CHAPTER 1

SOCIAL RESEARCH VERSUS ORDINARY WAYS OF KNOWING

As political comedians sometimes show, even the most "boring" news story can be made interesting—and possibly fun—depending on how you view it. Listening to the news can be valuable for the information one acquires, but it can be more edifying and entertaining to try to see through the apparently factual claims made by reporters, government officials, pundits, activists, and other commentators. By keeping in mind the idea that the truth is (almost) never exactly what someone claims it to be, news can be seen as a biased argument rather than an impartial description of reality. Somewhat similarly, it is possible to bring an irreverent attitude to social science journal articles. The standard article contains a lot of news but almost no entertainment value, at least on the surface. What's needed is for the reader to bring the right attitude to these scholarly works. A strong sense of irony—and the ability to ask the right questions—can help deflate even the most authoritative, statistic-laden, peer-reviewed publication.

How to Critique Journal Articles in the Social Sciences is not a jokebook, though. Its purpose is to help readers appreciate the rigor and complexity of social research while reducing the intimidation factor. When students understand in detail the inevitable frailty of most research, they are more likely to consider themselves worthy to enter into dialogue and debate with journal articles and even to attempt social research themselves. If this involves having a good laugh at authors' expense, so be it. (As long as we remember that our own claims may potentially be as problematic as others' claims, we're on relatively safe ground.)

After reading this book and practicing its exercises, any reasonably intelligent person should be able to challenge the wall of facts that social

scientists so artfully manufacture and present. Out of the debris, however, we will always want to salvage some potentially valuable insights, perspectives, and statistics, imperfect though they may be. Research may be inescapably flawed, but it is still highly worthwhile.

So, right at the outset, let me be clear that I do hold social scientists in high regard, and I hope that—after reading this book—you will as well. Any author whose work I criticize can also be complimented for exhibiting a great deal of skill and determination.

One way to convey the respect I have for social scientists—and to encourage readers to feel the same—is to compare social research to some of the alternative ways of knowing that can be found in everyday life.

☆ ORDINARY HUMAN INQUIRY

There are many ways of generating and validating information about the world. First, people can simply use their "common sense" and apply their society's conventional wisdom to a situation. Or, a person may simply turn to an authority figure for the truth—such as a parent, teacher, politician, or radio talk show host. Those who are religious may consult sacred texts for truths about the world, pray for insight, or consult an oracle. People read newspapers, magazines, and websites; watch television; exchange informational e-mails; and discuss current affairs with their friends. If they hear advice about a self-improvement strategy—perhaps for dieting, getting better grades, or maintaining close relationships—individuals may test out the idea via informal attempts at trial and error.

For the sake of simplicity, I would like to lump all these sorts of practices together and call them *ordinary human inquiry* or *everyday ways of knowing* (see Babbie, 2010). This loose category can then be contrasted with *social research,* the more germane topic for this book. Crudely put, there are nonscientific ways of knowing and there are scientific ways of knowing. As their name suggests, social scientists try to pursue the latter—to the degree they can—and they should be recognized and commended for their efforts.

☆ SIX DIFFERENCES BETWEEN ORDINARY HUMAN INQUIRY AND SOCIAL SCIENCE

When confronted with an issue they want to learn about, social scientists go to great lengths to study the topic as carefully and rigorously as feasible. Their efforts far exceed the attempts that laypersons make in everyday life. In this section, I will outline six ways that social researchers go well beyond

ordinary ways of knowing. These differences parallel the structure of journal articles, and foreshadow the main topics covered in this book.

Conceptualizing the Topic

First, researchers carefully conceptualize their research questions. Scholars try to formulate precisely what topic they are studying and what they want to know about it. For example, a researcher may be interested in *the causes of poverty* but is unlikely to be content with that phrase. A journal article on this topic would likely specify what *poverty* means and would distinguish different kinds of causes (such as structural vs. individual; economic factors at the global, national, and local levels, etc.). Scholars want to carefully delineate that which they are studying and that which they are not.

Compare this with ordinary human inquiry, where two friends (or news pundits, etc.) may engage in a heated discussion without spending much time specifying the question at hand: What is their conversation about? What specific issue are they trying to address? Conversations often ramble from topic to topic with little attention given to setting the parameters of the debate. Terms may be used extremely loosely, and few people stop to compare their definitions to make sure they are talking about the same thing.

As we'll see in Chapter 3, social researchers usually do better than laypersons at conceptualizing the issues they want to address. Nevertheless, research is far from perfect. Key terms may be relatively carefully defined, but these definitions contain ambiguities that can't be fully eliminated. And, different researchers propose divergent definitions of the same concept, leading to contradictions and confusion when readers move from article to article.

Reading the Literature: Quantity and Quality

A second key difference between ordinary human inquiry and social science is the reading that is involved. In everyday life, it is common for people to express confident opinions on a meager basis. Our seemingly well-informed companions may skim the *New York Times*, FoxNews.com, or nothing at all. They may pontificate enthusiastically after listening to a radio talk show or watching a local news broadcast.

Social scientists, in contrast, read prolifically. (When friends or relatives ask me to comment on a social issue, I sometimes say that I would prefer to read several scholarly publications before I formulate an opinion.) And it's not just the quantity—the quality of what scholars read matters just as much. Social scientists read rigorous, peer-reviewed publications written by authors who have devoted years or decades to becoming experts on a given topic. Whereas popular news coverage can almost always be skimmed quickly, scholarly

work can at times require a slow, painstaking process of reading and rereading. Perhaps because reality is complex, scholars' work is equally complex. Readers must carefully navigate dense paragraphs and technical terms while underlining key passages, commenting in the margins, and giving due attention to crucial details revealed in tiny footnotes.

Obtaining a Ph.D. requires a tremendous amount of reading in order to become familiar with the current state of the literature in one's disciplinary subfield. Then, social scientists must continue to read throughout their careers if their own research projects are to make contributions to the constantly evolving debates that occur on the pages of scholarly journals.

However, as well-read as scholars may be, they cannot read everything. No one can claim to keep abreast of the (literally) thousands of journal articles that are published each year—not to mention books—that might contain some theory, method, or finding that is relevant to his or her work. Even narrowly circumscribed subfields can advance at a rapid pace. Moreover, any single article can be "read" or interpreted in different ways, and a careful reading does not guarantee your interpretation is correct. Just as different people have different reactions to movies or to religious scriptures, different scholars can draw divergent implications from a particular article or group of articles. As I will show in Chapter 4, a seemingly objective literature review inevitably involves some arbitrary, selective, and interpretive decision making about what to read and what sense to make of it.

Taking Careful Measurements

In everyday life, people loosely measure the phenomena they are interested in, such as "good" versus "bad" television shows or "fair" versus "unfair" behavior by friends and coworkers. Often, these "measurements" are merely haphazard impressions and hazy memories. Social scientists, in contrast, attempt to develop standardized measurement procedures that can be consciously and systematically applied to a wide range of occurrences of a particular phenomenon. This is called *operationalization*. It allows scholars to be more explicit, thorough, and evenhanded as they collect examples and evidence.

For example, people may casually determine how hardworking or lazy a college student is. "You always seem to be partying," or "You never have any fun," friends or relatives may say. Such claims might be based on a few informal conversations or casual observations. Imagine a more scientific approach. To determine how hardworking a student is, one might want to specify different kinds of labor—such as schoolwork, paid employment, volunteering, and family obligations. Then, one might want to develop a system for asking—such as a carefully constructed questionnaire—exactly how

many hours per week a student tends to spend on each activity. Data could also be collected regarding the number of hours the student spends on leisure so that comparisons could be made between time devoted to working and nonworking activities.

Chapter 5 will explain why social scientists' measurements are better than laypersons' but still far from perfect. Researchers may present their measurement strategies as obvious or straightforward, but they usually involve subjective choices. (For example, should some family obligations count as work or leisure or both?) There are usually many different ways to measure a variable. Different scholars make different choices, which shape the results of their research. The problem of inter-researcher discontinuity casts doubt on whether different studies of the "same" topic are comparable and cumulative.

Collecting Samples

Imagine you want to decide whether to take a course with Professor Smith. Of course, all professors are geniuses who excel at nearly everything. Yet, for some reason, you want to know, in advance, whether Prof. Smith is a good teacher. You might be tempted to ask a couple friends who took a course from Smith. Or, you might find a dozen evaluations of Smith on a public website similar to www.ratemyprofessors.com. You might be tempted to treat these inquiries as sufficient. No offense—social scientists would not.

Assuming Prof. Smith teaches more than 100 students every year, the two friends are a pretty small sample on which to generalize about a person's teaching ability. The (often small) number of evaluations on www.ratemyprofessors.com may also be problematic, especially if the students who use the website tend to do so when they have negative feelings about their instructors or when they are principally concerned with "easy grading." In addition, the website's ratings may have been posted over a period of years, producing a sample of, say, 20 individuals out of several hundred. And since the website isn't policed very well, the same student may submit several evaluations while pretending to be a different person each time.

In everyday life, people are free to draw inferences—and jump to conclusions—based on weak, haphazardly collected samples. Researchers try to do better.

Researchers tend to collect samples that are much larger and more carefully assembled than those collected by laypersons. Sometimes an entire population can be studied—similar to when an instructor collects teaching evaluations from all of the students enrolled in a course. Usually, though, researchers gather a sample of the relevant data. While doing this, they pay attention to exactly how their sample is selected, who or what makes it into the sample, and the degree to which generalizing is warranted. Researchers

tend to use better procedures, collect better samples, and extrapolate more cautiously.

Still, virtually no sampling system is perfect. Scholars have limited time and resources. Their selection procedures involve trade-offs and judgment calls and produce samples with regrettable deficiencies and drawbacks. Then, scholars sometimes generalize too far from their samples and make unwarranted assertions about larger populations. Chapter 6 will discuss how to identify both the strengths and the weaknesses of authors' strategies for sampling and generalizing.

Analyzing Data and Presenting Results

So far I've suggested that laypersons tend to jump from topic to topic without clearly defining the issue at hand or the key terms they're using to discuss it; they take very loose measurements (if any) of the phenomena involved; and they overgeneralize from small, haphazardly collected samples. A related but distinguishable tendency is the manner in which people analyze and present any "data" that they actually possess.

Laypersons often make exaggerated claims about causal connections, sometimes using absolutist adjectives such as *always* and *never.* For example, a husband might tell his wife, "You're always complaining about your coworkers. You have a bad attitude." Or, a wife might tell her husband, "You're completely self-centered. You never do the dishes." Usually, these kinds of statements are based on weak measurement and data collection, as we've already discussed; moreover, these statements tend to involve hasty analyses and inaccurate descriptions of the data being discussed.

Social scientists do not need to make snap judgments in the course of a heated conversation. Instead, during the months or years they devote to writing their journal articles, they can calmly take their time and systematically crunch the numbers. Researchers can use statistical software to process hundreds or thousands of pieces of data about a wide range of causal factors and events in order to determine whether certain variables are correlated with each other. For example, researchers might collect questionnaires from several thousand high school students in order to determine whether marijuana smoking tends to be associated with delinquency or if other variables are superior predictors. Researchers tend not to present their findings in terms of simple yes or no, but provide qualifying details about the precise degree to which variables may be related, and they highlight weaknesses in their work that limit its potential accuracy. To use some fancy lingo, scholars usually prefer circumspection and precision to melodrama.

Nevertheless, even the most rigorous data analysis involves subjective choices. Social scientists can never analyze all the variables that are relevant

to a study; they must choose a small number of issues to focus on. In addition, it is often difficult for scholars to determine the causal order of their independent and dependent variables—a version of the dilemma "Which came first—the chicken or the egg?" For instance, does drug use tend to lead to delinquency, or does a pattern of delinquency usually come first?

The kinds of data analyses that appear in journal articles are often overwhelmingly technical. The mathematical equations and tables can generate awe, fear, or dread. Any newcomer may wonder, "Who am I to question such statistical geniuses?" By the end of Chapter 7, you'll see that even a social science newbie can identify strengths and weaknesses in the most technical article.

Ethics and Politics

In everyday life, people regularly avoid sensitive, politically charged topics. Many families avoid religion and politics at the dinner table. Coworkers might frown upon someone who raises the topic of same-sex marriage at the water cooler. "Stick to sports, television shows, and celebrity gossip—those are safer topics," we tell ourselves and our companions.

Yet, at the same time, people don't seem to realize that even "safe" inquiries can be fraught with peril. A simple question—such as "Why didn't you go to Prof. Smith's class yesterday?"—might be more risky than we realize. Perhaps a student was absent due to a problem with drugs or alcohol, a death in the family, or an emotional breakdown due to being dumped by a boyfriend or girlfriend. And then, once people learn sensitive information about a friend or acquaintance, there is a tendency to share it with others via "secrets" (a.k.a. gossip) that can spread quickly and damage personal reputations.

In comparison, social scientists try to be more cautious about what they ask, whom they reveal personal information to, and what the effects of their inquiries might be. Researchers certainly do not shy away from sensitive, politically charged topics. Yet, whether they are asking about someone's age, education level, self-esteem, sexual experiences, or religious beliefs, researchers carefully think about what they will ask and what they will do with the information.

Researchers follow the codes of ethics established by the scholarly associations they belong to; they submit their research proposals to their universities' Institutional Review Boards for careful examination and approval before collecting data; and they read what prior scholars have written about the ethics of research. Scholars think about how best to phrase questions and how to store personal information so it can't be accidentally viewed or purposefully stolen. When writing their articles, researchers take steps to disguise the identities of

their respondents so that readers cannot link discrediting information to any particular individuals.

Still, ethics and politics are interpretive matters, involving subjective standards and viewpoints. There is usually more than one way to answer questions like "What's the right (ethical) thing to do here?" and "What good (political) goal might this study help accomplish?" In Chapter 8, we'll explore some strategies for identifying the dilemmas and trade-offs in researchers' ethical choices. In Chapter 9, we'll discuss ways of challenging authors' politics.

☆ CONCLUSION

As you can see, there is a recurring theme that runs through this book: Research is better than ordinary human inquiry but is far from perfect. Chapters 3 through 9 apply this theme to the most important aspects of social research: conceptualization, literature reviews, measurement, sampling, analysis, ethics, and politics. Chapter 10 offers some reasons for reading journal articles despite their flaws.

After finishing this book, you should be able to appreciate the strengths of research without being overwhelmed by it, and you should be able to identify the weaknesses of research without rejecting it entirely. Ideally, this book will encourage you to approach journal articles with a mind-set that is neither naïve nor cynical. I hope you will pursue the middle path—be a critical consumer of the information and insights that social science can offer you (Best, 2001).