

CHAPTER 1

SCIENCE, SOCIETY, AND SOCIAL RESEARCH



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LEARNING OBJECTIVES

- ❖ Describe the four common errors in everyday reasoning
- ❖ Define social science and identify its limitations
- ❖ Identify the four types of social research
- ❖ Explain the difference between the orientations in the following two pairs: quantitative/qualitative; positivist/constructivist

“I’ll jump online with the people I’m with, just briefly, to get a point across. . . . I never really learned how to do a good job with talking in person.” Bree was a college senior in 2014 when she described her use of the internet with friends in this way to sociologist Sherry Turkle (2015:140). Do you use the internet in this way? Do any of your friends? How about Professor Turkle’s (2015:212) own MIT students, who told her “they text in all their classes. . . . These students don’t feel they can be present unless they are also, in a way, absent. For some, three minutes is too long to go without checking their phones. Some say two minutes is their rule.” Does that apply to you? To your classmates? Have your experiences left you feeling that the internet improves or diminishes the quality of social interaction? Do others agree with you about that? Would more government regulation help?

That’s where social research begins, with questions about the social world that arise from our own experiences, from previously reported research (like Sherry Turkle’s *Reclaiming Conversation: The Power of Talk in a Digital Age*), or from a desire to assess social policies and programs or to make changes to them. Of course, you already know from the books and articles you have been reading in other courses that what social scientists know is based on social research. I’ll bet that you also have seen enough changes in the internet in your own lifetime—to use just one example—to know that the job of social research is never finished. In order to understand the ever-changing social world, we need

to keep studying it. But now it’s time to take the next step: to learn how social research differs from other ways of understanding the social world, to consider the advantages of this approach to understanding, and to compare the strengths and weaknesses of particular research methods. By the time you finish this book (with your professor’s guidance 😊), you will know more when you read social research results, you will be able to contribute more to social research projects, and you will also understand more—and have more questions—about the social world.

Consider the internet itself. This aspect of our social world didn’t even exist for most people before the 1990s, but by 2018, nine in ten American adults used the internet—including 98% of those 18 to 29 (but only two-thirds of those 65 and older) see exhibit 1.1. One-quarter of U.S. adults said they were almost constantly online (Pew Research Center 2019a, <https://www.pewinternet.org/fact-sheet/internet-broadband/6/9/2019>), while more than two-thirds use social media (Facebook is most popular) and about three-quarters use YouTube (Pew Research Center 2019b, <https://www.pewinternet.org/fact-sheet/social-media/>). A total of 4,383,81 persons used the internet around the world in May 2019, although that represented only 57% of the world’s population, with the lowest level of internet penetration only 37% in Africa (6/9/2019, <https://www.internetworldstats.com/stats.htm>).

So when we talk about our social world, the internet must be part of the conversation, but even that part quickly generates more questions than we can hope to answer without social research: How does internet use vary across social groups? What are different ways people use the internet? What are the social consequences of internet use?

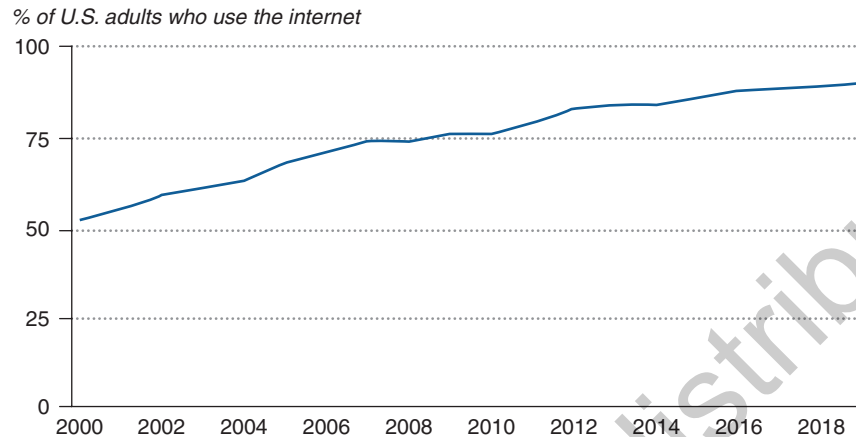
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▼ EXHIBIT 1.1

Internet Use Over Time



Pew Research Center, JUNE 12, 2019, "Internet/Broadband Fact Sheet", <https://www.pewinternet.org/fact-sheet/internet-broadband/>.

This chapter gives special attention to questions about internet use, social networking services, and social ties, but its goal is to illustrate the value of social research and introduce the methods of social research in relation to a compelling contemporary issue. We cannot avoid asking questions about our complex social world or our position in it. In fact, the more you begin to “think like a social scientist,” the more such questions will come to mind—and that’s a good thing! But it is through learning how answers to questions about the social world can be improved with systematic methods of investigation that we can move beyond first impressions and gut reactions. The use of research methods to investigate questions about the social world results in knowledge that can be more important, more trustworthy, and more useful than reliance just on personal opinions and individual experiences. You will also learn about the challenges that researchers confront. By the chapter’s end, you should know what is “scientific” in social science and appreciate how the methods of science can help us understand the problems of society.

The Value of Social Research

As you begin this book, you might wonder whether learning about social research methods is worth the effort. It is if you would like to do as well as possible in your other social science courses; if you want to maximize your career opportunities; and if you care about the community you live in, the schools your children may attend, and the direction of the nation. In courses ranging from the sociology of gender to the politics of communication, you will read about social research results and so need to know how to assess the quality of the evidence produced. Almost any organization for which you might work, from a government agency or a nonprofit organization to a private employer, conducts or at least uses social research methods to evaluate programs, identify client needs, or assess customer satisfaction. If you plan to work as a program director, social service worker, or in almost any other capacity, your ability to understand social research will help you to evaluate information and make decisions; of course, it is also a necessary foundation for graduate school. And there can be even more direct benefits if you take advantage of

one of the many job opportunities in social science research at one of the hundreds of organizations that evaluate and help to advance social policy, such as the RAND Corporation, the National Opinion Research Center (NORC), the Institute for Social Research (ISR), Mathematica, and ABT Associates (Prewitt, Schwandt, & Straf 2012:28). As you will see in the “Careers and Research” vignettes throughout *Understanding the Social World*, there are many opportunities to enhance your job prospects if you understand social research methods.

The U.S. federal government spent about \$2.79 billion on social science research at higher education institutions (including psychology, anthropology, and economics) in fiscal year 2017, with about \$552 million of that total in sociology, demography, and population studies (Gibbons 2018: table 3; <https://www.nsf.gov/statistics/2019/nsf19302/>). The results have included programs to increase voter turnout, reduce violence in communities, lessen smoking and hence rates of lung cancer, improve the health and well-being of infants, and lower rates of domestic violence. From wellness visits by teen mothers to community-based policing, social science research has helped to improve social welfare (Abrams 2007:2–4; NIH n.d.). By learning the methods used in this type of research, you can begin to evaluate its quality and help to shape its impact. Are you ready to proceed?

Avoiding Errors in Reasoning About the Social World

How can we improve our reasoning about the social world? How do social research methods help us to avoid errors rooted in personal experiences? First, let’s identify the different processes involved in learning about the social world and the types of errors that can result as we reason about the social world.

When we learn about the social world, we engage in one or more of four processes: (1) “*observing*” through our five senses (seeing, hearing, feeling, tasting, or smelling); (2) *generalizing* from what we have observed to other times, places, or people; (3) *reasoning* about the connections between different things that we have observed; and (4) *reevaluating* our understanding of the social world on the basis of these processes. It is easy to make mistakes with each of them.

My favorite example of the errors in reasoning that occur in the nonscientific, unreflective discourse about the social world that we hear on a daily basis comes from a letter to famous advice columnist Ann Landers. The letter was written by someone who had just moved with her two cats from the city to a house in the country. In the city, she had not let her cats outside and felt guilty about confining them. When they arrived in the country, she threw her back door open. Her two cats cautiously went to the door and looked outside for a while then returned to the living room and lay down. Her conclusion was that people shouldn’t feel guilty about keeping their cats indoors. Even when they have the chance, cats don’t really want to play outside, she reasoned.

Do you see this person’s errors in her approach to

- *Observing?* She observed the cats at the outside door only once.
- *Generalizing?* She observed only two cats, both of which previously were confined indoors.
- *Reasoning?* She assumed that others feel guilty about keeping their cats indoors and that cats are motivated by feelings about opportunities to play.
- *Reevaluating?* She was quick to conclude that she had no need to change her approach to the cats.



Photo 1.1 What could the woman with the cats have done to avoid the four errors in reasoning?

©iStockphoto.com/w-ings

You don't have to be a scientist or use sophisticated research techniques to avoid these four errors in reasoning, but the methods of social science are designed to reduce greatly the risk of making them. **Science** relies on logical and systematic methods to answer questions. Science does this in a way that allows others to inspect and evaluate its methods. In this way, scientific research develops a body of knowledge that is continually refined, as beliefs are rejected or confirmed on the basis of testing empirical

evidence. **Social science** relies on scientific methods to investigate individuals, societies, and social processes. Although the activities involved in social science methods—asking questions, observing social groups, or counting people—are similar to things we do in our everyday lives, social scientists develop, refine, apply, and report their understanding of the social world more systematically, or “scientifically,” than does Joanna Q. Public.

Observing

One common mistake in learning about the social world is **selective observation**—choosing to look only at things that are in line with our preferences or beliefs. When we are inclined to criticize individuals or institutions, it is all too easy to notice their every failure. For example, if we are convinced in advance that all heavy internet users are anti-social, we can find many confirming instances. But what about elderly people who serve as internet pen pals for grade-school children? Couples who maintain their relationships when working in faraway cities? If we acknowledge only the instances that confirm our predispositions, we are victims of our own selective observation.

British internet researcher Gina Neff has observed both positive and negative effects:

“Apps and websites cannot replace the communities that have always connected and supported us, but they can help diverse and dispersed groups coordinate care in unprecedented ways.”

—Gina Neff, Associate Professor and Senior Research Fellow at the Oxford Internet Institute

Source: Pew Research Center <https://www.pewinternet.org/2018/07/03/shareable-quotes-from-experts-about-the-impact-of-digital-life/>.

Our observations can also simply be inaccurate. If, after a quick glance around the computer lab, you think there are 14 students present, when there are actually 17, you have made an **inaccurate observation**. If you hear a speaker say that “for the oppressed, the flogging never really stops,” when what she said was, “For the obsessed, the blogging never really stops” (Hafner 2004), you have made an inaccurate observation.

Such errors occur often in casual conversation and in everyday observation of the world around us. In fact, our perceptions do not provide a direct window onto the world around us, for what we think we have sensed is not necessarily what we have seen (or heard, smelled, felt, or tasted). Even when our senses are functioning fully, our minds have to interpret what we have sensed (Humphrey 1992). The optical illusion in Photo 1.2,

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

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

Selective observation: Choosing to look only at things that are in line with our preferences or beliefs.

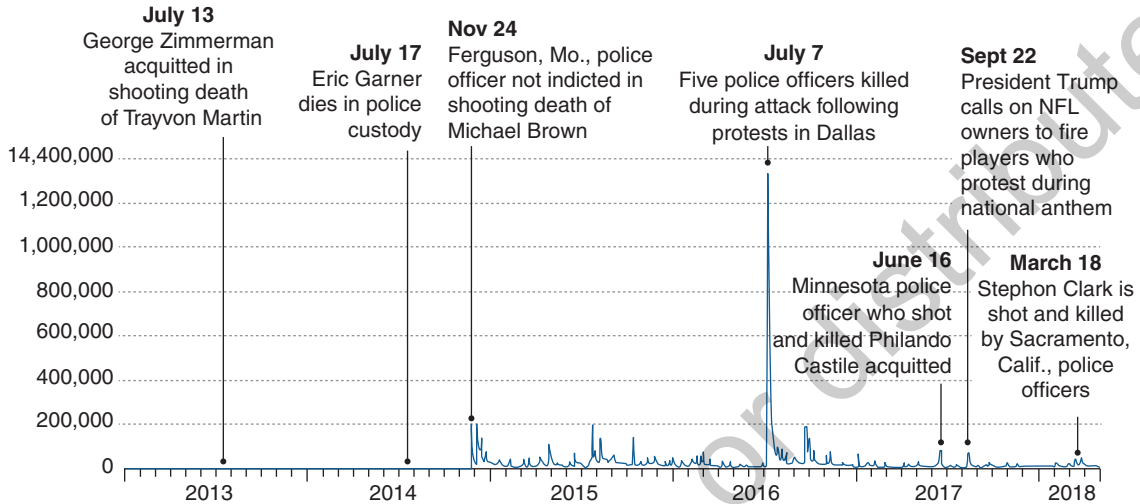
Inaccurate observation: An observation based on faulty perceptions of empirical reality.

▼ EXHIBIT 1.2

Twitter Posts Mentioning #BlackLivesMatter Over Time

Use of the #BlackLivesMatter hashtag on Twitter periodically spikes in response to major news events

Number of Twitter posts mentioning the #BlackLivesMatter hashtag, Jan. 1, 2013–May 1, 2018



Pew Research Center, July 2018, "Activism in the Social Media Age", https://www.pewinternet.org/2018/07/11/activism-in-the-social-media-age/pi_2018-07-10_social-activism_0-01/.

which comes from a JCPenney billboard that could be seen as either a teakettle or a saluting Adolf Hitler, should help you realize that perceptions involve interpretations. Different observers may perceive the same situation differently because they interpret it differently (so JCPenney quickly took down the billboard after complaints).

Social science methods can reduce the risk of selective or inaccurate observation by requiring that we measure and sample phenomena systematically. For example, what role has social media played in the 21st-century movement arising in the wake of highly publicized police killings of black civilians known as Black Lives Matter? It's easy to make up a "story" based on some messages sent by participants, but did this really involve lots of people? In the study of the role of social media in the Black Lives Matter movement highlighted in Exhibit 1.2, a Pew Research Center analysis finds there were almost 30 million tweets of the BLM hashtag by May 1, 2018—about 17,002 per day, but spiking in days after police-related deaths. They also reported that black Americans felt more positive than white Americans about the value of social media for promoting important issues or giving underrepresented groups a voice, based on a survey of 4,594 U.S. adults between May 29 and June 11, 2018.

Generalizing

Overgeneralization occurs when we conclude that what we have observed or what we know to be true for some cases is true for all or most cases (Exhibit 1.3). We are always drawing conclusions about people and society from our own interactions, but sometimes we forget that our experiences are limited. The social world is, after all, a complex place. We can interact with just a small fraction of individuals in the social world, and we may do so in a limited span of time. Lara Aknin, Michael Northom, and Elizabeth Dunn (2009) demonstrated considerable overgeneralization in Americans' beliefs about money buying

Overgeneralization: Concluding unjustifiably that what is true for some cases is true for all cases.



Photo 1.2 An optical illusion: What do you see?
FREDERIC J. BROWN/AFP/Getty Images

happiness. People tended to think that more money would increase happiness much more among those with less income than themselves than it actually did. Do you ever find yourself making a quick overgeneralization like that?

Social science research methods can reduce the likelihood of overgeneralization by using systematic procedures to select individuals, groups, events, messages or other units of interest. We can then be more confident in our generalizations.

For example, rather than receiving money, giving money to others—particularly to those you care about—increased happiness for most people (Aknin et al. 2013; 2019). Jean Twenge (2019) identified increasing time spent on the internet as a likely factor in this decline (Exhibit 1.4).

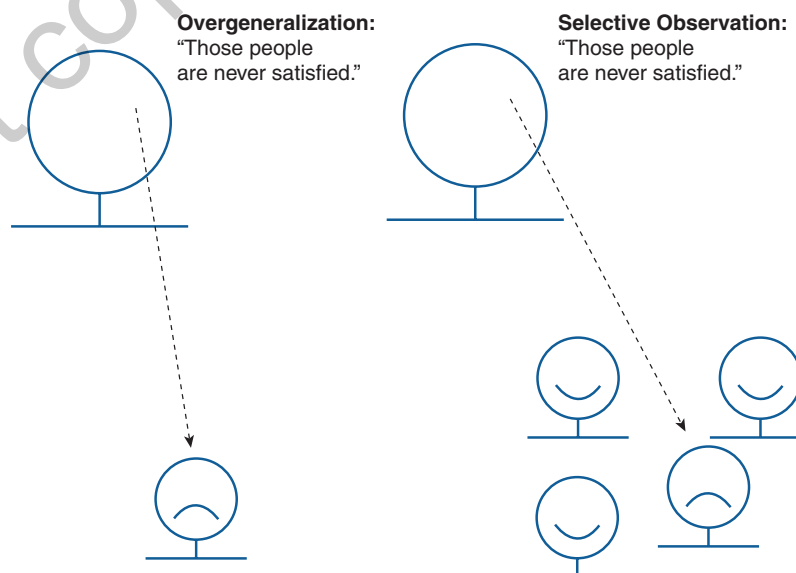
Reasoning

When we jump to conclusions or argue on the basis of invalid assumptions, we are using **illogical reasoning**. It is not always so easy to spot illogical reasoning. For example, would it be reasonable to propose that the 10% of U.S. adults who don't participate in the "information revolution" avoid the internet simply because they don't want to participate? In fact, the rate of internet use falls off sharply for households with less than \$30,000 in income and for those in rural areas, suggesting they lack the financial resources to buy a computer or pay for an internet connection or do not have a high-speed connection; that's probably not because they don't want to use it (<https://www.pewinternet.org/fact-sheet/internet-broadband/>; income chart, community chart). Conversely, an unquestioned assumption that everyone wants to connect to the internet may overlook some important considerations; for example, one-third of nonusers of the internet in 2013 said they had

Illogical reasoning: Jumping to conclusions or arguing on the basis of invalid assumptions.

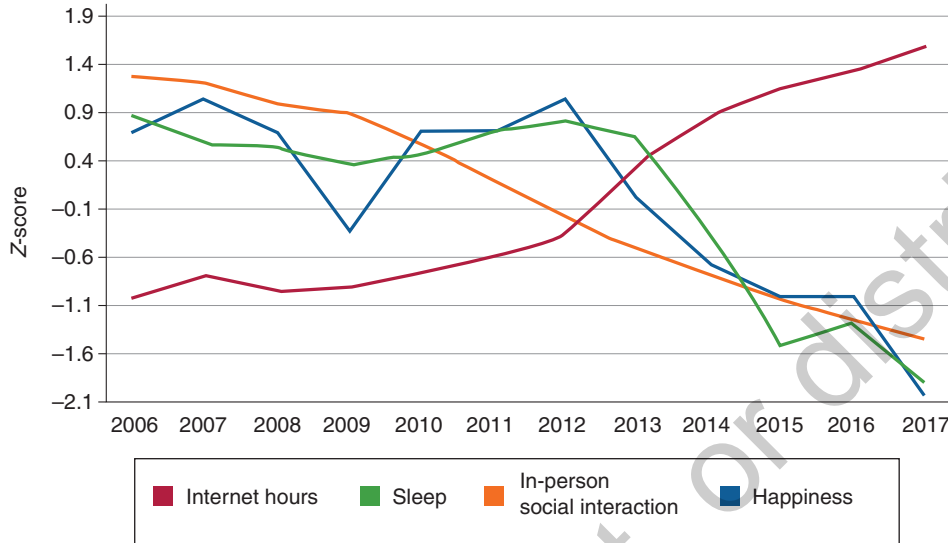
▼ EXHIBIT 1.3

The Difference Between Selective Observation and Overgeneralization



▼ EXHIBIT 1.4

Time Spent on the Internet, Sleeping More Than 7 Hours a Night Most Nights, Frequency of In-person Social Interaction Across 7 Activities, and General Happiness, Standardized (Z) Scores, 8th and 10th Graders, Monitoring the Future, 2006–2017



Helliwell, J., Layard, R., & Sachs, J. (2019). World Happiness Report 2019, New York: Sustainable Development Solutions Network.

no interest in it or thought it was irrelevant to their lives (Andersen et al. 2019, <https://www.pewresearch.org/fact-tank/2019/04/22/some-americans-dont-use-the-internet-who-are-they/>). Logic that seems impeccable to one person can seem twisted to another.

To avoid illogical reasoning, social researchers use explicit criteria for describing events and identifying causes and for determining whether these criteria are met in a particular instance.

Reevaluating

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

- *Ego-based and institutional commitments.* We all learn to greet with some skepticism the claims by leaders of companies, schools, agencies, and so on that people in their organization are happy, that revenues are growing, and that services are being delivered in the best possible way. We know how tempting it is to make statements about the social world that conform to our own needs or the needs of our employers rather than to the observable facts. It can also be difficult to admit that we were wrong once we have staked out a position on an issue. Barry Wellman recounts a call from a reporter after the death of what he believed were four “cyber addicts” (Boase, Horrigan, Wellman, & Rainie 2006:1). The reporter just wanted a quote from a computer-use expert, such as Wellman, that would affirm his belief. But the interview didn’t last long: The reporter lost interest when Wellman pointed out that other causes might be involved, that “addicts” were a low percentage of users, and that no one worries about “neighboring addicts” who chat daily in their front yards. (Boase et al. 2006:1)

Resistance to change: The reluctance to reevaluate our ideas in light of new information.



SOCIAL MEDIA USE IS LINKED TO A FEAR OF CRIME

Previous research indicated that people who watch more TV tend to be more afraid of crime. That's not entirely surprising, given all the dramas and news reports that focus on crime. But what about time spent on social media? Recent research by Jonathan Intravia, Rocio Paez, and Benjamin Gibbs at Ball State University in Indiana and Kevin Wolff at the John Jay College of Criminal Justice (2017) finds that young people (college students at three universities) were more fearful of crime if they spent more time on social media.

Are you surprised? Perhaps you were thinking that, of course, people who are more fearful of crime will also watch more crime stories on any medium. But it turns out that fear of crime wasn't associated with watching more crime stories on social media; it was using more social media itself that made a difference. Are you convinced? The findings were not limited to one region of the country, since the researchers sampled students at universities in the Midwest, South, and Northeast. The findings also did not seem to reflect more experience with crime, since the link between social media use and fear of crime was strongest for those who lived in more safe

neighborhoods. Tom Jacobs, *Pacific Standard's* writer, speculated that the intertwining of important news with trivia on social media sites creates an impression that the world is disordered and so perhaps more crime prone.

For Further Thought?

1. Media images as well as personal experiences have always influenced popular understanding of the social world. Do social media take this process of media influence to a whole new level?
2. What are the consequences for our everyday lives?
3. After reading this story, what related question would you like to study with research methods in the social world?

Jacobs, Tom. 2017. "Social Media Use Is Linked to a Fear of Crime." *Pacific Standard Magazine*, December 15. Retrieved from <https://psmag.com/news/social-media-use-is-linked-to-a-fear-of-crime>.

- *Excessive devotion to tradition.* Some degree of devotion to tradition is necessary for the predictable functioning of society. Social life can be richer and more meaningful if it is allowed to flow along the paths charted by those who have preceded us. But too much devotion to tradition can stifle adaptation to and understanding of changing circumstances.
- *Uncritical agreement with authority.* If we do not have the courage to evaluate critically the ideas of those in positions of authority, we will have little basis for complaint if they exercise their authority over us in ways we don't like. And if we do not allow new discoveries to challenge our beliefs, our understanding of the social world will remain limited. Do you see some of the challenges social science faces?

The Internet

Because they require that we base our beliefs on evidence that can be examined and critiqued by others, scientific methods lessen the tendency to develop answers about the social world from ego-based or institutional commitments, excessive devotion to tradition, or unquestioning respect for authority. For example, when Alice Marwick and danah boyd investigated what adults usually refer to as "bullying" on social media, they found that teens themselves often instead used the term *drama* as a way of distancing themselves from the concept of bullying. According to the researchers, "'drama' connotes something

immature, petty, and ridiculous,” even though the communications themselves may be quite hurtful. Marwick and boyd did not accept without question either the adult concept of bullying or the teen concept of drama as the appropriate way to think about the gossip, jokes, and arguments on social media. Instead, they examined these communications critically and so were able “to recognize teens’ own defenses against the realities of aggression, gossip, and bullying in networked publics” (Marwick & boyd 2011:23).



Photo 1.3 Would this teen say that she is being bullied? Or would she say it’s just drama?

©iStockphoto.com/SolStock

Types of Social Research

Whatever the motives, there are four types of social research projects. This section illustrates each type with examples from the large body of research about various aspects of social ties.

Descriptive Research

Defining and describing social phenomena of interest is a part of almost any research investigation, but **descriptive research** is often the primary focus of the first research about some issue. For example, Monica Anderson, Andrew Perrin, Jingjing Jiang, and Madhumitha Kumar (2019) at the Pew Research Center designed social research to answer the descriptive questions: How has internet use changed over time in the United States, and who still doesn’t use the internet? Measurement (the topic of Chapter 4) and sampling (Chapter 5) are central concerns in descriptive research. Survey research (Chapter 7) is often used for descriptive purposes. Some unobtrusive research also has a descriptive purpose (Chapter 9).

Example: Nonuse of the internet

The Pew Research Center survey of internet use demonstrated a marked decline in the percentage of Americans who say they never go online over the last two decades. To investigate this issue, Pew researchers combined data from 102 surveys they had conducted since 2000, involving 237,421 American adults (Pew Research Center 2019c, https://www.pewresearch.org/wp-content/uploads/2019/04/FT_19.04.22_NonInternetUsers_Methods.pdf).

While in 2000, almost half of U.S. adults never used the internet, by 2017, nonuse dropped to 10 percent (see Exhibit 1.5; Anderson et al. 2019). They also found that nonusers were more likely to be black and Hispanic than white, to be older, and to have low incomes, less education, and rural residence.

Exploratory Research

Exploratory research seeks to find out how people get along in the setting under question, what meanings they give to their actions, and what issues concern them. The goal is to learn “What is going on here?” and to investigate social phenomena without explicit expectations. Exploratory research frequently involves qualitative methods, which are the focus of Chapters 8 and 12.

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

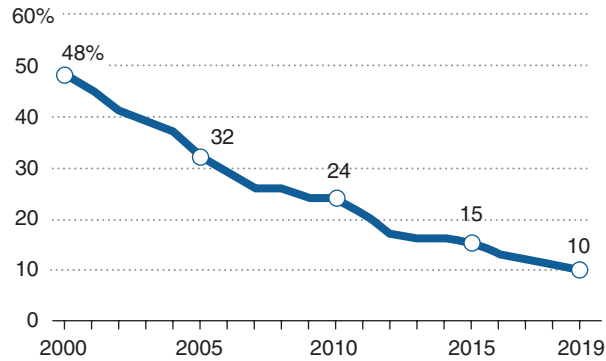
Exploratory research: Seeks to find out how people get along in the setting under question, what meanings they give to their actions, and what issues concern them.

▼ EXHIBIT 1.5

The Decline in Nonuse of the Internet

Population not online has declined substantially since 2000

% of U.S. adults who say they do not use the internet



Source: Pew Research Center, 2019. <https://www.pewresearch.org/fact-tank/2019/04/22/some-americans-dont-use-the-internet-who-are-they/>.

Explanatory research:

Seeks to identify causes and effects of social phenomena and to predict how one phenomenon will change or vary in response to variation in some other phenomenon.

Evaluation research:

Research that describes or identifies the impact of social policies and programs.

Example: How do child sex offenders perceive their actions on the internet?

Reyerson University anthropologist Jonah R. Rimer (2017) was concerned by the prevalence of online child sexual exploitation and wondered how offenders perceived their actions and the internet as a medium. For his investigation, he participated for 17 months in UK group programs for offenders and interviewed participants and program staff. When he explored the comments, he identified many that pointed to a view of the online environment as lacking the boundaries and observation that normally reinforces social norms. For example, one offender explained, “it was a solitary activity, I only did this when my wife wasn’t in the house, because being at home on my own, off sick, depressed... fed up with watching daytime TV, I’d go online.” (p. 39)

Explanatory Research

Explanatory research seeks to identify the causes

and effects of social phenomena and to predict how one phenomenon will change or vary in response to variation in some other phenomenon. Internet researchers adopt explanation as a goal when they ask such questions as whether media exposure influences attitudes about social issues and whether this influence varies by type of media (Simmons 2017). Chapter 6 focuses on the meaning of causation and how to identify causal effects with experimental methods; Chapter 7 addresses this issue in relation to survey methods.

Example: What effect do media news sources have on punitiveness?

Alicia D. Simmons (2017) at Colgate University sought to understand how exposure to different types of media influences affected support for punitive criminal justice policies. For this purpose, she analyzed data from 1,288 white, black, and Hispanic respondents to the internet-based Race Cues, Attitudes, and Punitiveness Survey (RCAPS) conducted in July 2009. Simmons (2017) found that punitiveness tended to increase with media exposure, but among white respondents, this effect was much stronger the lower the crime rate in their own area (see Exhibit 1.6).

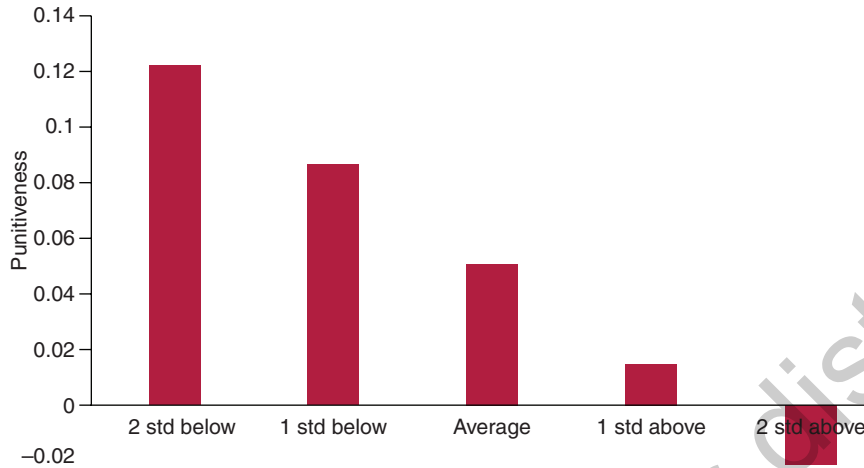
In terms of type of media, watching more local TV news was associated with more punitive attitudes, reading the newspaper with less punitive attitudes, and relying on the internet for news was not associated with overall support for punitiveness. However, more conservative respondents who relied more on the internet for news were more punitive (presumably, they picked more conservative internet sites as their news sources).

Evaluation Research

Evaluation research examines programs, policies, or other efforts to affect social patterns, whether by government agencies, private nonprofits, or for-profit businesses.

▼ EXHIBIT 1.6

Relationship Between an Average Amount of Local News Viewership and Whites' Punitiveness Across Index Crime Rates



Source: Alicia D. Simmons, 2017. Reprinted by permission of Oxford University Press.

Evaluation can include elements of descriptive, exploratory, and explanatory research. The focus of evaluation research on programs, policies, and other conscious efforts to create change raises some issues that are not relevant in other types of research (Lewis-Beck, Bryman, & Liao 2004:337).

Example: Does avatar-assisted therapy improve the treatment of substance use disorders?

Michael S. Gordon and his colleagues (2017) in Baltimore at the Friends Research Institute developed an avatar-assisted therapy program to aid in providing treatment to individuals with substance use disorders who could not come to the clinic for treatment. They then needed to test its effect. Of 78 outpatients seeking treatment for substance abuse who they screened, 62 were identified as eligible and participated in the research. Those who completed the avatar-based program attended more treatment sessions and were less likely to have a positive urine drug screen than those who did not complete it. Avatar-assisted therapy seemed to help.

Quantitative and/or Qualitative Methods

Did you notice the difference between the types of data used in the studies? The primary data used in the descriptive surveys about internet use were counts of the number of users, as well as their age, education, and other characteristics (Anderson et al. 2019). These data were numerical, so we say that this study used **quantitative methods**. Data analyzed by Alicia Simmons (2017) in her explanatory study of punitive attitudes and by Michael Gordon's group (2017) in the avatar-assisted therapy evaluation study were also quantitative. In contrast, Jonah Rimer (2017) interviewed in depth internet sex offenders in a treatment program. Because he recorded the text of the interviews and did not attempt to quantify what respondents said, we say that Rimer (2017) used **qualitative methods**.

Quantitative

methods: Methods such as surveys and experiments that record variation in terms of amounts. Data that are treated as quantitative are either numbers or attributes that can be ordered by magnitude.

Qualitative

methods: Methods such as participant observation, intensive interviewing, and focus groups that are designed to capture social life as participants experience it rather than in categories predetermined by the researcher. These methods rely on written or spoken words or observations that do not often have a direct numerical interpretation and typically involve exploratory research questions, an orientation to social context and human subjectivity, and the meanings attached by participants to events and to their lives.



JESSICA LEBLANC, RESEARCH ASSISTANT



Jessica LeBlanc majored in sociology at the University of New Hampshire, but she didn't really know what kind of career it would lead to. Then she took an undergraduate statistics course and found she really enjoyed it. She took additional

methods courses—survey research and an individual research project course—and really liked those also.

By the time she graduated, LeBlanc knew she wanted a job in social research. She looked online for research

positions in marketing, health care, and other areas. She noticed an opening at a university-based research center and thought their work sounded fascinating. As a research assistant, LeBlanc designed survey questions, transcribed focus group audiotapes, programmed web surveys, and managed incoming data. She also conducted interviews, programmed computer-assisted telephone surveys, and helped conduct focus groups.

The knowledge that LeBlanc gained in her methods courses about research designs, statistics, question construction, and survey procedures prepared her well for her position. Her advice to aspiring researchers: Pay attention in your first methods class!

The distinction between quantitative and qualitative methods involves more than just the type of data collected. Quantitative methods are most often used when the motives for research are explanation, description, or evaluation. Quantitative researchers are often guided by a positivist philosophy. **Positivism** asserts that a well-designed test of a specific prediction—for example, the prediction that social ties decrease among those who use the internet more—can move us closer to understanding actual social processes. Research guided by positivism presumes that our perceptions and understanding of the social world can be distorted by errors like those discussed in this chapter, but scientific methods can help us to see and understand reality more clearly.

Positivism: The belief, shared by most scientists, that there is a reality that exists quite apart from our own perception of it, that it can be understood through observation, and that it follows general laws.

Constructivism: Methodology based on questioning belief in an external reality; emphasizes the importance of exploring the way in which different stakeholders in a social setting construct their beliefs.

Exploration is more often the motive for using qualitative methods, although researchers also use these methods for descriptive, explanatory, and evaluative purposes. Qualitative research is often guided by the philosophy of **constructivism**. Constructivist social scientists believe that social reality is socially constructed and that the goal of social scientists is to understand what meanings people give to reality, not to determine how reality works apart from these constructions. This philosophy rejects the positivist belief that there is a concrete, objective reality that scientific methods help us understand (Lynch & Bogen 1997); instead, constructivists believe that people construct an image of reality based on their own preferences and prejudices and their interactions with others and that this is as true of scientists as it is of everyone else in the social world.

Chapters 2 and 3 highlight several other differences between quantitative and qualitative methods, and Chapters 8 and 12 present qualitative methods in much more detail.

Important as it is, the distinction between quantitative and qualitative orientations or methods shouldn't be overemphasized. Social scientists often combine these methods to enrich their research (Campbell & Russo 1999:141).

The use of multiple methods to study one research question is called **triangulation**. The term suggests that a researcher can get a clearer picture of the social reality being studied by viewing it from several different perspectives. Each will have some liabilities in a specific research application, and all can benefit from a combination of one or more other methods (Brewer & Hunter 1989; Sechrest & Sidani 1995).

The distinction between quantitative and qualitative data is not always sharp. Qualitative data can be converted to quantitative data, for example, when we count the frequency of particular words or phrases in a text or measure the time elapsed between different observed behaviors. Surveys that collect primarily quantitative data may also include questions asking for written responses, and these responses may be used in a qualitative, textual analysis. Qualitative researchers may test explicit explanations of social phenomena using textual or observational data.

Conclusions

I hope this first chapter has given you an idea of what to expect from the rest of the book. The aim is to introduce you to social research methods by describing what social scientists have learned about the social world as well as how they have learned it. The substance of social science is inevitably more interesting than its methods, but the methods become more interesting when they're linked to examples from substantive investigations.

Understanding the Social World is organized into four sections. The first section on Foundations for Social Research includes the introduction in Chapter 1 and then an overview of the research process in Chapter 2 and an introduction to issues in research ethics and an overview of research proposals in Chapter 3. The second section, Fundamentals of Social Research, presents methods for conceptualization and measurement (Chapter 4), sampling (Chapter 5), and causation (Chapter 6) that must be considered in any social research project. The third section, Social Research Designs, introduces the major methods of data collection used by sociologists: survey research (Chapter 7), qualitative methods (Chapter 8), and unobtrusive methods ranging from historical and comparative methods to secondary data analysis (Chapter 9). The last section, Analyzing and Reporting, introduces techniques for analyzing quantitative data with statistics (Chapter 10) and analyzing qualitative data with a variety of techniques (Chapter 11), as well as guidelines for evaluating research reports (Chapter 12).

Each chapter ends with several helpful learning tools. Lists of key terms and chapter highlights will help you review the ideas that have been discussed. Chapter questions and practice exercises will help you apply and deepen your knowledge. A "Careers and Research" example may help you envision future job possibilities, and a "Research in the News" vignette in each chapter will tie research methods to current events.

The study site for this book on the SAGE website provides interactive exercises and quizzes for reviewing key concepts, as well as research articles to review, websites to visit, data to analyze, and short lectures to hear. Check it out at edge.sagepub.com/schuttusw2e.

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

KEY TERMS

Constructivism	14	Inaccurate observation	6	Science	6
Descriptive research	11	Overgeneralization	7	Selective observation	6
Evaluation research	12	Positivism	14	Social science	6
Explanatory research	12	Qualitative methods	13	Triangulation	15
Exploratory research	11	Quantitative methods	13		
Illogical reasoning	8	Resistance to change	9		

HIGHLIGHTS

- Social research differs from the ordinary process of thinking about our experiences by focusing on broader questions that involve people outside our immediate experience and issues about why things happen and by using systematic research methods to answer those questions. Four common errors in reasoning are (1) selective or inaccurate observation, (2) overgeneralization, (3) illogical reasoning, and (4) resistance to change. These errors result from the complexity of the social world, subjective processes that affect the reasoning of researchers and those they study, researchers' self-interestedness, and unquestioning acceptance of tradition or of those in positions of authority.
- Social science is the use of logical, systematic, documented methods to investigate individuals, societies, and social processes, as well as the knowledge produced by these investigations.
- Social research can be descriptive, exploratory, explanatory, or evaluative—or some combination of these.
- Quantitative and qualitative methods structure research in different ways and are differentially appropriate for diverse research situations. They may be combined in research projects.
- Positivism is a research philosophy that emphasizes the goal of understanding the real world; this philosophy guides most quantitative researchers.
- Constructivism is a research philosophy that emphasizes the importance of exploring and representing the ways in which different stakeholders in a social setting construct their beliefs. Constructivists interact with research subjects to develop a shared perspective on the issue being studied.

CHAPTER QUESTIONS

The ethical challenges that arise in social research are discussed throughout the book. At the end of each chapter, one of the questions you are asked to consider may be about ethical issues related to that chapter's focus. This critical topic is introduced formally in Chapter 3, but let's begin here with a few questions for you to ponder:

1. The chapter refers to research on social isolation. What would *you* do if you were interviewing elderly persons in the community and found that one was very isolated and depressed or even suicidal, apparently as a result of his or her isolation? Do you believe that social researchers have an obligation to take action in a situation like this? What if you discovered a similar problem with a child? What guidelines would you suggest for researchers?
2. Pick a contemporary social issue of interest to you. Describe different approaches to research on this issue that would involve descriptive, exploratory, explanatory, and evaluative approaches.
3. Review the description of quantitative and qualitative approaches. Which approach do you prefer, and what is the basis of your preference? Would you prefer to take a mixed-methods approach? Why or why not?

PRACTICE EXERCISES

1. Review the “Letters to the Editor” section of a local newspaper. Which errors in reasoning do you find? What evidence would be needed to correct these errors?
2. Review “Types of Research” from the Interactive Exercises link on the book’s study site. To use these lessons, choose one of the four “Types of Research” exercises from the opening menu. About 10 questions are presented in each version of the lesson. After reading each question, choose one answer from the list presented. The program will evaluate your answers. If an answer is correct, the program will explain why you were right and go on to the next question. If you have made an error, the program will explain the error to you and give you another chance to respond.
3. Scan the articles on the book’s study site for this chapter. Classify the research represented in each article as primarily descriptive, exploratory, explanatory, or evaluative. Describe the evidence for your classification (even if the abstract mentions the type of research, look for other evidence). If more than one type of research is represented in an article, also mention that type.
4. Now read one of the articles in detail and decide whether the approach was quantitative or qualitative (or mixed) and whether the authors were guided primarily by a positivist or a constructivist philosophy. Explain your answer.

STUDENT RESOURCES



The student resource site, available at edge.sagepub.com/schuttusw2e offers useful study materials, such as eFlashcards, eQuizzes, and curated research articles.

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