1.4: Doing Sociological Research

Learning Objectives

- Describe the different types of units of analysis in sociology.
- Explain the difference between an independent variable and a dependent variable.
- List the major advantages and disadvantages of surveys, observational studies, and experiments.
- Discuss an example of a sociological study that raised ethical issues.

Research is an essential component of the social, natural, and physical sciences. This section briefly describes the elements and types of sociological research.

Variables, Units of Analysis, and the Scientific Method

Earlier discussion in this chapter focused on examples involving voting preferences and suicide rates. Each of these involves a characteristic that varies from one person to another or from one region to another. For example, some people are taller or happier than others, some regions have higher suicide rates than other regions, and so forth. We call any characteristic that varies a variable. Sociological research aims to test relationships between variables or, more precisely, to test whether one variable affects another variable.

Suppose we are interested in knowing whether women were more likely than men to have voted for Obama in 2008. In this example, we have two variables. The first is gender, whether someone is a woman or a man. The second variable is whether someone voted for Obama or McCain. In this example, gender is the independent variable and voting preference is the dependent variable. An independent variable is a variable we think can affect another variable. This other variable is the dependent variable, or the variable we think is affected by the independent variable. When sociological research tests relationships between variables, it is testing whether an independent variable affects a
dependent variable.

Sociology Making a Difference: Survey Research to Help the Poor

The Community Service Society (CSS) of New York City is a nonprofit organization that, according to its Web site (http://www.cssny.org), “engages in advocacy, research and direct service” to help low-income residents of the city. It was established about 160 years ago and has made many notable accomplishments over the years, including aiding the victims of the Titanic disaster in 1912, helping initiate the free school lunch program that is now found around the United States, and establishing the largest senior volunteer program in the nation.

A key component of CSS’s efforts today involves gathering much information about the lives of poor New Yorkers through an annual survey of random samples of these residents. Because the needs of the poor are so often neglected and their voices so often unheard, CSS calls this effort the Unheard Third survey, as the poor represent about one-third of the New York City population. The individual in charge of the survey at the time of this writing was Jeremy Reiss, who has a BA in sociology from Wesleyan University in Connecticut and a master’s degree in Social Policy and Planning from the London School of Economics. His interest in social research for social reform stems from his childhood. “Growing up, my parents worked as hard as they possibly could but we were never able to get ahead,” Reiss wrote on the CSS Web site. “I realized from an early age that hard work does not translate into economic security. I strive to help find solutions to make sure that the United States—and New York City in particular—provides a strong social safety net for those who cannot work, and ensures that work provides economic security.”

The Unheard Third survey that Reiss heads asks respondents their opinions about many issues affecting their lives and also asks them many questions about such matters as their health and health care needs, employment status and job satisfaction, debt, and housing. CSS then uses all this information in reports about the needs of the poor and near-poor in New York that it prepares for city and state officials, the news media, and key individuals in the private sector. In these ways, CSS uses survey research in the service of society. As its Web site (http://www.cssny.org/research) states, “research is a critical tool we use to increase our understanding of conditions that drive poverty as we advocate for public policy and programs that will improve the economic standing of low-income New Yorkers.”

Sociological research is conducted at different levels, depending on the unit of analysis chosen. The most common unit of analysis in sociology is the person; this is probably the type of research with which you are most familiar. If we conduct a national poll to see how gender influences voting decisions or how race influences views on the state of the economy, we are studying characteristics, or variables, involving people, and the person is the unit of analysis. Another common unit of analysis in sociology is the organization. Suppose we conduct a study of hospitals to see whether the patient-to-nurse ratio (the number of patients divided by the number of nurses) is related to the average number of days that patients stay in the hospital. In this example, the patient-to-nurse ratio and the average number of days patients stay are both characteristics of the hospital, and the hospital is the unit of analysis. A third unit of analysis in sociology is the geographical region, whether it is cities, states, regions of a country, or whole societies. In the United States, for example, more large cities generally have higher violent crime rates than small cities. In this example, the city is the unit of analysis.
No matter what unit of analysis sociologists use, they follow the scientific method in doing their research. To yield the most reliable conclusions possible, and especially ones that are free of bias or various kinds of methodological errors, the scientific method must be followed. As you probably learned in high school in your biology, chemistry, or physics class, the scientific method involves formulating a hypothesis, or a statement of the relationship between two variables; gathering the data to test the hypothesis; carrying out such a test; analyzing and writing up your results; and drawing appropriate conclusions. In following the scientific method, sociologists are no different from their colleagues in the natural and physical sciences or the other social sciences, even though their research is very different in other respects.

We now turn to the major methods that sociologists use to gather the information they analyze in their research. Table 1.2 summarizes the advantages and disadvantages of each method.

### Table 1.2 Major Sociological Research Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Survey</td>
<td>Many people can be included. If given to a random sample of the population, a survey’s results can be generalized to the population.</td>
<td>Large surveys are expensive and time consuming. Although much information is gathered, this information is relatively superficial.</td>
</tr>
<tr>
<td>Experiments</td>
<td>If random assignment is used, experiments provide fairly convincing data on cause and effect.</td>
<td>Because experiments do not involve random samples of the population and most often involve college students, their results cannot readily be generalized to the population.</td>
</tr>
<tr>
<td>Observation (field research)</td>
<td>Observational studies may provide rich, detailed information about the people who are observed.</td>
<td>Because observation studies do not involve random samples of the population, their results cannot readily be generalized to the population.</td>
</tr>
<tr>
<td>Existing data</td>
<td>Because existing data have already been gathered, the researcher does not have to spend the time and money to gather data.</td>
<td>The data set that is being analyzed may not contain data on all the variables in which a sociologist is interested or may contain data on variables that are not measured in ways the sociologist prefers.</td>
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### Types of Sociological Research

#### Surveys

The survey is the most common method by which sociologists gather their data. The Gallup Poll is perhaps the most well-known example of a survey and, like all surveys, gathers its data with the help of a questionnaire that is given to a group of respondents. The Gallup Poll is an example of a survey conducted by a private organization, but sociologists do their own surveys, as does the government and many organizations in addition to Gallup. Many surveys are administered to respondents who are randomly chosen and thus constitute a random sample. In a random sample, everyone in the population (whether it be the whole U.S. population or just the population of a state or city, all the
college students in a state or city or all the students at just one college, and so forth) has the same chance of being included in the survey. The ways in which random samples are chosen are too complex to fully discuss here, but suffice it to say the methods used to determine who is in the sample are equivalent to flipping a coin or rolling some dice. The beauty of a random sample is that it allows us to generalize the results of the sample to the population from which the sample comes. This means that we can be fairly sure of the attitudes of the whole U.S. population by knowing the attitudes of just 400 people randomly chosen from that population.

The General Social Survey, described earlier, is an example of a face-to-face survey, in which interviewers meet with respondents to ask them questions. This type of survey can yield a lot of information, because interviewers typically will spend at least an hour asking their questions, and a high response rate (the percentage of all people in the sample who agree to be interviewed), which is important to be able to generalize the survey’s results to the entire population. On the downside, this type of survey can be very expensive and time consuming to conduct.

Because of these drawbacks, sociologists and other researchers have turned to telephone surveys. Most Gallup Polls are conducted over the telephone. Computers do random-digit dialing, which results in a random sample of all telephone numbers being selected. Although the response rate and the number of questions asked are both lower than in face-to-face surveys (people can just hang up the phone at the outset or let their answering machine take the call), the ease and low expense of telephone surveys are making them increasingly popular.

Mailed surveys, done by mailing questionnaires to respondents, are still used, but not as often as before. Compared with face-to-face surveys, mailed questionnaires are less expensive and time consuming but have lower response rates, because many people simply throw out the questionnaire along with other junk mail. Whereas mailed surveys are becoming less popular, surveys done over the Internet are becoming more popular, as they can obviously reach many people at very low expense. A major problem with Web surveys is that their results cannot necessarily be generalized to the entire population, because not everyone has access to the Internet.

Learning From Other Societies: Social Research and Social Policy in Canada

In several nations beyond the United States, nonprofit organizations often use social science research, including sociological research, to develop and evaluate various social reform strategies and social policies. Canada is one of these nations. Information on Canadian social research organizations can be found at http://www.canadiansocialresearch.net/index.htm.

The Canadian Research Institute for Social Policy (CRISP) at the University of New Brunswick is one of these organizations. According to its Web site (http://www.unb.ca/crisp/index.php), CRISP is “dedicated to conducting policy research aimed at improving the education and care of Canadian children and youth…and supporting low-income countries in their efforts to build research capacity in child development.” To do this, CRISP analyzes data from large data sets, such as the Canadian National Longitudinal Survey of Children and Youth, and it also evaluates policy efforts at the local, national, and international levels.

A major concern of CRISP has been developmental problems in low-income children and teens. These problems are the focus of a CRISP project called Raising and Levelling the Bar: A Collaborative Research Initiative on Children’s Learning, Behavioural, and Health Outcomes. This project at the time of this writing involved a team of five senior researchers and almost two dozen younger scholars. CRISP notes that Canada may have the most complete data on...
child development in the world but that much more research with these data needs to be performed to help inform public policy in the area of child development. CRISP’s project aims to use these data to help achieve the following goals, as listed on its Web site: (a) safeguard the healthy development of infants, (b) strengthen early childhood education, (c) improve schools and local communities, (d) reduce socioeconomic segregation and the effects of poverty, and (e) create a family-enabling society (http://www.unb.ca/crisp/rlb.html). This project has written many policy briefs, journal articles, and popular press articles to educate varied audiences about what the data on children’s development suggest for child policy in Canada.

Experiments

Experiments are the primary form of research in the natural and physical sciences, but in the social sciences they are for the most part found only in psychology. Some sociologists still use experiments, however, and they remain a powerful tool of social research.

The major advantage of experiments, whether they are done in the natural and physical sciences or in the social sciences, is that the researcher can be fairly sure of a cause-and-effect relationship because of the way the experiment is set up. Although many different experimental designs exist, the typical experiment consists of an experimental group and a control group, with subjects randomly assigned to either group. The researcher “does something” to the experimental group that is not done to the control group. If the two groups differ later in some variable, then it is safe to say that the condition to which the experimental group was subjected was responsible for the difference that resulted.

Most experiments take place in the laboratory, which for psychologists may be a room with a one-way mirror, but some experiments occur in “the field,” or in a natural setting. In Minneapolis, Minnesota, in the early 1980s, sociologists were involved in a much-discussed field experiment sponsored by the federal government. The researchers wanted to see whether arresting men for domestic violence made it less likely that they would commit such violence again. To test this hypothesis, the researchers had police do one of the following after arriving at the scene of a domestic dispute: they either arrested the suspect, separated him from his wife or partner for several hours, or warned him to stop but did not arrest or separate him. The researchers then determined the percentage of men in each group who committed repeated domestic violence during the next 6 months and found that those who were arrested had the lowest rate of recidivism, or repeat offending (Sherman & Berk, 1984). Sherman, L. W., & Berk, R. A. (1984). The specific deterrent effects of arrest for domestic assault. American Sociological Review, 49, 261–272. This finding led many jurisdictions across the United States to adopt a policy of mandatory arrest for domestic violence suspects. However, replications of the Minneapolis experiment in other cities found that arrest sometimes reduced recidivism for domestic violence but also sometimes increased it, depending on which city was being studied and on certain characteristics of the suspects, including whether they were employed at the time of their arrest (Sherman, 1992). Sherman, L. W. (1992). Policing domestic violence: Experiments and dilemmas. New York, NY: Free Press.

As the Minneapolis study suggests, perhaps the most important problem with experiments is that their results are not generalizable beyond the specific subjects studied. The subjects in most psychology experiments, for example, are college students, who obviously are not typical of average Americans: they are younger, more educated, and more likely to be middle class. Despite this problem, experiments in psychology and other social sciences have given us very valuable insights into the sources of attitudes and behavior.
Observational Studies

Observational research, also called field research, is a staple of sociology. Sociologists have long gone into the field to observe people and social settings, and the result has been many rich descriptions and analyses of behavior in juvenile gangs, bars, urban street corners, and even whole communities.

Observational studies consist of both participant observation and nonparticipant observation. Their names describe how they differ. In participant observation, the researcher is part of the group that she or he is studying. The researcher thus spends time with the group and might even live with them. Several classical sociological studies of this type exist, many of them involving people in urban neighborhoods (Liebow, 1967, 1993; Whyte, 1943). Liebow, E. (1967). *Tally’s corner*. Boston: Little, Brown; Liebow, E. (1993). *Tell them who I am: The lives of homeless women*. New York: Free Press; Whyte, W. F. (1943). *Street corner society: The social structure of an Italian slum*. Chicago, IL: University of Chicago Press. Participant researchers must try not to let their presence influence the attitudes or behavior of the people they are observing. In nonparticipant observation, the researcher observes a group of people but does not otherwise interact with them. If you went to your local shopping mall to observe, say, whether people walking with children looked happier than people without children, you would be engaging in nonparticipant observation.

A classic example of field research is Kai T. Erikson’s *Everything in Its Path* (1976), Erikson, K. T. (1976). *Everything in its path: Destruction of community in the Buffalo Creek flood*. New York: Simon and Schuster. A study of the loss of community bonds in the aftermath of a flood in a West Virginia mining community, Buffalo Creek. The flood occurred when an artificial dam composed of mine waste gave way after days of torrential rain. The local mining company had allowed the dam to build up in violation of federal law. When it broke, 132 million gallons of water broke through and destroyed several thousand homes in seconds while killing 125 people. Some 2,500 other people were rendered instantly homeless. Erikson was called in by the lawyers representing the survivors to document the sociological effects of their loss of community, and the book he wrote remains a moving account of how the destruction of the Buffalo Creek way of life profoundly affected the daily lives of its residents.

Similar to experiments, observational studies cannot automatically be generalized to other settings or members of the population. But in many ways they provide a richer account of people’s lives than surveys do, and they remain an important method of sociological research.

Existing Data

Sometimes sociologists do not gather their own data but instead analyze existing data that someone else has gathered. The U.S. Census Bureau, for example, gathers data on all kinds of areas relevant to the lives of Americans, and many sociologists analyze census data on such topics as poverty, employment, and illness. Sociologists interested in crime and the legal system may analyze data from court records, while medical sociologists often analyze data from patient records at hospitals. Analysis of existing data such as these is called secondary data analysis. Its advantage to sociologists is that someone else has already spent the time and money to gather the data. A disadvantage is that the data set being analyzed may not contain data on all the variables in which a sociologist may be interested or may contain data on variables that are not measured in ways the sociologist might prefer.
Ethical Issues in Sociological Research

Research involving human subjects must follow certain ethical standards to make sure the subjects are not harmed. Such harm can be quite severe in medical research unless certain precautions are taken. For example, in 1932 the U.S. Public Health Service began studying several hundred poor, illiterate African American men in Tuskegee, Alabama. The men had syphilis, for which no cure then existed, and were studied to determine its effects. After scientists found a decade later that penicillin could cure this disease, the government scientists decided not to give penicillin to the Tuskegee men because doing so would end their research. As a result, several of the men died from their disease, and some of their wives and children came down with it. The study did not end until the early 1970s, when the press finally disclosed the experiment. Several observers likened it to experiments conducted by Nazi scientists. If the subjects had been white and middle class, they said, the government would have ended the study once it learned that penicillin could cure syphilis (Jones, 1981).


Fortunately, sociological research does not have this potential for harm, but it still must follow ethical standards. The federal government has an extensive set of standards for research on human subjects, and the major sociology professional society, the American Sociological Association, has a code of ethics for sociological research.

One of the most important ethical guidelines in sociological and other human subject research concerns privacy and confidentiality. When they do research, sociologists should protect the privacy and confidentiality of their subjects. When a survey is used, the data must be coded (prepared for computer analysis) anonymously, and in no way should it be possible for any answers to be connected with the respondent who gave them. In field research, anonymity must also be maintained, and aliases (fake names) should normally be used when the researcher reports what she or he has been observing.

Some sociologists consider the privacy and confidentiality of subjects so important that they have risked imprisonment when they have refused to violate confidentiality. In one example, a graduate student named Mario Brajuha had been doing participant observation as a restaurant waiter when the restaurant burned down. When the police suspected arson, they asked Brajuha to turn over his field notes. When Brajuha refused, he was threatened with imprisonment. Meanwhile, two suspects in the case also demanded his field notes for their legal defense, but again Brajuha refused. The controversy ended 2 years later when the suspects died and the prosecutor’s office abandoned its effort to obtain the notes (Brajuha & Hallowell, 1986).


In another case, a graduate student named Rik Scarce refused to turn over his field notes on radical environmentalists after one of the groups he was studying vandalized a university laboratory. Scarce was jailed for contempt of court when he refused to tell a grand jury what he had learned about the group and spent several months behind bars (Monaghan, 1993).


A third example aroused much discussion among sociologists when it came to light. Laud Humphreys studied male homosexual sex that took place in public bathrooms. He did so by acting as the lookout in several encounters where two men had sex; the men did not know Humphreys was a researcher. He also wrote down their license plates and obtained their addresses and a year later disguised himself and interviewed the men at their homes. Many sociologists and other observers later criticized Humphreys for acting so secretly and for violating his subjects’ privacy. Humphreys responded...
that he protected the men’s names and that their behavior was not private, as it was conducted in a public setting (Humphreys, 1975). Humphreys, L. (1975). Teamroom trade: Impersonal sex in public places. Chicago, IL: Aldine. As this example demonstrates, it is not always easy to decide whether a particular research project is ethically justifiable. Partly for this reason, colleges and universities have committees that review proposed human subject research to ensure that federal guidelines are followed.

Sociological Research in the Service of Society

Should the primary aim of sociological research be to help improve society, or should its primary aim be to discover social knowledge for its own sake? There is no right or wrong answer to this question. However, following in the spirit of the early American sociologists, this book hopes to show the relevance of sociological knowledge and insights, as derived from sound, objective research, for addressing many of the social issues facing American society and various nations around the world.

Although sociological research findings may be relevant for many social issues, this certainly does not guarantee that these findings will actually be marshaled to address these issues. For this to happen, elected officials and other policymakers must be open to the implications of research findings, and an informed public must make its desire for addressing these issues known. For many readers, the introduction to sociology course they are now taking might be the only sociology course they ever take; other readers will take more sociology courses and may even become a sociology major. Regardless of how many sociology courses you do take, and regardless of whether you become an elected official or policymaker or you remain a member of the informed public, this book hopes to help you think like a sociologist as social issues continue and emerge in the many years ahead.

Conclusion

- As a social science, sociology tests hypotheses involving independent and dependent variables reflecting various units of analysis.
- The major types of sociological research include surveys, experiments, observational studies, and the use of existing data.
- Potential ethical issues in sociological research are normally not as serious as those in medical research, but sociologists must still take care to proceed in an ethical manner in their research.
- Although sociologists differ on whether the primary aim of their research should be to improve social conditions, this aim harkens back to the roots of American sociology in efforts to achieve social reform.

For Your Review

1. Have you ever been a respondent or subject in any type of sociological or psychological research project? If so, how did it feel to be studied?
2. Which type of sociological research method sounds most interesting to you? Why?
3. This book emphasizes the use of sociological research to achieve social reform. Do you think this is an appropriate emphasis, or do you think sociological research should primarily be done for its own sake (i.e., to achieve social knowledge without regard to whether it has implications for social reform)? Explain your answer.