

2 Sociological Research



Figure 2.1 Many believe that crime rates go up during the full moon, but scientific research does not support this conclusion. (Photo courtesy of Jubula 2/flickr)

Learning Objectives

2.1. Approaches to Sociological Research

- Define and describe the scientific method
- Explain how the scientific method is used in sociological research
- Understand the function and importance of an interpretive framework
- Define what reliability and validity mean in a research study

2.2. Research Methods

- Differentiate between four kinds of research methods: surveys, field research, experiments, and secondary data analysis
- Understand why different topics are better suited to different research approaches

2.3. Ethical Concerns

- Understand why ethical standards exist
- Demonstrate awareness of the American Sociological Association's Code of Ethics
- Define value neutrality

Introduction to Sociological Research

Have you ever wondered if home schooling affects a person's later success in college or how many people wait until they are in their forties to get married? Do you wonder if texting is changing teenagers' abilities to spell correctly or to communicate clearly? How do social movements like Occupy Wall Street develop? How about the development of social phenomena like the massive public followings for Star Trek and Harry Potter? The goal of research is to answer questions. Sociological research attempts to answer a vast variety of questions, such as these and more, about our social world.

We often have opinions about social situations, but these may be biased by our expectations or based on limited data. Instead, scientific research is based on **empirical evidence**, which is evidence that comes from direct experience, scientifically gathered data, or experimentation. Many people believe, for example, that crime rates go up when there's a full moon, but research doesn't support this opinion. Researchers Rotton and Kelly (1985) conducted a **meta-analysis** of research on the full moon's effects on behavior. Meta-analysis is a technique in which the results of virtually all previous studies on a specific subject are evaluated together. Rotton and Kelly's meta-analysis included thirty-seven prior studies on the effects of the full moon on crime rates, and the overall findings were that full moons are entirely unrelated to crime, suicide, psychiatric problems, and crisis center calls (cited in Arkowitz and Lilienfeld 2009). We may each know of an instance in which a crime happened during a full moon, but it was likely just a coincidence.

People commonly try to understand the happenings in their world by finding or creating an explanation for an occurrence. Social scientists may develop a **hypothesis** for the same reason. A hypothesis is a testable educated guess about predicted outcomes between two or more variables; it's a possible explanation for specific happenings in the social world and allows for testing to determine whether the explanation holds true in many instances, as well as among various groups or in different places. Sociologists use empirical data and the **scientific method**, or an interpretative framework, to increase understanding of societies and social interactions, but research begins with the search for an answer to a question.

2.1 Approaches to Sociological Research

When sociologists apply the sociological perspective and begin to ask questions, no topic is off limits. Every aspect of human behavior is a source of possible investigation. Sociologists question the world that humans have created and live in. They notice patterns of behavior as people move through that world. Using sociological methods and systematic research within the framework of the scientific method and a scholarly interpretive perspective, sociologists have discovered workplace patterns that have transformed industries, family patterns that have enlightened family members, and education patterns that have aided structural changes in classrooms.

The crime during a full moon discussion put forth a few loosely stated opinions. If the human behaviors around those claims were tested systematically, a police officer, for example, could write a report and offer the findings to sociologists and the world in general. The new perspective could help people understand themselves and their neighbors and help people make better decisions about their lives. It might seem strange to use scientific practices to study social trends, but, as we shall see, it's extremely helpful to rely on systematic approaches that research methods provide.

Sociologists often begin the research process by asking a question about how or why things happen in this world. It might be a unique question about a new trend or an old question about a common aspect of life. Once the sociologist forms the question, he or she proceeds through an in-depth process to answer it. In deciding how to design that process, the researcher may adopt a scientific approach or an interpretive framework. The following sections describe these approaches to knowledge.

The Scientific Method

Sociologists make use of tried and true methods of research, such as experiments, surveys, and field research. But humans and their social interactions are so diverse that these interactions can seem impossible to chart or explain. It might seem that science is about discoveries and chemical reactions or about proving ideas right or wrong rather than about exploring the nuances of human behavior.

However, this is exactly why scientific models work for studying human behavior. A scientific process of research establishes parameters that help make sure results are objective and accurate. Scientific methods provide limitations and boundaries that focus a study and organize its results.

The scientific method involves developing and testing theories about the world based on empirical evidence. It is defined by its commitment to systematic observation of the empirical world and strives to be objective, critical, skeptical, and logical. It involves a series of prescribed steps that have been established over centuries of scholarship.

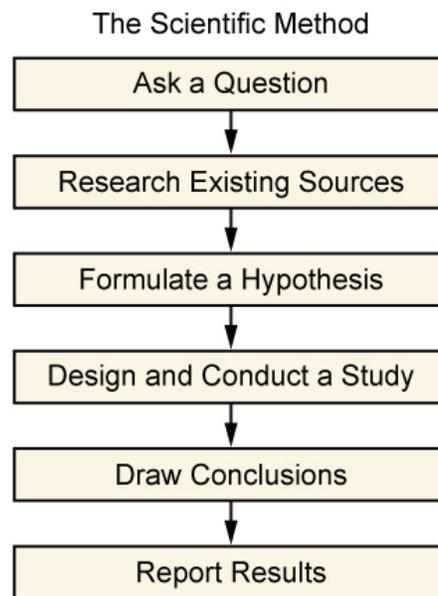


Figure 2.2 The scientific method is an essential tool in research.

But just because sociological studies use scientific methods does not make the results less human. Sociological topics are not reduced to right or wrong facts. In this field, results of studies tend to provide people with access to knowledge they did not have before—knowledge of other cultures, knowledge of rituals and beliefs, or knowledge of trends and attitudes. No matter what research approach they use, researchers want to maximize the study’s **reliability**, which refers to how likely research results are to be replicated if the study is reproduced. Reliability increases the likelihood that what happens to one person will happen to all people in a group. Researchers also strive for **validity**, which refers to how well the study measures what it was designed to measure. Returning to the crime rate during a full moon topic, reliability of a study would reflect how well the resulting experience represents the average adult crime rate during a full moon. Validity would ensure that the study’s design accurately examined what it was designed to study, so an exploration of adult criminal behaviors during a full moon should address that issue and not veer into other age groups’ crimes, for example.

In general, sociologists tackle questions about the role of social characteristics in outcomes. For example, how do different communities fare in terms of psychological well-being, community cohesiveness, range of vocation, wealth, crime rates, and so on? Are communities functioning smoothly? Sociologists look between the cracks to discover obstacles to meeting basic human needs. They might study environmental influences and patterns of behavior that lead to crime, substance abuse, divorce, poverty, unplanned pregnancies, or illness. And, because sociological studies are not all focused on negative behaviors or challenging situations, researchers might study vacation trends, healthy eating habits, neighborhood organizations, higher education patterns, games, parks, and exercise habits.

Sociologists can use the scientific method not only to collect but also to interpret and analyze the data. They deliberately apply scientific logic and objectivity. They are interested in—but not attached to—the results. They work outside of their own political or social agendas. This doesn't mean researchers do not have their own personalities, complete with preferences and opinions. But sociologists deliberately use the scientific method to maintain as much objectivity, focus, and consistency as possible in a particular study.

With its systematic approach, the scientific method has proven useful in shaping sociological studies. The scientific method provides a systematic, organized series of steps that help ensure objectivity and consistency in exploring a social problem. They provide the means for accuracy, reliability, and validity. In the end, the scientific method provides a shared basis for discussion and analysis (Merton 1963).

Typically, the scientific method starts with these steps—1) ask a question, 2) research existing sources, 3) formulate a hypothesis—described below.

Ask a Question

The first step of the scientific method is to ask a question, describe a problem, and identify the specific area of interest. The topic should be narrow enough to study within a geography and time frame. “Are societies capable of sustained happiness?” would be too vague. The question should also be broad enough to have universal merit. “What do personal hygiene habits reveal about the values of students at XYZ High School?” would be too narrow. That said, happiness and hygiene are worthy topics to study. Sociologists do not rule out any topic, but would strive to frame these questions in better research terms.

That is why sociologists are careful to define their terms. In a hygiene study, for instance, hygiene could be defined as “personal habits to maintain physical appearance (as opposed to health),” and a researcher might ask, “How do differing personal hygiene habits reflect the cultural value placed on appearance?” When forming these basic research questions, sociologists develop an **operational definition**, that is, they define the concept in terms of the physical or concrete steps it takes to objectively measure it. The operational definition identifies an observable condition of the concept. By operationalizing a variable of the concept, all researchers can collect data in a systematic or replicable manner.

The operational definition must be valid, appropriate, and meaningful. And it must be reliable, meaning that results will be close to uniform when tested on more than one person. For example, “good drivers” might be defined in many ways: those who use their turn signals, those who don't speed, or those who courteously allow others to merge. But these driving behaviors could be interpreted differently by different researchers and could be difficult to measure. Alternatively, “a driver who has never received a traffic violation” is a specific description that will lead researchers to obtain the same information, so it is an effective operational definition.

Research Existing Sources

The next step researchers undertake is to conduct background research through a **literature review**, which is a review of any existing similar or related studies. A visit to the library and a thorough online search will uncover existing research about the topic of study. This step helps researchers gain a broad understanding of work previously conducted on the topic at hand and enables them to position their own research to build on prior knowledge. Researchers—including student researchers—are responsible for correctly citing existing sources they use in a study or that inform their work. While it is fine to borrow previously published material (as long as it enhances a unique viewpoint), it must be referenced properly and never plagiarized.

To study hygiene and its value in a particular society, a researcher might sort through existing research and unearth studies about child-rearing, vanity, obsessive-compulsive behaviors, and cultural attitudes toward beauty. It's important to sift through this information and determine what is relevant. Using existing sources educates researchers and helps refine and improve studies' designs.

Formulate a Hypothesis

A **hypothesis** is an assumption about how two or more variables are related; it makes a conjectural statement about the relationship between those variables. In sociology, the hypothesis will often predict how one form of human behavior influences another. In research, **independent variables** are the *cause* of the change. The **dependent variable** is the *effect*, or thing that is changed.

For example, in a basic study, the researcher would establish one form of human behavior as the independent variable and observe the influence it has on a dependent variable. How does gender (the independent variable) affect rate of income (the dependent variable)? How does one's religion (the independent variable) affect family size (the dependent variable)? How is social class (the dependent variable) affected by level of education (the independent variable)?

Table 2.1 Examples of Dependent and Independent Variables Typically, the independent variable causes the dependent variable to change in some way.

Hypothesis	Independent Variable	Dependent Variable
The greater the availability of affordable housing, the lower the homeless rate.	Affordable Housing	Homeless Rate
The greater the availability of math tutoring, the higher the math grades.	Math Tutoring	Math Grades
The greater the police patrol presence, the safer the neighborhood.	Police Patrol Presence	Safer Neighborhood
The greater the factory lighting, the higher the productivity.	Factory Lighting	Productivity
The greater the amount of observation, the higher the public awareness.	Observation	Public Awareness

At this point, a researcher’s operational definitions help measure the variables. In a study asking how tutoring improves grades, for instance, one researcher might define a “good” grade as a C or better, while another uses a B+ as a starting point for “good.” Another operational definition might describe “tutoring” as “one-on-one assistance by an expert in the field, hired by an educational institution.” Those definitions set limits and establish cut-off points that ensure consistency and replicability in a study.

As the table shows, an independent variable is the one that causes a dependent variable to change. For example, a researcher might hypothesize that teaching children proper hygiene (the independent variable) will boost their sense of self-esteem (the dependent variable). Or rephrased, a child’s sense of self-esteem depends, in part, on the quality and availability of hygienic resources.

Of course, this hypothesis can also work the other way around. Perhaps a sociologist believes that increasing a child’s sense of self-esteem (the independent variable) will automatically increase or improve habits of hygiene (now the dependent variable). Identifying the independent and dependent variables is very important. As the hygiene example shows, simply identifying two topics, or variables, is not enough; their prospective relationship must be part of the hypothesis.

Just because a sociologist forms an educated prediction of a study’s outcome doesn’t mean data contradicting the hypothesis aren’t welcome. Sociologists analyze general patterns in response to a study, but they are equally interested in exceptions to patterns. In a study of education, a researcher might predict that high school dropouts have a hard time finding rewarding careers. While it has become at least a cultural assumption that the higher the education, the higher the salary and degree of career happiness, there are certainly exceptions. People with little education have had stunning careers, and people with advanced degrees have had trouble finding work. A sociologist prepares a hypothesis knowing that results will vary.

Once the preliminary work is done, it’s time for the next research steps: designing and conducting a study and drawing conclusions. These research methods are discussed below.

Interpretive Framework

While many sociologists rely on the scientific method as a research approach, others operate from an **interpretive framework**. While systematic, this approach doesn’t follow the hypothesis-testing model that seeks to find generalizable results. Instead, an *interpretive framework*, sometimes referred to as an interpretive perspective, seeks to understand social worlds from the point of view of participants, which leads to in-depth knowledge.

Interpretive research is generally more descriptive or narrative in its findings. Rather than formulating a hypothesis and method for testing it, an interpretive researcher will develop approaches to explore the topic at hand that may involve a significant amount of direct observation or interaction with subjects. This type of researcher also learns as he or she proceeds and sometimes adjusts the research methods or processes midway to optimize findings as they evolve.

2.2 Research Methods

Sociologists examine the world, see a problem or interesting pattern, and set out to study it. They use research methods to design a study—perhaps a detailed, systematic, scientific method for conducting research and obtaining data, or perhaps

an ethnographic study utilizing an interpretive framework. Planning the research design is a key step in any sociological study.

When entering a particular social environment, a researcher must be careful. There are times to remain anonymous and times to be overt. There are times to conduct interviews and times to simply observe. Some participants need to be thoroughly informed; others should not know they are being observed. A researcher wouldn't stroll into a crime-ridden neighborhood at midnight, calling out, "Any gang members around?" And if a researcher walked into a coffee shop and told the employees they would be observed as part of a study on work efficiency, the self-conscious, intimidated baristas might not behave naturally. This is called the **Hawthorne effect**—where people change their behavior because they know they are being watched as part of a study. The Hawthorne effect is unavoidable in some research. In many cases, sociologists have to make the purpose of the study known. Subjects must be aware that they are being observed, and a certain amount of artificiality may result (Sonnenfeld 1985).

Making sociologists' presence invisible is not always realistic for other reasons. That option is not available to a researcher studying prison behaviors, early education, or the Ku Klux Klan. Researchers can't just stroll into prisons, kindergarten classrooms, or Klan meetings and unobtrusively observe behaviors. In situations like these, other methods are needed. All studies shape the research design, while research design simultaneously shapes the study. Researchers choose methods that best suit their study topics and that fit with their overall approaches to research.

In planning studies' designs, sociologists generally choose from four widely used methods of social investigation: survey, field research, experiment, and **secondary data analysis**, or use of existing sources. Every research method comes with plusses and minuses, and the topic of study strongly influences which method or methods are put to use.

Surveys

As a research method, a **survey** collects data from subjects who respond to a series of questions about behaviors and opinions, often in the form of a questionnaire. The survey is one of the most widely used scientific research methods. The standard survey format allows individuals a level of anonymity in which they can express personal ideas.



Figure 2.3 Questionnaires are a common research method; the U.S. Census is a well-known example. (Photo courtesy of Kathryn Decker/flickr)

At some point, most people in the United States respond to some type of survey. The U.S. Census is an excellent example of a large-scale survey intended to gather sociological data. Not all surveys are considered sociological research, however, and many surveys people commonly encounter focus on identifying marketing needs and strategies rather than testing a hypothesis or contributing to social science knowledge. Questions such as, "How many hot dogs do you eat in a month?" or "Were the staff helpful?" are not usually designed as scientific research. Often, polls on television do not reflect a general population, but are merely answers from a specific show's audience. Polls conducted by programs such as *American Idol* or *So You Think You Can Dance* represent the opinions of fans but are not particularly scientific. A good contrast to these are the Nielsen Ratings, which determine the popularity of television programming through scientific market research.



Figure 2.4 American Idol uses a real-time survey system—with numbers—that allows members in the audience to vote on contestants. (Photo courtesy of Sam Howzit/flickr)

Sociologists conduct surveys under controlled conditions for specific purposes. Surveys gather different types of information from people. While surveys are not great at capturing the ways people really behave in social situations, they are a great method for discovering how people feel and think—or at least how they say they feel and think. Surveys can track preferences for presidential candidates or reported individual behaviors (such as sleeping, driving, or texting habits) or factual information such as employment status, income, and education levels.

A survey targets a specific **population**, people who are the focus of a study, such as college athletes, international students, or teenagers living with type 1 (juvenile-onset) diabetes. Most researchers choose to survey a small sector of the population, or a **sample**: that is, a manageable number of subjects who *represent* a larger population. The success of a study depends on how well a population is represented by the sample. In a **random sample**, every person in a population has the same chance of being chosen for the study. According to the laws of probability, random samples represent the population as a whole. For instance, a Gallup Poll, if conducted as a nationwide random sampling, should be able to provide an accurate estimate of public opinion whether it contacts 2,000 or 10,000 people.

After selecting subjects, the researcher develops a specific plan to ask questions and record responses. It is important to inform subjects of the nature and purpose of the study up front. If they agree to participate, researchers thank subjects and offer them a chance to see the results of the study if they are interested. The researcher presents the subjects with an instrument, which is a means of gathering the information. A common instrument is a questionnaire, in which subjects answer a series of questions. For some topics, the researcher might ask yes-or-no or multiple-choice questions, allowing subjects to choose possible responses to each question. This kind of **quantitative data**—research collected in numerical form that can be counted—are easy to tabulate. Just count up the number of “yes” and “no” responses or correct answers, and chart them into percentages.

Questionnaires can also ask more complex questions with more complex answers—beyond “yes,” “no,” or the option next to a checkbox. In those cases, the answers are subjective and vary from person to person. *How do you plan to use your college education? Why do you follow Jimmy Buffett around the country and attend every concert?* Those types of questions require short essay responses, and participants willing to take the time to write those answers will convey personal information about religious beliefs, political views, and morals. Some topics that reflect internal thought are impossible to observe directly and are difficult to discuss honestly in a public forum. People are more likely to share honest answers if they can respond to questions anonymously. This type of information is **qualitative data**—results that are subjective and often based on what is seen in a natural setting. Qualitative information is harder to organize and tabulate. The researcher will end up with a wide range of responses, some of which may be surprising. The benefit of written opinions, though, is the wealth of material that they provide.

An **interview** is a one-on-one conversation between the researcher and the subject, and it is a way of conducting surveys on a topic. Interviews are similar to the short-answer questions on surveys in that the researcher asks subjects a series of questions. However, participants are free to respond as they wish, without being limited by predetermined choices. In the back-and-forth conversation of an interview, a researcher can ask for clarification, spend more time on a subtopic, or ask additional questions. In an interview, a subject will ideally feel free to open up and answer questions that are often complex. There are no right or wrong answers. The subject might not even know how to answer the questions honestly.

Questions such as, “How did society’s view of alcohol consumption influence your decision whether or not to take your first sip of alcohol?” or “Did you feel that the divorce of your parents would put a social stigma on your family?” involve so many factors that the answers are difficult to categorize. A researcher needs to avoid steering or prompting the subject to respond in a specific way; otherwise, the results will prove to be unreliable. And, obviously, a sociological interview is

not an interrogation. The researcher will benefit from gaining a subject's trust, from empathizing or commiserating with a subject, and from listening without judgment.

Field Research

The work of sociology rarely happens in limited, confined spaces. Sociologists seldom study subjects in their own offices or laboratories. Rather, sociologists go out into the world. They meet subjects where they live, work, and play. **Field research** refers to gathering **primary data** from a natural environment without doing a lab experiment or a survey. It is a research method suited to an interpretive framework rather than to the scientific method. To conduct field research, the sociologist must be willing to step into new environments and observe, participate, or experience those worlds. In field work, the sociologists, rather than the subjects, are the ones out of their element.

The researcher interacts with or observes a person or people and gathers data along the way. The key point in field research is that it takes place in the subject's natural environment, whether it's a coffee shop or tribal village, a homeless shelter or the DMV, a hospital, airport, mall, or beach resort.

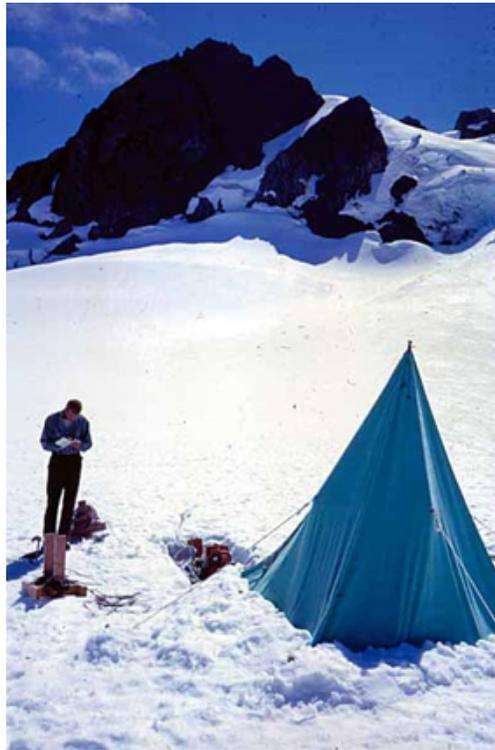


Photo Courtesy of Olympic National Park

Figure 2.5 Sociological researchers travel across countries and cultures to interact with and observe subjects in their natural environments. (Photo courtesy of IMLS Digital Collections and Content/flickr and Olympic National Park)

While field research often begins in a specific *setting*, the study's purpose is to observe specific *behaviors* in that setting. Field work is optimal for observing *how* people behave. It is less useful, however, for understanding *why* they behave that way. You can't really narrow down cause and effect when there are so many variables floating around in a natural environment.

Much of the data gathered in field research are based not on cause and effect but on **correlation**. And while field research looks for correlation, its small sample size does not allow for establishing a causal relationship between two variables.

Making Connections: Sociology in the Real World



Parrotheads as Sociological Subjects



Figure 2.6 Business suits for the day job are replaced by leis and T-shirts for a Jimmy Buffett concert. (Photo courtesy of Sam Howzitt/flickr)

Some sociologists study small groups of people who share an identity in one aspect of their lives. Almost everyone belongs to a group of like-minded people who share an interest or hobby. Scientologists, folk dancers, or members of Mensa (an organization for people with exceptionally high IQs) express a specific part of their identity through their affiliation with a group. Those groups are often of great interest to sociologists.

Jimmy Buffett, an American musician who built a career from his single top-10 song “Margaritaville,” has a following of devoted groupies called Parrotheads. Some of them have taken fandom to the extreme, making Parrothead culture a lifestyle. In 2005, Parrotheads and their subculture caught the attention of researchers John Mihelich and John Papineau. The two saw the way Jimmy Buffett fans collectively created an artificial reality. They wanted to know how fan groups shape culture.

What Mihelich and Papineau found was that Parrotheads, for the most part, do not seek to challenge or even change society, as many sub-groups do. In fact, most Parrotheads live successfully within society, holding upper-level jobs in the corporate world. What they seek is escape from the stress of daily life.

At Jimmy Buffett concerts, Parrotheads engage in a form of role play. They paint their faces and dress for the tropics in grass skirts, Hawaiian leis, and Parrot hats. These fans don’t generally play the part of Parrotheads outside of these concerts; you are not likely to see a lone Parrothead in a bank or library. In that sense, Parrothead culture is less about individualism and more about conformity. Being a Parrothead means sharing a specific identity. Parrotheads feel connected to each other: it’s a group identity, not an individual one.

In their study, Mihelich and Papineau quote from a recent book by sociologist Richard Butsch, who writes, “un-self-conscious acts, if done by many people together, can produce change, even though the change may be unintended” (2000). Many Parrothead fan groups have performed good works in the name of Jimmy Buffett culture, donating to charities and volunteering their services.

However, the authors suggest that what really drives Parrothead culture is commercialism. Jimmy Buffett’s popularity was dying out in the 1980s until being reinvigorated after he signed a sponsorship deal with a beer company. These days, his concert tours alone generate nearly \$30 million a year. Buffett made a lucrative career for himself by partnering with product companies and marketing Margaritaville in the form of T-shirts, restaurants, casinos, and an expansive line of products. Some fans accuse Buffett of selling out, while others admire his financial success. Buffett makes no secret of his commercial exploitations; from the stage, he’s been known to tell his fans, “Just remember, I am spending your money foolishly.”

Mihelich and Papineau gathered much of their information online. Referring to their study as a “Web ethnography,” they collected extensive narrative material from fans who joined Parrothead clubs and posted their experiences on websites. “We do not claim to have conducted a complete ethnography of Parrothead fans, or even of the Parrothead Web activity,” state the authors, “but we focused on particular aspects of Parrothead practice as revealed through Web

research” (2005). Fan narratives gave them insight into how individuals identify with Buffett’s world and how fans used popular music to cultivate personal and collective meaning.

In conducting studies about pockets of culture, most sociologists seek to discover a universal appeal. Mihelich and Papineau stated, “Although Parrotheads are a relative minority of the contemporary US population, an in-depth look at their practice and conditions illuminate [sic] cultural practices and conditions many of us experience and participate in” (2005).

Here, we will look at three types of field research: participant observation, ethnography, and the case study.

Participant Observation

In 2000, a comic writer named Rodney Rothman wanted an insider’s view of white-collar work. He slipped into the sterile, high-rise offices of a New York “dot com” agency. Every day for two weeks, he pretended to work there. His main purpose was simply to see whether anyone would notice him or challenge his presence. No one did. The receptionist greeted him. The employees smiled and said good morning. Rothman was accepted as part of the team. He even went so far as to claim a desk, inform the receptionist of his whereabouts, and attend a meeting. He published an article about his experience in *The New Yorker* called “My Fake Job” (2000). Later, he was discredited for allegedly fabricating some details of the story and *The New Yorker* issued an apology. However, Rothman’s entertaining article still offered fascinating descriptions of the inside workings of a “dot com” company and exemplified the lengths to which a sociologist will go to uncover material.

Rothman had conducted a form of study called **participant observation**, in which researchers join people and participate in a group’s routine activities for the purpose of observing them within that context. This method lets researchers experience a specific aspect of social life. A researcher might go to great lengths to get a firsthand look into a trend, institution, or behavior. Researchers temporarily put themselves into roles and record their observations. A researcher might work as a waitress in a diner, live as a homeless person for several weeks, or ride along with police officers as they patrol their regular beat. Often, these researchers try to blend in seamlessly with the population they study, and they may not disclose their true identity or purpose if they feel it would compromise the results of their research.



Figure 2.7 Is she a working waitress or a sociologist conducting a study using participant observation? (Photo courtesy of zoetnet/flickr)

At the beginning of a field study, researchers might have a question: “What really goes on in the kitchen of the most popular diner on campus?” or “What is it like to be homeless?” Participant observation is a useful method if the researcher wants to explore a certain environment from the inside.

Field researchers simply want to observe and learn. In such a setting, the researcher will be alert and open minded to whatever happens, recording all observations accurately. Soon, as patterns emerge, questions will become more specific, observations will lead to hypotheses, and hypotheses will guide the researcher in shaping data into results.

In a study of small towns in the United States conducted by sociological researchers John S. Lynd and Helen Merrell Lynd, the team altered their purpose as they gathered data. They initially planned to focus their study on the role of religion in U.S. towns. As they gathered observations, they realized that the effect of industrialization and urbanization was the more relevant topic of this social group. The Lynds did not change their methods, but they revised their purpose.

This shaped the structure of *Middletown: A Study in Modern American Culture*, their published results (Lynd and Lynd 1959).

The Lynds were upfront about their mission. The townspeople of Muncie, Indiana, knew why the researchers were in their midst. But some sociologists prefer not to alert people to their presence. The main advantage of covert participant observation is that it allows the researcher access to authentic, natural behaviors of a group's members. The challenge, however, is gaining access to a setting without disrupting the pattern of others' behavior. Becoming an inside member of a group, organization, or subculture takes time and effort. Researchers must pretend to be something they are not. The process could involve role playing, making contacts, networking, or applying for a job.

Once inside a group, some researchers spend months or even years pretending to be one of the people they are observing. However, as observers, they cannot get too involved. They must keep their purpose in mind and apply the sociological perspective. That way, they illuminate social patterns that are often unrecognized. Because information gathered during participant observation is mostly qualitative, rather than quantitative, the end results are often descriptive or interpretive. The researcher might present findings in an article or book and describe what he or she witnessed and experienced.

This type of research is what journalist Barbara Ehrenreich conducted for her book *Nickel and Dimed*. One day over lunch with her editor, as the story goes, Ehrenreich mentioned an idea. *How can people exist on minimum-wage work? How do low-income workers get by?* she wondered. *Someone should do a study.* To her surprise, her editor responded, *Why don't you do it?*

That's how Ehrenreich found herself joining the ranks of the working class. For several months, she left her comfortable home and lived and worked among people who lacked, for the most part, higher education and marketable job skills. Undercover, she applied for and worked minimum wage jobs as a waitress, a cleaning woman, a nursing home aide, and a retail chain employee. During her participant observation, she used only her income from those jobs to pay for food, clothing, transportation, and shelter.

She discovered the obvious, that it's almost impossible to get by on minimum wage work. She also experienced and observed attitudes many middle and upper-class people never think about. She witnessed firsthand the treatment of working class employees. She saw the extreme measures people take to make ends meet and to survive. She described fellow employees who held two or three jobs, worked seven days a week, lived in cars, could not pay to treat chronic health conditions, got randomly fired, submitted to drug tests, and moved in and out of homeless shelters. She brought aspects of that life to light, describing difficult working conditions and the poor treatment that low-wage workers suffer.

Nickel and Dimed: On (Not) Getting By in America, the book she wrote upon her return to her real life as a well-paid writer, has been widely read and used in many college classrooms.



Figure 2.8 Field research happens in real locations. What type of environment do work spaces foster? What would a sociologist discover after blending in? (Photo courtesy of drewzhrodge/flickr)

Ethnography

Ethnography is the extended observation of the social perspective and cultural values of an entire social setting. Ethnographies involve objective observation of an entire community.

The heart of an ethnographic study focuses on how subjects view their own social standing and how they understand themselves in relation to a community. An ethnographic study might observe, for example, a small U.S. fishing town, an Inuit community, a village in Thailand, a Buddhist monastery, a private boarding school, or an amusement park. These

places all have borders. People live, work, study, or vacation within those borders. People are there for a certain reason and therefore behave in certain ways and respect certain cultural norms. An ethnographer would commit to spending a determined amount of time studying every aspect of the chosen place, taking in as much as possible.

A sociologist studying a tribe in the Amazon might watch the way villagers go about their daily lives and then write a paper about it. To observe a spiritual retreat center, an ethnographer might sign up for a retreat and attend as a guest for an extended stay, observe and record data, and collate the material into results.

Institutional Ethnography

Institutional ethnography is an extension of basic ethnographic research principles that focuses intentionally on everyday concrete social relationships. Developed by Canadian sociologist Dorothy E. Smith, institutional ethnography is often considered a feminist-inspired approach to social analysis and primarily considers women's experiences within male-dominated societies and power structures. Smith's work is seen to challenge sociology's exclusion of women, both academically and in the study of women's lives (Fenstermaker, n.d.).

Historically, social science research tended to objectify women and ignore their experiences except as viewed from the male perspective. Modern feminists note that describing women, and other marginalized groups, as subordinates helps those in authority maintain their own dominant positions (Social Sciences and Humanities Research Council of Canada, n.d.). Smith's three major works explored what she called "the conceptual practices of power" (1990; cited in Fenstermaker, n.d.) and are still considered seminal works in feminist theory and ethnography.

Making Connections:

Sociological Research



The Making of *Middletown: A Study in Modern U.S. Culture*

In 1924, a young married couple named Robert and Helen Lynd undertook an unprecedented ethnography: to apply sociological methods to the study of one U.S. city in order to discover what "ordinary" people in the United States did and believed. Choosing Muncie, Indiana (population about 30,000), as their subject, they moved to the small town and lived there for eighteen months.

Ethnographers had been examining other cultures for decades—groups considered minority or outsider—like gangs, immigrants, and the poor. But no one had studied the so-called average American.

Recording interviews and using surveys to gather data, the Lynds did not sugarcoat or idealize U.S. life (PBS). They objectively stated what they observed. Researching existing sources, they compared Muncie in 1890 to the Muncie they observed in 1924. Most Muncie adults, they found, had grown up on farms but now lived in homes inside the city. From that discovery, the Lynds focused their study on the impact of industrialization and urbanization.

They observed that Muncie was divided into business class and working class groups. They defined *business class* as dealing with abstract concepts and symbols, while *working class* people used tools to create concrete objects. The two classes led different lives with different goals and hopes. However, the Lynds observed, mass production offered both classes the same amenities. Like wealthy families, the working class was now able to own radios, cars, washing machines, telephones, vacuum cleaners, and refrigerators. This was an emerging material new reality of the 1920s.

As the Lynds worked, they divided their manuscript into six sections: Getting a Living, Making a Home, Training the Young, Using Leisure, Engaging in Religious Practices, and Engaging in Community Activities. Each chapter included subsections such as "The Long Arm of the Job" and "Why Do They Work So Hard?" in the "Getting a Living" chapter.

When the study was completed, the Lynds encountered a big problem. The Rockefeller Foundation, which had commissioned the book, claimed it was useless and refused to publish it. The Lynds asked if they could seek a publisher themselves.

Middletown: A Study in Modern American Culture was not only published in 1929 but also became an instant bestseller, a status unheard of for a sociological study. The book sold out six printings in its first year of publication, and has never gone out of print (PBS).

Nothing like it had ever been done before. *Middletown* was reviewed on the front page of the *New York Times*. Readers in the 1920s and 1930s identified with the citizens of Muncie, Indiana, but they were equally fascinated by

the sociological methods and the use of scientific data to define ordinary people in the United States. The book was proof that social data was important—and interesting—to the U.S. public.



Figure 2.9 A classroom in Muncie, Indiana, in 1917, five years before John and Helen Lynd began researching this “typical” U.S. community. (Photo courtesy of Don O'Brien/flickr)

Case Study

Sometimes a researcher wants to study one specific person or event. A **case study** is an in-depth analysis of a single event, situation, or individual. To conduct a case study, a researcher examines existing sources like documents and archival records, conducts interviews, engages in direct observation and even participant observation, if possible.

Researchers might use this method to study a single case of, for example, a foster child, drug lord, cancer patient, criminal, or rape victim. However, a major criticism of the case study as a method is that a developed study of a single case, while offering depth on a topic, does not provide enough evidence to form a generalized conclusion. In other words, it is difficult to make universal claims based on just one person, since one person does not verify a pattern. This is why most sociologists do not use case studies as a primary research method.

However, case studies are useful when the single case is unique. In these instances, a single case study can add tremendous knowledge to a certain discipline. For example, a feral child, also called “wild child,” is one who grows up isolated from human beings. Feral children grow up without social contact and language, which are elements crucial to a “civilized” child’s development. These children mimic the behaviors and movements of animals, and often invent their own language. There are only about one hundred cases of “feral children” in the world.

As you may imagine, a feral child is a subject of great interest to researchers. Feral children provide unique information about child development because they have grown up outside of the parameters of “normal” child development. And since there are very few feral children, the case study is the most appropriate method for researchers to use in studying the subject.

At age three, a Ukrainian girl named Oxana Malaya suffered severe parental neglect. She lived in a shed with dogs, and she ate raw meat and scraps. Five years later, a neighbor called authorities and reported seeing a girl who ran on all fours, barking. Officials brought Oxana into society, where she was cared for and taught some human behaviors, but she never became fully socialized. She has been designated as unable to support herself and now lives in a mental institution (Grice 2011). Case studies like this offer a way for sociologists to collect data that may not be collectable by any other method.

Experiments

You’ve probably tested personal social theories. “If I study at night and review in the morning, I’ll improve my retention skills.” Or, “If I stop drinking soda, I’ll feel better.” Cause and effect. If this, then that. When you test the theory, your results either prove or disprove your hypothesis.

One way researchers test social theories is by conducting an **experiment**, meaning they investigate relationships to test a hypothesis—a scientific approach.

There are two main types of experiments: lab-based experiments and natural or field experiments. In a lab setting, the research can be controlled so that perhaps more data can be recorded in a certain amount of time. In a natural or field-based experiment, the generation of data cannot be controlled but the information might be considered more accurate since it was collected without interference or intervention by the researcher.

As a research method, either type of sociological experiment is useful for testing *if-then* statements: *if* a particular thing happens, *then* another particular thing will result. To set up a lab-based experiment, sociologists create artificial situations that allow them to manipulate variables.

Classically, the sociologist selects a set of people with similar characteristics, such as age, class, race, or education. Those people are divided into two groups. One is the experimental group and the other is the control group. The experimental group is exposed to the independent variable(s) and the control group is not. To test the benefits of tutoring, for example, the sociologist might expose the experimental group of students to tutoring but not the control group. Then both groups would be tested for differences in performance to see if tutoring had an effect on the experimental group of students. As you can imagine, in a case like this, the researcher would not want to jeopardize the accomplishments of either group of students, so the setting would be somewhat artificial. The test would not be for a grade reflected on their permanent record, for example.

Making Connections: Sociological Research



An Experiment in Action



Figure 2.10 Sociologist Frances Heussenstamm conducted an experiment to explore the correlation between traffic stops and race-based bumper stickers. This issue of racial profiling remains a hot-button topic today. (Photo courtesy of dwightsghost/flickr)

A real-life example will help illustrate the experiment process. In 1971, Frances Heussenstamm, a sociology professor at California State University at Los Angeles, had a theory about police prejudice. To test her theory she conducted an experiment. She chose fifteen students from three ethnic backgrounds: black, white, and Hispanic. She chose students who routinely drove to and from campus along Los Angeles freeway routes, and who'd had perfect driving records for longer than a year. Those were her independent variables—students, good driving records, same commute route.

Next, she placed a Black Panther bumper sticker on each car. That sticker, a representation of a social value, was the independent variable. In the 1970s, the Black Panthers were a revolutionary group actively fighting racism. Heussenstamm asked the students to follow their normal driving patterns. She wanted to see whether seeming support of the Black Panthers would change how these good drivers were treated by the police patrolling the highways. The dependent variable would be the number of traffic stops/citations.

The first arrest, for an incorrect lane change, was made two hours after the experiment began. One participant was pulled over three times in three days. He quit the study. After seventeen days, the fifteen drivers had collected a total of thirty-three traffic citations. The experiment was halted. The funding to pay traffic fines had run out, and so had the enthusiasm of the participants (Heussenstamm 1971).

Secondary Data Analysis

While sociologists often engage in original research studies, they also contribute knowledge to the discipline through **secondary data analysis**. Secondary data don't result from firsthand research collected from primary sources, but are the already completed work of other researchers. Sociologists might study works written by historians, economists, teachers, or early sociologists. They might search through periodicals, newspapers, or magazines from any period in history.

Using available information not only saves time and money but can also add depth to a study. Sociologists often interpret findings in a new way, a way that was not part of an author's original purpose or intention. To study how women were encouraged to act and behave in the 1960s, for example, a researcher might watch movies, television shows, and situation comedies from that period. Or to research changes in behavior and attitudes due to the emergence of television in the late 1950s and early 1960s, a sociologist would rely on new interpretations of secondary data. Decades from now, researchers will most likely conduct similar studies on the advent of mobile phones, the Internet, or Facebook.

Social scientists also learn by analyzing the research of a variety of agencies. Governmental departments and global groups, like the U.S. Bureau of Labor Statistics or the World Health Organization, publish studies with findings that are useful to sociologists. A public statistic like the foreclosure rate might be useful for studying the effects of the 2008 recession; a racial demographic profile might be compared with data on education funding to examine the resources accessible by different groups.

One of the advantages of secondary data is that it is **nonreactive research** (or unobtrusive research), meaning that it does not include direct contact with subjects and will not alter or influence people's behaviors. Unlike studies requiring direct contact with people, using previously published data doesn't require entering a population and the investment and risks inherent in that research process.

Using available data does have its challenges. Public records are not always easy to access. A researcher will need to do some legwork to track them down and gain access to records. To guide the search through a vast library of materials and avoid wasting time reading unrelated sources, sociologists employ **content analysis**, applying a systematic approach to record and value information gleaned from secondary data as they relate to the study at hand.

But, in some cases, there is no way to verify the accuracy of existing data. It is easy to count how many drunk drivers, for example, are pulled over by the police. But how many are not? While it's possible to discover the percentage of teenage students who drop out of high school, it might be more challenging to determine the number who return to school or get their GED later.

Another problem arises when data are unavailable in the exact form needed or do not include the precise angle the researcher seeks. For example, the average salaries paid to professors at a public school is public record. But the separate figures don't necessarily reveal how long it took each professor to reach the salary range, what their educational backgrounds are, or how long they've been teaching.

When conducting content analysis, it is important to consider the date of publication of an existing source and to take into account attitudes and common cultural ideals that may have influenced the research. For example, Robert S. Lynd and Helen Merrell Lynd gathered research for their book *Middletown: A Study in Modern American Culture* in the 1920s. Attitudes and cultural norms were vastly different then than they are now. Beliefs about gender roles, race, education, and work have changed significantly since then. At the time, the study's purpose was to reveal the truth about small U.S. communities. Today, it is an illustration of 1920s' attitudes and values.

2.3 Ethical Concerns

Sociologists conduct studies to shed light on human behaviors. Knowledge is a powerful tool that can be used toward positive change. And while a sociologist's goal is often simply to uncover knowledge rather than to spur action, many people use sociological studies to help improve people's lives. In that sense, conducting a sociological study comes with a tremendous amount of responsibility. Like any researchers, sociologists must consider their ethical obligation to avoid harming subjects or groups while conducting their research.

The American Sociological Association, or ASA, is the major professional organization of sociologists in North America. The ASA is a great resource for students of sociology as well. The ASA maintains a **code of ethics**—formal guidelines for conducting sociological research—consisting of principles and ethical standards to be used in the discipline. It also describes procedures for filing, investigating, and resolving complaints of unethical conduct.

Practicing sociologists and sociology students have a lot to consider. Some of the guidelines state that researchers must try to be skillful and fair-minded in their work, especially as it relates to their human subjects. Researchers must obtain participants' informed consent and inform subjects of the responsibilities and risks of research before they agree to partake. During a study, sociologists must ensure the safety of participants and immediately stop work if a subject becomes potentially endangered on any level.

Researchers are required to protect the privacy of research participants whenever possible. Even if pressured by authorities, such as police or courts, researchers are not ethically allowed to release confidential information. Researchers must make results available to other sociologists, must make public all sources of financial support, and must not accept funding from any organization that might cause a conflict of interest or seek to influence the research results for its own purposes. The ASA's ethical considerations shape not only the study but also the publication of results.

Pioneer German sociologist Max Weber (1864–1920) identified another crucial ethical concern. Weber understood that personal values could distort the framework for disclosing study results. While he accepted that some aspects of research design might be influenced by personal values, he declared it was entirely inappropriate to allow personal values to shape the interpretation of the responses. Sociologists, he stated, must establish **value neutrality**, a practice of remaining impartial, without bias or judgment, during the course of a study and in publishing results (1949). Sociologists are obligated to disclose research findings without omitting or distorting significant data.

Is value neutrality possible? Many sociologists believe it is impossible to set aside personal values and retain complete objectivity. They caution readers, rather, to understand that sociological studies may, by necessity, contain a certain amount of value bias. It does not discredit the results but allows readers to view them as one form of truth rather than a singular fact. Some sociologists attempt to remain uncritical and as objective as possible when studying cultural institutions. Value neutrality does not mean having no opinions. It means striving to overcome personal biases, particularly subconscious biases, when analyzing data. It means avoiding skewing data in order to match a predetermined outcome that aligns with a particular agenda, such as a political or moral point of view. Investigators are ethically obligated to report results, even when they contradict personal views, predicted outcomes, or widely accepted beliefs.

Chapter Review

Key Terms

case study: in-depth analysis of a single event, situation, or individual

code of ethics: a set of guidelines that the American Sociological Association has established to foster ethical research and professionally responsible scholarship in sociology

content analysis: applying a systematic approach to record and value information gleaned from secondary data as it relates to the study at hand

correlation: when a change in one variable coincides with a change in another variable, but does not necessarily indicate causation

dependent variables: a variable changed by other variables

empirical evidence: evidence that comes from direct experience, scientifically gathered data, or experimentation

ethnography: observing a complete social setting and all that it entails

experiment: the testing of a hypothesis under controlled conditions

field research: gathering data from a natural environment without doing a lab experiment or a survey

Hawthorne effect: when study subjects behave in a certain manner due to their awareness of being observed by a researcher

hypothesis: a testable educated guess about predicted outcomes between two or more variables

independent variables: variables that cause changes in dependent variables

interpretive framework: a sociological research approach that seeks in-depth understanding of a topic or subject through observation or interaction; this approach is not based on hypothesis testing

interview: a one-on-one conversation between the researcher and the subject

literature review: a scholarly research step that entails identifying and studying all existing studies on a topic to create a basis for new research

meta-analysis: a technique in which the results of virtually all previous studies on a specific subject are evaluated together

nonreactive research: using secondary data, does not include direct contact with subjects and will not alter or influence people's behaviors

operational definitions: specific explanations of abstract concepts that a researcher plans to study

participant observation: when a researcher immerses herself in a group or social setting in order to make observations from an "insider" perspective

population: a defined group serving as the subject of a study

primary data: data that are collected directly from firsthand experience

qualitative data: comprise information that is subjective and often based on what is seen in a natural setting

quantitative data: represent research collected in numerical form that can be counted

random sample: a study's participants being randomly selected to serve as a representation of a larger population

reliability: a measure of a study's consistency that considers how likely results are to be replicated if a study is reproduced

samples: small, manageable number of subjects that represent the population

scientific method: an established scholarly research method that involves asking a question, researching existing sources, forming a hypothesis, designing and conducting a study, and drawing conclusions

secondary data analysis: using data collected by others but applying new interpretations

surveys: collect data from subjects who respond to a series of questions about behaviors and opinions, often in the form of a questionnaire

validity: the degree to which a sociological measure accurately reflects the topic of study

value neutrality: a practice of remaining impartial, without bias or judgment during the course of a study and in publishing results

Section Summary

2.1 Approaches to Sociological Research

Using the scientific method, a researcher conducts a study in five phases: asking a question, researching existing sources, formulating a hypothesis, conducting a study, and drawing conclusions. The scientific method is useful in that it provides a clear method of organizing a study. Some sociologists conduct research through an interpretive framework rather than employing the scientific method.

Scientific sociological studies often observe relationships between variables. Researchers study how one variable changes another. Prior to conducting a study, researchers are careful to apply operational definitions to their terms and to establish dependent and independent variables.

2.2 Research Methods

Sociological research is a fairly complex process. As you can see, a lot goes into even a simple research design. There are many steps and much to consider when collecting data on human behavior, as well as in interpreting and analyzing data in order to form conclusive results. Sociologists use scientific methods for good reason. The scientific method provides a system of organization that helps researchers plan and conduct the study while ensuring that data and results are reliable, valid, and objective.

The many methods available to researchers—including experiments, surveys, field studies, and secondary data analysis—all come with advantages and disadvantages. The strength of a study can depend on the choice and implementation of the appropriate method of gathering research. Depending on the topic, a study might use a single method or a combination of methods. It is important to plan a research design before undertaking a study. The information

gathered may in itself be surprising, and the study design should provide a solid framework in which to analyze predicted and unpredicted data.

Table 2.2 Main Sociological Research Methods Sociological research methods have advantages and disadvantages.

Method	Implementation	Advantages	Challenges
Survey	<ul style="list-style-type: none"> Questionnaires Interviews 	<ul style="list-style-type: none"> Yields many responses Can survey a large sample Quantitative data are easy to chart 	<ul style="list-style-type: none"> Can be time consuming Can be difficult to encourage participant response Captures what people think and believe but not necessarily how they behave in real life
Field Work	<ul style="list-style-type: none"> Observation Participant observation Ethnography Case study 	<ul style="list-style-type: none"> Yields detailed, accurate real-life information 	<ul style="list-style-type: none"> Time consuming Data captures how people behave but not what they think and believe Qualitative data is difficult to organize
Experiment	<ul style="list-style-type: none"> Deliberate manipulation of social customs and mores 	<ul style="list-style-type: none"> Tests cause and effect relationships 	<ul style="list-style-type: none"> Hawthorne Effect Ethical concerns about people's wellbeing
Secondary Data Analysis	<ul style="list-style-type: none"> Analysis of government data (census, health, crime statistics) Research of historic documents 	<ul style="list-style-type: none"> Makes good use of previous sociological information 	<ul style="list-style-type: none"> Data could be focused on a purpose other than yours Data can be hard to find

2.3 Ethical Concerns

Sociologists and sociology students must take ethical responsibility for any study they conduct. They must first and foremost guarantee the safety of their participants. Whenever possible, they must ensure that participants have been fully informed before consenting to be part of a study.

The ASA maintains ethical guidelines that sociologists must take into account as they conduct research. The guidelines address conducting studies, properly using existing sources, accepting funding, and publishing results.

Sociologists must try to maintain value neutrality. They must gather and analyze data objectively and set aside their personal preferences, beliefs, and opinions. They must report findings accurately, even if they contradict personal convictions.

Section Quiz

2.1 Approaches to Sociological Research

- A measurement is considered _____ if it actually measures what it is intended to measure, according to the topic of the study.
 - reliable
 - sociological
 - valid
 - quantitative
- Sociological studies test relationships in which change in one _____ causes change in another.
 - test subject
 - behavior