You May Ask Yourself

AN INTRODUCTION TO THINKING LIKE A SOCIOLOGIST

Dalton Conley

NEW YORK UNIVERSITY
Demographer Neil Bennett, along with Ann Klimas Blanc and David Bloom, caused a stir in February 1988 when they published a report on cohabitation (unmarried couples living together) in the *American Sociological Review*. In particular, they found that couples who lived together before marriage tended to have higher divorce rates than those who did not—80 percent higher, to be precise. The magnitude of the difference shocked the researchers. In fact, they wouldn’t have been surprised to find just the reverse: that those who married after living together would have either sorted out their problems or broken up rather than marry. This study was based on data collected from Swedish women, the group about which the most comprehensive data were available, but Bennett and his colleagues predicted that their American counterparts were likely to follow suit, because Swedish family trends tend to reflect American social changes some 10 to 15 years in advance (Bennett, Blanc, & Bloom, 1988).

What shocked the researchers even more than their findings, however, was the media attention their research received. The *New York Times*, for example, ran the following headline for an article on the research: “Divorce May Be the Price of Living Together First.” The authors of the report certainly didn’t agree with the way their findings were interpreted. What alternative explanations might exist? How could Bennett and his colleagues investigate these other possibilities? And should we take away from this research the belief that cohabitation does, in fact, cause divorce?

Bennett and his colleagues might have retreated to study some distant tribe or uncontroversial issue, but by November of the next year they were back in the trenches of the culture wars with an article on marriage trends—specifically, the low likelihood of unmarried women in their late thirties ever
marrving (Bennett, Bloom, & Craig, 1989). Conservatives attacked Bennett and his colleagues for supporting women who chose careers over families. Liberals rallied against what they believed was an implicit criticism of women for “shirking their biological responsibilities.” Newsweek even ran a cover story on the study, announcing that women over forty were “more likely to be killed by a terrorist than they were to get married” (Bennett & Bloom, 2002). And then those words were immortalized in the 1989 film When Harry Met Sally. But all along, the researchers protested, to no avail, insisting that the main point of their article—the differences in marriage rates between blacks and whites—had been lost in the controversy.

There’s certainly a lesson to be learned here—namely, that the media don’t always evaluate social science research as objectively as a sociologist would—a more general question remains: how do we think we know what we know? How do we establish causality—the notion that a change in one factor results in a corresponding change in another—in social science? In the case of Bennett’s research, the answer turned out to be that people who live together tend to have more liberal attitudes and thus consider divorce less taboo. In other words, the types of people who are likely to cohabit are also those less likely to have qualms about divorcing, irrespective of whether they actually lived together before marriage or not.

Although the media have the tendency to advance whatever interpretation will become most easily sensationalized, as social scientists, we have a set of standard rules that we follow in investigating our questions. We call these rules research methods. They’re the tools we use to describe, explore, and explain various social phenomena. There are two general categories of methods for gathering sociological data:

Quantitative methods seek to obtain information about the social world that is already in or can be converted to numeric form. This methodology then uses statistical analysis to describe the social world that those data represent. Some of this analysis attempts to mimic the scientific method of using treatment and control (or placebo) groups to determine how changes in one factor affect another social outcome, while factoring out every other simultaneous event. Such information is often acquired through surveys but may also include data collected by other means, ranging from sampling bank records to weighing people on a scale.

Qualitative methods, of which there are many, attempt to collect information about the social world that cannot be readily converted to numeric form. The information gathered with this approach is
often used to document the meanings that actions engender in social participants or to describe the mechanisms by which social processes occur. Qualitative data are collected in a host of ways—from spending time with people and recording what they say and do (participant observation) to interviewing them in an open-ended manner to reviewing archives.

Both quantitative and qualitative research approaches provide potential ways to establish a causal relationship between social elements. Researchers using quantitative approaches, by eliminating all other possibilities through their study’s design, hope to state with some certainty that one condition causes another. Qualitative methodology describes social processes in such detail as to rule out other, competing possibilities. To take an analogous example from medical research, some studies have shown a difference in lung cancer rates between smokers and nonsmokers for whom findings on other relevant dimensions (such as diet, family history, and so on) were similar. This is typical of the approach that quantitative social scientists use when trying to argue that one factor causes another. Other cancer researchers have documented what behavioral changes occur in smokers (they may exercise less, for instance), others have examined what happens to the lungs of smokers (compared with those of nonsmokers) by utilizing MRIs or other medical technologies, and still others have focused on the chemicals inside cigarettes and the way they interact with cells in a Petri dish. Although these approaches are a far cry from hanging out on a street corner with a gang, they succeed in accomplishing what qualitative social scientists hope to do: attempt to establish causation by describing in rich detail the exact effects and changes they observe.

This chapter gives examples of sociological research conducted using different methods, starting with the various theoretical viewpoints from which social scientists can approach research. We’ll then examine some techniques used by researchers to tell causal stories and give examples of specific studies that have employed these methods. Finally, we’ll talk about the ways that social research can be used for ends other than filling textbooks and keeping sociologists busy.

**RESEARCH 101: THE BASICS**

The general goal of sociology is to allow us to see how our individual lives are intimately related to (and, in turn, affect) the social forces that exist beyond us. Good sociological research begins with a puzzle or paradox and asks,
“What causes what to happen?” Once you pick a question to investigate, there are two ways to approach research: deductively and inductively. A **deductive approach** starts with a theory, forms a hypothesis, makes empirical observations, and then analyzes the data to confirm, reject, or modify the original theory. Conversely, an **inductive approach** starts with empirical observations and then works to form a theory. These different approaches are represented in the research cycle shown in Figure 2.1.

**Causation versus Correlation**

Regardless of which method we use, social research is about telling a story. The goal is to recount the story as completely as possible so we’re fairly certain the story can’t be told another way. Let’s take an example of something we’ll examine more closely in Chapter 16: the relationship between income and health. We know that a **correlation (or association)** exists between income and health, that is, they tend to vary together. People with higher levels of income tend to enjoy better overall health. But to say two things are correlated is very different from stating that one causes the other. In fact, there are three possible causal stories about the relationship between income and health. We might reasonably assert that bad health causes you to have a lower income—you get sick and can’t work, you lose your job, and so forth. If we drew a diagram of such a scenario, it would look like this:

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   poorer health  -->  lower income
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However, we could just as easily tell the opposite story—that higher income leads to better health. You can afford better doctors, you have access to

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**Deductive approach** a research approach that starts with a theory, forms a hypothesis, makes empirical observations, and then analyzes the data to confirm, reject, or modify the original theory.

**Inductive approach** a research approach that starts with empirical observations and then works to form a theory.

**Correlation (or association)** simultaneous variation in two variables.
How did studying lottery winners help sociologists understand the relationship between wealth and health?
organic foods in your upscale neighborhood, and there’s a gym at the office. The diagram of this story would resemble the following:

\[
\text{poorer health} \quad \longleftrightarrow \quad \text{lower income}
\]

Finally, we could conclude that a third factor causes both income and health to vary in the same direction. For the sake of argument, we will call this factor "reckless tendencies"—a love of fast cars, wine, and late nights. Such short-sighted behavior could negatively affect our health (especially the wine). And it could also affect our income. Maybe we are unable to get to work on time or are spending too much money on those fast cars instead of investing it in the stock market. In that case, the causal diagram would look like this:

```
Poorer health
  \arrow{<}{\text{Reckless tendencies}}
  \arrow{>}{\text{lower income}}
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In this scenario, if we merely observe health and income, it may appear as if one causes the other, but the truth of the matter would be that they are not related in the slightest except they are connected through a third factor.

How can we arrive at any conclusions with respect to the health–income correlation? We can’t randomly assign people to different jobs at various pay
levels and see what happens; nor can we independently affect people's health and (ethically) observe what happens to their income, and it is certainly difficult to curb or instill reckless tendencies on a random basis. Thus, we can't really rule out any of the arrows, but could get confirmation for some of them.

We can rule out many third factors by measuring them and then comparing individuals who are similar in that particular respect (like education level) but differ in other key regards (say, income). Other factors may not be so easy to measure, and in these cases, we might look for a natural experiment, that is, an event or change in the real world that affects the factor which we believe causes an outcome but does not affect the outcome in any way other than through that factor. For example, some researchers have used lottery winnings as a natural experiment, comparing the health of winners who won a significant sum with those who won only a token amount. The assumption is that based on how lotteries work, the amount won is not determined by the winner's health, but subsequent changes in health may well be driven by the money won.

Although no certain answers exist in social science, we can safely conclude that low income does contribute to poor health, at least to some extent in specific contexts. (We can also be fairly sure that bad health has a negative effect on our income.) However, our case would be stronger if we knew exactly how the effect of low income impacts health. In other words, we don't know the causal mechanism. Is it that low-wage jobs are stressful? (It is well known that certain types of chronic stress are bad for you.) If so, does such stress cause these workers' behavior to change, perhaps by increasing their binge eating of fast food, smoking rates, or alcohol consumption? Or is there a more direct, psychobiological pathway—say, the stress of a verbally abusive boss that can cause higher corticosteroid levels in the bloodstream? Or is it all of these factors and more? The more dots we can connect, the stronger our causal story becomes and the better prepared we are to intervene.

Remember, it is very difficult, especially in social science, to assert that change in one factor causes a change in another. It's much easier to say two things are correlated, which just means that we observe change in both. For example, as race varies (across individuals), so does average life expectancy. Likewise, as nutrition changes across or within populations, so does average height, but can we say that better nutrition causes some populations to be taller? Maybe, but maybe not. Let's further examine this.

To establish causation, three factors are needed: correlation, time order, and ruling out alternative explanations. We've already covered correlation. We notice variations in nutrition across countries and simultaneously observe different average heights across the same countries that tend to correspond statistically to those differences in nutrition. Now we need to establish time order. Have people in country A always been taller than those in country B (a bad sign for the “nutrition causes height” case)? Or, did changes in
nutrition occur before increases (or decreases) in height? We can imagine a situation where a drought, flood, frost, or some other environmental factor destroyed a main food source in country B, leading to dramatic changes in peoples’ diet and altering average heights in that nation. Finally, we have to rule out alternative explanations for the variations observed in both nutrition and height. Is a third factor responsible for changes in both? The groundwater supply perhaps? Groundwater supply could lead to better nutrition through higher crop yields (which turns out not to matter for height, let’s say), but it could also lead to cleaner drinking water and thus less infection (which turns out to matter for height, again for the sake of argument). If this were the case, then the relationship between nutrition and height would be termed spurious or false, whereas the relationship between infection and height might be described as a “true” causal relationship. Figure 2.2 illustrates this possibility.

FIGURE 2.2 | The Charge of Spuriousness

Nutrition \(\rightarrow\) Height

\[\text{Spurious relationship}\]

Nutrition \(\leftrightarrow\) Height

Infection

Why is the correlation between nutrition and height spurious?

THE PROBLEM OF REVERSE CAUSALITY

Reverse causality is just what it sounds like. You think A is causing B when, in fact, B is causing A. For example, what is the relationship between income and health? Is it that when you’re sick, you miss lots of school, don’t receive as much education, must take off more time from work, are passed over for promotions, and ultimately remain stuck in a lower-level job and therefore have a lower income than your comparatively healthy neighbor? Or is it that when you’re employed in a lower-paying job, you can’t afford good health care, a gym membership, or organic food? Or that your low-paying job is stressful, so you drink and smoke more than you should to take your mind off your work situation, but, as a result, you also develop depression and have overall poor health? The problem of reverse causality is why it’s so important to establish time order.
However, we should also note that time order is no guarantee by itself: People may alter their current behavior based on future expectations. Perhaps, for example, I choose to save less today because I assume that my children will become rich adults on their own and support me in my old age. Strict reliance on time order—observing current savings behavior and children’s income 30 years later—would lead me to the wrong conclusion, namely, that my credit card debt caused my children’s success later in life, when it was actually the other way around. One way to fix this, of course, would be to directly measure my expectations for my children’s future income to resolve the matter of time order.

**Variables**

In research we talk a great deal about variables. Simply put, you should always have one dependent variable (the outcome you are trying to explain) and one or more independent variables, which are the measured factors that you believe have a causal impact on the dependent variable. Because it’s possible to have more than one independent variable, we will call the most important one the key independent variable. The difference between the independent and the dependent is that change in your dependent variable depends on change in your independent variable. Knowing which variable is which is important for complying with mandates for establishing causality. Often, when we establish correlation but can’t do the same for causation, it’s because we don’t know which variable is causing change in the other—we can’t establish time order, for example, so we don’t know which variable is the independent and which is the dependent.

In high-school science class, you may have learned that a hypothesis is an educated guess. In social research, we use the term hypothesis to refer to a proposed relationship between two variables, usually with a stated direction. The direction of the relationship refers to whether your variables move together (positive) or in opposite directions (negative).

Let’s take some examples. We know that income is positively related to education: As people’s education increases, usually so too does their income. Overt prejudice, on the other hand, is negatively related to education: As people’s educational levels increase, generally their levels of expressed prejudice decrease.

**Hypothesis Testing**

Are you starting to see how these pieces fit together in the design of a research project? Perhaps we have a special interest in one concept, say, poverty. Poverty is a broad concept, so we need to specify what we mean by poverty in this particular study. This process is called operationalization. When you read a study, it’s important to understand how the author is operationalizing
his or her concept. If I do a study on poverty among Americans who fall below the official poverty line, and someone else completes a study that examines poverty using the United Nations definition of it—namely, subsistence on less than $1 per day—we're discussing two very different concepts of poverty. As the old adage says, we're comparing apples and oranges. Once I decide how I'm defining poverty, I can begin to consider all the variables related to my concept. In the case of poverty, we might take a look at education, employment status, race, or gender.

It's time to make some decisions. First of all, is poverty my dependent or independent variable? Am I thinking about poverty as the cause of something else (poor health) or its result (lack of formal education)? Let's say I want to examine the factors that cause poverty, and I'm especially interested in the effect of parental education on children's poverty levels, because theory tells me that a link exists. Assuming that I've defined educational level (number of years in school? grades or degrees completed? scores on a certain test? prestige of any college attended?), now I'm ready to pose my research question: What effect do parents' educational levels have on children's chances of living in poverty as adults? And I can form some hypotheses:

$H_0$ (hypothesis one): Parental education is negatively associated with children's likelihood of living in poverty as adults. (The lower the educational level of the parents, the greater the chance that their children will be poor as adults.)

For each hypothesis, a corresponding **null hypothesis** exists. In this case, it is the following:

$H_0$ (the null to hypothesis one): There is no relationship between parental education and children's likelihood of living in poverty as adults. Also for each hypothesis, an equal and opposite **alternative hypothesis** exists:

$H_A$ (the alternative to hypothesis one): There is a positive relationship between parental education and children's likelihood of living in poverty as adults.

I may have a secondary—or corollary—hypothesis as well:

$H_2$: This effect will be greater for African Americans and for children who grow up in single-parent households.

Parental education is my key independent variable, but I also believe that race and family structure may affect how my independent variable matters. In this example, race and family structure would be **moderating variables**—that is, they affect the relationship between my independent and my dependent variables.
variable. (Children’s education or test scores in this example would be mediating variables that are positioned between the independent and dependent variable, but do not interact with either to affect the relationship between them.)

This, too, generates a null hypothesis and an alternative hypothesis. I am not quite ready to test my hypotheses, however. First, I need to tell stories—that is, causal stories about why I would expect the hypotheses (including the null and alternative hypotheses) to be true. In support of \( H_1 \), I might say that parents who are more educated have acquired more confidence and skills for succeeding in our economy and that they are then more likely to pass on some of this knowledge and positive outlook to their kids at home. In support of \( H_0 \), the schooling system has an equalizing effect such that parents’ educational levels do not have any impact on the economic prospects of children. In support of \( H_A \), parents who have spent a great deal of money on their own education may have less left over to help their children. Establishing the groundwork for a reasonably “fair fight” between main and alternative hypotheses is important so we do not spend time discovering trivialities that are already well known (e.g., low-income individuals tend to be poor). So how good were my guesses or hypotheses? It’s time to turn to the data and find out.

**Validity, Reliability, and Generalizability**

Validity, reliability, and generalizability are simple but important concepts. To say a measure has validity means that it measures what you intend it to. So if you step on a scale expecting to see if you’ve lost a few pounds and it measures your height, it’s not valid. Likewise, if I ask you how happy you are with your life in general, and you tell me how happy you are with school in particular, at this exact moment my question isn’t a valid measure of your life satisfaction. Reliability refers to how likely you are to obtain the same result using the same measure the next time. A scale that’s off by 10 pounds might not be totally valid—it will not give me my actual weight—but the scale is reliable if every time I step on it, it reads exactly 10 pounds less than my true weight. Likewise, a clock that’s 5 minutes fast is reliable but not valid. But if I ask you how you’re feeling in general, and you tell me exactly how you feel, and then a week from now I ask you how you’re feeling in general, and you tell me exactly how you feel, and it’s completely different from how you felt the first time I asked (because that first time you had just found $10 on the floor), then that measure (my question) is valid but not reliable. Ideally, we’d like our measures to be both valid and reliable, but sometimes we have to make trade-offs between the two. Keep this in mind as we discuss the various methods of data collection.
Finally, generalizability is the extent to which we can claim that our findings inform us about a group larger than the one we studied. Can we generalize our findings to a larger population? And how do we determine whether we can?

Role of the Researcher

EXPERIMENTER EFFECTS
As if social research weren't hard enough already (because we don't have placebos and double-blind studies with which to work), there are also "white coat" effects—that is, the effects that researchers have on the very processes and relationships they are studying by virtue of being there. Often, subjects change their behavior, consciously or not, just because they are part of a study. Have you ever been in a classroom when the teacher is being observed? It might prove to be the best class the teacher has ever taught, even if she didn't mean to put on the charm for the observer.

When we do qualitative field work (interviews, ethnography, or participant observation) we talk about reflexivity, which means being aware of the white coat effects you may be inspiring. What is your relationship to your research subjects? Frequently, research focuses on groups that are disadvantaged relative to the researcher in one way or another. Researchers might have more money, more education, or more resources in general. How does that shape the interactions between researcher and subjects and, ultimately, the findings?

Urban ethnographer Mitchell Duneier spent five years hanging out with booksellers on the sidewalks of Sixth Avenue in Manhattan. He wanted to understand how these street vendors and their groups of friends, many of them homeless, functioned in the community. During the course of his research, Duneier became friends with many of these people. As researchers, we're supposed to remain objective, but even if you want to (and some people may not want to remain impartial in certain situations), it's not always possible. One day an incident occurred between the police and the street vendors, and Duneier was there (with his tape recorder running in his shirt pocket, unbeknownst to the police). He defended his friends to the officers. Because he was a white, well-spoken and highly educated professional his
People freely use the word “sample,” but in social research it has a very specific and important meaning. You are always studying a population. That population could be the entire U.S. population, gay fathers, public schools in the rural South, science textbooks, gangs, Fortune 500 companies, or middle-class, Caucasian single mothers. Most of the time it’s too time-consuming and expensive to collect information about the entire population you want to study, so instead you focus on a sample. Your sample then is the subset of the population from which you are actually collecting data. (If you do collect information on the entire population, it’s called a census.)

How you go about collecting your sample is probably one of the most important steps of your research. Let’s say I want to study attitudes toward underage drinking in the United States and hand out a survey to your sociology class. Based on the findings of that survey,
I make claims on how the entire U.S. population feels about underage drinking: They're in favor of it. Would you believe my claims? I hope not! Your sociology class is probably not representative of the U.S. population as a whole. Age would be the most important factor, but differences in socioeconomic status, education, race, and the like would exist. In other words, the results I would obtain from a survey of a college sociology class would not be generalizable to the U.S. population and probably not even college students as a whole—maybe not even students at your school (the students next door in organic chemistry might have very different thoughts about underage drinking). I would be "speaking beyond my data."

Although the issues of generalizability are always at play, they become particularly acute when social scientists use case studies. A case study, often used in qualitative research, is an in-depth look at a specific phenomenon in a particular social setting. If we wanted to understand the interaction among parents, teachers, and administrators in the American public school system, we might do a case study of your high school. How representative of all U.S. high schools do you think your school is? Does your town have a higher or lower average household income than the United States as a whole? Is the PTA particularly vocal? Is yours a regional high school whose students travel long distances to attend? All these factors—these variables—are important, and if your town isn't typical (statistically speaking), we'd question the usefulness of the findings. This is perhaps the main drawback of the case study method. The findings have very low generalizability. One benefit, however, is that we typically obtain very detailed information. So there is often a trade-off between breadth (i.e., generalizability) and depth (i.e., amount of information and nuanced detail). A case study can serve as a useful starting point for exploring new topics. For example, researchers often use case studies to develop hypotheses, and generate and refine survey questions that the researchers will then administer to a much larger sample. Likewise, qualitative case studies are sometimes used to try to understand causal mechanisms that have been indicated in large-scale survey studies.
interactions with police probably differed significantly from those between
the typical African American street vendor and the police—Duneier could
speak his mind with a bit less fear of arrest and with the knowledge that he
could afford a competent lawyer to defend him. How did Duneier’s pres­
ence change the interaction that transpired? Most social scientists would
argue that once subjects become accustomed to the researcher’s presence,
yield behave as normal, but we don’t have any real way to determine
this. When we’re engaged in the practice of qualitative research, we may find
ourselves in situations where we have to choose whether objectivity and dis­
tance are more important than standing up for what we believe is right. At
these times, we need to take a step back and think about our own role as both
researcher and participant, because it is our perception and experience of
events that eventually become the data from which we make our claims.

POWER: IN THE EYES OF THE RESEARCHER,
WE’RE NOT ALL EQUAL

Along these lines, it is worth asking the following: What role does power play
in research? As social researchers, we’re not supposed to make value judg­
ments; we should put aside our personal biases, strive for neutrality, and re­
main impartial and objective. The truth, however, is that we make judgments
all the time, beginning at the most basic level of deciding what to study—what
does the field in general deem worthy of scholarly attention? What topics am
I sufficiently interested in to spend two, five, or ten years or my entire career
studying? What research do grantmaking institutions regard as important
enough to fund? What does the social scientific community more broadly
view as problematic or interesting and in need of explanation?

Historically, sociology, like most sciences, has been male-dominated. But it’s also a disci­
pline founded on the idea of making the natural seem unnatural, so it’s a good place from which
change can percolate. Following the feminist movement of the late 1960s, a growing stream of
thought within sociology sought to turn a criti­
cal, feminist lens on the discipline itself. Because
research ultimately forms the foundation of our
work, methods became a key site of debate, and
thus the concept of feminist methodology was
born. What do feminist research methods look
like? First, it’s important to understand that there
is no one feminist research method, just as there is
no single school of feminism. Feminist research­
ers use the same techniques for gathering data as
other sociologists, but they employ those techniques in ways that differ significantly from traditional methods. As Sandra Harding explains it, feminist researchers

listen carefully to how women informants think about their lives and men’s lives, and critically to how traditional social scientists conceptualize women’s and men’s lives. They observe behaviors of women and men that traditional social scientists have not thought significant. They seek examples of newly recognized patterns in historical data. (1987, p. 2)

The feminist part doesn’t lie in the method per se, nor necessarily in having women as subjects. Rather, Harding proposes three elements to make research distinctly feminist. First, treat women’s experiences as legitimate empirical and theoretical resources. Second, engage in social science that may bring about policy changes to help improve women’s lives. Third, take into account the researcher as much as the overt subject matter. When we enter a research situation, an imbalance of power usually exists between the researcher and the research subjects, and we need to take this power dimension seriously. The point of adopting feminist methods isn’t to exclude men or male perspectives: It’s not instead of; it’s in addition to. It means taking all subjects seriously rather than privileging one type of data, experience, or worldview over another.

**Creating and Testing Theory**

Good research is usually guided by theory, but there are different types of theories. Which theory best fits your subject? In Chapter 1, I described the differences between positivist and interpretivist sociology. As distinct as they are in their focus, they also lend themselves to different methodological approaches to research. Because positivists are concerned with the factors that influence social life, they tend to rely more heavily on quantitative measures. If, however, you’re more concerned with the meanings actors attach to their behavior, as interpretive sociologists are, then you’ll likely be drawn to more qualitative measures.

Ultimately, the distinction between quantitative and qualitative methods is a false dichotomy: The most important thing is to determine what you want to learn and then contemplate the best possible way to collect the empirical data that would answer your question—that is, deploy whatever tool is called for by the present research problem. That’s why getting the research question right is so important to the entire endeavor. Once the question is precisely operationalized, the method to answer the question should be obvious. If the question still could be approached in several ways, then you probably haven’t refined it enough. Figure 2.3 (p. 56) gives an overview of the entire process.
FIGURE 2.3 | The Research Process

**INTEREST**

\[ ? \rightarrow Y \]

\[ Y \rightarrow ? \]

**CONCEPTUALIZATION**

Specify the meaning of the concepts and variables to be studied

**OPERATIONALIZATION**

How will we actually measure the variables under study?

**IDEA**

\[ X \rightarrow Y \]

\[ A \rightarrow B \]

**CHOICE OF RESEARCH METHOD**

Experiments
Survey research
Field research
Content analysis
Existing data research
Comparative research
Evaluation research

**THEORY**

\[ A \rightarrow B \rightarrow E \rightarrow F \]

C
D
X
Y

**POPULATION AND SAMPLING**

Whom do we want to be able to draw conclusions about?
Who will be observed for that purpose?

**OBSERVATIONS**

Collecting data for analysis and interpretation

**DATA PROCESSING**

Transforming the data collected into a form appropriate to manipulation and analysis

**ANALYSIS**

Analyzing data and drawing conclusions

**APPLICATION**

Reporting results and assessing their implications

56 | CHAPTER 2 | METHODS
Data Collection

Remember that social science research is largely about collecting empirical evidence to generate or test empirical claims. So how do we go about collecting the evidence needed to support our claims? Let’s use case studies—that is, particular examples of good research—and see what these researchers wanted to know, how they obtained their data, and what they found.

PARTICIPANT OBSERVATION

How does the state transmit gender norms in its attempts to reform deviant girls? This is one of the key questions guiding the analysis that sociologist Lynne Haney presents in an article titled “Homeboys, Babies, Men in Suits: The State and the Reproduction of Male Dominance” (1996). Taking a highly theoretical approach, Haney wanted to test feminist theories of the state (i.e., the government). Macro-level theories generally treat the state as a uniform structure that operates in the same way in all places all people all of the time, but Haney had a hunch that these theories were too simplistic. People aren’t just passive subjects acted on by a greater entity called the state.

To test these assumptions, Haney examined the state at the institutional level in a 10-month study using a technique called *participant observation*, which aims to uncover the meanings people give to their actions by observing those actions in practice. What this usually entails is “hanging out” and documenting people’s practices in a given society. Some participant observation focuses more heavily on the participating, and some concentrates on the observing, depending on the interests of the researcher and the appropriateness of actually “participating” in the given setting. The contexts in which the observations occur form the *sites* for ethnographic researchers. Haney chose as her sites a probation center and a group home for incarcerated teen mothers. These sites allowed her to compare different institutional settings within the juvenile justice system. In both sites, she began her research by interviewing key officials. She then worked as an assistant to a parole officer in one site and as a tutor in the other. She attended meetings between clients and staff, spent time with the girls, and accompanied them on shopping trips.

By engaging in all these activities at her sites, Haney was able to establish relationships with Three women study in the girls unit in San Jose Juvenile Hall. How did data from Lynne Haney’s participant observation challenge conventional wisdom about the experience of young women in the juvenile justice system?
both the girls and the staff. This gave her access to a wide variety of information. Prevailing theories argued that the state (the government) imposed a monolithic, patriarchal agenda on women. But that’s not what Haney found. She discovered conflicts and contradictions between the specific institutions she studied and the larger justice bureau (an arm of the state), among the staff, and between state workers and clients. The staff wanted to empower the girls—make them less dependent on public (through welfare and the state) and private (through their boyfriends) patriarchy. The girls, however, often used these very factors to defy their parole officers and case workers. For example, when the officer would forcibly separate (through assignment into juvenile detention) the girls from their “homeboys,” in hopes of breaking their dependence, the girls would often bring the men in question to the next meeting. By doing her research where the action was, Haney complicated the preexisting feminist theory of the state and suggested a more complex and nuanced way of viewing it.

INTERVIEWS

Interviews are another form of gathering qualitative data. For Money, Morals, and Manners, sociologist Michèle Lamont interviewed upper-middle-class men in France and the United States about their tastes. She chose the men in her sample based on their social status—they were employed as managers, professionals, and entrepreneurs—arguing that these people hold enormous power in their jobs and communities, and consequently their tastes are influential in shaping the culture around them. Lamont conducted more than 160 interviews, trying to determine how the people in her sample defined what it means to be a “worthy person” and analyzing “the relative importance attached to religion, honesty, low moral standards, cosmopolitanism, high culture, money, [and] power” (Lamont, 1992). The comparative aspect of her research design allowed her to identify some of the cultural differences between American and French tastes. For example, she ascertained that the French men valued art more than their American counterparts, whereas the Americans cared more about money than their French counterparts.

By using unstructured, open-ended interviews, Lamont allowed the subjects to go off on tangents, to vent, to share intimacies that might not appear at first glance to be related to the study. But she also did probe—that is, she pushed subjects past their initial, comfortable answers on somewhat delicate, controversial issues. Knowing how and when to probe and when to back off is part of the art of interviewing that results from practice. Other researchers may rely on semistructured or structured interviews—that is, interviews in which the researchers have more than just a set of topics to cover in no preset
order; rather, the researchers develop a specific set of questions to address with all respondents in a relatively fixed sequence. If an interview becomes very structured, it falls into the next category: survey research.

SURVEY RESEARCH

Chances are you've filled out a survey at some point. One customarily receives them from the manufacturers and retailers of electronics, from restaurants and hotels. Surveys are an ordered series of questions intended to elicit information from respondents, and they can be powerful methods of data collection. Surveys may be done anonymously and distributed widely, so you reach a much larger sample than if you relied solely on interviews. At the same time, however, you have to pay attention to your response rate. Out of all the surveys you distributed, how many were actually completed and returned to you? Lately, we have been bombarded with more and more surveys soliciting our opinions about everything from what soap we prefer to how to stop global warming. It has become increasingly difficult for researchers to get their surveys answered amid the din of the information society, and response rates, in general, continue to fall.

Why does this matter? If who answered your survey or tore it up was merely random, then the only concern would be the cost in time and money to obtain, say, 200 completed surveys. But, as it turns out, who responds and who doesn't is not random. As a researcher, you need to consider the ways that selection bias can enter your sample. Are the people who completed the survey different in some significant way from the people who didn't? Surveys can also be done in person or over the phone. This method of survey design differs from interviews in that a set questionnaire exists. Surveys are generally converted into quantitative data for statistical analysis—everything from simple estimates (How many gay policemen are there in America?) to comparisons of averages across groups (What proportion of gay policemen support abortion rights, and what proportion of retired female plumbers do?) to complex techniques such as multiple regression, where one measured factor (such as education level) is held constant, or statistically removed from the picture, to pin down the effect of another factor (such as total family income) on some outcome.

The General Social Survey (GSS), run by the National Opinion Research Center of the University of Chicago, is one of the premier surveys in the United States. Each year since 1972, the GSS has asked respondents a battery of questions about their social and demographic characteristics and their opinions on a wide range of subjects. Each year some questions are new, but many are the same. This has allowed researchers to track American attitudes about a range of important issues, from race relations to abortion.
politics to beliefs about sexual orientation, and to see how the beliefs of
different demographic subgroups have converged or diverged over three and
a half decades. The GSS is an example of a repeated cross-sectional survey.
That is, it samples a new group of approximately 2,000 nationally representa­tive
Americans in each yearly survey wave. Each sample should represent
the U.S. population of that particular survey year. This allows us to track
how attitudes, for example, change in the country over time.

A cross-sectional study stands in contrast to a panel survey, also known as
a longitudinal study, which tracks the same individuals, households, or other
social units over time. One such survey, the Panel Study of Income Dynamics
(PSID) run by the Institute for Social Research at the University of Michigan,
has followed 5,000 American families each year since 1968. (Recently, the
PSID had to trim back to every other year because of budget cutbacks.) It even
tracks family members who have split off and formed their own households and
families. In this way, the survey has taken on the structure of a family tree. The
PSID has contributed to important research on questions about how families
transition in and out of poverty, what predicts if marriages will last, and how
much economic mobility exists in the United States across generations—just to
name a few of the topics that PSID analysis has illuminated.

HISTORICAL METHODS

How do we study the past? We can’t interview or survey dead people, and
we certainly can’t observe institutions or social settings that no longer ex­ist. What researchers employing historical methods do is collect data from
written reports, newspaper articles, journals, diaries, artwork, and other ar­tifacts
that date to the period they want to study. Researchers often study
social movements using historical methods, because the full import of the
movement may not be apparent until after it has ended.

How did America end up with a relatively weak welfare state and a high
tolerance for inequality, particularly in the context of race, compared with
other industrialized democracies? To answer that question, sociologist Jill
Quadagno went back to the archives to research what had been said officially
(in regulations and other government documents) and unofficially (in the
press) about the passage and implementation of the New Deal in the 1930s
and the War on Poverty in the 1960s (Quadagno, 1996).

Quadagno took into account many different explanations: timing (the
United States industrialized early, before the adequate development of
protective political institutions), institutions (the United States has one of
the most fragmented political systems in the developed world, making it
comparatively difficult to marshal large-scale government programs), and
“American exceptionalism” (the notion that our culture, lacking a history of
feudalism, was uniquely individualistic and nonpaternalistic).
Finally, the issue on which Quadagno focused her research was the looming shadow of racism in America. According to Quadagno, in order to prevent blacks from participating fully in the American social contract, authority devolved from the federal government to state and local authorities, which could then exclude blacks overtly or covertly. The result was a much weaker safety net and one that, for a long time, excluded minorities disproportionately. For example, to ensure that congressional committees controlled by racist southern Democrats passed Social Security, President Franklin D. Roosevelt had to agree to exclude agricultural and domestic workers from the system. This exception was made purposely to exclude African Americans, who were disproportionately employed in these two sectors. Thus, by conducting historical, archival research, Quadagno and others have been able to show the relevance of race in explaining the particularities of the social safety net in the United States.

COMPARATIVE RESEARCH

Whereas the above example above focuses on one case, sometimes sociologists compare two or more historical societies; we call this "comparative historical" research. For example, Rogers Brubaker compared the conceptions of citizenship and nationhood in France and Germany (Brubaker, 1992). Comparative research is a methodology by which a researcher compares two or more entities (usually countries or cultures) with the intent of learning more about one or both. By examining official documents and important texts over a period of many years leading up to, during, and after the formation of the German state and the French state, Brubaker showed that fundamentally different historical circumstances led to very different visions of citizenship in each nation.

France was formed from a loosely knit group of powerful duchies and principalities. There was no preexisting French nation or nationality before the creation of the French government. The idea of nationhood—that is, of French identity—had to be forged by the state itself, and this led to a very inclusive notion of citizenship. Germany, by contrast, grew out of an already well-refined, tribal sense of Prussian nationality. Thus, Germany's citizenship policy was based on excluding others rather than including them. In the early 1990s, when Brubaker was writing, the results of these different historical starting points could be seen in the two countries' immigration
Greek miners seeking work in the German Ruhr Basin in 1960 after West Germany began a guest worker program. What did Roger Brubaker’s comparative research about European immigration policies reveal about definitions of citizenship?

Experimental methods seek to alter the social landscape in a very specific way for a given sample of individuals and then track what results that change yields; often involve comparisons to a control group that did not experience such an intervention.

POLICIES. In France, birth in French territory was sufficient for a claim on citizenship. But in “Germany,” it was difficult to become a citizen unless you were born to a German citizen—a catch-22 for multiple generations of guest workers who had known no other homeland but failed to become German. In recent years, these policies have converged significantly because of European integration, falling more toward the French model.

The general approach to comparative research is to find cases that match on many potentially relevant dimensions but vary on just one, allowing researchers to observe the effect of that particular dimension. Although all social science research makes inferences based on implicit or explicit comparison, comparative research usually refers to cross-national studies. For example, if you wanted to determine the effect of polygamy on gender relations, it would be a good idea to compare provinces of Mali, West Africa, that have different rates of polygamy and monogamy but similar cultures. It would be a bad idea to compare Mali with Massachusetts, because other than starting with the same first two letters, these settings have little in common. Likewise, in studying the effects of universal health care, it would be better to compare the United States (which doesn’t have such a health care system) to Canada (which does) than to compare South Africa (which doesn’t) to Sweden (which does), because the latter two countries are so different from each other geographically and culturally.

EXPERIMENTATION

Because social scientists deal with people, the controlled environment of a laboratory-based experiment is not always an option. For example, I dream of randomly assigning the students in one of my classes to married or single life in order to examine marital status on some dimension. Assuming seating is random, I’d just draw a line straight down the middle of the lecture hall; all the students on one side would have to marry, while those on the other side would have to remain single. Think of the possibilities! For better or worse, however, I’m not allowed to perform such experiments.

Some sociologists do use experimental methods, however. Sociologist Devah Pager wanted to explore an increasingly relevant issue in our society: How does a criminal record affect employment opportunities for blacks...
and whites? We know that ex-cons have trouble finding work. But does that result from the fact that they are ex-cons? Or rather, are ex-con "types" not very employable in the first place independent of whether or not they've done time? In other words, Pager wished to determine whether incarceration has a causal or spurious effect on individuals' employment outcomes. To answer this question, she used a specific type of experimental method, an audit study, in which a pair of comparable people—say, an equally educated male and female, or a black male and a white male—are observed in a specific situation to see if they fare differently. Because the pairs are carefully chosen to ensure that they have comparable qualifications (matching résumés or equivalent previous job experience), any differential treatment would occur in response to other qualities of the respondent, such as gender or race. As Pager states, "The appeal of the audit methodology lies in its ability to combine experimental methods with real-life contexts" (Pager, 2003). She selected four 23-year-old males from a local university: two whites and two blacks. They were specifically matched on physical appearances and general styles of self-presentation (other than their racial characteristics). After training them to behave similarly in practice job application interactions, she gave the participants résumés indicating the same level of education and job experience, and sent them out in same-race pairs to apply for entry-level positions. She was trying to control for all other factors that have previously been found to account for (or are often thought to account for) differential employment rates between whites and blacks and between felons and nonfelons. Finally, within each pair, one was randomly assigned a criminal record on his résumé. Pager then tallied the number of job offers and requests for interviews each participant received.

Not only did the white applicants overall receive more callbacks than their black peers with identical résumés and interview skills, but whites
Job seekers waiting in line for interviews at utility company Con Edison. What did Devah Pager's experiments with job interviews uncover about the impact of race and a criminal record?
with a criminal record on their résumé received more callbacks than blacks without a history of incarceration (Figure 2.4). Because Pager’s research design was so tightly controlled and she attempted to take into account all possible factors, she was left with few other conclusions than this: Racism plays a huge factor in determining the impact of a criminal record on one’s employment opportunities. Pager’s results are all the more worrisome when we consider that black males have a 32 percent chance of being incarcerated at some point in their lifetime versus a 6 percent chance for their white counterparts (The Sentencing Project, 2006).

CONTENT ANALYSIS

You may have heard the common criticism that the media depict only exceptionally thin female bodies (and furthermore that the pervasiveness of such images is harmful to women and girls in our society). What empirical evidence would we need to test the claim that the media have a bias toward thinness in women? We might start by choosing one type of media—movies, advertisements, or magazines—and counting the images of skinny women. This would be a type of content analysis, a systematic analysis of the content rather than the structure of a communication, such as a written work, speech, or film.

Race scholar Ann Morning (2004) used content analysis to investigate depictions and discussions of race in American textbooks across academic disciplines and over time. Morning analyzed both manifest and latent content on race in 92 high-school textbooks in the fields of biology, anthropology, psychology, sociology, world culture, and world geography. Manifest content refers to what we can observe; Morning’s study included overt discussions and definitions of race and images of different races. Latent content refers to what is implied but not stated outright, so Morning looked for sections of the texts where race was directly implied, even if the word race wasn’t used. She chose her sample from all high-school textbooks published in the United States from 1952 to 2002.

Ultimately, Morning’s analysis disputed earlier findings that biology textbooks no longer discuss race. Her findings showed that only social sciences texts employed constructivist approaches (i.e., the belief that race is a social construct), whereas biology books reinforced essentialist conceptualizations (i.e., the belief that race is innate and genetic). However, contrary to her original hypotheses, social sciences textbooks also used biological components in their definitions of race, and only the fields of anthropology and sociology critiqued the traditional concept of race. Why does all this matter?
As Morning points out, if textbooks aren’t changing, how are students supposed to learn new concepts or viewpoints? Anthropology and sociology aren’t widely taught at the high-school level, whereas biology is mandatory in most public-school systems. In fact, Morning’s content analysis suggests that high-school students are likely to know more about the supposed links between some genetic diseases and certain races than they are about changing definitions of race over time.

**ETHICS OF SOCIAL RESEARCH**

At the beginning of this chapter, I mentioned the contributions feminists made to research methods with their emphasis on examining relationships between power and the process of knowledge generation. Today, we have more codified standards that must be met by all researchers. Many professional associations have their own ethical standards—doctors, lawyers, journalists, psychologists, and sociologists, just to name a few. Colleges and universities, too, often have guidelines for research conducted with humans (as well as animals, particularly vertebrates). As a professional sociologist, I am beholden to the ethical guidelines established by my peers and the American Sociological Association. As a professor, I am also responsible to my home institution. And as a researcher, I am ultimately responsible to my research subjects. I work with already collected statistical information (or secondary data) for the most part, which makes the process a little easier, but that doesn’t mean I don’t have to pay careful attention to the ethical standards of my discipline.

A few golden rules exist in research. The first is *do no harm.* This may seem obvious; you don’t want to cause physical harm to your subjects. But what about psychological or emotional harm? What if you want to interview men and women on their attitudes toward abortion, and a respondent becomes very upset because he or she cares deeply about the subject? The initial charge not to do harm seems a little more complicated now. Often, we tell research subjects that by participating in the study, they will encounter no more harm than they are likely to experience in everyday life.

The second rule is informed consent. Subjects have a right to know they are participating in a study and what that study will consist of. If you’re interviewing people or asking them to complete a survey, this makes sense. But how far do you take the rule of informed consent in participant observation? Generally, you have to obtain permission to be at your chosen site, but do you remind every person you bump into that you’re doing research? And then what do you say in the case of experimentation? Devah Pager certainly informed the participants in her audit study what role...
Voluntary participation the right of a research subject to decide if he or she wants to participate in a study; also implied in this notion is the idea that the subject can stop participating at any time without repercussion.

Protected populations groups that a researcher often needs additional approval to study, such as minors, prisoners and other institutionalized individuals, pregnant women and their unborn fetuses, and the disabled.

they were playing, but she couldn't reveal as much to the potential employers to whom she was sending them: Their knowledge that the applicants' job search was just an experiment would have defeated the central purpose of her research. Sometimes, mild forms of deception are necessary for the sake of research. You just need to periodically recall the first rule—if you’re deceiving people, it had better be absolutely necessary, and you had better make sure they’re safe.

The third rule is voluntary participation, which usually goes hand in hand with informed consent. People have a right to decide if they want to participate in your study. They can also stop participating at any point with no penalty. If you’re interviewing someone who doesn’t want to answer a question, he or she doesn’t have to; if the interviewee becomes upset and wants to stop, that’s his or her prerogative. There are also certain protected populations—minors, prisoners and other institutionalized individuals, pregnant women and their unborn fetuses, the disabled—whom you often need additional approval to study. As Lynne Haney’s research shows, it’s not impossible to study these populations. Haney, in fact, had a trifecta: Her subjects were underage, incarcerated, and pregnant. Such research just requires additional effort and caution.

Find out if your college or university has an institutional review board and what the requirements are to gain approval for a research project before you start your budding career as a sociologist. And then, never forget, question everything, and make the familiar strange. Good luck!

POLICY: Social Science and Public Policy—Do the Twain Ever Meet?

Much debate has occurred throughout the history of sociology over the relationship between social science and public policy. The term public sociology is used to describe social research whose aims include sharing its findings with a wider audience in order to influence society instead of just studying it. Knowledge that stays locked up in books, journals, and libraries and that is read and understood only by those creating it, the argument goes, does little good for the general public.

The Role of the Public Intellectual

What good is all this research if no one pays any attention to it? Much of sociology does involve preaching to the choir. We write journal articles, which have to follow a very specific format. Few sociologists may read them because
we focus on and speak to our own subfields. Some sociologists assert that the lack of attention from the media may be a good thing. We're not pressured by outside forces to pursue certain research agendas and forsake others, and we're not sanctioned when our findings don’t support a specific political platform. Sociologist William Julius Wilson finds some merit in this argument, but ultimately regards it as short-sighted:

The more sociology is ignored by the media and policy makers, the less attention it receives as an academic discipline and therefore the more removed it is from the decision-making arena, the fewer students it attracts, and the more difficulty it has in trying to obtain funding from private foundations and government agencies. (Wilson, 1998, p. 436)

Wilson's own work focuses on the black underclass and on racial and class issues surrounding unemployment and economic depression. Because these are pressing national issues (even if they're not often acknowledged as such), Wilson has made a conscious effort to get his work out there, to prompt the media and politicians to take notice of what his research finds.

The call for researchers to contribute their research to debates in the public arena has gone out, and Judith Stacey, like many, has answered. She hasn't always liked the conversation, however. Much of her work focuses on gay families and their children—a hot-button topic in the United States at the moment and for the foreseeable future. Stacey has appeared on talk shows and radio programs, and has even testified in court cases about the well-being of children with same-sex parents (Stacey & Biblarz, 2001). Wanting to do some good with her research, Stacey was dismayed when her findings were twisted, taken out of context, and ultimately used to support the very agenda she was seeking to dispel. Likewise, researchers Peter Bearman and Hannah Brückner discovered that teenagers who took a “virginity pledge” did on average delay the onset of their first sexual intercourse (Bearman & Brückner, 2001; Brückner & Bearman, 2005). However, Bearman and Brückner also found that “pledgers” were also more likely to have unprotected, risky sex when that first encounter finally occurred. They may have been surprised to find that their research was cited on a presidential campaign website in 2000 as evidence supporting the efficacy of “abstinence-only” sexual education. Only the first half of their findings was reported: that the pledge delayed sexual activity. The politico chose to ignore the other half
of the story—namely, that the pledge likely was broken in an unplanned moment of passion, which, in turn, led to greater risk of unwed pregnancy and STDs.

Stories like these don’t mean that we shouldn’t attempt to reach a broader audience with our research or be policy-oriented, but we have to remember that ultimately we can’t control how people interpret our research. We can just make our best effort in terms of research design, data collection, and the actual explanation of our findings. And then we cross our fingers.

Conclusion

Sociology is a field that deploys a variety of methodologies from survey research to participant observation to historical approaches. Therefore, we sociologists often feel that we have to defend our very identity as a science. Indeed, even some sociologists would argue that sociology is not a science. I would assert, however, that sociology is among the most difficult sciences of all. Sociology is a science in which you can’t complete controlled experiments—the treatment and control group staple of most bench science. Perhaps zoology or paleontology are other examples of fields in which the scientist is called on to piece together observational data without the ability to run experiments. Nonetheless, sociologists also must face the task of imputing causal processes, not just describing or classifying the world.

How does one assess causation with only observational data to go by, especially when there are multiple factors to analyze, factors that may all interact with one another? And add to that this complication: Reality changes as you study it and by virtue of the fact that you study it. Our basic units of analysis, such as the family, and our conceptual frameworks, such as race and class, are always shifting as we study them. On top of that, the fact remains that many of the topics we study—gender and sexuality, race and class, family life, politics, and so on—are, by design, the most politically charged and most personally sensitive topics in our society. That doesn’t make research easy. So what we sociologists are trying to achieve in this difficult field is to inch our way toward causality.
ASSIGNMENT

Create a research design to collect empirical data to either support or disprove one of the following claims:

- People on welfare are lazy and don't want to work.
- Women are worse drivers than men.
- Blacks are naturally more athletic.

Remember to think about the different variables involved, whether you're aiming to establish correlation or causation, and what method of data collection is best suited for your research question.

QUESTIONS FOR REVIEW

1. What is the difference between causality and correlation? Use the example from the beginning of the chapter—on the link between cohabitation and divorce—to illustrate this difference.

2. Describe one of studies discussed in this chapter, its methodology (e.g., interviews), and general findings. Then imagine how an additional study using a different methodology (e.g., comparative research) might build on these findings and generate new questions.

3. A sociologist observes the work-seeking habits of welfare recipients. After weeks of observation, trends emerge and the researcher forms a theory about the behaviors of this group. Is the sociologist in this example using a deductive or inductive approach? How would the sociologist study this phenomenon using the other approach?

4. A sociologist analyzes the effects of social class and gender on intelligence based on standardized test scores. The test consistently gets similar results but actually measures the ability to read quickly. What are the dependent and independent variables in this example? Are the results of this study valid or reliable?

5. Participant observation research is often long, painstaking, and personally demanding for the sociologist. Why bother with this data collection method? Use the example of Lynne Haney's research to support your answer.

6. Surveys are complicated to design, costly to administer, and (once administered to a sample) potentially suffer from selection bias. Why use this data collection method? Draw on the example of the General Social Survey to support your answer.

7. Why do sociologists have to run their projects by institutional review boards? What are the "golden rules" sociologists should keep in mind when conducting research?