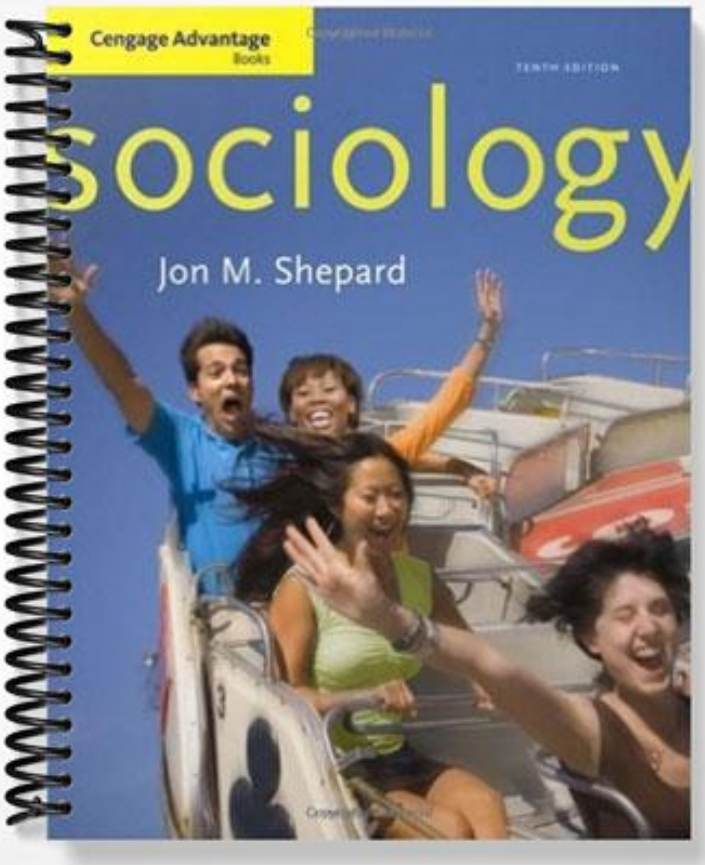
SOLUTIONS MANUAL



CHAPTER 2
SOCIAL RESEARCH

BRIEF CHAPTER OUTLINE

I. LEARNING OBJECTIVES

II. USING THE SOCIOLOGICAL IMAGINATION

III. SOURCES OF KNOWLEDGE
- A. Nonscientific Sources of Knowledge
  1. How do we know what we know?

IV. A MODEL FOR DOING RESEARCH
- A. Identifying the Problem
- B. Reviewing the Literature
- C. Formulating a Hypothesis
- D. Developing a Research Design
- E. Collecting Data
- F. Analyzing Data
- G. Using the Research Model
- H. Science as a Source of Knowledge
  1. Objectivity
  2. Can scientists be objective?
  3. How to reduce subjectivity
  4. Verifiability

V. CAUSATION AND THE LOGIC OF SCIENCE
- A. The Nature of Causation
  1. Causation
  2. Multiple causation
- B. Causation and Variables
  1. How are variables related to causation?
  2. Correlation
  3. Criteria for causal relationships
- C. The Experiment as a Model
  1. Experiment
  2. Experimental and control groups

VI. QUANTITATIVE RESEARCH METHODS
- A. Survey Research
  1. Conduct of effective surveys
  2. Representative samples
  3. Information gathering
  4. Advantages and disadvantages of closed-ended survey research
- B. Precollected Data
  1. Types of precollected data
  2. Advantages and disadvantages of precollected data

VII. QUALITATIVE RESEARCH METHODS
- A. Field Research
  1. Case study
  2. Participant observation
  3. Advantages and disadvantages of field studies
- B. The Subjective Approach
  1. Ethnomethodology
  2. How do ethnomethodologists reveal individuals' sense of social reality?

VIII. ETHICS IN SOCIAL RESEARCH
- A. The Issue of Ethics
- B. A Code of Ethics in Sociological Research
  1. Did Humphreys violate the code of ethics?
  2. Do ethical concerns make research harder?

IX. A FINAL NOTE
- A. Reliability, Validity, and Replication
  1. Other important research considerations
  2. Reliability
  3. Validity
  4. Replication

LEARNING OBJECTIVES

After careful study of this chapter, students should be able to do the following:

1. Identify major nonscientific sources of knowledge; explain how science differs and why it is an important source of knowledge.
2. Explain the steps sociologists use to guide their research and why each is important.
3. Be able to apply the vocabulary of sociological research: population, sample, verifiability, types of variables, and operational definition. Define basic statistical measures: mean, median, mode, and average.
4. Discuss objectivity; how possible and desirable is it within sociological research.
5. Explain causation, multiple causation, and the criteria necessary to establish causation.
6. Define quantitative, and differentiate the major quantitative research methods used by sociologists.
7. Define qualitative, and describe the major qualitative research methods used by sociologists.
8. Understand different types of variables: independent, dependent, and intervening.
9. Explain correlations, positive and negative, and spurious correlations.
10. Discuss how an experiment is a useful demonstration of how causation is determined.
11. Define randomization, how it is achieved, and why it is important.
12. Compare and contrast the advantages and disadvantages of open-ended and closed-ended questions.
13. Describe the role of ethics in research.
14. State the importance of reliability, validity, and replication in social research.
15. Describe the relationship between theory and research.

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ASA RECOMMENDATIONS

4. Departments should **infuse the empirical base of sociology** throughout the curriculum, giving students exposure to research opportunities across several methodological traditions, providing repeated experiences in posing sociological questions, developing theoretical explanations, and bringing data to bear on them.

5. Departments should structure the curriculum of required major courses and substantive elective courses to have at least four levels with appropriate prerequisites. At each succeeding level, courses should increase in both depth and integration in the major while providing multiple **opportunities for students to develop higher-order thinking skills and to improve their written and oral communication skills.**

6. Within this four-level model, departments should also structure the curriculum to include one or more content areas of substantive sequences which cut across two or more levels of the curriculum. Departments should design sequences to **develop students' skills in empirical and theoretical analysis** along with their knowledge about one or more specialty areas within sociology.

7. Departments should structure the curriculum to **develop students' sociological literacy** by ensuring that they take substantive courses at the heart of the discipline as well as across the breadth of the field.

DETAILED CHAPTER OUTLINE

I. LEARNING OBJECTIVES

II. USING THE SOCIOLOGICAL IMAGINATION

III. SOURCES OF KNOWLEDGE
ASA Recommendations 4, 5, & 6

A. Nonscientific Sources of Knowledge – Motivated reasoning keeps us from being open to new information. We tend to accept information consistent with prior beliefs, and reject that which is inconsistent. Science promotes the use of reasoning instead of emotion in evaluation information.

1. How do we know what we know? – Nonscientific sources of knowledge are intuition, common sense, authority, and tradition. Intuition is quick insight, common sense refers to widely held beliefs, an authority is someone who supposedly has more knowledge than we do, and tradition is a belief in how things have always been. All of these may involve motivated reasoning.

IV. A MODEL FOR DOING RESEARCH
ASA Recommendations 4, 6, & 7

A. Identifying the Problem –The first step in doing research is to choose a topic for investigation. Topics may come from personal interest, or have relevance outside the researcher's own experience.

B. Reviewing the Literature – Once a topic is selected the research reviews any relevant theories or previous research relevant to that topic.

C. Formulating a Hypothesis – More than one hypothesis may be developed that explains the expected relationship among the variables. Hypotheses must be testable statements. Operational definitions of the variables make abstract concepts measurable.

D. Developing a Research Design – A research design describes the procedures that will be used to collect and analyze data. The research design states the population under investigation, and describes what sample or subset of the population will be used. A sample is a limited number of cases drawn from the population and must be selected so that it has the same characteristics as the population.

E. Collecting Data – Data is collected by asking people questions, observing behavior, and analyzing existing materials and records.

F. Analyzing Data – Data is analyzed to determine whether the hypothesis is supported. Since the same data may be interpreted in different ways, the researchers must be alert to their own potential for bias.

G. Using the Research Model – While these steps provide the model for doing scientific research, they are not followed rigidly or mechanically. Even when sociologists appear not to follow these steps they still have the research model in mind. The same process is used to evaluate research reports.

H. Science as a Source of Knowledge

1. Objectivity – Scientists are expected to keep their own biases from influencing their research. Data should be evaluated on the basis of its merits only. This is what Weber meant by doing value-free research.

2. Can scientists be objective? – Researchers are sometimes accused of letting their personal biases influence their work. An example is Alfred Kinsey, a sex researcher who has been accused of having an ideological agenda based on his own sexual preferences. Some, like historian Howard Zinn, argue that complete neutrality is impossible; all the steps in the research process involve choices that may unconsciously be affected by personal preferences.

3. How to reduce subjectivity – According to Zinn, subjectivity in research is reduced if researchers strive for the truth and follow safeguards such as reexamining their thinking, allowing contradictory evidence to alter their view, and making public any evidence that is contrary to their own ideas. Some like Gunnar Myrdal argue that researchers must not only recognize their own biases, they must also make them public.

4. Verifiability – Researchers are expected to detail their research methods so that a study may be repeated by other scientists. Research repeated using the same methods should yield the same results, or the original findings will be questioned.

V. CAUSATION AND THE LOGIC OF SCIENCE

ASA Recommendations 4, 6, & 7

A. The Nature of Causation

1. Causation – According to causation, events occur in predictable ways, with one event leading to another. Scientists assume causation and attempt to discover the factors that cause events to occur.

2. Multiple causation – When an event occurs as a result of several factors operating in combination, it is said to have multiple causation. Most events are too complex to be explained by a single factor.

B. Causation and Variables

1. How are variables related to causation? – Variables are characteristics that are subject to change, or occur in varying degrees. Those that may be measured and given a numerical value are called quantitative variables; those that differ in kind rather than number are called qualitative variables. Income and literacy rates are examples of quantitative variables; marital status and group membership are qualitative. Independent variables are those that cause something to occur. Dependent variables are those in which a change is observed. If hunger is thought to lead to crime, hunger is the independent

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variable and crime is the dependent variable. An intervening variable influences the relationship between the independent and dependent variables.

2. Correlation – When two or more variables are related in such a way so that a change in one is associated with a change, positively or negatively, in the other. A positive correlation exists when both variables change in the same direction (e.g., study time increases and grades improve). A negative correlation exists when an increase in the independent variable is linked to a decrease in the dependent variable.

3. Criteria for causal relationships – Three standards are generally used to establish causality: the variables must be correlated, all possible contaminating factors must be taken into account, and a change in the independent variable must occur before a change in the dependent variable can occur. When two unrelated variables have a high correlation this is termed a spurious correlation. Lack of church attendance does not cause delinquency. Both church attendance and delinquency are related to age; the correlation between them is spurious.

C. The Experiment as a Model – Although they are not often used by sociologists, experiments provide an excellent model for demonstrating causation.

1. Experiment – Experiments are conducted in such a way as to prevent any possible contaminating factors. The components of an experiment are a pretest and posttest, an experimental variable and experimental group, and a control group. The control group is a control for contaminating variables and is not exposed to the experimental variable. If the experimental and control groups have the same characteristics and the pretest and posttest are the same, any difference in outcomes for the two groups may be explained by the application of the experimental variable.

2. Experimental and control groups – In order to trust the results of an experiment, the experimental and control groups must be comparable. This may be achieved by matching participants in pairs and assigning one to each group. Alternately, randomization assigns subjects to groups based on chance. Randomization is preferable to matching.

VI. QUANTITATIVE RESEARCH METHODS

ASA Recommendations 4, 6, & 7

A. Survey Research – Survey research is ideal for large numbers of people and is widely used by sociologists. A survey asks people to answer the same series of questions.

1. Conduct of effective surveys – Effective surveys have carefully selected respondents and carefully formulated questions.

2. Representative samples – Representative samples rely on randomization. In a random sample all members are selected on the basis of chance, so each member has an equal possibility of being a member of the sample. Random samples may be drawn by hand or using tables of random numbers. For greater precision, a stratified random sample is used; this divides the population into categories and then selects randomly from each category.

3. Information gathering – Surveys gather information using questionnaires, or written sets of questions, or in an interview during which an interviewer asks the questions. Both types of surveys may use open- or closed-ended questions. Closed-ended questions have predetermined responses from which respondents must choose. Open-ended questions permit the respondent to answer in his or her own words. These questions are much more difficult to quantify.

4. Advantages and disadvantages of closed-ended survey research – Closed-ended questions yield responses that are easily compared and lend themselves to the use of statistical techniques. Closed-ended surveys permit data collection from very large samples, more detailed analysis, and a large number of variables, all of which is more

easily quantified. Disadvantages of survey research include expense due to the large sample size and a low response rate, especially for mailed questionnaires. Nonresponses in both questionnaires and interviews may make surveys biased. The way in which questions are asked may also introduce bias. Closed-ended questions force respondents to choose and prevent the collection of unanticipated information. Surveys do not permit researchers to probe the context for the behavior being studies. The researcher's unintentional behavior may influence the results they obtain if participants think they detect clues as to what the study is trying to find. This is termed the Hawthorne effect.

B. Precollected Data – The use of previously collected information is called secondary analysis. This is the method Emile Durkheim used in his classic study of suicide.

1. Types of precollected data – Sources of precollected data are government reports, company documents, voting and prison records, vital statistics, and information gathered by other social scientists. The U.S. Census Bureau collects information on the total population and is an important source of precollected data for sociologists. The U.S. Department of Labor is another important source, collecting information on income and employment levels.

2. Advantages and disadvantages of precollected data – Existing sources are an inexpensive source of high-quality information. They permit the study of a topic over a long period of time, and because the data has been collected by others it is not subject to the researcher's bias. Disadvantages of precollected data are that it may not fit a researcher's needs precisely, may have been collected in a way that biased the information, and may be too old to be considered valid.

VII. QUALITATIVE RESEARCH METHODS

ASA Recommendations 4, 6, & 7

A. Field Research – Field research is appropriate when behavior must be understood within a natural setting, and may not be measured quantitatively.

1. Case study – A case study is the thorough investigation of a single group, community, or incident. It is the most popular type of field research and may involve observation, using of existing data, and surveys, as well as interviews with informants. The researcher must identify factors that make the case unique and therefore not applicable to similar situations.

2. Participant observation – In participant observation, the researcher becomes a part of the group being studied. This participation may be overt if the researcher reveals his or herself as a sociologist, or covert if that knowledge is kept from the group.

3. Advantages and disadvantages of field studies – Advantages of field studies include depth and breadth of understanding gained, the inclusion of unique insights from the people involved, and adaptability of the research to changing conditions. Field study may be possible in situations in which surveys would be impossible or risk bias. Disadvantages are that field studies may not be generalizable to similar situations, and a lack of precise measurement devices leaves the researcher open to personal judgment and interpretation. Field studies are difficult to duplicate. The results of field studies are often further investigated using quantitative methods.

B. The Subjective Approach – The subjective approach within sociology has its roots in the Weber's method of *verstehen*, the process of imagining oneself in another's place. This approach seeks to ascertain the subjective interpretations of the participants themselves.

1. Ethnomethodology – Ethnomethodology is a subjective approach that attempts to uncover routine social behavior that people expect of themselves and others in daily life. Ethnomethodology attempts to make obvious the taken-for-granted meanings and expectations for behavior in social situations.

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2. How do ethnomethodologists reveal individuals' sense of social reality? – Harold Garfinkel, a leading ethnomethodologist, advocates disrupting people's routines, and depriving them of their mental maps for expected behavior. The ethnomethodologist learns by observing how people go about reconstructing a coherent picture of social reality.

VIII. ETHICS IN SOCIAL RESEARCH

ASA Recommendations 5 & 7

A. The Issue of Ethics – Although principles for conducting research exist, they are not always followed. Nazi doctors conducted sadistic experiments in concentration camps, the U.S. government deliberately withheld treatment for African American sharecroppers with syphilis in order to study the disease, and the U.S. military funded research that intentionally exposed patients to radiation. These are severe violations of ethics. Placing subjects in stressful situations, neglecting to get informed consent, and plagiarism are also violations of research ethics.

B. A Code of Ethics in Sociological Research – The formal code of ethics for sociologists covers relationships between researchers and students, employers, and employees that extend beyond the research process. Research ethics include: protections of rights, privacy, integrity, dignity, and autonomy of the research subjects, in addition to objectivity, high research standards, and accurate reporting.

1. Did Humphreys violate the code of ethics? – Laud Humphreys used covert methods to obtain personal information about men he had observed engaging in homosexual acts in a public bathroom. By being covert, Humphreys denied the research subjects the opportunity to refuse to participate, and his written records placed the men he observed at risk of public exposure. Despite his use of covert methods, Humphreys did protect the identity of his subjects, to the extent of allowing himself to be arrested.

2. Do ethical concerns make research harder? – Ethical concerns often do make research harder, and it is the researcher's responsibility to make moral decisions to balance the interests of the subjects with the need to gather accurate and timely data. Even the most outspoken of critics of ethics violations argues for disguised observation on occasion. The essential point is that care must be taken to balance the various needs and protect subjects from harm.

IX. A FINAL NOTE

ASA Recommendations 4, 6, & 7

A. Reliability, Validity, and Replication

1. Other important research considerations – In addition to applying the scientific method and respecting the need for research ethics, researchers must pay attention to the quality of their measurement devices by emphasizing reliability and validity.

2. Reliability – A measurement technique is considered reliable if it produces consistent results when applied repeatedly. If the same questionnaire, administered to the same subjects at different times yields the same results, it is considered reliable. A technique may be reliable and not be valid.

3. Validity – When a measurement technique measures what it is designed to measure, it is considered valid. Questions intended to measure parental satisfaction with child care may, in fact, be a better indicator of the parents' need to feel positive about leaving their children with others during the day. Measurement techniques do not always measure what they intend to. They may be reliable without having validity.

4. Replication – Duplicating a study in order to determine its accuracy is related to reliability and validity. Failure to duplicate the results of an earlier study, using the same methods, may highlight problems with validity and reliability. Replication promotes the accumulation of knowledge over time. The importance of research results lies in their

ability to either verify or challenge sociological theory. There is a reciprocal relationship between theory and research.

CLASS ACTIVITIES

1. Give students a list of things they might "know" about; this should be very abstract. What do they know about patterns of marriage and divorce, who is most likely to be a delinquent, and how people behave in times of disaster. Ask students to write what they think they know, and how they know it. Specifically, where did the information they have listed come from? Present students with some of the data related to the items you listed. Ask them to compare their prior knowledge with sociological knowledge. When it is different, what can the differences be attributed to?

2. Design a study with the class in order to demonstrate each step of the process. Divide the class into small groups. Give each group a research question. Using the seven steps involved in research design, ask each group to design a study. During the analysis step, instruct them to assume their hypotheses are confirmed by the data. Ask them to draw conclusions from them. Ask each group to present their design, findings, and conclusions for the class to critique.

3. Bring some current research papers to class and ask the class to break them down into their basic steps in Shepard's seven-step model. At the end of the discussion, ask the students to predict any potential problems with the methods, interpretation, or the ethics of the research.

4. Discuss Laud Humphreys's "Tearoom Trade." Ask the students to evaluate it with regard to the ethics involved in the research. What potential ethical problems are associated with research using qualitative methods? Is there any way a topic like this can be studied according to good ethical standards?

5. Give students a list of possible research topics. For each topic, ask them to identify which research method would be most appropriate for gathering data. Make sure your list mixes topics that require different sources of information (e.g., birth rate for their home community, reasons why students don't vote, whether teachers deliver unintentional sexist messages). Ask students to explain the advantages and disadvantages of the research methods they assign to the topics. Explain that each method is a compromise, so researchers are forced to choose methods whose weaknesses are minimal in a particular research situation.

TEACHING SUGGESTIONS

1. Give students a scenario, preferably something that will seem familiar to them (e.g., a roommate comes storming into their room, an instructor is acting very irritable and unpredictable). Ask students to explain what they believe might be going on in these situations. Explain that, in essence, the students are theorizing—using a set of propositions to explain social behavior. What is the importance of theory? Theory shapes how a situation will be understood. Illustrate the importance of a theoretical perspective by determining the types of questions that might be applied to the situations you've presented. Use different questions to demonstrate how questions drive the explanations.

2. Note to the instructor: This lecture consists of a demonstration testing a hypothesis derived from Durkheim's theory of suicide. Besides demonstrating the research process, it provides opportunities

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for discussion regarding the logic of correlation and causation. Because it uses macro-level ecological data, it also allows discussion of issues such as the ecological fallacy committed by Durkheim. If the instructor has the appropriate IBM compatible computer and audio/visual equipment for projection of a computer screen in the classroom, this lecture works extremely well using Showcase Presentational Software available from Microcase Corporation, Bellevue, WA.

Durkheim's Theory of Suicide: A Model for Real Research

Step 1: The Problem
Suppose we were interested in doing some research on suicide. Through the reading we have done about Durkheim's study of suicide, we already know about some of the relevant issues. If we were to do some more reading about Durkheim, we would be able to put suicide in an even larger social context for our study.

Step 2: Review of the Literature
In *The Division of Labor in Society*, Durkheim's model of society stated that each society progresses from a state of mechanical solidarity (common values and beliefs) to that of organic solidarity (economic interdependence). As the mechanical solidarity foundation begins to lose its vigor, the amount of deviant behavior is likely to increase. Why does this happen? As we move away from mechanical solidarity, anomie increases and more deviance occurs. That's why we have such a proliferation of written law and codes as societies modernize.

What does it mean for a society when anomie increases? What is anomie? Anomie is simply a state in which previously accepted norms are no longer sufficient to bind people to normative behavior. According to Durkheim, the norms of society not only help to regulate people, but to integrate them into society. When people are not integrated into society and regulated by society sufficiently, deviant behavior (including suicide) is likely to increase.

Step 3: Formulate Hypotheses
Suppose Durkheim was here today and hypothesized that religion was the institution whose primary function was to regulate (through promoting a certain morality) and to integrate people socially through religious rituals and social activities. Because this integration and regulation decreases the amount of deviance, religion tends to have the effect of diminishing the suicide rate of a society. Combining this with his previous work on suicide, we could generate a testable hypothesis. This hypothesis would state the following:

Hypothesis: Religious participation in a society diminishes the likelihood of suicide.

Step 4: Develop a Research Design
How could we test this hypothesis? If we are to follow Durkheim and his macro approach, we need to obtain information about suicide rates and rates of church membership and see if they are correlated. If we find a negative correlation between church membership and suicide rates it would support our hypothesis that religion would tend to decrease the likelihood of suicide.

Step 5: Collect Data
In this case, we can do what Durkheim did by using precollected data on suicide rates. We have data on suicide and church membership rates by state compiled by Microcase Corporation. The suicide rates are expressed in the number of suicides per 100,000 population, while the church membership rates are expressed in the number of church members per 1,000 population.

Step 6: Analyze Data
We can analyze this by computing a correlation between church membership and suicide rates. The correlation between church membership and suicide rates is -.58 ($p < .O1$), suggesting that suicide rates diminish as church membership rates increase. (Note: This provides an excellent opportunity to engage in further discussion of the concepts of correlation and causation if it has not been addressed previously.) Let's look at the states with the highest and lowest church membership rates and see their suicide rates.

Ch. Memb. **Highest C.M.**	Ch. Memb Rate	Suicide Rank	Suicide Rate	Rank
Rhode Island	775	1	11.2	34
Mississippi	771	2	9.2	47
Louisiana	769	3	12.1	24
Utah	756	4	13.2	13
North Dakota	742	5	11.0	37
Lowest C.M.				
California	368	45	14.5	10
Oregon	365	46	14.6	9
Hawaii	337	47	NA	NA
Washington	317	48	13.3	12
Alaska	315	49	16.9	4
Nevada	311	50	22.9	1

Step 7: Conclusions
The states with high rates of church membership tend to have lower rates of suicide. Even more convincing are the high rates of suicide among the states that have the lowest rates of church membership. This gives us an indication that Durkheim's theory of the role of religion in society has some empirical support. Does this **prove** his theory? Absolutely not! What we've done is demonstrate that the data fails to disprove that part of his theory. Thus, the theory still provides a viable explanation for suicide. The integration (belonging) and regulation (meaning through common values) provided by religion may function to decrease the likelihood of suicide in a society.

There are other questions raised by our research. Notice that Utah has one of the highest rates of church membership, but one of the highest rates of suicide. How can we explain this exception? One explanation from Durkheim would be that Utah is one of the most religiously homogeneous states in the United States. Perhaps the extreme degree of consensus promotes a different type of suicide, such as the altruistic form discussed by Durkheim. If we take a slightly different perspective on Durkheim's "egoistic suicide," we can come up with an even better explanation. It is possible that the human psyche needs a slight sense of individual consciousness within a strong collective consciousness. Thus, when the consensus within a collective is too strong, egoistic suicide increases. After all, what stronger affirmation of ego could there be than to terminate ego?

3. Obtain a copy of the video *Quiet Rage* from Stanford University and show it in class (or ask that students view the video prior to class). It is an explanation of Philip Zimbardo's famous experiment in which college student volunteers were selected to play the role of either prisoner or guard. Discuss the ethical implications of this experiment. Why has this study never been replicated?

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4. See the article, "Illustrating the Classical Experiment," by Richard A. Zeller (*Teaching Sociology*, Vol. 16, No. 2 (Apr., 1988), pp. 190–192). The article is available for purchase from the American Sociological Association, and may be found in JSTOR and ERIC. Zeller's article presents a paper and pencil experiment that may be conducted in class, demonstrating the various characteristics of an experiment and the scientific method.

5. Locate a number of studies on a variety of topics. Without disclosing the specifics of the variables used, briefly describe to the class the findings and conclusions of the authors. Ask students to identify the variables of each of the studies. Next, ask them how these variables might be operationalized. Compare the students' operational definitions with those that were actually used in the research. Have students discuss the advantages and disadvantages of different operational definitions.

VIDEO SUGGESTIONS

Popular film
Miss Evers' Boys (118 minutes)
This HBO special about the Tuskeegee syphilis studies can be used to raise questions about research ethics, racial and class inequality and the U.S. health care system.

Internet clips
Start Seeing Cycles ("Awareness Test") (2 min.)
This fun short public service announcement points out how easy it is to overlook information when a problem has been framed for us. The clip could be used as a precursor to a discussion about framing social issues, priming effects of social cognition, the unreliability of eyewitness reports or qualitative research methods. Can be found at: http://www.youtube.com/watch?v=Ahg6qcgoay4&feature=related

INTERNET EXERCISES

1. Visit the website of the U.S. Bureau of the Census at http://www.census.gov. Enter the zip code for your community and browse the information that is generated. Be prepared to discuss the types of data that are available there. How does the Census Bureau collect these data? Look into the link for Census 2010 for information on the upcoming Census.

2. Go to the website of the National Center for Health Statistics at http://www.cdc.gov/nchs. What agency of the U.S. government sponsors this website? What types of data are available there? Why would a governmental agency collect these data?

3. Using your favorite search engine, look up information about the Hawthorne effect. What is it? Why is it named "Hawthorne?" Describe the experiment that led to the discovery of the Hawthorne effect. What was the original purpose of the experiment?

4. Explore the website for Zimbardo's prison guard experiment. Review the slide show, and watch the video clips. What new questions or insights do you now have about this experiment? Why is there a website devoted to it so many years after it was conducted? http://www.prisonexp.org

KEY TERMS

After studying the material in this section, students should have a clear understanding of the following concepts (page references in parentheses):

Authority (35)
Case study (48)
Causation (39)
Closed-ended questions (44)
Common sense (35)
Control group (42)
Correlation (41)
Dependent variable (40)
Ethics (51)
Ethnomethodology (50)
Experiment (42)
Experimental group (42)
Field research (48)
Field studies (48)
Hawthorne effect (45)
Hypothesis (36)
Independent variable (40)
Intervening variable (40)
Interview (44)
Intuition (35)
Matching (43)
Mean (44)
Median (44)
Mode (44)
Multiple causation (39)
Negative correlation (41)
Objectivity (38)
Open-ended questions (45)
Operational definitions (36)
Participant observation (48)
Population (36)
Positive correlation (41)
Precollected data (45)
Qualitative variable (40)
Quantitative variable (40)
Questionnaire (44)
Random sample (43)
Randomization (43)
Reliability (54)
Replication (55)
Sample (36)
Scientific method (36)
Secondary analysis (45)
Spurious correlation (42)
Stratified random sample (43)
Subjective approach (49)
Subjectivity (39)
Survey (36)
Tradition (35)
Validity (55)
Variable (39)
Verifiability (39)

FURTHER READING

Babbie, Earl R. 1995. *The practice of social research.* 7th ed. Belmont, CA: Wadsworth.
The classic undergraduate research methods text. Babbie is very thorough, covering the entire research process. Covers the logic behind scientific research, how this research is to be structured, data collection methods, data analysis, and the social context (uses and ethics) of research.

Dubin, Robert. 1978. *Theory building.* New York: The Free Press.
While it is too advanced for use by all but the most advanced undergraduates, *Theory Building* is useful in lecture preparation. Dubin focuses on the process of developing scientific theory from conceptualization to the development of complex theoretical propositions.

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Glaser, Barney G., and Anselm L. Strauss. 1967. *The discovery of grounded theory: Strategies for qualitative research.* New York: Aldine de Gruyter.
This is one of the classic resources related to qualitative research. Covers how qualitative researchers may generate theory after analysis of qualitative data, creative use of qualitative data, and the implications of grounded theory.

Henry, Gary T. 1990. *Practical sampling.* Newbury Park: Sage Publications.
As with all the monographs from Sage, this work is a concise and easy to use reference. Henry covers material from the logic of sampling through the major sampling methods. Good for lecture preparation, but basic enough for use by undergraduates.

Stewart, David W. 1993. *Secondary research: Information sources and methods.* Newbury Park: Sage Publications.
A concise guide to obtaining and using precollected data. It covers many of the major sources for precollected data, criteria for evaluating its quality, and methods of its use.

Wallace, Walker L. 1971. *The logic of science in sociology.* New York: Aldine Publishing Company.
A short reference guide that covers the logic in using the scientific method in social science research. Covers general theory construction, hypothesis testing, and empirical generalization in the light of theory.