Jason Redmond/AFP/Getty Images

2 RESEARCHING CRIME

LEARNING OBJECTIVES

2.1 Differentiate descriptive and explanatory research in criminology.

2.2 Identify strengths and weaknesses of official crime statistics.

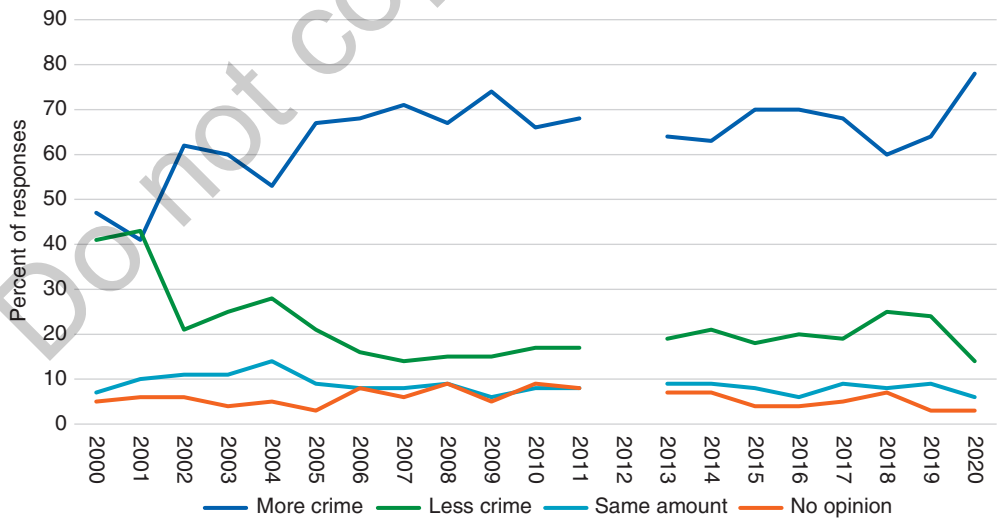
2.3 Describe the uses and limitations of survey and experimental research in criminology.

2.4 Demonstrate understanding of how and why criminologists conduct qualitative research and unobtrusive research.

2.5 Describe the ethical concerns in criminological research.

Gallup, a polling organization, has asked Americans "Is there more crime in the U.S. than there was a year ago, or less?" nearly every year over the past two decades. In all but two of those years, a majority stated that they believe there is more crime than in the previous year (see Figure 2.1). In 2020, 78% reported that there was more crime compared to only 14% who believed there was less (6% thought it was the same, and 3% reported no opinion).[1] If we are to believe the hunches of most Americans, then we must conclude that crime in the U.S. has increased year after year since 2002. But has it? We need accurate crime data to determine if our gut feelings are trustworthy. Our "common sense" beliefs about crime are subjective, shaped by political climate, media coverage, and personal experience.[2] Criminological research, in contrast, attempts to systemically measure crime to obtain as precise a count as possible.

FIGURE 2.1 ■ Responses to question "Is there more crime in the U.S. than there was a year ago, or less?"—percentages by year (2000-2020)



Note: Question not asked in 2012

Source: Gallup Historical Trends. (2021). *Gallup Poll: Crime.* In depth: topics A to Z. https://news.gallup.com/poll/1603/crime.aspx

Let's consider the consequences of relying on our intuition rather than systematic observation to determine the threat posed by crime. Fear of crime is a powerful predictor of psychological well-being and behavior.[3] Specifically, it keeps people anxious and indoors. Unjustified fears, then, reduce our quality of life unnecessarily. The belief that crime is always getting worse also shapes our political priorities and our trust in the agencies tasked with reining in law-breaking. Indeed, cultivating worries about crime is a tried-and-true campaign strategy dating back to the 1970s.[4] Having an accurate measure of crime is essential for making informed decisions, from deciding whether to avoid public transportation to determining who ought to represent us in government.

BASICS OF CRIMINOLOGICAL RESEARCH

Criminology is the scientific study of crime. This chapter is about *how* criminologists study crime, victimization, and criminal punishment scientifically. You will learn about the many methods researchers employ—in basic and applied research—to figure out (1) how much crime and punishment is occurring and (2) what predicts changes in crime and punishment Recall from Chapter 1 that criminology is etiological or concerned with causes. Criminologists also explore the consequences of crime and punishment (e.g., for victims and for formerly incarcerated people), attitudes towards crime and punishment, how criminal subcultures operate, and more. But before we get to the research methods used by criminologists, we must first address some basics regarding the purpose of our research (descriptive vs. explanatory), the kinds of data we collect (quantitative vs. qualitative), and the kinds of outcomes we are examining (levels of analysis).

Descriptive Versus Explanatory Research

Criminological research is either descriptive or explanatory. The roots of these words—*descript* and *explan*—clue us in about their meanings. **Descriptive research** seeks to describe the extent and characteristics of crime. It answers the "How much?" question: How many murders happened last year? What percentage of white-collar workers steal from their workplaces? How frequently do sex offenders re-offend after release from prison? Criminologists engage in descriptive research when they examine one variable at a time (a variable is a characteristic or property that can be measured and takes on multiple values). Notice that the example questions about murder, white-collar theft, and sex offender re-offending do not ask about the causes of these patterns, which would require mentioning two variables: a predictor and its outcome. Instead, those questions, as in all descriptive research, seek only to identify the patterns, not to account for them. They ask, simply, "How much?" We need descriptive research to determine whether the 78% of Gallup Poll respondents in 2020 who thought crime had increased since 2019 were correct. There are three primary data sources that criminologists rely on to answer the question of how much crime is happening in society:

1. Official crime statistics
2. Victimization survey data
3. Self-report survey data

Criminology, though, is etiological. We want to explain crime, victimization, and punishment. We are interested in causes. **Explanatory research** answers the "Why?" question: Why were there more murders in 2020 than 2019? Why do white-collar workers with high incomes commit money-generating crimes? Does age at release from prison predict whether a sex offender will re-offend? Note how the descriptive questions from earlier are transformed into explanatory questions by asking about predictors. Nearly all criminological research is explanatory, but describing the trends we wish to explain is a prerequisite to explanation. Both descriptive research and explanatory research are important.

Policy research is one type of explanatory research common in criminology. Policy research examines the impact of policy changes (like new laws, programs, and police practices) on crime and other

outcomes. In this case, the predictor is the policy itself. Consider, for example, firearm restrictions for domestic violence perpetrators. People with histories of abusing their partners are prohibited by federal law, and some state laws, from purchasing or keeping guns if they are the subject of a domestic violence restraining order or they have certain misdemeanor domestic violence convictions (all felony convictions, regardless of domestic violence connection, result in the federal gun access restriction). Criminologists ask: Does restricting domestic abusers' access to guns reduce homicide? Policy research examining murders of abused partners and exes suggests that it does, in fact, have the intended effect.[5] And there is compelling evidence that the restrictions could also be effective for reducing mass murder, if implemented (many abusers fall through the cracks and there are loopholes for private gun purchases). A study of all mass shootings with four or more victims occurring between 2014 and 2017 revealed that nearly one-third of murderers had a history of domestic violence.[6]

Quantitative Versus Qualitative Research

Descriptive and explanatory research can be either quantitative or qualitative. Notice that these terms look like *quantity* and *quality*. That is a good starting place for understanding the distinction. *Quantitative research* relies on statistical evidence using numerical data. Criminologists Heap and Waters offer four main tasks of quantitative criminology: measurement ("How much crime?"), causality ("What causes crime?"), generalization ("Can findings apply elsewhere?"), and replication ("Can the research be repeated to yield similar findings?").[7] You are encountering quantitative criminology when you come across crime rates or descriptions of correlations between variables. Analysis of official crime statistics, surveys, and experiments are quantitative methods used by criminologists.

Qualitative research, in contrast, uses nonnumerical data, such as statements from people who are interviewed individually or in focus groups, descriptions of observations made by researchers (called field notes), or textual content from existing sources (e.g., Twitter posts, news articles, or offender manifestos). Qualitative data are typically comprised of words rather than numbers. They can also be images. Qualitative data are useful for gaining insight into "lived experiences," including how individuals create meaning.[8] Criminologists obtain qualitative data when conducting in-depth interviews and ethnographies, as well as when they use certain unobtrusive methods.

The type of data—quantitative or qualitative—criminologists opt to use is determined by their research questions. Some questions can only be answered using numerical data (e.g., Does widespread unemployment increase property crime rates?), and others require the discursive, or wordy, data of qualitative research (e.g., How do gang members create a moral code that permits some forms of violence while prohibiting other types?). Mixed-method studies combine qualitative and quantitative methods to gain a fuller understanding of their subject. For example, in a study of how abandoned housing—and its demolition—matters for nearby crime, criminologists analyzed two types of data from a high-crime Ohio community: (1) quantitative data from "calls for service" (911 calls and nonemergency calls to police) and video recordings of community properties and (2) qualitative data from interviews with law enforcement, ex-offenders, and community members.[9] The interviewees' observations about how vacant houses are perceived by residents and why people (don't) call 911 provided essential context for interpreting the statistical association between razing abandoned houses and a reduction in nearby crime.

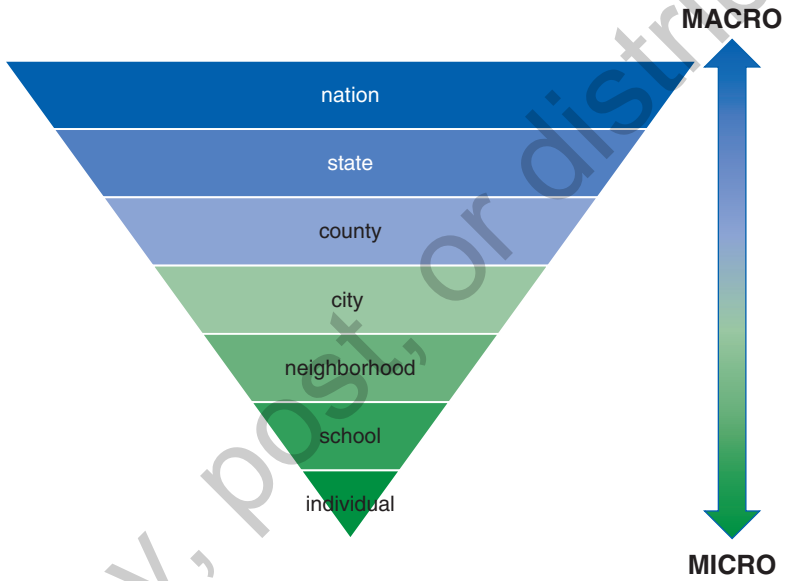
In the ethnography *Down, Out, and Under Arrest,* researcher Forrest Stuart observed and interviewed police and those who are policed in LA's Skid Row. Stuart's research was qualitative.

AP Photo/Nick Ut

Levels of Analysis

When conducting research, criminologists observe the social world as though through the lens of a camera. Our **level of analysis**, or the scale or size of our research focus, determines what we see through the lens. We can zoom in to study individuals, asking questions like "Does moving to a low-poverty neighborhood reduce the risk of arrest for adolescents?" or "Does ADHD increase criminal activity in young adulthood?" Moving, having ADHD symptoms, being arrested, and criminal activity are individual variables: Some individuals move and others stay put, some individuals have ADHD symptoms and others don't, and so on. Therefore, we would need to examine data on individuals to answer these questions. This is individual-level research, which is also called micro-level research.

FIGURE 2.2 ■ Levels of analysis, ranging from micro (bottom) to macro (top)

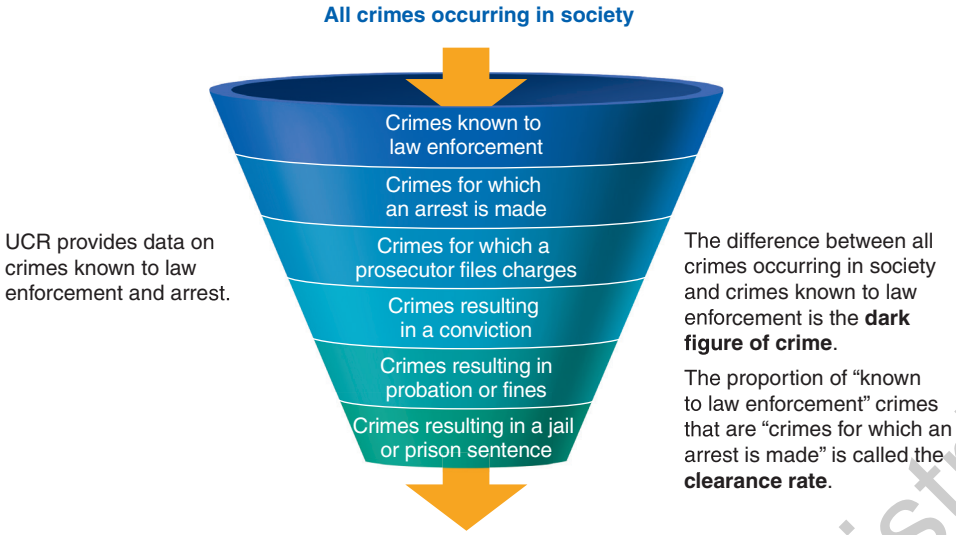


Now let's zoom out a little to examine neighborhood variation instead of individual variation. With our lens focused on neighborhoods, we might ask questions like "Is there more robbery in neighborhoods with a higher density of pawn shops, payday lenders, and liquor stores?" or "Is there less vandalism in neighborhoods where residents know and trust one another?" We need neighborhood data, like neighborhood crime rates and counts of pawn shops per square mile. This is neighborhood-level research. If we zoom out even more, we might see cities through our lens. Even more zooming and we will analyze states. The most macro-level studies examine variation across nations or regions of the world. Figure 2.2 depicts levels of analysis commonly used in criminology, but it does not list all possibilities. For example, criminologists who study white-collar offending often focus their lens on workplaces.[10] And gang researchers, conducting gang-level research, compare gangs of different types to see which are the most violent.[11]

OFFICIAL CRIME STATISTICS

Criminologists have the formidable task of figuring out how much crime is happening in society, a descriptive and quantitative process. Official crime statistics are measures of crime—mostly in the form of crime counts and rates—provided by criminal justice agencies, including police, courts, and correctional agencies. Law enforcement are the first point of entry into criminal justice processing, making them the most important source of official crime data when attempting to measure the total amount of crime occurring.

FIGURE 2.3 ■ Criminal justice funnel



The criminal justice system acts as a funnel. Most illegal activity goes on without detection. It never ends up in the funnel. The crime that happens without ever becoming known to officials is called the **dark figure of crime**. Think about the ways that crime comes to the public's attention. It typically begins with a complainant, a person who reports a crime to an appropriate agency, such as the police or Child Protective Services. Of all the crimes that go on, only a portion will ever become known to law enforcement. For offenses like drug trafficking and possession, there are no victims to report it. For offenses like identity theft and fraud, victims may not be aware that they have been targeted, or they may see it as something to report to their credit card company rather than the police. And victims are frequently reticent to report crimes like intimate partner violence and rape.

As the funnel narrows, the portion of all crimes measured becomes smaller. Once an offense becomes known to law enforcement, it *may* result in an arrest. Once an arrest is made, it *may* lead to a conviction. Once a person is convicted, they *may* serve time in a correctional facility. Therefore, crime statistics from police provide a more valid answer to the "How much?" question than do prison data.

This does not mean that data from further down the funnel are useless. After all, criminologists are interested in more than just counting crimes. Data on arrests, sentencing, and other criminal justice outcomes are especially helpful for answering explanatory questions about inequalities. For example, a criminologist used arrest data from the St. Louis Metropolitan Police Department to determine the role of racially discriminatory policing in drug arrests, finding evidence of "out-of-place" racial profiling, or targeting people whose race doesn't match that of most residents.[12] In another study, criminologists used data from the Pennsylvania Sentencing Commission to examine if women and men are punished equally when convicted of child neglect and child physical abuse. Male abusers, they found, were more likely than female abusers to be sentenced to prison, due—though only in part—to men's more extensive criminal histories.[13]

Uniform Crime Reporting (UCR) Program

The **Uniform Crime Reporting (UCR) program** is the longest running source of official crime data in the U.S. It was created in 1929 with data collection beginning the next year, following efforts by the International Association of Chiefs of Police to design a standardized (or uniform) system for reporting and tracking crime statistics. The Federal Bureau of Investigation (FBI) was tasked with compiling crime data submitted voluntarily by local, state, and federal police agencies. The percentage of law enforcement agencies submitting their data has increased substantially over time, with about 99% of the U.S. population now living in police jurisdictions that submit data to the FBI for the UCR program.[14] The UCR crime statistics are published annually in a report called *Crime in the United States.*

Initially, the UCR provided data on only seven criminal offenses, including four violent crimes (murder and nonnegligent manslaughter, aggravated assault, forcible rape, and robbery) and three

property crimes (burglary, larceny-theft, and motor vehicle theft). An additional property offense, arson, was added in 1979. The UCR referred to the eight offenses as *index crimes* or *Part I offenses*, and it provided rates of index offenses known to law enforcement as well as arrest statistics (see Chapter 3 for index offense descriptions). Revisions in the 1980s added 21 offense categories for which arrest data were provided: simple assault, curfew offenses and loitering, embezzlement, forgery and counterfeiting, disorderly conduct, driving under the influence, drug offenses, fraud, gambling, liquor offenses, offenses against the family, prostitution, public drunkenness, runaways, sex offenses, stolen property, vandalism, vagrancy, and weapons offenses. These were *Part II offenses*.

For years, *Crime in the United States* presented aggregated counts and rates of Part I and Part II offenses as part of the Summary Reporting System (SRS), the principal data source for researchers attempting to measure and track crime in the U.S. But the SRS's critics pointed out three significant limitations that could be improved with a better data reporting system[15]:

- The SRS covered only a narrow range of offenses. It did not include data on specific forms of crime that are of interest to researchers, law enforcement, and policy makers (e.g., gang crime, firearm violence, domestic violence, crimes against children, white-collar offenses).
- The SRS only reported one crime per incident. Only the most serious crime was reported if multiple offenses took place during a single criminal event. This is called the *hierarchy rule.* For example, if a burglar happened upon a homeowner and killed them, only the homicide was counted (not the burglary).[16]
- The SRS used aggregate, or summed, monthly counts of crimes that obscured important factors like offense location, victim-offender relationship, and time of day.

Other limitations of the SRS were general critiques of official crime data and were not specific to the SRS. Among these were critiques that (1) the SRS only entailed crimes reported or known to police, (2) political pressures have occasionally led agencies to "fudge" the numbers to appear more effective at crime control, and (3) racial/ethnic and socioeconomic biases, in part, influence arrests and, therefore, arrest data.

Notice the use of past tense in describing the SRS. The reason is the recent phasing out of the summary reports in favor of a system that provides complex and detailed information on criminal incidents, including characteristics of the criminal events, the offenders, and the victims. The transition to the new system, called the National Incident-Based Reporting System (NIBRS), represents "one of the most significant changes in crime measurement in U.S. history" (p. 1030).[17] Today, the UCR program houses four data collections, with NIBRS now the primary source of official crime statistics in the U.S.:

1. The National Incident-Based Reporting System (NIBRS)
2. The Law Enforcement Officers Killed and Assaulted (LEOKA) Program
3. The Hate Crime Statistics Program
4. The National Use-of-Force Data Collection (newest addition)

National Incident-Based Reporting System

The **National Incident-Based Reporting System (NIBRS)**, which replaced the summary reporting system in 2021, is a clearinghouse for detailed crime data reported by local, state, tribal, and federal police agencies. It avoids the three major shortcomings of its predecessor: (1) a limited number of offenses included, (2) the hierarchy rule, and (3) reliance on aggregate counts that fail to supply offense details.

First, NIBRS expanded the crime categories for reported offenses and arrests, now providing information on 22 *Group A offense categories* containing 46 specific crimes. NIBRS also furnishes arrest data (only) for 10 additional *Group B offense categories* (see Table 2.1). In addition, it broadened the range of offenses included in the categories that had been previously reported in the summary reports. For example, the SRS reported aggravated assault, which was defined as an "unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury," typically with the use of

a weapon or "by other means likely to produce death or great bodily harm."[18] In other words, only the most serious form of assault. NIBRS reports multiple assault offenses, including aggravated assault, simple assault (assault without severe bodily harm), and intimidation.

TABLE 2.1 ■ Group A and Group B offenses reported in National Incident-Based Reporting System

Group A offense categories (known offenses and arrests)	
Arson	Homicide offenses
Assault offenses	Kidnapping/abduction
Bribery	Larceny/theft offenses
Burglary/breaking and entering	Motor vehicle theft
Counterfeiting/forgery	Pornography/obscene materials
Destruction/damage/vandalism of property	Prostitution offenses
Drug/narcotic offenses	Robbery
Embezzlement	Sex offenses, forcible
Extortion/blackmail	Sex offenses, nonforcible
Fraud offenses	Stolen property offenses
Gambling offenses	Weapons law violations
Group B offense categories (arrests only)	
Bad checks	Family offenses, nonviolent
Curfew/loitering/vagrancy violations	Liquor law violations
Disorderly conduct	Peeping Tom
Driving under the influence	Trespass of real property
Drunkenness	All other offenses

Source: Federal Bureau of Investigation. (n.d.). *A guide to understanding NIBRS.* https://ucr.fbi.gov/nibrs/2012/resources/a-guide-to-understanding-nibrs

Second, NIBRS does not use the hierarchy rule. Multiple crimes can take place during a single incident (recall the homicidal burglar from earlier). NIBRS allows for up to 10 offenses to be reported in one criminal incident. Plus, unlike the earlier system, NIBRS data indicate if a criminal incident had multiple offenders and/or multiple victims. Simply put, it provides a fuller picture of crime. In fact, some law enforcement agencies early on worried that transitioning to NIBRS would give the appearance of a crime boom because the hierarchy rule would no longer suppress crime counts. To test if this was true, the FBI compared crime estimates supplied by the SRS and NIBRS over a 20-year period and found only minimal increases in Part I offenses when using NIBRS (less than a 1% increase for rape, robbery, aggravated assault, and burglary and a 3% increase for larceny-theft and motor vehicle theft).[19] The reasons? Most crimes were single-incident offenses. If they weren't, then the additional crimes were not Part I offenses.

Third, NIBRS is, as its name implies, an incident-based data source. It provides extensive details about criminal incidents not captured by traditional aggregate reports. Table 2.2 lists the data points, called elements, that NIBRS organizes into data segments: incident information, offense information, property information, victim information, offender information, and arrest information (see Table 2.2). In addition to offering demographic data on offenders and victims, NIBRS allows users to analyze what happened during criminal incidents, such as when they happened, where they happened, whether offenders were drunk or high, how many used weapons, and the nature of the relationships between offenders and victims. It also reveals the consequences of crime for victims, including the extent of injury and property loss.

Darryl McCauley, the half-brother of comedian Dane Cook, was sentenced to five to six years in prison for embezzling $10 million from the entertainer. His offense, embezzlement, would be counted as a "known offense" in NIBRS but not in the UCR's summary reporting system.

AP Photo/Lisa Poole, pool

TABLE 2.2 Data reported in National-Incident Based Reporting System

Data segment	Data elements included
Incident information	(1) incident date, (2) incident hour, (3) exceptional clearance, (4) exceptional clearance date
Offense information	(1) offense code, (2) attempted or completed, (3) offender suspected of using (alcohol, drugs, computers), (4) location, (5) type and number of premises entered, (6) type of criminal activity/gang information, (7) weapon/force used, (8) bias motivation
Property information	(1) loss type, (2) property description, (3) value of property, (4) date recovered, (5) number of motor vehicles stolen/recovered, (6) drug types and amounts
Victim information	(1) connection to offenses, (2) type of victim, (3) age, sex, race, ethnicity, and resident status, (4) assault and homicide circumstances, (5) injury types, (6) relationships to offenders
Offender information	(1) age, sex, and race of offender
Arrest information	(1) arrest date, (2) type of arrest, (3) arrest offense code, (4) age, sex, race, ethnicity, and resident status, (5) disposition of minor

Source: Federal Bureau of Investigation. (n.d.). *A guide to understanding NIBRS.* https://ucr.fbi.gov/nibrs/2012/resources/a-guide-to-understanding-nibrs

Understanding Rates

We measure crime to make comparisons—comparisons across time (e.g., Is there more fraud this year than last year?), comparisons across geographic locations (e.g., Is there more gang-related homicide in Phoenix than in Houston?), comparisons across groups (e.g., Do juveniles engage in dating violence more than adults?). Accurate comparisons are impossible without standardizing our measures of crime. Here is an example to illustrate using data from the UCR:

In 2020, California was home to 2,203 intentional homicides (murder and nonnegligent manslaughter). The same year, Delaware reported only 73 intentional homicides.[20] Wow, that's a big difference! It sounds like California is a much deadlier state than Delaware. Right? Not so fast. We cannot—or *should not*—compare the counts of homicides in California and Delaware without taking their population sizes into account. Fewer than a million people lived in Delaware in 2020 (989,948 at mid-year, to be exact). Compare that to the nearly 40 million people living in California that year. California may have had many more murders, but they also had many more people. Comparing them requires the calculation of **crime rates**, which are ratios of the number of crimes occurring in a location to the size of that location's population:

$$\frac{\textit{Number of crimes}}{\textit{Number of people in the population}} \times 100,000 = \textit{Crime rate per } 100,000$$

Putting the population size in the denominator permits us to standardize and make comparisons across places (like California and Delaware), time periods, and groups that differ in population size. Technically, we *could* then compare what we calculated using only the division, but the result would not be intuitive. We multiply by 100,000 to make the values easier to interpret and compare. But there is nothing precious about the number 100,000. We could report rates per 1,000, per 10,000, or per 1 million. Traditionally, though, the UCR reports crimes rates per 100,000 inhabitants (or people in the population), which is why 100,000 is included here. Let's calculate rates with our California and Delaware homicide data.

California's rate of intentional homicide per 100,000 people in the population (2020):

$$\frac{2,203 \textit{ intentional homicides}}{39,538,223} \times 100,000 = 5.57000 = 5.57 \textit{ intentional homicides per } 100,000$$

Delaware's rate of intentional homicide per 100,000 people in the population (2020):

$$\frac{73 \textit{ intentional homicides}}{989,948} \times 100,000 = 7.37000 = 7.37 \textit{ intentional homicides per } 100,000$$

Delaware had a higher homicide rate than California in 2020 despite its far smaller count. In California, there were 5.57 intentional homicides in 2020 for every 100,000 people living in California that year, while Delaware saw 7.37 intentional homicides for every 100,000 people living in Delaware in 2020. It is important to always note the metric when reporting a crime rate: It is 5.57 *per 100,000,* not just 5.57 (5.57%? 5.57 per million? No one knows!). Note what would have happened if we had not multiplied by 100,000. California's rate would have been .0000557 and Delaware's would have been .0000737. Those values are not nearly as interpretable as 5.57 per 100,000 and 7.37 per 100,000.

The previously mentioned rates are incidence rates. In criminology, **incidence** refers to the occurrence or frequency of criminal events. The numerators—2,203 and 73—were frequencies of intentional homicide events. Their corresponding incidence rates—5.57 and 7.37 per 100,000—tell us how widespread crimes are. They do not tell us how widespread *criminals* are. It is possible that only a handful of people committed Delaware's 73 murders and nonnegligent manslaughters. It is also possible that each homicide was committed by a different person. The incidence rate does not shed light on either possibility. But prevalence rates do. **Prevalence**, in criminology, refers to the proportion of a population that engages in (or is a victim of) crime. The equation for prevalence rates looks similar to the equation for incidence rates, but the numerator is changed to the number of people involved in crime, as either offender or victim, rather than the number of criminal events:

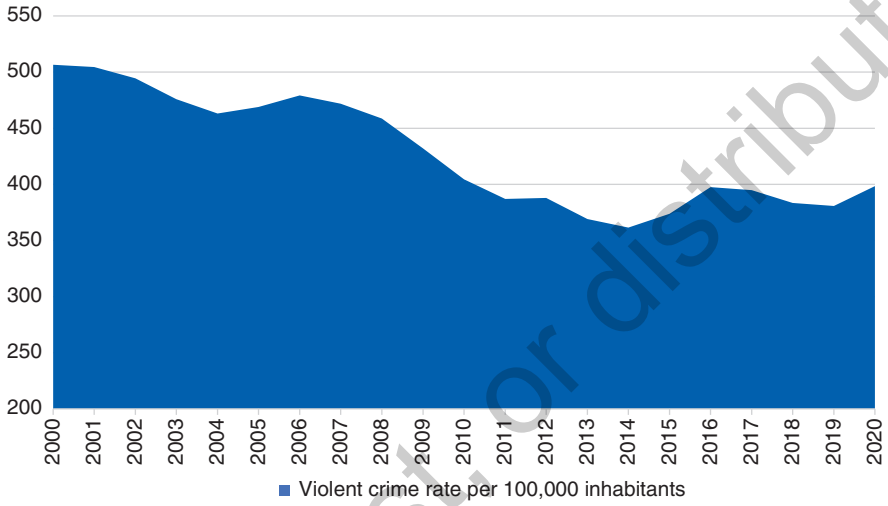
$$\frac{\textit{Number of offenders (or victims)}}{\textit{Number of people in the population}} \times 100,000 = \textit{Prevalence rate per } 100,000$$

ENGAGED CRIMINOLOGY 2.1

Are Our Crime Perceptions Correct?

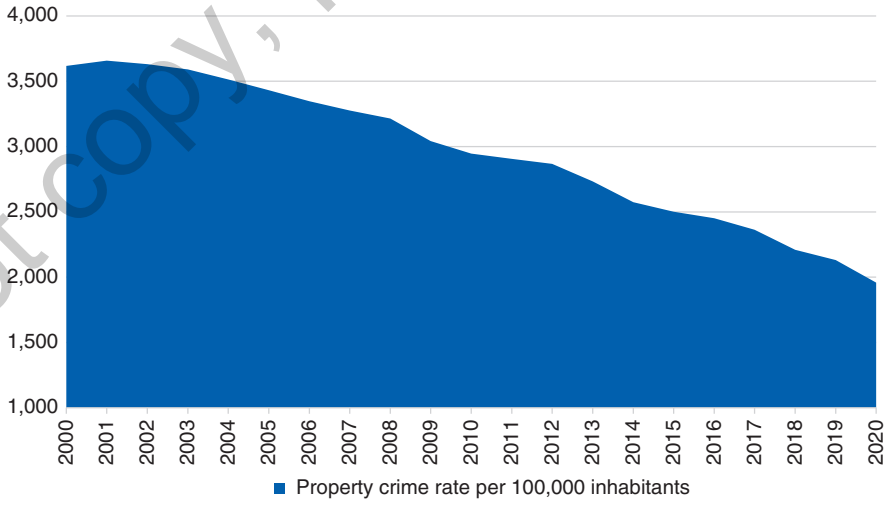
This chapter began with polling data showing that most Americans have answered "more" to the question "Is there more crime in the U.S. than there was a year ago, or less?" every year since 2002. In this exercise, you will use data from the Uniform Crime Reporting program to determine if their perceptions were correct.

FIGURE 2.4 ■ Violent crime rate per 100,000 inhabitants, 2000-2020



Source: Federal Bureau of Investigation. (2020). Crime Data Explorer. https://crime-data-explorer.app.cloud.gov/pages/explorer/crime/crime-trend

FIGURE 2.5 ■ Property crime rate per 100,000 inhabitants, 2000-2020



Source: Federal Bureau of Investigation. (2020). Crime Data Explorer. https://crime-data-explorer.app.cloud.gov/pages/explorer/crime/crime-trend

Use the figures to answer the questions:

1. Describe what happened to violent crime rates in the U.S. between 2000 and 2020 by reporting rates presented in Figure 2.4.
2. Describe what happened to property crime rates in the U.S. between 2000 and 2020 by reporting rates presented in Figure 2.5.
3. Are Americans' perceptions about increases in crime (every year since 2002) correct?

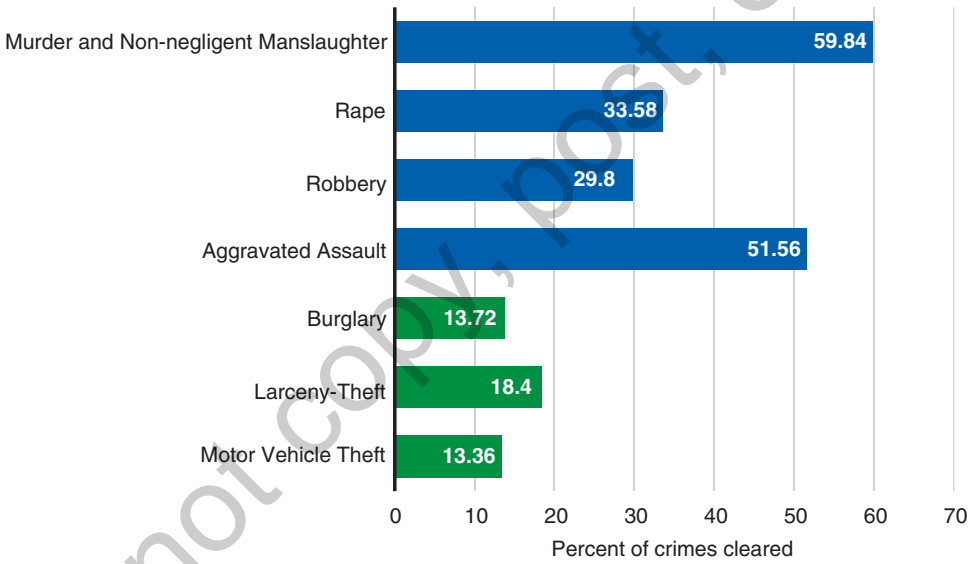
Incidence and prevalence rates are indirect measures of how well crime is being controlled, partially answering the question "Are police effective?" in addition to the "How much?" question. A better indicator of law enforcement performance, though, is the clearance rate, which is reported in NIBRS. A crime is cleared (or closed) if three things occur:

1. It leads to an arrest.
2. Criminal charges are filed.
3. The case is handed over to the prosecutor.

It can also be cleared by "exceptional means" if there is enough evidence for arrest and prosecution of an identified offender but circumstances prevented that from happening. For example, perhaps the offender died, the victim refused to cooperate, or the offender is in another country that refuses to turn the person over. The **clearance rate** indicates the proportion of known offenses that were cleared by either arrest or exceptional means. One person's arrest can clear multiple offenses, and several arrests are necessary for clearing crimes with more than one offender. The clearance rate, expressed as a percentage, is calculated using this equation:

$$\frac{\textit{Number of crimes cleared by arrest or exceptional means}}{\textit{Number of crimes reported}} \times 100 = \textit{Clearance rate}$$

FIGURE 2.6 ■ Clearance rates (percent cleared), by offense, five-year averages (2016-2020)



Source: Federal Bureau of Investigation. (2021). Crime Data Explorer. https://crime-data-explorer.fr.cloud.gov/pages/home

SURVEYS AND EXPERIMENTAL RESEARCH

Surveys and experiments are quantitative methods that criminologists use to examine relationships between variables with the goal of establishing causation. Statistical results from surveys and experiments help criminologists answer their explanatory research questions (survey data are useful for descriptive purposes, as well). Despite their shared quantitative focus, though, many features distinguish surveys from experiments.

Survey Research in Criminology

What percentage of robbery victims report the offense to police, and how do they make that decision? How frequently do adolescents abuse prescription drugs, and where do they get them? How widespread is the problem of prison sexual assault, and where in the prison is it most likely to happen? Why are some people more fearful of crime than others? Criminologists use surveys to answer descriptive ("How much?") and explanatory ("Why?") questions like these. To answer these questions, researchers must ask people—robbery victims, adolescents, inmates, the general public—about their experiences, behaviors, feelings, and thoughts.

Survey researchers administer questionnaires using a variety of modes: online, over the phone, face-to-face, through the mail. Some surveys are self-administered, which means that the respondents read the questions and mark their responses, as in mail-in and online surveys. Self-administered surveys are ideal for researchers asking about sensitive and socially undesirable topics, like histories of family violence, criminality, and substance use. In interviewer-administered surveys, including face-to-face and telephone surveys, researchers ask the respondents questions and note their responses. This way, researchers can clarify the meaning of questions. Online and telephone surveys are the least expensive and best for reaching large numbers of geographically dispersed respondents, but they tend to have low response rates, which means that only a small proportion of contacted people complete these surveys.

Like official crime statistics, survey data are quantitative. Survey responses are converted into numerical values through a process called coding, which are then analyzed using statistical methods (other, less common, survey questions are open-ended, allowing respondents to answer in their own words). Remember the issue of spuriousness addressed in Chapter 1, illustrated with the association between ice cream consumption and murder rates: Sometimes associations between variables are not causal. Instead, a third variable (like warm weather!) is making it appear that there is a causal relationship when there isn't. In statistical analysis, criminologists can control for, or rule out, alternative explanations for the results. In other words, survey data analysis is useful for determining the causes of crime and punishment and ruling out spuriousness.

Unlike official crime statistics, survey researchers typically rely on sample data. Let's use an example to illustrate. Imagine you have been given the task of determining the scale of sexual victimization among those incarcerated in U.S. correctional facilities. You believe, correctly, that you will get fuller information if you survey inmates, themselves, rather than rely purely on administrative records. But there are approximately 1.3 million people in U.S. prisons. You cannot possibly survey all of them! Fortunately, you don't need to. You can instead select a representative **sample**, or subset, of all prisoners. The sample is drawn from a **population**, which is comprised of all the people about which you wish to reach conclusions with your analysis. Perhaps you will randomly select 10% of U.S. correctional facilities and survey the people incarcerated in them. You plan to generalize from your analysis of sample data to the population of all U.S. prisoners. In fact, the Bureau of Justice Statistics did exactly this with the National Inmate Survey. The survey, administered to inmates using computer-assisted questionnaires in 2007, 2008-2009, and 2011-2012, fulfills requirements of the Prison Rape Elimination Act of 2003. The act's purpose was to "provide for the analysis of the incidence and effects of prison rape in Federal, State, and local institutions and to provide information, resources, recommendations and funding to protect individuals from prison rape."[21]

The National Inmate Survey and the Survey of Prison Inmates are longitudinal surveys, conducted by the Bureau of Justice Statistics, that sample individuals from the population of prisoners in the U.S.

AP Photo/Ted S. Warren, File

Some surveys are **cross-sectional**, collecting data at one point in time. They provide a one-time snapshot of respondents' experiences, behaviors, feelings, or thoughts. Others, like the National Inmate Survey, have multiple periods of data collection. They are **longitudinal** (think "long" as in over a long time period). Longitudinal surveys are called panel studies if the same sample of people is surveyed at each period of data collection, permitting researchers to analyze how they change over time. They are trend studies if a new group of people is surveyed each time, which was the case for the National Inmate Survey.

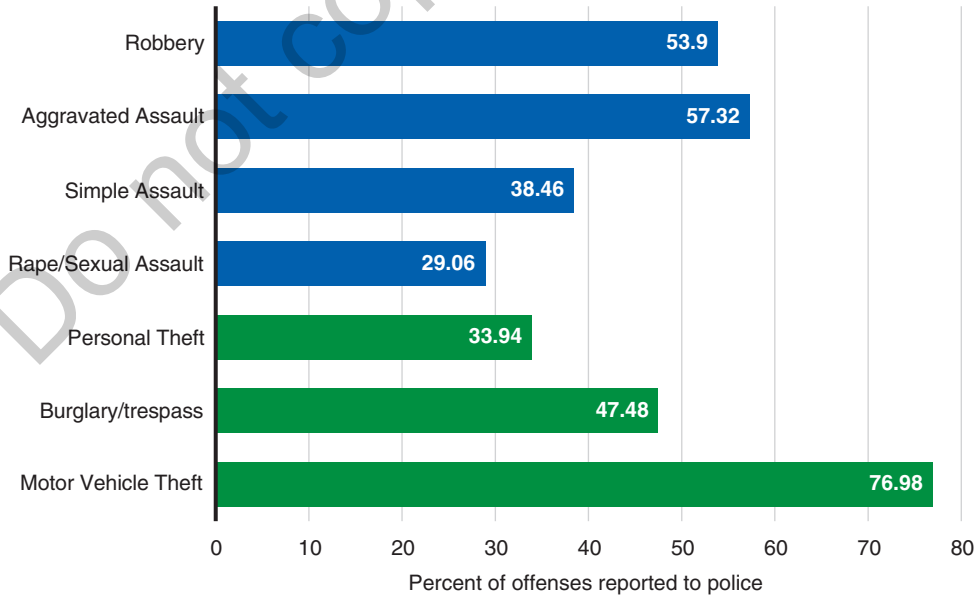
National Crime Victimization Survey

The size of the dark figure of crime—the amount of crime that never becomes known to officials—varies immensely by offense. Rape and sexual assault, for example, have a large dark figure, whereas motor vehicle theft's dark figure is puny in comparison. That is probably not a surprise: Sexual victimization is notoriously underreported, and people typically alert law enforcement when their cars are stolen because cars are expensive, necessary, and, most importantly, insurance companies require that victims file police reports in order to claim benefits. But how on earth can we possibly know the size of each crime's dark figure? Isn't it, by definition, unknowable? The dark figure is beyond the reach of police-reported crime rates, but it *can* be estimated using victimization survey data.

The most important source of victimization data in the U.S. is the **National Crime Victimization Survey (NCVS)**, a nationally representative, household-based survey that collects data on household and personal victimization of people age 12 and older. Figure 2.7 displays the percentage of victimizations from the NCVS that were reported to law enforcement, giving a glimpse of the dark figure's size by type of crime. Over a span of five years, more than three-quarters of motor vehicle thefts become known to police compared to fewer than 30% of rapes and sexual assaults.

The NCVS, conducted since 1973 (and formerly called the National Crime Survey), is administered by the U.S. Census Bureau for the Bureau of Justice Statistics. Twice each year, researchers conduct face-to-face and telephone surveys with all members, age 12 and older, of a nationally representative sample of about 49,000 households, though sample size varies year to year based on budgetary

FIGURE 2.7 ■ Percent offenses reported to police, by offense, five-year averages (2016-2020)



Source: Bureau of Justice Statistics. (2020). *NCVS Dashboard (N-DASH).* https://ncvs.bjs.ojp.gov/Home#hometopHome

constraints.[22] All told, approximately 160,000 people are surveyed each year in total.[23] When households are selected and members agree to participate, they remain in the NCVS for three years and are surveyed every six months about personal and household victimization. Personal victimization occurs when the individual has been targeted, as in assault, rape, and thefts taking place outside of the home. Offenses that target households, like burglary and trespassing, result in household victimization (all members of the household were victims).

The NCVS has four primary objectives:

1. *Produce comprehensive information about victims and the consequences of victimization*. The NCVS provides the following information: demographic data on victims (e.g., sex, age, race, marital status, employment), household information (e.g., rented or owned, urban or rural, whether public housing), victim-offender relationships (e.g., spouse, roommate, neighbor, customer/client), victims' self-protective actions taken during crime events, outcomes of self-protective actions, context of victimization (e.g., location, whether others came to aid), consequences of victimization (e.g., how much money was lost, emotional distress, and school- and work-related outcomes).
2. *Determine the scale and scope of the dark figure of crime.* In addition to measuring crimes not reported to law enforcement, respondents are asked why they did not report them. Thus, the NCVS tells us which crime types and circumstances (e.g., types of victim-offender relationships, victim characteristics, locations of incidents) yield the largest dark figures. It also sheds light on the reasons some victims are unwilling or unable to inform police of what has transpired.
3. *Supply uniform estimates of certain crime types.* The NCVS provides estimates of crime incidence rates. NCVS personal victimization rates are presented per 1,000 persons age 12 and older (as compared to the UCR's metric of "per 100,000 inhabitants"). Household victimization rates are expressed per 1,000 households. The NCVS also provides victimization prevalence rates, indicating what percentage of people have been victims of various crimes.
4. The NCVS does not measure all forms of criminal victimization. For example, it does not provide homicide data (murder victims don't complete surveys). Nor does it include crimes committed against young children, commercial victimization (like shoplifting and burglaries of businesses), corporate crime, or victimless offenses. It also excludes some forms of personal and household victimization, like kidnapping and arson. Nonetheless, the NCVS provides valuable standardized estimates for major crime types: robbery, assault, rape and sex assault, burglary, theft, motor vehicle theft, vandalism, and more.
5. *Provide comparisons of crime victimization across areas, time periods, and groups.* As standardized measures, incidence and prevalence rates make comparisons possible. Moreover, criminologists can compare the nature and consequences of victimization across time, place, and group. For example, they can observe whether the proportion of victims of domestic violence who report the offense to police has increased over the years. Plus, because the survey includes victims and non-victims, researchers can determine the predictors of victimization risk, which is impossible when relying on police records.

The NCVS has undergone several redesigns to improve its accuracy and usefulness. The most recent revisions focus on (1) expanding the number of crimes to include offenses like stalking, identity theft, and fraud; (2) improving measurement of offenses that have been included in the NCVS for a long time, especially rape and sexual assault; (3) adding new demographic questions about disability status, veteran status, citizenship, gender identity, and sexual orientation; (4) measuring perceptions of police and their performance in interacting with victims; and (5) adding questions about the use of victim services. For decades after its inception, the NCVS provided only national

estimates rather than state or city estimates (remember levels of analysis from earlier!). The recent redesign of the NCVS boosts the sample size in the largest U.S. states to allow for subnational—or state-level—estimates.[24]

The NCVS is, on its own, an exceptionally valuable source of data on the reach and impact of (some forms of) crime victimization in the U.S. It has even greater utility when combined with other sources of crime data. Criminologists get the most valid answer to the "How much?" question when they use triangulation. In **triangulation**, researchers rely on several data sources or research methods to gain a more complete and accurate understanding of their subject.[25] Criminologists combine what they observe in the Uniform Crime Reports (UCR), the NCVS, and offender self-report surveys to reach the most reliable conclusions possible about the extent and nature of crime in the U.S.

Offender Self-Report Surveys

The NCVS relies on victim reports. The UCR relies on police records. Who else can tell us about crime besides victims and law enforcement? People who violate the law, of course! In offender self-report surveys, researchers administer questionnaires to either

1. A sample of the general population, some of whom have engaged in criminal activity, or
2. A sample of known criminal offenders.

As with all criminological research methods, the type selected—general sample or offender sample—depends on the criminologist's research questions. Plus, the benefits and challenges differ between them, so it is best to address them one at a time.

Self-report surveys that rely on samples from the general population are useful for measuring the prevalence—the proportion of a population that engages in crime—of low-level criminal conduct, such as illicit substance use, shoplifting, drunk driving, and theft of services (what one criminologist calls the "crimes of everyday life"[26]). Plus, criminologists can examine the predictors of minor criminal activity by comparing the experiences, behaviors, feelings, and thoughts of the law-breakers and law-abiders in the sample. These surveys are good for answering questions about what differentiates people who skirt the rules from those who adhere to them.

The easiest way to address the limitations of using self-report surveys is to contemplate who—among the general population—is most likely to end up in a survey's sample. First, they are most likely to be young and in school. Unlike adults, who have greater autonomy and are not concentrated in a single location, high school students are ripe for inclusion. The focus on high schoolers is compounded by public concerns about the problem behaviors of adolescents, including drinking, drug use, unprotected sex, and other high-risk activities. Second, they are likely to be conventional. The individuals who are most embedded in a criminal lifestyle—whether adolescents or adults—are especially unlikely to participate in survey research (because, e.g., they have dropped out or been pushed out of school, are incarcerated, or are unstably housed). And even when they do, they represent a tiny proportion of the overall sample. Researchers would need an enormous sample size to get enough serious law-breakers included. The result is that general-population self-report surveys are ineffective for estimating the prevalence and predictors of serious crimes like murder, robbery, burglary, kidnapping, and human trafficking. On top of that, ensuring honesty is a major challenge. Though respondents are assured anonymity (data are stripped of names and other identifying information), concerns about judgments or legal consequences can cause respondents to underreport their serious illegal actions. In a reversed pattern, some adolescents exaggerate their involvement in low-level crime.

It is not all bad news, though. Self-report surveys capture offenses that other sources of crime data do not—namely, victimless crimes (like drug use) and other offenses that tend to escape police attention, such as shoplifting, drunk driving, and vandalism. For example, the National Survey on Drug Use and Health (NSDUH), a trend study begun in 1971, collects drug use data annually from a

nationally representative sample of about 70,000 people age 12 and older.[27] The Monitoring the Future survey administers questionnaires to 8th-, 10th-, and 12th-grade students every two years, asking them about their behaviors, attitudes, and values regarding drugs, alcohol, and tobacco. A subset of the graduating seniors is selected for a follow-up survey that measures substance use among college students.

Some self-report surveys move beyond just drugs and alcohol. For instance, the National Longitudinal Survey of Adolescent to Adult Health (called Add Health) has followed a nationally representative sample of about 20,000 people from their middle and high school years (Grades 7 through 12) into middle age, surveying them five times: 1994-1995, 1996, 2001-2002, 2008, and 2016-2018. The surveys include questions about criminal activities like stealing, assault, selling illicit drugs, using weapons, damaging property, and committing intimate partner violence. They also contain measures of criminal justice involvement, like whether they have ever been arrested, charged, and convicted for a range of serious offenses. Table 2.3 presents a comparison of the three main sources of crime data.

TABLE 2.3 ■ Comparison of sources of crime data: NIBRS, NCVS, and self-report surveys

	National Incident-Based Reporting System (NIBRS)	National Crime Victimization Survey (NCVS)	Self-report surveys
Includes crimes not reported to police?	No	Yes	Yes
Relies on sample data?	No	Yes	Yes
Includes "victimless" crimes?	Yes	No	Yes
Useful for estimating prevalence?	No	Yes, for victimization	Yes, for offending (and victimization)
Best for which type of offenses?	Serious and minor offenses	Serious and minor offenses	Minor offenses
Age of offenders and victims represented?	All ages included	Includes victims age 12 and older; offenders of any age	Better for understanding juvenile offending

Let's say you are not concerned with estimating prevalence, nor do you wish to compare lawbreakers and law-abiders. Instead, you want to study a select kind of criminal offender to understand their experiences, behaviors, feelings, and thoughts. Surveying an offender-only sample might be the best strategy for you. But you will need to clear some hurdles in your path. The biggest one is finding respondents. There isn't a Big Book of Identity Thieves or a Directory of Armed Robbers you can use to locate and contact participants. Moreover, surveys need sample sizes large enough for completing statistical analyses. That means you need to go where there are large concentrations of people who qualify to be in your study, and that is the criminal justice system.

An example of an offender-only survey comes from criminologists Griffin and Evans, who used a mail-in survey of 306 registered sex offenders living throughout Mississippi to examine racial differences in experiences with stigma (being treated as disgraced or with great disapproval).[28] They found that Black registered sex offenders reported fewer negative consequences—called collateral consequences—than white registered sex offenders (e.g., harassment, losing a job, trouble finding a place to live, property damage). The researchers offered two potential explanations: (1) Both groups do, in fact, get treated poorly, but white registered sex offenders are more apt to note their unequal treatment because they are less accustomed, generally, to discrimination than are Black respondents. (2) Black communities express greater forgiveness to people with criminal records as a "method of coping with discrimination and inequality in the dominant community" (p. 20).

Griffin and Evans wanted to know the consequences of registering as a sex offender, a form of criminal justice involvement. Surveying only sex offenders who have been caught and punished isn't a

problem for them. Indeed, it is necessary. But that isn't the case for many survey researchers. Relying on the criminal justice system as a source for respondents creates complications if people who have been punished differ from those who have not. How might they be different? They might be less-skilled offenders, more likely to suffer from mental health or substance abuse problems, poorer and less educated, and their experiences in jail or prison might transform their perspectives. Always consider whether the sample is representative of the population of interest when interpreting survey results.

Experimental Research

People often (incorrectly) use the word *experiment* when describing any kind of study, but experiments are a very specific type of research. A study is an **experiment** *only* if the researcher manipulates a condition to observe if it causes a change in the outcome. In most cases, experiments include two or more groups that differ only in terms of receiving an experimental condition. The group that doesn't receive the experimental condition is called the control group. Typically, experimenters randomly assign participants (or locations or whatever else is receiving the experimental condition) to experimental and control groups to ensure that they are comparable, or as close to identical as possible. Because the experimental condition is the only thing that differentiates the groups, the researcher can be confident that any difference in the outcome is due to experimental condition and not some other factor. Experiments are considered the gold standard for determining causation for this reason. And remember, criminology is etiological, or concerned with causes.

Many criminological experiments investigate the impact of criminal justice interventions or policy changes on behavior. For example, a big problem for courts and defendants is the failure to appear for a scheduled court date. People miss court dates for lots of reasons: They forget, they are unaware that they are scheduled to appear in court, they must work or take care of children, they lack transportation, and more. One solution is to make reminder phone calls, just like a doctor's office. How can we know if this will work? After all, if the problem is work conflicts, child care, or transportation, then reminders are unlikely to be effective. Or maybe people don't show because they simply can't be bothered. Reminders won't work in that case, either. One criminologist sought to answer this question using an experiment in which people scheduled for court dates in New York City were randomly assigned to one of four groups: (1) no call, (2) reminder call three days in advance, (3) reminder call on same day as appearance, and (4) reminder call three days in advance and on the same day.[29] The experiment's results were encouraging. Reminder calls, regardless of when they occurred, reduced failures to appear by 37%. That's a significant causal impact of reminders!

You might wonder: If experiments are the gold standard for determining causation, then why isn't *all* criminological research experimental? The short answer is that most of the causes that interest criminologists are not things we can or *should* manipulate as researchers. Do you want to know if unemployment causes crime? As a researcher, you cannot randomly assign people to be fired from their jobs. Does the death of a parent contribute to juvenile delinquency? You aren't going to kill parents to find out. Many of the predictors that matter for crime, victimization, and how one is treated in the criminal justice system—poverty, education, sex, race and ethnicity, immigration status, mental health, trauma, family histories of incarceration or substance use, to name just a few—are outside the control of experimenters.

Natural experiments offer the benefits of experiments (isolating causation) without requiring criminologists to manipulate conditions that they cannot or should not manipulate. In a **natural experiment**, "natural" conditions mimic what would occur in an experiment. In other words, random assignment to experimental and control groups happened by chance or due to non-research-related circumstances. For example, assignment of cases to judges is a random or "natural" condition that creates comparable groups, just like experimental and control groups. Some judges are particularly lenient, and some are particularly punitive. As a result, equivalent defendants—same offense, same criminal history, same demographic characteristics—receive vastly different sentencing outcomes. What differentiates them? The answer is the criminal punishment they receive. For instance, one might receive probation while an equivalent defendant receives a prison sentence. Or one might receive a short prison sentence while their counterpart is locked up for years. The punishment mimics an experimental condition.

Now think about the many criminologists who study the impact of a criminal record on later (un) employment. Study after study reveals the difficulties ex-felons face in finding decent paid work.[30] The research is clear on this point. It is less clear on the reasons. It could be due to employers seeing a felony record—a "negative credential"[31]—and rejecting the applicant. Or it could be a result of time in prison rather than just the record; the longer the person is in prison, the larger the gap is in their employment history. Plus, potential employers might see incarcerated ex-felons as a riskier option than ex-felons who have never been to prison. Of course, researchers can't randomly assign people to receive a prison sentence, yet that is precisely what happens when cases are randomly assigned to lenient and punitive judges. Criminologists can then conduct natural experiments on the causal effects of prison on finding work.[32] They find that *any* felony conviction impedes employment, and that prison, relative to probation, adds an additional layer of impediment for defendants with strong preconviction employment histories.

QUALITATIVE RESEARCH AND UNOBTRUSIVE RESEARCH

Qualitative research is unconcerned with the "how much?" question. While quantitative research seeks to generalize, qualitative research aims for depth on a smaller number of cases in order to describe how people create meaning, maintain cultures, and understand their social world. Qualitative study may help to answer the "why?" question, but it does not test hypotheses about causal effects. Rather, it provides what early sociologist Max Weber called *Verstehen*: achieving understanding of action's meaning from the perspective of the actor. In-depth interviews and ethnographic study are qualitative methods through which criminologists can attain *Verstehen*.

Unobtrusive research (research that doesn't intrude into the lives of its subjects) can provide *Verstehen,* as well, especially when researchers employ qualitative techniques like covert observation. Other unobtrusive methods, however, like analysis of archival data or big data, are quantitative and better-suited to hypothesis testing.

In-Depth Interviews and Ethnography

In-depth interviews are exactly what they sound like. They are probing interviews of study participants conducted by researchers, ranging from unstructured free-flow interviews to highly structured interviews with predetermined questions. Many fall in between as semi-structured interviews guided by set questions but with researchers going "off script" to follow the flow of the conversation, ask follow-up questions, and press for deeper answers. Focus groups are similar, but they include multiple respondents being interviewed simultaneously, in groups. Interviews are typically audio-recorded and transcribed, or converted into text, for analysis. Qualitative researchers use a process called coding to locate and organize patterns in the transcript evidence.

Criminologists' research questions and goals govern the types of methods they use. Questions about emotions, decision-making, identity, and interpretation of experiences are best addressed with in-depth interviews or other qualitative techniques. Table 2.4 offers a few examples of criminological studies that use in-depth interviewing. Consider whether the research questions from the studies in Table 2.4 could have been answered effectively using quantitative methods like surveys or experiments.

Ethnography is "the study of groups of people in their natural setting, typically involving the researcher being present for extended periods of time in order to collect data systematically about their daily activities and the meanings they attach to them" (p. 115).[37] Unlike stand-alone in-depth interviews, ethnography is immersive, with researchers typically acting as participant observers. In criminological ethnographies, particularly studies of active offenders, ethnographers limit their participation to only noncriminal activities.[38] Nearly all ethnographies include in-depth interviews, as well. For example, ethnographer Lynne Haney spent three years conducting fieldwork in child support courts throughout Florida, New York, and California—in addition to interviewing 125 formerly incarcerated fathers—to examine how criminal justice and child support systems operate together in the post-incarceration lives of fathers who have been to prison.[39] Her ethnography set out to capture and analyze the impacts of mass incarceration on fathers who find themselves caught in a system of debts that hinder successful reintegration after prison.

TABLE 2.4 ■ Examples of in-depth interview studies in criminology

Authors	Research questions	How they studied it
Jacobs and Cherbonneau (2017)	How do auto thieves manage "nerve" (controlling of fear and emotions) in making criminal decisions and accomplishing their crimes?	35 semi-structured interviews with active auto thieves in a large Midwestern city
Dickinson (2020)	How do sellers of illicit drugs understand their own identities and responses to drug debt (i.e., how they behave when people owe them money)?	33 in-depth interviews with active drug sellers in St. Louis, MO
Rios, Prieto, and Ibarra (2020)	How do police establish legitimacy through respectful interactions with gang-associated Latinos while simultaneously relying on stop-and-frisk tactics?	Observations during ride-alongs with police Gang Suppression Team (GST) and in-depth interviews with community members policed by the GST in a small California city
Trejbalová, Monaghan, Kennedy, Decker, and Cimino (2020)	How does being detained as a juvenile for prostitution and solicitation affect the lives and self-concepts of children who have been sexually exploited?	36 semi-structured interviews with formerly detained young women in Nevada

Sources: Jacobs & Cherbonneau[33]; Dickinson[34]; Rios, Prieto, & Ibarra[35]; Trejbalová, Monaghan, Kennedy, Decker, & Cimino.[36]

Ethnographies present challenges for any kind of researcher, but the hurdles are especially high for criminologists, who are usually interested in exploring criminal subcultures (like armed robbers or human traffickers) or criminal justice settings (like prison culture or police culture). Few other researchers, for instance, worry about being compelled by the courts to provide documents or testimony leading to a research participant's criminal conviction (researchers can obtain certificates of confidentiality from the National Institute of Health to protect against this).[40] For criminologists, ethnographic challenges include the following[41]:

- Negotiating access to highly controlled settings, including prisons, jails, and re-entry programs; plus, authorities controlling access may seek to dictate the content of the research, such as who is interviewed and what is asked in interviews.
- Negotiating access to "hidden populations" and criminal subcultures (e.g., criminal gangs, terrorist organizations, drug trafficking participants); requires the help of a "gatekeeper," a cultural insider who vouches for the researcher.
- Research participants might initially consider researchers untrustworthy and may test their trust throughout the study.
- The illegality of behavior—or stigma assigned to the behavior—may make people hesitant to fully participate or be completely honest.

Unobtrusive Research

Nearly every research method described in this chapter requires that people allow a researcher to intrude into their lives in some way—by asking questions, by exposing them to experimental conditions, by observing them. Intrusive techniques are required for answering some research questions. For instance, it is difficult to learn about people's motivations for shoplifting without asking them. Other questions, however, can be answered without making demands on others' time and attention with the use of unobtrusive methods. **Unobtrusive research** includes physical trace analysis, analysis of available (or archival) data, content analysis, and covert observation, none of which intrude into the lives of others.[42] A major benefit of unobtrusive techniques is that the behavior under investigation is immune to the presence of a researcher. It is nonreactive. Survey researchers worry about honesty, ethnographers

fret that people alter their presentation of self, and interviewers fear that respondents seek to please them with socially desirable answers. These concerns evaporate with the use of unobtrusive methods.

Courtroom observational research is an example of an unobtrusive method used in criminology.

Chris Ryan/OJO Images/Getty Images

In *physical trace analysis*, researchers examine the material markers of human activity—that which is left behind—to learn about the behaviors of the people or places that created them. For example, publicly discarded drug use paraphernalia and empty liquor bottles could be counted and recorded, serving as markers of substance use and, potentially, community disorder. Litter, dog (and human) waste, and used condoms also serve as physical traces of criminologically relevant activity.

In *analysis of available data*, criminologists benefit from archived information collected for reasons that often have nothing to do with criminology. Emergency room data on treatment of drug overdoses provide insight into the scale of illicit drug use. Calls to nonemergency numbers like 311 alert researchers to the crime-related concerns of residents.[43] Foreclosure and eviction data indicate the magnitude of local housing crises.[44] These data already exist in the world and can be used without making demands on research participants.

Content analysis is the systematic examination of textual or image data to "appraise the meaning and messages" contained in the content.[45] The easiest way to understand this is to describe the kinds of content that criminologists analyze, including crime news articles,[46] advertisements for illicit services,[47] court decisions,[48] and even criminology textbooks.[49] Most, though not all, criminological content analysis explores trends in the depiction of crime and criminals in media, sometimes through journalistic content and other times through public responses to news coverage. For example, researchers have analyzed reader comments to news stories about parents of mass murderers Adam Lanza (Newtown) and Dylan Klebold and Eric Harris (Columbine) to study trends in sympathy and blame for mothers and fathers. They identified clear patterns of mother blame and a near absence of any mention of the fathers at all. When brought up, the fathers—unlike the mothers—were not held solely responsible by the commenting public for their sons' horrific crimes.[50]

Covert observation takes place without the awareness of observed parties. The word *covert* means secret or clandestine. There are ethical restrictions on observing people for research in private spaces—like at their homes, at school, in a doctor's office—without their consent, as is necessary in most

research. However, clandestine public observation is sometimes permitted, such as observations on a public sidewalk. Criminologists interested in studying behavior often turn to video recordings as a form of unobtrusive observation, though gaining consent may still be necessary (see section Ethics in Criminological Research). Imagine, for example, that you wanted to understand how robberies unfold, including why some are successful—for the robbers, at least!—and others fail. You could, as others have done, analyze surveillance video footage of robberies.[51] Or perhaps you want to examine racial bias in police-citizen interactions. You ask: Are police quicker to use force and do they use *more* force against Black persons than otherwise similar white persons? Think about how you might use observation to answer that question. You could certainly do hours upon hours of police ride-alongs, but you're more likely to get high-quality observations (and save a great deal of time) by analyzing video footage from police officers' body-worn cameras. Criminologists do just this, observing that police are quicker to use force against people who are Black, even when the level of resistance is the same.[52]

Covert research, which takes place without the awareness of observed parties, is permitted when occurring in public settings.

Marco Piunti/E+/Getty Images

ENGAGED CRIMINOLOGY 2.2

Analyzing Surveillance Videos

In this activity, you will analyze patterns in convenience store robberies using an unobtrusive method of observation: analysis of surveillance video footage.

Step 1: Locate surveillance videos.

Search for "convenience store robbery" on YouTube. This will bring up many videos. Only select videos that feature surveillance footage of robberies posted by either (1) law enforcement agencies or (2) news organizations. Locate four videos that meet these criteria.

Step 2: Watch and analyze the videos.

As you watch each video, pay attention and take notes on the following characteristics:

- How many people are committing the robbery?
- Are there other people present in the store during the robbery (other than the clerk)?

- How do the robbers behave during the robbery? For example, do they show a weapon? Do they appear excitable or calm? What emotions do they display?
- How do the victims (clerks) behave during the robbery?

Note whether there are similarities across the videos in how convenience store robbers enact their crimes. What patterns do you see?

Step 3: Evaluate the method.

In about 10-12 minutes, write down your responses to the following questions:

1. What can we learn about convenience store robberies from video surveillance footage that we cannot learn from other methods, like surveys or ethnographies?
2. What *can't* we learn about convenience store robberies when we rely on observation of video surveillance footage?
3. Do you think these four videos are a representative sample of all convenience store robberies? Why or why not? And does it matter?
4. Does the perspective of the observer matter for what patterns are identified? That is, might you interpret what you see differently than what a classmate interprets?

Your instructor will let you know whether to complete this activity solo or in groups, as well as how to submit and share your findings and evaluation of the method.

Big Data

Even as you read this chapter, you are emitting a kind of digital dust—a residue of your online activity that can be scraped up and analyzed. Maybe you are wearing a fitness tracker? Posting on Instagram? Making online purchases? Using your phone's mapping app? Every tap of a credit card, every post or photo, every online search creates data. *Lots* of data. So much data that it's called **big data**, referring to enormous data sets too complex for traditional data analysis software. Think of big data as any large data set containing information from networked devices or any Internet activity. Just as advertisers, insurance companies, and governments benefit from the datafication of our lives, so too can criminologists, especially those interested in the new field of computational criminology.[53] For example, criminologists analyzed eight months' worth of geolocated tweets (i.e., Twitter posts with latitude/longitude coordinates) in southern California to track where people are, and when.[54] Then they linked that information to location-specific crime rate data from law enforcement to see if the flow of people influenced patterns of victimization.

The use of big data in criminology is still in its infancy, and many are doubtful that it will transform the discipline.[55] Their concerns center on the quality of data. Criminologists warn that big data are "messy, noisy, and unstructured" (p. 323).[56] They also lack the richness of information provided by data collected specifically for criminological purposes—we learn much more useful details from answers to researcher-created survey or interview questions than from tweets or Google searches. Plus, big data can suffer from problems of selection bias, meaning that only a select group's online activity is captured in the data. This is especially true of social media data, which are a common type of big data explored by criminologists. Nonetheless, the future of criminology, like the future of all disciplines, will be shaped by the technologies that define our world. Ultimately, though, criminologists' research questions will dictate the value of big data.

ETHICS IN CRIMINOLOGICAL RESEARCH

Imagine that your criminology instructor has assigned a research project. Every student in your class must collect and analyze their own data on college student criminal conduct, your instructor tells you. Your classmates conduct the following studies:

- Informal interviews with five drug dealers who supply illicit drugs to the campus community. The student doesn't tell the suppliers the reason for the interviews (they think is just a conversation), and the student includes the suppliers' first names in the research paper.

- An online survey of 300 enrolled students in which they are asked to report their recent criminal behaviors, including theft, assault, and substance use. They also provide their university email address in order to be entered into a drawing to win a $100 gift card.
- An experiment in which underage students are offered the purchase of a fake ID to see under what conditions they are willing to buy it. The interactions are video-recorded and analyzed. The students do not know they are part of an experiment and that there are no fake IDs being sold.

Can you think of any ethical problems with these studies? The word *ethics* refers to moral principles of right and wrong, so ethical problems in research are those that violate a code of proper—or "right"—conduct.

Criminologists and all other researchers who study humans must adhere to a well-defined code of ethics. Before conducting their studies, researchers must gain approval from their institution's **Institutional Review Board (IRB)**. IRBs examine researchers' proposed procedures to ensure that they follow certain guidelines that protect the people being studied, including:

1. *Participants are not harmed by the research.* This principle—also called beneficence—is similar to the physicians' creed "first, do no harm." The physical harms done by an unscrupulous doctor are obvious (see the section on health care crimes in Chapter 4 if you are unsure!), but what are the harms done by criminological research? Potential harms include (1) legal repercussions for exposed criminal activity; (2) personal consequences, such as job loss, relationship loss, eviction, school expulsion, violent retaliation, and harms to reputation or social standing; and (3) psychological harms, including those caused by revisiting past traumas, such as the traumas of child abuse, sexual violence, and other forms of victimization. Researchers should eliminate or minimize these harms by following the next principles listed.
2. *Participation in research is voluntary.* This principle—also called respect for persons—emphasizes that participants must consent to being involved in the research, and they must consent freely. Their participation is only truly voluntary if the nature of the research and its potential risks are known; they cannot consent to something they don't understand. The criminologist leading the study must obtain participants' informed consent before proceeding with the study, typically with an *informed consent* form. Informed consent forms must include each of these items:

    - Title of study
    - Researchers' names and contact information
    - A brief and clearly worded description of the research's purpose
    - A concise description of what will happen during the research
    - Description of potential risks and benefits of participation
    - Assurance of either anonymity or confidentiality, including how that will be achieved through data collection and storage procedures
    - Information about participants' right to withdraw from the research at any time

Some populations have a diminished ability to freely consent to research. These populations include minors, individuals with severe mental illness, people with intellectual disabilities, individuals unfamiliar with or uncomfortable using the language used in the research, and—especially relevant for criminology—people under some form of criminal justice supervision, including jail inmates, prisoners, probationers, and people in court-mandated substance abuse treatment. IRBs require special protections be put in place when working with vulnerable populations whose involvement may be coerced or based on limited comprehension of what they are agreeing to.

3. *Participants are granted anonymity or confidentiality.* Protecting the identities of research participants is of utmost importance in criminological research. Think of the sensitive nature of what we study! Some researchers avoid collecting data on identifiers, including names,

birth dates, email addresses, phone numbers, and IP addresses, so even the researcher has no clue who is included. Or, alternatively, they strip the data of this information to achieve anonymity. *Anonymity* occurs when researchers cannot link participants' identities to information about them. Anonymity is not always possible, though. For example, identifiers must be maintained to follow participants over time in longitudinal panel surveys, and qualitative interviewers know their respondents' identities. In these cases, researchers must ensure *confidentiality*. Data are confidential when researchers can link participants' identities to information about them, but they conceal their identifies from others. Ethnographers and other qualitative researchers accomplish this in part by assigning pseudonyms, or fake names, to participants.

4. *Participants are not deceived unless under certain approved circumstances*. Deception involves presenting false information about the research, concealing information about the nature of the study, or concealing that research is taking place at all. It is, essentially, lying to participants (active deception) or, at the very least, withholding information (passive deception). Deception undermines informed consent, and it must be "justified by compelling scientific or administrative concerns."[57] And there are compelling reasons. Some degree of deception is necessary in many experiments, but experimenters alert participants of this in their informed consent procedures and debrief them, or fully explain the deception, later. Plus, covert observation necessarily entails deception, typically of the passive variety.

CHAPTER SUMMARY

LO 2.1 Differentiate descriptive and explanatory research in criminology.

Some descriptive research seeks to answer the "how much?" question—it is about the extent of crime. Explanatory research, in contrast, attempts to answer the "why?" question and thereby assess causes of crime, victimization, punishment, and other outcomes.

LO 2.2 Identify strengths and weaknesses of official crime statistics.

Official crime statistics, like those produced by NIBRS, provide information on criminal offenses known to police, arrests, and clearance rates. They include all known incidences rather than relying on sample data. They are limited by reliance on police for the data. They do not capture the dark figure of crime, they require honesty, and they are influenced by racial, ethnic, and socioeconomic biases.

LO 2.3 Describe the uses and limitations of survey and experimental research in criminology.

Survey research, including the National Crime Victimization Survey and offender self-reports, is useful for measuring crime that goes unreported to law enforcement as well as respondents' experiences, behaviors, feelings, and thoughts about crime, criminal justice, and related topics. Surveys are limited in that they rely on sample data and respondent accuracy. Experiments are best for determining causation, but ethical and practical concerns limit their use.

LO 2.4 Demonstrate understanding of how and why criminologists conduct qualitative research and unobtrusive research.

Qualitative research (like in-depth interviews and ethnographies) allows criminologists to study subcultures, identity formation, and decision- and meaning-making. It also allows for follow-up questioning and in-depth elaboration not possible in quantitative reports. Qualitative research seeks to understand action's meaning from the perspective of the actor. Unobtrusive research (like covert observation, content analysis, and analysis of archival data) is immune to the presence of a researcher because it does not require intrusion into the lives of its subjects.

LO 2.5 Describe the ethical concerns in criminological research.

In ethical criminological research, participants are not harmed, they participate voluntarily (with informed consent), their responses or other data remain anonymous or confidential, and they can only be deceived under certain approved circumstances. Criminologists must obtain approval for their research from an Institutional Review Board, which scrutinizes research methods to verify adherence to an established code of ethics.

ENGAGED DISCUSSION

1. Consider the crime of drunk driving. Develop one descriptive question about drunk driving. Then develop one explanatory question about it.
2. Imagine that you calculate your county's incidence rate and prevalence rate for murder this year and the values are the same. What can you conclude?
3. The NCVS excludes homeless persons. What is one way the criminal victimization of people experiencing homelessness might differ from the criminal victimization of those who are housed?
4. Come up with one type of text, image, or video content that you think might be useful in criminological research. What research questions could be answered by analyzing that content?
5. What are some ethical issues with conducting research on prisoners? What could researchers do to make their research on prisoners ethical?

KEY TERMS

Big data (p. 48)
Clearance rate (p. 37)
Crime rate (p. 35)
Cross-sectional (p. 39)
Dark figure of crime (p. 31)
Descriptive research (p. 28)
Ethnography (p. 44)
Experiment (p. 43)
Explanatory research (p. 28)
Incidence (p. 35)
In-depth interviews (p. 44)
Institutional Review Board (IRB) (p. 49)
Level of analysis (p. 30)
Longitudinal (p. 39)
National Crime Victimization Survey (NCVS) (p. 39)
National Incident-Based Reporting System (NIBRS) (p. 32)
Natural experiment (p. 43)
Policy research (p. 28)
Population (p. 38)
Prevalence (p. 35)
Sample (p. 38)
Triangulation (p. 41)
Uniform Crime Reporting (UCR) program (p. 31)
Unobtrusive research (p. 45)