INTRODUCTION

Social research is all around us. Educators, government officials, business managers, human service providers, and health care professionals regularly use social research methods and findings. People use social research to raise children, reduce crime, improve public health, sell products, or just understand one's life. Reports of research appear on broadcast news programs, in popular magazines, in newspapers, and on the Internet.

Research findings can affect people's daily lives and public policies. For example, I recently heard a debate regarding a U.S. federal government program to offer teenagers sexual abstinence counseling. A high-level government official argued for such counseling and strongly opposed offering teens birth control information. An independent health administrator noted that there is no scientific evidence showing that abstinence-only counseling works. He said that 80 percent of teens are already sexually active by the age of 18, therefore it is essential to provide birth control information. He pointed to many research studies showing that birth control instruction for teens reduces pregnancy rates and the spread of sexually transmitted diseases. The government abstinence-only advocate relied on moral persuasion because he had no research evidence. Ideology, faith, and politics shape many government programs rather than solid research evidence, but good social research can help all of us make informed decisions. The evidence also explains why many programs fail to accomplish much or may do more harm than good.

This book is about social research. In simple terms, research is a way of going about finding answers to questions. Professors, professional researchers, practitioners, and students in many fields conduct research to seek answers to questions about the social world. You probably already have some notion of what social research entails. First, let me end some possible misconceptions. When I asked students in my classes what they think social research entails, they gave the following answers:

- It is based on facts alone; there is no theory or personal judgment.
- Only experts with a Ph.D. degree or college professors read it or do it.
- It means going to the library and finding a lot of magazine articles or books on a topic.
- It is when someone hangs around a group and observes.
- It means conducting a controlled experiment.
- Social research is drawing a sample of people and giving them questionnaires to complete.
- It is looking up lots of statistical tables and information from official government reports.
- To do it, one must use computers to create statistics, charts, and graphs.

The first two answers are wrong, and the others describe only part of what constitutes social research. It is unwise to confuse one part with the whole.

People conduct social research to learn something new about the social world; or to carefully document guesses, hunches, or beliefs about it; or to refine their understanding of how the social world works. A researcher combines theories or ideas with facts in a careful, systematic way and uses creativity. He or she learns to organize and plan carefully and to select the appropriate technique to address a specific kind of question. A researcher also must treat the people in a study in ethical and moral ways. In addition, a researcher must fully and clearly communicate the results of a study to others.

Social research is a process in which people combine a set of principles, outlooks, and ideas (i.e., methodology) with a collection of specific practices, techniques, and strategies (i.e., a method of inquiry) to produce knowledge. It is

an exciting process of discovery, but it requires persistence, personal integrity, tolerance for ambiguity, interaction with others, and pride in doing quality work.

Reading this book cannot transform you into an expert researcher, but it can teach you to be a better consumer of research results, help you to understand how the research enterprise works, and prepare you to conduct small research projects. After studying this book, you will be aware of what research can and cannot do, and why properly conducted research is important.

ALTERNATIVES TO SOCIAL RESEARCH

Unless you are unusual, most of what you know about the social world is not based on doing social research. You probably learned most of what you know using an alternative to social research. It is based on what your parents and other people (e.g., friends, teachers) have told you. You also have knowledge based on your personal experiences, the books and magazines you have read, and the movies and television you have watched. You may also use plain old "common sense."

More than a collection of techniques, social research is a process for producing knowledge. It is a more structured, organized, and systematic process than the alternatives that most of us use in daily life. Knowledge from the alternatives is often correct, but knowledge based on research is more likely to be true and have fewer errors. Although research does not always produce perfect knowledge, compared to the alternatives it is much less likely to be flawed. Let us review the alternatives before examining social research.

Authority

You have acquired knowledge from parents, teachers, and experts as well as from books, television, and other media. When you accept something as being true because someone in a position of authority says it is true or because it is in an authoritative publication, you are relying on authority as a basis for knowledge. Relying on the wisdom of authorities is a quick, simple, and cheap way to learn something. Authorities often spend time and effort to learn something, and you can benefit from their experience and work.

There are also limitations to relying on authority. First, it is easy to overestimate the expertise of other people. You may assume that they are right when they are not. History is full of past experts whom we now see as being misinformed. For example, some "experts" of the past measured intelligence by counting bumps on the skull; other "experts" used bloodletting to try to cure diseases. Their errors seem obvious now, but can you be certain that today's experts will not become tomorrow's fools? Second, authorities may not agree, and all authorities may not be equally dependable. Whom should we believe if authorities disagree? Third, authorities may speak on fields they know little about or be plain wrong. An expert who is very informed about one area may use his or her authority in an unrelated area. Also, using the halo effect (discussed later), expertise in one area may spill over illegitimately to be authority in a totally different area. Have you ever seen television commercials where a movie star uses his or her fame as authority to convince you to buy a car? We need to ask: Who is or is not an authority?

An additional issue is the misuse of authority. Sometimes organizations or individuals give an appearance of authority so they can convince others to agree to something that they might not otherwise agree to. A related situation occurs when a person with little training and expertise is named as a "senior fellow" or "adjunct scholar" in a private "think tank" with an impressive name, such as the Center for the Study of X or the Institute on Y Research. Some think tanks are legitimate research centers, but many are mere fronts created by wealthy special-interest groups to engage in advocacy politics. Think

tanks can make anyone a "scholar" to facilitate the mass media accepting the person as an authority on an issue. In reality, the person may not have any real expertise.[1] Also, too much reliance on authorities can be dangerous to a democratic society. Experts may promote ideas that strengthen their own power and position. When we accept the authority of experts, but do not know how they arrived at their knowledge, we lose the ability to evaluate what the experts say and lose control of our destiny.

Tradition

People sometimes rely on tradition for knowledge. Tradition is a special case of authority—the authority of the past. Tradition means you accept something as being true because "it's the way things have always been." For example, my father-in-law says that drinking a shot of whiskey cures a cold. When I asked about his statement, he said that he had learned it from his father when he was a child, and it had come down from past generations. Tradition was the basis of the knowledge for the cure. Here is an example from the social world: Many people believe that children who are raised at home by their mothers grow up to be better adjusted and have fewer personal problems than those raised in other settings. People "know" this, but how did they learn it? Most accept it because they believe (rightly or wrongly) that it was true in the past or is the way things have always been done. Some traditional social knowledge begins as simple prejudice. You might rely on tradition without being fully aware of it with a belief such as "People from that side of the tracks will never amount to anything" or "You never can trust that type of person" or "That's the way men (or women) are." Even if traditional knowledge was once true, it can become distorted as it is passed on, and soon it is no longer true. People may cling to traditional knowledge without real understanding; they assume that because something may have worked or been true in the past, it will continue to be true.

Common Sense

You know a lot about the social world from your everyday reasoning or common sense. You rely on what everyone knows and what "just makes sense." For example, it "just makes sense" that murder rates are higher in nations that do not have a death penalty, because people are less likely to kill if they face execution for doing so. This and other widely held commonsense beliefs, such as that poor youth are more likely to commit deviant acts than those from the middle class or that most Catholics do not use birth control, are false.

Common sense is valuable in daily living, but it allows logical fallacies to slip into thinking. For example, the so-called gambler's fallacy says: "If I have a long string of losses playing a lottery, the next time I play, my chances of winning will be better." In terms of probability and the facts, this is false. Also, common sense contains contradictory ideas that often go unnoticed because people use the ideas at different times, such as "opposites attract" and "birds of a feather flock together." Common sense can originate in tradition. It is useful and sometimes correct, but it also contains errors, misinformation, contradiction, and prejudice.

Media Myths

Television shows, movies, and newspaper and magazine articles are important sources of information. For example, most people have no contact with criminals but learn about crime by watching television shows and movies and by reading newspapers. However, the television portrayals of crime, and of many other things, do not accurately reflect social reality. The writers who create or "adapt" images from life for television shows and movie scripts distort reality either out of ignorance or because they rely on authority, tradition, and common sense. Their primary goal is to entertain, not to represent reality accurately. Although many journalists try to present a realistic picture of the world,

they must write stories in short time periods with limited information and within editorial guidelines.

Unfortunately, the media tend to perpetuate the myths of a culture. For example, the media show that most people who receive welfare are Black (actually, most are White), that most people who are mentally ill are violent and dangerous (only a small percentage actually are), and that most people who are elderly are senile and in nursing homes (a tiny minority are). Also, mass media "hype" can create a feeling that a major problem exists when it may not (see Box 1.1). People are misled by visual images more easily than other forms of "lying"; this means that stories or stereotypes that appear on film and television can have a powerful effect on people. For example, television repeatedly shows low-income, inner-city, African American youth using illegal drugs. Eventually, most people "know" that urban Blacks use illegal drugs at a higher rate than other groups in the United States, even though this notion is false.

Competing interests use the media to win public support.[2] Public relations campaigns try to alter what the public thinks about scientific findings, making it difficult for the public to judge research findings. For example, a large majority of scientific research supports the global warming thesis (i.e., pollutants from industrialization and massive deforestation are raising the earth's temperature and will cause dramatic climate change and bring about environmental disasters). The scientific evidence is growing and gets stronger each year. The media give equal attention to a few dissenters who question global warming, creating the impression in the public mind that "no one really knows" or that scientists are undecided about the issue of global warming. The media sources fail to mention that the dissenters represent less than 2 percent of all scientists, or that most dissenting studies are paid for by heavily polluting industries. The industries also spend millions of dollars to publicize the findings because their goal is to deflect growing criticism and delay environmental regulations, not to advance knowledge.

Newspapers offer horoscopes, and television programs or movies report on supernatural powers, ESP (extrasensory perception), UFOs (unidentified flying objects), and angels or ghosts. Although no scientific evidence exists for such, between 25 and 50 percent of the U.S. public accepts them as true, and the percentage with

Box 1.1 Is Road Rage a Media Myth?

Americans hear a lot about *road rage*. *Newsweek* magazine, *Time* magazine, and newspapers in most major cities have carried headlines about it. Leading national political officials have held public hearings on it, and the federal government gives millions of dollars in grants to law enforcement and transportation departments to reduce it. Today, even psychologists specialize in this disorder.

The term *road rage* first appeared in 1988, and by 1997, the print media were carrying over 4,000 articles per year on it. Despite media attention about "aggressive driving" and "anger behind the wheel," there is no scientific evidence for road rage. The term is not precisely defined and can refer to anything from gunshots from cars, use of hand gestures, running bicyclists off the road, tailgating, and even anger over auto repair bills! All the data on crashes and accidents show declines during the period when road rage reached an epidemic.

Perhaps media reports fueled perceptions of road rage. After hearing or reading about road rage and having a label for the behavior, people began to notice rude driving behavior and engaged in *selective observation*. We will not know for sure until it is properly studied, but the amount of such behavior may be unchanged. It may turn out that the national epidemic of road rage is a widely held myth stimulated by reports in the mass media. (For more information, see Michael Fumento, "Road Rage versus Reality," *Atlantic Monthly* [August 1998].)

such beliefs has been growing over time as the entertainment media give the phenomenon more prominence.[3]

Personal Experience

If something happens to you, if you personally see it or experience it, you accept it as true. Personal experience, or "seeing is believing," has a strong impact and is a powerful source of knowledge. Unfortunately, personal experience can lead you astray. Something similar to an optical illusion or mirage can occur. What appears true may actually be due to a slight error or distortion in judgment. The power of immediacy and direct personal contact is very strong. Even knowing that, people fall for illusions. Many people believe what they see or personally experience rather than what very carefully designed research has discovered.

The four errors of personal experience reinforce each other and can occur in other areas, as well. They are a basis for misleading people through propaganda, cons or fraud, magic, stereotyping, and some advertising. The most frequent problem is *overgeneralization;* it occurs when some evidence supports your belief, but you falsely assume that it applies to many other situations, too. Limited generalization may be appropriate; under certain conditions, a small amount of evidence can explain a larger situation. The problem is that many people generalize far beyond limited evidence. For example, over the years, I have known five blind people. All of them were very friendly. Can I conclude that all blind people are friendly? Do the five people with whom I happened to have personal experience with represent all blind people?

The second error, *selective observation,* occurs when you take special notice of some people or events and tend to seek out evidence that confirms what you already believe and ignore contradictory information. People often focus on or observe particular cases or situations, especially when they fit preconceived ideas. We are sensitive to features that confirm what we think, but ignore features that contradict it. For example, I believe tall people are excellent singers. This may be because of stereotypes, what my mother told me, or whatever. I observe tall people and, without awareness, pay particular attention to their singing. I look at a chorus or top vocalist and notice those who are tall. Without realizing it, I notice and remember people and situations that reinforce my preconceived ideas. Psychologists found that people tend to "seek out" and distort their memories to make them more consistent with what they already think.[4]

A third error is *premature closure.* It often operates with and reinforces the first two errors. Premature closure occurs when you feel you have the answer and do not need to listen, seek information, or raise questions any longer. Unfortunately, most of us are a little lazy or get a little sloppy. We take a few pieces of evidence or look at events for a short while and then think we have it figured out. We look for evidence to confirm or reject an idea and stop when a small amount of evidence is present. In a word, we jump to conclusions. For example, I want to learn whether people in my town support Mary Smith or Jon Van Horn for mayor. I ask 20 people; 16 say they favor Mary, 2 are undecided, and only 2 favor Jon, so I stop there and believe Mary will win.

Another common error is the *halo effect;* it is when we overgeneralize from what we accept as being highly positive or prestigious and let its strong reputation or prestige "rub off" onto other areas. Thus, I pick up a report by a person from a prestigious university, say Harvard or Cambridge University. I assume that the author is smart and talented and that the report will be excellent. I do not make this assumption about a report by someone from Unknown University. I form an opinion and prejudge the report and may not approach it by considering its own merits alone. How the various alternatives to social research might address the issue of laundry is shown in Table 1.1.

TABLE 1.1 Alternatives to Social Research

Alternative Explanation to Social Research	Example Issue: In the division of household tasks by gender, why do women tend to do the laundry?
Authority	Experts say that as children, females are taught to make, select, mend, and clean clothing as part of a female focus on physical appearance and on caring for children or others in a family. Women do the laundry based on their childhood preparation.
Tradition	Women have done the laundry for centuries, so it is a continuation of what has happened for a long time.
Common Sense	Men just are not as concerned about clothing as much as women, so it only makes sense that women do the laundry more often.
Media Myth	Television commercials show women often doing laundry and enjoying it, so they do laundry because they think it's fun.
Personal Experience	My mother and the mothers of all my friends did the laundry. My female friends did it for their boyfriends, but never the other way around. It just feels natural for the woman to do it.

HOW SCIENCE WORKS

Although it builds on some aspects of the alternative ways of developing knowledge, science is what separates social research. Social research involves thinking scientifically about questions about the social world and following scientific processes. This suggests that we examine the meaning of science and how its works.

Science

The term *science* suggests an image of test tubes, computers, rocket ships, and people in white lab coats. These outward trappings are a part of science, especially natural science (i.e., astronomy, biology, chemistry, geology, and physics,), that deals with the physical and material world (e.g., plants, chemicals, rocks, stars, and electricity). The social sciences, such as anthropology, psychology, political science, and sociology, involve the study of people—their beliefs, behavior, interaction, institutions, and so forth. Fewer people associate these disciplines with the word *science.* Science is a social institution and a way to produce knowledge. Not everyone is well informed about science. For example, a 2001 survey found that about only one-third of U.S. adults could correctly explain the basics of science.[5]

Scientists gather data using specialized techniques and use the data to support or reject theories. *Data* are the empirical evidence or information that one gathers carefully according to rules or procedures. The data can be *quantitative* (i.e., expressed as numbers) or *qualitative* (i.e., expressed as words, visual images, sounds, or objects). *Empirical evidence* refers to observations that people experience through the senses—touch, sight, hearing, smell, and taste. This confuses people, because researchers cannot use their senses to directly observe many aspects of the social world about which they seek answers (e.g., intelligence, attitudes, opinions, feelings, emotions, power, authority, etc.). Researchers have many specialized techniques to observe and indirectly measure such aspects of the social world.

The Scientific Community

Science comes to life through the operation of the scientific community, which sustains the as-

sumptions, attitudes, and techniques of science. The *scientific community* is a collection of people who practice science and a set of norms, behaviors, and attitudes that bind them together. It is a professional community—a group of interacting people who share ethical principles, beliefs and values, techniques and training, and career paths. For the most part, the scientific community includes both the natural and social sciences.[6]

Many people outside the core scientific community use scientific research techniques. A range of practitioners and technicians apply research techniques that scientists developed and refined. Many use the research techniques (e.g., a survey) without possessing a deep knowledge of scientific research. Yet, anyone who uses the techniques or results of science can do so better if they also understand the principles and processes of the scientific community.

The boundaries of the scientific community and its membership are defined loosely. There is no membership card or master roster. Many people treat a Ph.D. degree in a scientific field as an informal "entry ticket" to membership in the scientific community. The Ph.D., which stands for doctorate of philosophy, is an advanced graduate degree beyond the master's that prepares one to conduct independent research. Some researchers do not have Ph.D.s and not all those who receive Ph.D.s enter occupations in which they conduct research. They enter many occupations and may have other responsibilities (e.g., teaching, administration, consulting, clinical practice, advising, etc.). In fact, about one-half of the people who receive scientific Ph.D.s do not follow careers as active researchers.

At the core of the scientific community are researchers who conduct studies on a full-time or part-time basis, usually with the help of assistants. Many research assistants are graduate students, and some are undergraduates. Working as a research assistant is the way that most scientists gain a real grasp on the details of doing research. Colleges and universities employ most members of the scientific community's core. Some scientists work for the government or private industry in organizations such as the National Opinion Research Center and the Rand Corporation. Most, however, work at the approximately 200 research universities and institutes located in a dozen advanced industrialized countries. Thus, the scientific community is scattered geographically, but its members tend to work together in small clusters.

How big is the scientific community? This is not an easy question to answer. Using the broadest definition (including all scientists and those in science-related professions, such as engineers), it includes about 15 percent of the labor force in advanced industrialized countries. A better way to look at the scientific community is to examine the basic unit of the larger community: the discipline (e.g., sociology, biology, psychology, etc.). Scientists are most familiar with a particular discipline because knowledge is specialized. Compared to other fields with advanced training, the numbers are very small. For example, each year, about 500 people receive Ph.D.s in sociology, 16,000 receive medical degrees, and 38,000 receive law degrees.

A discipline such as sociology may have about 8,000 active researchers worldwide. Most researchers complete only two or three studies in their careers, whereas a small number of highly active researchers conduct many dozens of studies. In a specialty or topic area (e.g., study of the death penalty, social movements, divorce), only about 100 researchers are very active and conduct most research studies. Although research results represent what humanity knows and it has a major impact on the lives of many millions of people, only a small number of people are actually producing most new scientific knowledge.

The Scientific Method and Attitude

You have probably heard of the scientific method, and you may be wondering how it fits into all this. The *scientific method* is not one single thing; it refers to the ideas, rules, techniques, and approaches that the scientific community

uses. The method arises from a loose consensus within the community of scientists. It includes a way of looking at the world that places a high value on professionalism, craftsmanship, ethical integrity, creativity, rigorous standards, and diligence. It also includes strong professional norms such as honesty and uprightness in doing research, great candor and openness about how one conducted a study, and a focus on the merits of the research itself and not on any characteristics of individuals who conducted the study.

Journal Articles in Science

Consider what happens once a researcher finishes a study. First, he or she writes a detailed description of the study and the results as a research report or a paper using a special format. Often, he or she also gives an oral presentation of the paper before other researchers at a conference or a meeting of a professional association and seeks comments and suggestions. Next, the researcher sends several copies to the editor of a scholarly journal. Each editor, a respected researcher chosen by other scientists to oversee the journal, removes the title page, which is the only place the author's name appears, and sends the article to several reviewers. The reviewers are respected scientists who have conducted studies in the same specialty area or topic. The reviewers do not know who did the study, and the author of the paper does not know who the reviewers are. This reinforces the scientific principle of judging a study on its merits alone. Reviewers evaluate the research based on its clarity, originality, standards of good research methods, and advancing knowledge. They return their evaluations to the editor, who decides to reject the paper, ask the author to revise and resubmit it, or accept it for publication. It is a very careful, cautious method to ensure quality control.

The scholarly journals that are highly respected and regularly read by most researchers in a field receive far more papers than they can publish. They accept only 10 to 15 percent of submitted manuscripts. Even lower-ranked journals regularly reject half of the submissions. Thus, several experienced researchers screen a journal article based on its merits alone, and publication represents the study's tentative acceptance by the scientific community as a valid contribution to knowledge. Unlike the authors of articles for the popular magazines found at newsstands, scientists are not paid for publishing in scholarly journals. In fact, they may have to pay a small fee to help defray costs just to have their papers considered. Researchers are happy to make their research available to their peers (i.e., other scientists and researchers) through scholarly journals. The article communicates the results of a study that a researcher might have devoted years of his or her life to, and it is the way researchers gain respect and visibility among their professional peers. Likewise, the reviewers are not paid for reviewing papers, but consider it an honor to be asked to conduct the reviews and to carry out one of the responsibilities of being in the scientific community. The scientific community imparts great respect to researchers who publish many articles in the foremost scholarly journals because these researchers are directly advancing the scientific community's primary goal—the accumulation of carefully developed knowledge. A researcher gains prestige and honor and a reputation as an accomplished researcher through such publications.

You may never publish an article in a scholarly journal, but you will probably read many such articles. It is important to see how they are a vital component in the system of scientific research. Researchers actively read what appears in the journals to learn about new research findings and the methods used to conduct a study. Eventually, the new knowledge is disseminated in textbooks, new reports, or public talks.

STEPS IN THE RESEARCH PROCESS

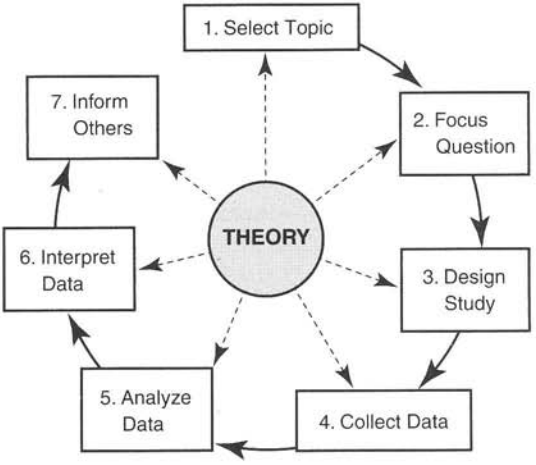
Social research proceeds in a sequence of steps, although various approaches to research suggest

slightly different steps. Most studies follow the seven steps discussed here. To begin the process, you select a *topic*—a general area of study or issue, such as domestic abuse, homelessness, or powerful corporate elites. A topic is too broad for conducting a study. This makes the next step crucial. You must then narrow down the topic, or *focus* the topic into a specific research question for a study (e.g., "Are people who marry younger more likely to engage in physical abuse of a spouse under conditions of high stress than those who marry older?"). As you learn about a topic and narrow the focus, you should review past research, or the *literature*, on a topic or question. You also want to develop a possible answer, or hypothesis, and theory can be important at this stage.

After specifying a research question, you have to develop a highly detailed plan on how you will carry out the study. This third step requires that you decide on the many practical details of doing the research (e.g., whether to use a survey or qualitative observing in the field, how many subjects to use, etc.). It is only after completing the design stage that you are ready to *gather the data* or evidence (e.g., ask people the questions, record answers, etc.). Once you have very carefully collected the data, your next step is to manipulate or *analyze the data.* This will help you see any patterns in it and help you to give meaning to or *interpret* the data (e.g., "People who marry young and grew up in families with abuse have higher rates of physical domestic abuse than those with different family histories"). Finally, you must *inform others* by writing a report that describes the study's background, how you conducted it, and what you discovered.

The seven-step process shown in Figure 1.1 is oversimplified. In practice, you will rarely complete one step totally then leave it behind to move to the next step. Rather, the process is interactive in which the steps blend into each other. What you do in a later step may stimulate you to reconsider and slightly adjust your thinking in a previous one. The process is not strictly linear and may flow back and forth before reaching an end. The seven steps are for one research project; it is one cycle of going through the steps in a single study on a specific topic.

FIGURE 1.1 Steps in the Research Process



Science is an ongoing enterprise that builds on prior research and builds a larger, collectively created body of knowledge. Any one study is a small part of the much larger whole of science. A single researcher may be working on multiple research projects at once, or several researchers may collaborate on one project. Likewise, one project may result in one scholarly article or several, and sometimes several smaller projects are reported in a single article.

DIMENSIONS OF RESEARCH

Three years after they graduated from college. Tim and Sharon met for lunch. Tim asked Sharon, "So, how is your new job as a researcher for Social Data, Inc.? What are you doing?" Sharon answered, "Right now I'm working on an applied research project on day care quality in which we're doing a cross-sectional survey to get descriptive data for an evaluation study." Sharon

touched on four dimensions of social research as she described her research on day care.

Social research comes in several shapes and sizes. Before you begin a study, you will need to make several decisions about the specific type of research you are going to conduct. Researchers need to understand the advantages and disadvantages of each type, although most end up specializing in doing one type. We can think of the types as fitting into one of the categories in each of four dimensions of research.

The first dimension is a distinction in how research is used, or between applied and basic research. The next is the purpose of doing research, or its goal, to explore, describe, or explain. The next two dimensions are more specific: how time is incorporated into the study design, and the specific data collection technique used.

The dimensions overlap, in that certain dimensions are often found together (e.g., the goal of a study and a data collection technique). Once you learn the dimensions, you will begin to see how the particular research questions you might want to investigate tend to be more compatible with certain ways of designing a study and collecting data. In addition, being aware of the dimensions of research will make it easier to understand the research reports by others.

Use of Research

For over a century, science has had two wings. Some researchers adopt a detached, purely scientific, and academic orientation; others are more activist, pragmatic, and interventionist oriented. This is not a rigid separation. Researchers in the two wings cooperate and maintain friendly relations. Some individuals move from one wing to another at different stages in their careers. In simple terms, some researchers concentrate on advancing general knowledge over the long term, whereas others conduct studies to solve specific, immediate problems. Those who concentrate on examining the fundamental nature of social reality are engaged in basic research.

Basic Research. *Basic social research* advances fundamental knowledge about the social world. Basic researchers focus on refuting or supporting theories that explain how the social world operates, what makes things happen, why social relations are a certain way, and why society changes. Basic research is the source of most new scientific ideas and ways of thinking about the world. Many nonscientists criticize basic research and ask, "What good is it?" and consider it to be a waste of time and money. Although basic research often lacks a practical application in the short term, it provides a foundation for knowledge that advances understanding in many policy areas, problems, or areas of study. Basic research is the source of most of the tools, methods, theories, and ideas about underlying causes of how people act or think used by applied researchers. It provides the major breakthroughs that significant advances in knowledge; it is the painstaking study of broad questions that has the potential of shifting how we think about a wide range of issues. It may have an impact for the next 50 years or century. Often, the applications of basic research appear many years or decades later. Practical applications may be apparent only after many accumulated advances in basic knowledge build over a long time period. For example, in 1984, Alec Jeffreys, a geneticist at the University of Leicester in England, was engaged in basic research studying the evolution of genes. As an indirect accidential side effect of a new technique he developed, he discovered a way to produce what is now call human DNA "fingerprints" or unique markings of the DNA of individuals. This was not his intent. He even said he would have never thought of the technique if DNA fingerprints had been his goal. Within 10 years applied uses of the technique were developed. Today, DNA analysis is a widely used technique in criminal investigations.

Applied Research. *Applied social research* is designed to address a specific concern or to offer solutions to a problem identified by an employer, club, agency, social movement, or orga-

nization. Applied social researchers are rarely concerned with building, testing, or connecting to a larger theory, developing a long-term general understanding, or carrying out a large-scale investigation that might span years. Instead, they usually conduct a quick, small-scale study that provides practical results for use in the short term (i.e., next month or next year). For example, the student government of University X wants to know whether the number of University X students who are arrested for driving while intoxicated or involved in auto accidents will decline if it sponsors alcohol-free parties next year. Applied research would be most applicable for this situation.

People employed in businesses, government offices, health care facilities, social service agencies, political organizations, and educational institutions often conduct applied research and use the results in decision making. Applied research affects decisions such as the following: Should an agency start a new program to reduce the wait time before a client receives benefits? Should a police force adopt a new type of response to reduce spousal abuse? Should a political candidate emphasize his or her stand on the environment instead of the economy? Should a company market a skin care product to mature adults instead of teenagers?

The scientific community is the primary consumer of basic research. The consumers of applied research findings are practitioners such as teachers, counselors, and social workers, or decision makers such as managers, agency administrators, and public officials. Often, someone other than the researcher who conducted the study uses the results.

Applied research results are less likely to enter the public domain in publications and may be available only to few decision makers or practitioners. This means that applied research findings often are not widely disseminated and that well-qualified researchers rarely get to judge the quality of applied studies.

The decision makers who use the results of an applied study may or may not use them wisely. Sometimes despite serious problems with a study's methodology and cautions from the researchers, politicians use results to justify cutting programs they dislike or to advance programs they favor. Because applied research often has immediate implications or involves controversial issues, it often generates conflict. One famous researcher, William Whyte (1984), encountered conflict over findings in his applied research on a factory in Oklahoma and on restaurants in Chicago. In the first case, the management was more interested in defeating a union than in learning about employment relations; in the other, restaurant owners really sought to make the industry look good and did not want findings on the nitty-gritty of its operations made public.

Applied and basic researchers adopt different orientations toward research methodology (see Table 1.2). Basic researchers emphasize high methodological standards and try to conduct near-perfect research. Applied researchers must make more tradeoffs. They may compromise scientific rigor to get quick, usable results, but compromise is never an excuse for sloppy research. Applied researchers try to squeeze research into the constraints of an applied setting and balance rigor against practical needs. Such balancing requires an in-depth knowledge of research and an awareness of the consequences of compromising standards.

Types of Applied Research. There are many specific types of applied research. Here, you will learn about three major types: evaluation, action, and social impact assessment.

Evaluation Research Study. *Evaluation research study* is applied research designed to find out whether a program, a new way of doing something, a marketing campaign, a policy, and so forth, is effective—in other words, "Does it work?" The most widely used type of applied research is evaluation research.[7] This type of research is widely used in large bureaucratic organizations (e.g., businesses, schools, hospi-

TABLE 1.2 Basic and Applied Social Research Compared

Basic	Applied
1. Research is intrinsically satisfying and judgments are by other sociologists.	1. Research is part of a job and is judged by sponsors who are outside the discipline of sociology.
2. Research problems and subjects are selected with a great deal of freedom.	2. Research problems are "narrowly constrained" to the demands of employers or sponsors.
3. Research is judged by absolute norms of scientific rigor, and the highest standards of scholarship are sought.	3. The rigor and standards of scholarship depend on the uses of results. Research can be "quick and dirty" or may match high scientific standards.
4. The primary concern is with the internal logic and rigor of research design.	4. The primary concern is with the ability to generalize findings to areas of interest to sponsors.
5. The driving goal is to contribute to basic, theoretical knowledge.	5. The driving goal is to have practical payoffs or uses for results.
6. Success comes when results appear in a scholarly journal and have an impact on others in the scientific community.	6. Success comes when results are used by sponsors in decision making.

Source: Adapted from Freeman and Rossi (1984:572–573).

tals, government, large nonprofit agencies) to demonstrate the effectiveness of what they are doing. An evaluation researcher does not use techniques different from those of other social researchers. The difference lies in the fact that decision makers, who may not be researchers themselves, define the scope and purpose of the research. Also, their objective is to use results in a practical situation.[8]

Evaluation research questions might include: Does a Socratic teaching technique improve learning over lecturing? Does a law-enforcement program of mandatory arrest reduce spouse abuse? Does a flextime program increase employee productivity? Evaluation researchers measure the effectiveness of a program, policy, or way of doing something and often use several research techniques (e.g., survey and field). If it can be used, the experimental technique is usually preferred. Practitioners involved with a policy or program may conduct evaluation research for their own information or at the request of outside decision makers. The decision makers may place limits on the research by fixing boundaries on what can be studied and by determining the outcome of interest. This often creates ethical dilemmas for a researcher.

Ethical and political conflicts often arise in evaluation research because people can have opposing interests in the findings. The findings of research can affect who gets or keeps a job, it can build political popularity, or it may help promote an alternative program. People who are personally displeased with the findings may attack the researcher or his or her methods.

Evaluation research has several limitations: The reports of research rarely go through a peer review process, raw data are rarely publicly available, and the focus is narrowed to select inputs and outputs more than the full process by which

a program affects people's lives. In addition, decision makers may selectively use or ignore evaluation findings.

Action Research Study. *Action research* is applied research that treats knowledge as a form of power and abolishes the division between creating knowledge and using knowledge to engage in political action. There are several types of action research, but most share five characteristics: (1) the people being studied actively participate in the research process; (2) the research incorporates ordinary or popular knowledge; (3) the research focuses on issues of power; (4) the research seeks to raise consciousness or increase awareness of issues; and (5) the research is tied directly to a plan or program of political action. Action research tends to be associated with a social movement, political cause, or advocacy for an issue. It can be conducted to advance a range of political positions. Some action research has an insurgent orientation with goals of empowering the powerless, fighting oppression and injustice, and reducing inequality. Wealthy and powerful groups or organizations also sponsor and conduct action research to defend their status, position, and privileges in society.

Most action researchers are explicitly political, not value neutral. Because the primary goal is to affect sociopolitical conditions, publishing results in formal reports, articles, or books is secondary. Most action researchers also believe that knowledge develops from direct experience, particularly the experience of engaging in sociopolitical action.

For example, most feminist research is action research. It has a dual mission: to create social change by transforming gender relations and to contribute to the advancement of knowledge. A feminist researcher who studies sexual harassment might recommend policy changes to reduce it as well as to inform potential victims so they can protect themselves and defend their rights. At times, researchers will explain study results in a public hearing to try to modify new policies or laws. The authors of a study on domestic violence that will be discussed shortly as an explanatory study example (Cherlin et al., 2004) testified in the United States Senate. The study findings and the testimony helped to alter marriage promotion provisions in a 2005 welfare reform law.[9]

Social Impact Assessment Research Study. A researcher who conducts *social impact assessment (SIA)* estimates the likely consequences of a planned intervention or intentional change to occur in the future. It may be part of a larger environmental impact statement required by government agencies and used for planning and making choices among alternative policies. He or she forecasts how aspects of the social environment may change and suggests ways to mitigate changes likely to be adverse from the point of view of an affected population. *Impacts* are the difference between a forecast of the future with the project or policy and without the project or policy. For example, the SIA might estimate the ability of a local hospital to respond to an earthquake, determine how housing availability for the elderly will change if a major new highway is built, or assess the impact on college admissions if students receive interest-free loans. Researchers who conduct SIAs often examine a range of social outcomes and work in an interdisciplinary research team to estimate the social outcomes. The outcomes include measuring "quality of life" issues, such as access to health care, illegal drug and alcohol use, employment opportunities, schooling quality, teen pregnancy rates, commuting time and traffic congestion, availability of parks and recreation facilities, shopping choices, viable cultural institutions, crime rates, interracial tensions, or social isolation. There is an international professional association for SIA research that advances SIA techniques and promotes SIA by governments, corporations, and other organizations.

Social impact assessments are rarely required, but a few governments mandate them. For example, in New South Wales, Australia, a registered club or hotel cannot increase the

number of poker machines unless the Liquor Administration Board in the Department Gaming and Racing approves an SIA for the club or hotel. The SIA enables the board to assess the likely local community impact from increasing the number of poker machines. The format includes a matrix that allows the board to identify the social and economic impacts, positive and negative, financial or nonfinancial, quantified or qualitative. In New Zealand, the Gambling Act of 2003 requires an SIA before expanding gambling. In one 2004 study in New Zealand for the Auckland City Council, it noted that 90 percent of New Zealand's adults gamble, 10 percent gamble regularly (once a week or more often), and about 1 percent are problem gamblers, although this varies by age, income, and ethnicity. The SIA recommended limiting the locations of new gambling venues, monitoring their usage, and tracing the amount of gambling revenues that are returned to the community in various ways (e.g., clubs, trusts, etc.). It contained a matrix with social (e.g, arrests, divorce, domestic violence), economic (e.g., unemployment, bankruptcy, tourism expansion), and cultural impacts (e.g., time away from other leisure activity) listed by their effect on all gamblers, problem gamblers, the local community, and the region.[10]

Purpose of a Study

If you ask someone why he or she is conducting a study, you might get a range of responses: "My boss told me to"; "It was a class assignment"; "I was curious"; "My roommate thought it would be a good idea." There are almost as many reasons to do research as there are researchers. Yet, the purposes of social research may be organized into three groups based on what the researcher is trying to accomplish—explore a new topic, describe a social phenomenon, or explain why something occurs. Studies may have multiple purposes (e.g., both to explore and to describe), but one of three major purposes is usually dominant (see Box 1.2).

Box 1.2 Purpose of Research

Exploratory

- Become familiar with the basic facts, setting, and concerns.
- Create a general mental picture of conditions.
- Formulate and focus questions for future research.
- Generate new ideas, conjectures, or hypotheses.
- Determine the feasibility of conducting research.
- Develop techniques for measuring and locating future data.

Descriptive

- Provide a detailed, highly accurate picture.
- Locate new data that contradict past data.
- Create a set of categories or classify types.
- Clarify a sequence of steps or stages.
- Document a causal process or mechanism.
- Report on the background or context of a situation.

Explanatory

- Test a theory's predictions or principle.
- Elaborate and enrich a theory's explanation.
- Extend a theory to new issues or topics.
- Support or refute an explanation or prediction.
- Link issues or topics with a general principle.
- Determine which of several explanations is best.

Exploration. Perhaps you have explored a new topic or issue in order to learn about it. If the issue was new or no researchers had written about it, you began at the beginning. In *exploratory research,* a researcher examines a new area to formulate precise questions that he or she can address in future research. Exploratory research may be the first stage in a sequence of studies. A researcher may need to conduct an exploratory study in order to know enough to design and execute a second, more systematic and extensive study. It addresses the "what?" question: "What is this social activity really about?"

Many higher-education officials are concerned about college students' low retention rates, especially students from minority-disadvantaged social backgrounds. For example, of Latinos who enroll in college, 80 percent leave without receiving a degree. Officials seek ways to reduce dropouts and increase the chances that students who begin college will stay until they earn a degree. Garza and Landeck (2004) conducted an exploratory study of over 500 Latino students at a college along the Texas–Mexico border who had dropped out. They wanted to learn the influencing factors and rationales in student decision making. The authors discovered that the primary factors and rationales were unrelated to teaching quality or university services. Instead, the students who dropped out had been overwhelmed by personal problems or had serious difficulties with family or job responsibilities. Such factors were a major reason given by over 80 percent of the students who dropped out.

Exploratory researchers tend to use qualitative data and not be wedded to a specific theory or research question. Exploratory research rarely yields definitive answers. If you conduct an exploratory study, you may get frustrated and feel it is difficult because there are few guidelines to follow. Everything is potentially important, the steps are not well defined, and the direction of inquiry changes frequently. You need to be creative, open-minded, and flexible; adopt an investigative stance; and explore all sources of information.

Description. Perhaps you have a more highly developed idea about a social phenomenon and want to describe it. *Descriptive research* presents a picture of the specific details of a situation, social setting, or relationship; it focuses on "how?" and "who?" questions: "How did it happen?" "Who is involved?" A great deal of social research is descriptive. Descriptive researchers use most data-gathering techniques—surveys, field research, content analysis, and historical-comparative research. Only experimental research is less often used. Much of the social research found in scholarly journals or used for making policy decisions is descriptive.

Descriptive and exploratory research often blur together in practice. In descriptive research, a researcher begins with a well-defined subject and conducts a study to describe it accurately and the outcome is a detailed picture of the subject. The results may indicate the percentage of people who hold a particular view or engage in specific behaviors—for example, that 8 percent of parents physically or sexually abuse their children. A descriptive study presents a picture of types of people or of social activities.

Stack, Wasserman, and Kern (2004) conducted a descriptive study on pornography use on the Internet by people in the United States. They found that the greatest users were those with weak social bonds. More specifically, the types of people who were adult users of pornography tended to be males with unhappy marriages and weak ties to organized religion. Pornography users were also more likely to have engaged in nonconventional sexual behavior (i.e., had an extramarital affair or engaged in paid sex) but not other forms of deviance, such as illegal drug use.

Explanation. When you encounter an issue that is well recognized and have a description of it, you might begin to wonder why things are the way they are. *Explanatory research* identifies the sources of social behaviors, beliefs, conditions, and events; it documents causes, tests theories, and provides reasons. It builds on exploratory

and descriptive research. For example, an exploratory study discovers a new type of abuse by parents; a descriptive researcher documents that 10 percent of parents abuse their children in this new way and describes the kinds of parents and conditions for which it is most frequent; the explanatory researcher focuses on why certain parents are abusing their children in this manner. Cherlin, Burton, Hurt, and Purvin (2004) explained instability in marriage or cohabitation using a woman's past experience with sexual or physical abuse. They tested the hypothesis that women with a history of abuse would be less likely marry than those without such histories. The authors reasoned that those who were abused have fewer social supports and resources to resist or avoid abusive partners, and they are more likely to harbor feelings of self-blame, guilt, and low self-esteem that inhibit the formation of healthy romantic relationships. An abusive experience also creates greater emotional distance and a hesitancy to make long-term commitments. Using quantitative and qualitative data gathered in low-income neighborhoods in three cities—Boston, Chicago, and San Antonio—they found that adult women who had experienced past abuse were less likely to be married, and those with multiple forms of abuse were most likely to remain single. It appears that women without a past history of abuse who found themselves in an abusive relationship as an adult were likely to withdraw from it, but women who had been abused as children were less likely to leave and tended to enter into a series of unstable, transitory relations.

Time Dimension in Research

An awareness of how a study uses the time dimension will help you read or conduct research. This is because different research questions or issues incorporate time differently. Some studies give a snapshot of a single, fixed time point and allow you to analyze it in detail (cross-sectional). Other studies provide a moving picture that lets you follow events, people, or social relations over several time points (longitudinal). Quantitative studies generally look at many cases, people, or units, and measure limited features about them in the form of numbers. By contrast, a qualitative study usually involves qualitative data and examines many diverse features of a small number of cases across either a short or long time period (see Figure 1.2).

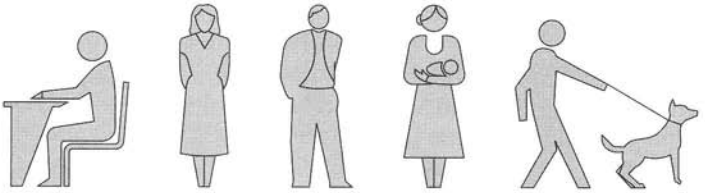
Cross-Sectional Research. Most social research studies are *cross-sectional;* they examine a single point in time or take a one-time snapshot approach. Cross-sectional research is usually the simplest and least costly alternative. Its disadvantage is that it cannot capture social processes or change. Cross-sectional research can be exploratory, descriptive, or explanatory, but it is most consistent with a descriptive approach to research. The descriptive study by Stack, Wasserman, and Kern (2004) on pornography use was cross-sectional, based on a national U.S. survey conducted in 2000.

Longitudinal Research. Researchers using *longitudinal research* examine features of people or other units at more than one time. It is usually more complex and costly than cross-sectional research, but it is also more powerful and informative. Descriptive and explanatory researchers use longitudinal approaches. Let us now look at the three main types of longitudinal research: time series, panel, and cohort.

Time-Series Study. A *time-series study* is longitudinal research in which a researcher gathers the same type of information across two or more time periods. Researchers can observe stability or change in the features of the units or can track conditions over time. The specific individuals may change but the overall pattern is clear. For example, there has been a nationwide survey of a large sample of incoming freshman students since 1966. Since it began, over 11 million students at more than 1,800 colleges participated. The fall 2003 survey of 276,449 students found many facts and trends, such as only 34 percent of

FIGURE 1.2 The Time Dimension in Social Research

CROSS-SECTIONAL: Observe a collection of people at one time.

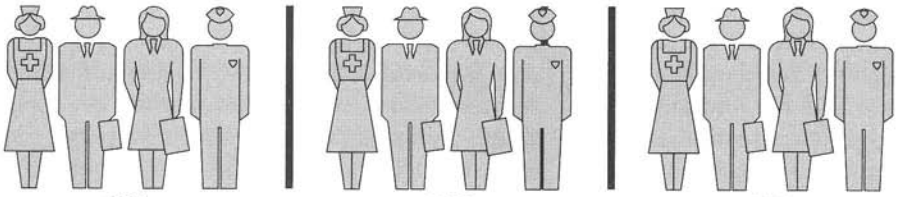


February 2007

TIME SERIES: Observe different people at multiple times.

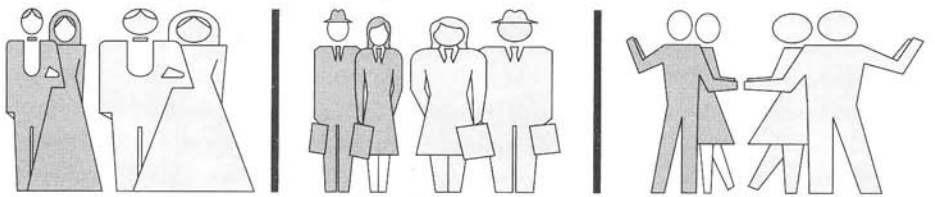
1950 1970 1990 2010

PANEL: Observe the exact same people at two or more times.



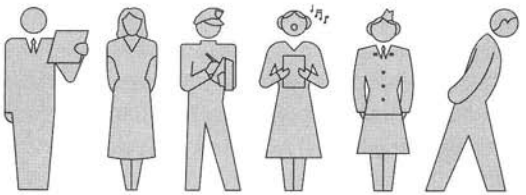
1986 1996 2006

COHORT: Observe people who shared an experience at two or more times.



Married in 1967 1987 2007

CASE STUDY: Observe a small set intensely across time.



2005 → 2007

entering freshmen studied six or more hours per week. This was the lowest level since the question was asked in 1987 (when it was 47 percent). Yet, alcohol consumption was down. In 2003, 44.8 percent reported drinking beer, which represented a steady decline from 73.7 percent in 1982. In 2003, freshmen were more interested in keeping up with politics. The 33.9 percent who said it was very important to stay politically informed was up from a low of 28.1 percent in 2000, and 22.5 percent said they discussed politics regularly, up from 19.4 percent in 2002 (which had been the highest since a low point in 1993). These figures are still far lower than the 60.3 percent who expressed an interest in politics in 1966, or the one-third who discussed politics regularly in 1968. The importance of family has steadily increased over the years, with 74.8 percent of students calling it essential or very important. This is up from the low point of 58.8 percent in 1977 when the question was first asked. However, religious involvement declined. The percentage of students who attended religious services regularly was at its lowest level in 35 years. In addition, the percent claiming "none" as a religious preference reached a record high of 17.6 percent, compared to a record low of 6.6 percent in 1966. Another trend over the past two decades has been a steady growth in opposition to the death penalty. Nearly one in three incoming students advocated ending capital punishment. This is the highest score since 1980 (when it was 33.2 percent), although the percent withholding an opinion was far higher earlier in time; it exceeded 60 percent in the 1970.[11]

Panel Study. The *panel study* is a powerful type of longitudinal research in which the researcher observes exactly the same people, group, or organization across multiple time points. It is more difficult to conduct than time-series research. Panel research is formidable to conduct and very costly. Tracking people over time is often difficult because some people die or cannot be located. Nevertheless, the results of a well-designed panel study are very valuable. Even short-term panel studies can clearly show the impact of a particular life event. For example, Oesterle, Johnson, and Mortimer (2004) examined panel data from a longitudinal study that began in 1988 with 1,000 ninth-grade students enrolled in the St. Paul, Minnesota, public school district and looked at volunteering activities during late adolescence and young adulthood, covering nine years from age 18–19 (1992) to age 26–27 (2000). They found that volunteering at an earlier stage strongly affected whether one volunteered at a later stage. Also, people who devoted full time to working or parenting at an earlier stage (18–19 years old) were less likely to volunteer at a later stage (26–27 years old) than those whose major activity was attending school.

Cohort Study. A *cohort study* is similar to a panel study, but rather than observing the exact same people, the study focuses on a category of people who share a similar life experience in a specified time period. Researchers examine the category as a whole for important features and focus on the cohort, or category, not on specific individuals. Commonly used cohorts include all people born in the same year (called *birth cohorts*), all people hired at the same time, and all people who graduate in a given year. Unlike panel studies, researchers do not have to find the exact same people for cohort studies; rather, they need only to identify those who experienced a common life event. In a study of Generation X in the United States, Andolina and Mayer (2003) focused on the cohort of people born between 1967 and 1974. They compared 10 birth cohorts at different time periods over several decades, tracing questions across 24 years. The authors found that White Xers are distinct in their support for school racial integration and for government action to enforce such efforts, compared to other birth cohorts, but not in their attitudes toward employment opportunities or affirmative action. Despite greater general support than other cohorts for equality through integration, it does not extend to issues beyond the schoolyard.

Case Studies. In cross-sectional and longitudinal research, a researcher examines features on many people or units, either at one time period or across time periods, and measures several common features on them, often using numbers. In *case-study research,* a researcher examines, in depth, many features of a few cases over a duration of time with very detailed, varied, and extensive data, often in a qualitative form. The researcher carefully selects a few key cases to illustrate an issue and study it (or them) in detail and considers the specific context of each case. This contrasts with other longitudinal studies in which the researcher gathers data on many units or cases, then looks for general patterns in the mass of numbers.

For example, Snow and Anderson (1992) conducted a case study on homeless people in Austin, Texas. It provided a wealth of details about the lives and conditions of homeless people, identified several types of homeless people, outlined the paths by which they became homeless, and discussed several processes that kept them homeless. This case study used many types of detailed qualitative and quantitative data, with exploratory, descriptive, and explanatory phases to reveal a great amount of unexpected and new information.[12]

Data Collection Techniques

Social researchers collect data using one or more specific techniques. This section gives you a brief overview of the major techniques. In later chapters, you will read about these techniques in detail and learn how to use them. Some techniques are more effective when addressing specific kinds of questions or topics. It takes skill, practice, and creativity to match a research question to an appropriate data collection technique. The techniques fall into two categories based on whether the data being gathered are quantitative or qualitative.

Quantitative Data Collection Techniques. Techniques for quantitative data collection include experiments, surveys, content analyses, and existing statistics.

Experiments. *Experimental research* closely follows the logic and principles found in natural science research; researchers create situations and examine their effects on participants. A researcher conducts experiments in laboratories or in real life with a relatively small number of people and a well-focused research question. Experiments are most effective for explanatory research. In the typical experiment, the researcher divides the people being studied into two or more groups. He or she then treats both groups identically, except that one group but not the other is given a condition he or she is interested in: the "treatment." The researcher measures the reactions of both groups precisely. By controlling the setting for both groups and giving only one group the treatment, the researcher can conclude that any differences in the reactions of the groups are due to the treatment alone.

Surveys. A *survey researcher* asks people questions in a written questionnaire (mailed or handed to people) or during an interview and then records answers. The researcher manipulates no situation or condition; he or she simply asks many people numerous questions in a short time period. Typically, he or she then summarizes answers to questions in percentages, tables, or graphs. Researchers use survey techniques in descriptive or explanatory research. Surveys give the researcher a picture of what many people think or report doing. Survey researchers often use a sample or a smaller group of selected people (e.g., 150 students), but generalize results to a larger group (e.g., 5,000 students) from which the smaller group was selected. Survey research is very widely used in many fields.

Content Analyses. *A content analysis* is a technique for examining information, or content, in written or symbolic material (e.g., pictures, movies, song lyrics, etc.). In content analysis, a

researcher first identifies a body of material to analyze (e.g., books, newspapers, films, etc.) and then creates a system for recording specific aspects of it. The system might include counting how often certain words or themes occur. Finally, the researcher records what was found in the material. He or she often measures information in the content as numbers and presents it as tables or graphs. This technique lets a researcher discover features in the content of large amounts of material that might otherwise go unnoticed. Researchers can use content analysis for exploratory and explanatory research, but primarily it is used for descriptive research.

Existing Statistics. In *existing statistics research,* a researcher locates previously collected information, often in the form of government reports or previously conducted surveys, then reorganizes or combines the information in new ways to address a research question. Locating sources can be time consuming, so the researcher needs to consider carefully the meaning of what he or she finds. Frequently, a researcher does not know whether the information of interest is available when he or she begins a study. Sometimes, the existing quantitative information consists of stored surveys or other data that a researcher reexamines using various statistical procedures. Existing statistics research can be used for exploratory, descriptive, or explanatory purposes, but it is most frequently used for descriptive research.

Qualitative Data Collection Techniques. Techniques for qualitative data collection include field research and historical-comparative research.

Field Research. Most field researchers conduct case studies looking at a small group of people over a length of time (e.g., weeks, months, years). A *field researcher* begins with a loosely formulated idea or topic, selects a social group or natural setting for study, gains access and adopts a social role in the setting, and observes in detail. The researcher gets to know personally the people being studied, may conduct open-ended and informal interviews, and takes detailed notes on a daily basis. After leaving the field site, the researcher carefully rereads the notes and prepares written reports. Field research is used most often for exploratory and descriptive studies; it is rarely used for explanatory research.

Historical-Comparative Research. Historical-comparative researchers examine aspects of social life in a past historical era or across different cultures. Researchers who use this technique may focus on one historical period or several, compare one or more cultures, or mix historical periods and cultures. Like field research, a researcher combines theory building/testing with data collection and begins with a loosely formulated question that is refined during the research process. Researchers often gather a wide array of evidence, including existing statistics and documents (e.g., novels, official reports, books, newspapers, diaries, photographs, and maps) for study. In addition, they may make direct observations and conduct interviews. Historical-comparative research can be exploratory, descriptive, or explanatory and can blend types.

CONCLUSION

This chapter gave you an overview of social research. You saw how social research differs from the ordinary ways of learning-knowing about the social world, how doing research is based on science and the scientific community, and about several types of social research based on its dimensions (e.g., its purpose, the technique used to gather data, etc.). The dimensions of research loosely overlap with each other. The dimensions of social research are a kind of "road map" to help you make your way through the terrain of social research. In the next chapter, we turn to social theory. You read about it a little in this chapter. In the next chapter, you will learn how

theory and research methods work together and about several types of theory.

Key Terms

action research study
applied social research
basic social research
case study
cohort study
cross-sectional research
data
descriptive research
empirical evidence
evaluation research study
existing statistics research
experimental research
explanatory research
exploratory research
field research
halo effect
historical comparative research
longitudinal research
overgeneralization
panel study
premature closure
qualitative data
quantitative data
scientific community
scientific method
selective observation
social impact assessment study
social research
survey research
time-series study

Endnotes

1. See Rampton and Stauber (2001:247–277 and 305–306).
2. See Best (2001:15) on advocates and media.
3. See National Science Board (2002:735–739).
4. Schacter (2001) provides a summary of memory issues.
5. National Science Board (2002:739).
6. Discussions of the scientific community can be found in Cole and Gordon (1995), Crane (1972), Hagstrom (1965), Merton (1973), Mulkay (1991), and Ziman (1999).
7. See Patton (2001) and Weiss (1997) for a more detailed discussion of recent advances in evaluation research.
8. Beck (1995) provides a useful overview.
9. See Herring and Ebner (2005) on the use of domestic violence study findings.
10. See Adams (2004) for more information on the Auckland City study.
11. See the website at www.gseis.ucla.edu/heri/heri.html.
12. Also see Snow and Anderson (1991) for a discussion of the case-study method in their study of homeless people. Also see George and Bennett (2005) on the case-study method generally.