by Zaykowski alone without collaboration.

Road Map to the Book

This text is presented in six parts. Part I, the current chapter, offered information on what is meant by research methods and why research methods are important. It showed that understanding methods offers information needed to be a better consumer, producer, and proposer of knowledge. Being an informed consumer, proposer, and producer of research and knowledge is a vitally important skill regardless of the path in life you or anyone takes. Plus it provides a new path in that you can become a researcher yourself. Part II presents information on the beginning stages of conducting research. This includes developing a research topic or research question and conducting a literature review. In addition, it demonstrates that preparing for research is not a linear process, but each part informs the other. It requires constant looping back to refine your approach. Part III of the book moves into the introduction and

description of important foundational elements used in designing, proposing, and conducting a study. This includes concepts, conceptualizations, operationalizations, variables, measurements, and samplings. Part IV focuses on the ways a researcher can collect different types of data that will be used to answer the research question. It covers approaches used to gather qualitative data, the use of secondary data, experimental research, crime mapping, and several others. Part V focuses on basic analytic approaches you can use to generate findings to answer a research question. In addition, this section discusses approaches to make your research broadly relevant, especially in terms of policy. In this chapter, we offer the policy implications of our highlighted articles. Part VI, the final part of the book, synthesizes all of the information presented in the text to demonstrate how these skills can be used practically in careers in criminal justice and criminology (and beyond). In addition, this section presents valuable information about things you can do to turn these skills into a rewarding and influential career. This includes discussing where to search for jobs, documents needed in these searches, interviewing skills, and other important basics.

TABLE 1.2 ⬢ Researchers and Their Research

Rod Brunson	Brunson, R., & Weitzer, R. (2009). Police relations with Black and White youths in different urban neighborhoods. *Urban Affairs Review, 44*(6), 858–885.
James Carr	Carr, J. D., & Maxwell, S. R. (2018). Police officers' perceptions of organizational justice and their trust in the public. *Police Practice and Research, 19*(4), 365–379.
Carlos Cuevas	Sabina, C., Cuevas, C. A., & Cotignola-Pickens, H. M. (2016). Longitudinal dating violence victimization among Latino teens: Rates, risk factors, and cultural influences. *Journal of Adolescence, 47*, 5–15.
Mary Dodge	Dodge, M., Starr-Gimeno, D., & Williams, T. (2005). Puttin' on the sting: Women police officers' perspectives on reverse prostitution assignments. *The International Journal of Police Science & Management, 7*(2), 71–85.
Elizabeth Groff	Groff, E., & Taniguchi, T. (2019). Using citizen notification to interrupt near-repeat residential burglary patterns: The micro-level near-repeat experiment. *Journal of Experimental Criminology, 15*(2), 115–149.
Heather Zaykowski	Zaykowski, H. (2014). Mobilizing victim services: the role of reporting to the police. *Journal of Traumatic Stress, 27*(3), 365–369.

CHAPTER WRAP-UP

This chapter presents foundational material regarding what research methods are and why they are important. Research methods were placed in the larger context of knowledge and social science research. This chapter offered a first glimpse at the steps used in conducting research and how this knowledge can be used to assess existing information and create new knowledge. A brief introduction to the steps in research was provided, including generating a research question; engaging in a literature review; identifying data, samples, definitions, and analytic techniques; and finally, making and disseminating conclusions. An important topic introduced and emphasized was ethics in research. Classic research examples in which ethics were absent

were discussed as well as contemporary guiding principles and requirements of conducting ethical research to avoid problems from the past. Finally, this chapter introduced you to several prominent criminology and criminal justice researchers who will share stories about their own research throughout the text. Better understanding what each did and why they did it, when conducting their own research, will illustrate the reality of research that includes both successes as well as hurdles and problems to be solved. Decisions, hurdles, and roadblocks are a normal part of research, and understanding how they were dealt with in reality by a variety of researchers will make you a stronger researcher. Next, we move to Part II of the book that provides insight into the foundational steps of conducting research. We first focus our attention on developing a research question, and then we turn to conducting a literature review.

APPLIED ASSIGNMENTS

1. Homework Applied Assignment: Unethical Research

Students should find an example of unethical research. The example does not have to be from the social sciences and can include research from the military, medicine, or elsewhere. Do not use an article that has been widely discussed, including those discussed in this chapter, such as Zimbardo, Milgram, or the Tuskegee Syphilis Experiment. In your thought paper, present the following: a summary of the research—purpose, methodology, and findings. Describe specifically why you believe the work is unethical. Which principles of ethical research were violated? Discuss whether the research question may have been researched in another more ethical way. Do you believe that what was learned outweighs the ethical problems with this research? Turn in a summary of the unethical research along with your discussion of it as your thought paper. Be prepared to discuss what you found in class.

2. Group Work in Class Applied Assignment: Unethical Research

As a group, discuss one of the pieces of unethical research described in this chapter. As a group, be able to offer a synopsis of this research, including a summary of the research—purpose, methodology, and findings. Describe specifically why you believe the work is unethical, if you do. If you do not believe it was unethical, be able to defend your position using information from this chapter (e.g., principles of ethical research). Discuss whether the research question may have been researched in another more ethical way. How might it have been done more ethically? Do you believe that what was learned outweighs the ethical problems with this research? How is what we learned from this research relevant today?

3. Internet Applied Assignment: Using These Skills to Get a Career

Do a search of the many career positions available for those with research methods skills in the criminology or criminal justice fields. Some helpful search terms include "analyst" or "research" or "data." Also look to some specific agency websites such as Rand, Abt, Weststat, and Research Triangle Institute (RTI). Be sure to consider looking at businesses that hire those with methods skills. Search for roles using these skills in the local and federal government. Write a paper that focuses on the many jobs that one can get using these skills. Reflect on how mastering these skills will be useful in the real world. Identify those skills you want to especially focus on to make yourself marketable.

Key Words and Concepts

Find mobile-friendly eFlashcards of these key terms and definitions at:
https://edge.sagepub.com/rennison-research-methods-2e

Assessment of risk and benefits 24
Authoritative sources 11
Behaviorally specific questions 6
Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects and Research 22
Beneficence 23
Bureau of Justice Statistics (BJS) 8
Comprehensible 24
Data 4
Definition 6
Ethics 4
Information 24
Informed consent 23
Institutional review board (IRB) 24
Intuition 12
Justice 23
Knowledge 3
Literature review 15
Measurement 6
National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research 22
National Crime Victimization Survey (NCVS) 9
National Research Act of 1974 22
Nuremburg Code 21
Personal experience 11
Research 4
Research methods 4
Research question 12
Respect for persons 22
Sample 6
Science 4
Selection of subjects 24
Social science research 4
Stanford Prison Experiment 20
Tradition, customs, and norms 11
Tuskegee Syphilis Experiment 17
Voluntary participation 23

Key Points

- Research methods identify the process and approaches available when conducting research.
- Research methods are important because they offer information on the options available when conducting research that ensures quality creation of knowledge as well as a critical means for assessing existing knowledge.
- In different research studies, there may be differences in definitions, measurements, and samples used (as well as in other methodological elements) that explain the differences in findings. Just because two studies result in different findings does not mean one or both are bad studies.
- There is no universally agreed-upon definition for many concepts studied in criminology and criminal justice.
- One gains knowledge from scientific and non-scientific sources. Nonscientific sources are easy to use, but they come with the limitation that they may be incorrect.
- Research is guided by a research question. The purpose of the research is to answer the research question and enhance knowledge on the topic.
- Literature reviews summarize and synthesize existing understanding about a topic.
- Designing research means planning the precise steps used to answer the research question.
- Every step of research must involve ethical considerations.
- The Belmont Report provides three fundamental principles of ethical research, including respect for persons, beneficence, and justice. The requirements of these principles include informed consent stemming from comprehensible information used to volunteer for the study, assessment of risks and benefits by all involved, fairness in selecting subjects, and ensuring risks and benefits are justly distributed among subjects in the research.
- IRB committees are charged with reviewing, approving, and monitoring health and social science research conducted involving humans in the United States (with few exceptions).

Review Questions

1. What do we mean by "research methods"?
2. Why is understanding research methods an important skill?
3. Why is developing a research question valuable?
4. What can a literature review offer regarding research methods?
5. Why is scientific knowledge especially useful?
6. What is offered by understanding the research methods used in a particular piece of research?
7. Concepts used across pieces of research may be defined and measured differently. Why is that important to understand when assessing and designing research?
8. What was the impetus for the Nuremberg Code and the Belmont Report?
9. What was the importance of the Nuremberg Code and the Belmont Report?
10. Why are IRB committees important, and what caused them to come into existence?

Critical Thinking Questions

1. The FBI and NCVS use different crimes in their definitions of violence. Which do you feel is better (if either), and why? Would you add any crimes that are missing from either? Which crimes? How would you measure them?
2. The FBI and NCVS count crimes differently. Do you believe counting victimizations, victims, or offense/incidents is more appropriate? Why? How would changing NCVS estimates from victimizations to victims change crime statistics?
3. Defenders of the Tuskegee Syphilis Experiment argue that by preventing participants from accessing penicillin, much was learned about syphilis. Do you believe that the benefits gained from this research outweighed the costs to those men and their families? Why or why not? Is there another way this same information could have been accessed?
4. Many argue that IRB committees should be disbanded when it comes to social science. What are the advantages and disadvantages of disbanding IRB committees? Would you be in favor of this? Do you believe social science researchers would be able to police themselves? Why or why not?
5. In *Damned Lies and Statistics*, Joel Best (2012) notes that no research is perfect, but some is less perfect than others. Given this introduction to research methods, what are some ways some research can be made closer to perfect in your opinion?

Notes

1. FBI estimates are provided in a "per 100,000" rate. This has been adjusted to make the comparison with the NCVS rates equivalent.
2. The NCVS data do allow for the calculation of incident and prevalence rates; nevertheless, most BJS reports are focused on victimizations.
3. Some documents now available do focus on ethics when it comes to animal research. One such example was written by Bernard Rollin and can be found at http://animalresearch.thehastingscenter.org/report/the-moral-status-of-invasive-animal-research/#footnote-1, and at http://www.apa.org/monitor/jan03/animals.aspx.