
CHAPTER

2

SOCIOLOGICAL RESEARCH

CHAPTER OUTLINE

STEPS IN THE RESEARCH PROCESS

Defining the Problem

Reviewing the Literature

Formulating the Hypothesis

Collecting and Analyzing Data

Developing the Conclusion

In Summary: The Research Process

MAJOR RESEARCH DESIGNS

Quantitative and Qualitative Research

Surveys

Observation

Experiments

Use of Existing Sources

RESEARCH ETHICS

Confidentiality

Research Funding

Value Neutrality

*Feminist Methodology: Learning from
our Oversights*

LEARNING OBJECTIVES

1. Identify the different steps in the research process.
 2. Gain an understanding of the different kinds of research sociologists conduct and the designs used to do so.
 3. Identify the techniques sociologists use to collect data.
 4. Recognize the importance of validity and reliability in research findings.
 5. Assess the ethics of social research.
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CHAPTER SUMMARY

Sociologists are committed to the use of the *scientific method* in their research. The basic steps in the scientific method are: defining the problem, reviewing the literature, formulating the hypothesis, selecting the research design, and collecting and analyzing the data. Finally, the researcher develops a conclusion based on the findings of the research.

An *operational definition* transforms an abstract concept into indicators that are observable and measurable, allowing researchers to assess the concept. A review of the literature concerning the problem under study helps refine the problem and reduce avoidable mistakes. A *hypothesis* is a testable statement about the relationship between two or more factors known as variables. *Variables* are measurable traits or characteristics that are subject to change under different conditions. The variable hypothesized to cause or influence another variable is called the *independent variable*. The variable that is changed by or dependent on the independent variable is called the *dependent variable*. A *correlation* exists when a change in one variable coincides with a change in the other.

In most studies, social scientists carefully select a sample. A *sample* is a selection from a larger population that is statistically representative of the population. In a *random sample*, every member of the population being studied has the same chance of being selected for the study.

The scientific method requires both validity and reliability. *Validity* refers to the degree to which a measure or scale truly reflects the phenomenon under study. *Reliability* refers to the extent to which a measure produces consistent results. Sociological studies sometime fail to support the original hypothesis and researchers must reformulate their conclusions. *Control variables* are those factors that are held constant to test the relative impact of an independent variable.

A *research design* is a detailed plan or method for obtaining data scientifically. *Surveys* are a common method of *quantitative research* used by researchers to collect data. Surveys may consist of oral *interviews* or written *questionnaires*. *Observation* is a *qualitative research* method, which allows researchers to collect data through everyday interaction with a group or community under study. *Experiments* are artificially created situations in which researchers can manipulate variables. Typically, an *experimental group* is exposed to the independent variable and the *control group* is not. Analyzing existing data that has been previously collected is called *secondary analysis*. *Content analysis* involves the systematic coding and objective recording of data, such as using newspapers, periodicals, and other common documents or venues to interpret and test the significance of data. All researchers must abide by a *code of ethics* to ensure that researchers are not causing harm or violating a person's privacy. Most research seeks to remain *value neutral* in its judgments when interpreting research results. Sociologists using the feminist perspective have had the greatest impact on the current generation of social researchers. Feminist theorists reject the notion that work and family are separate spheres, and have drawn attention to researchers' tendency to overlook women in sociological studies.

LECTURE OUTLINE

I. Steps in the Research Process (LO 1, LO 4)

- The *scientific method* is a systematic, organized series of steps that ensures maximum objectivity and consistency in researching a problem.
- Requires adherence to a series of steps designed to ensure the accuracy of the results.

A. Defining the Problem

- An *operational definition* is required to assess the concept. **Example:** using membership in exclusive social clubs as an operational definition of status.

B. Reviewing the Literature

- Refines the problem under study, clarifies data collection techniques, and eliminates or reduces avoidable mistakes.

C. Formulating the Hypothesis

- A *hypothesis* is a testable statement about the relationship between two or more factors known as *variables* (a measurable trait or characteristic).
- *Independent variables* cause or influence change in dependent variables.
- *Dependent variables* are changed by the independent variables or are dependent on them.
- *Causal logic* involves the relationship between a condition or variable and a particular consequence, with one event leading to the other. **Example:** Time spent studying may result in a higher grade on an exam.
- *Correlation* is a relationship between two variables in which a change in one coincides with a change in the other. Correlations may be positive or negative. Correlation does not equal causation. Sociologists seek to identify the causal link between variables.

D. Collecting and Analyzing Data

- Research designs guide researchers in collecting data.

1. Selecting the Sample

- A *sample* is a statistically representative selection from a larger population.
- A *random sample* occurs when every member of an entire population has the same chance of being selected for the study.

2. Ensuring Validity and Reliability

- *Validity* refers to the degree to which a measure or scale accurately reflects the phenomenon under study.
- *Reliability* refers to the extent to which a measure produces consistent results.

E. Developing the Conclusion

- Conclusion represents both an end and a beginning in research.

1. Supporting Hypotheses

- Some studies refute a hypothesis, which leads to reformulations about a conclusion and adjustments in research designs.

2. Controlling for Other Factors

- A *control variable* is a factor held constant to test the relative impact of the independent variable. **Example:** surveying neighbourhood crime rates.

F. In Summary: The Research Process

- The data support or refute the hypothesis
- Research is cyclical: the studies researchers produce become part of the literature review for the next project.

II. Major Research Designs (LO 2)

- A detailed plan or method for obtaining data scientifically.

Quantitative and Qualitative Research

- The survey is an example of *quantitative research*, which collects and reports data primarily in numerical form. Analysis of these data depends upon statistics, such as the *mean*, the *median*, and the *mode*.
- In *qualitative research*, researchers rely on what they see in the field and naturalistic settings, and often focus on small groups and communities.

A. Surveys

- Generally in the form of an interview or questionnaire, providing researchers with information about how people think or act. **Example:** Ipsos Reid poll.

1. Issues in Designing Surveys

- A survey must be based on precise, representative sampling to reflect a broad range of the population.
- Questions must be worded carefully.
- The characteristics of the interviewer have an impact on survey data.

2. Types of Surveys

- There are two main forms of the survey.
- In an *interview*, the researcher obtains information through face-to-face or telephone questioning.
- In a *questionnaire*, the researcher uses a printed or written form to obtain information.
- Skillful interviewers can go beyond written questions and probe a subject's underlying feelings; questionnaires have the advantage of being less expensive to administer.

B. Observation

- Investigators collect information by participating directly and/or by closely watching a group or community. **Example:** studying gangs, or service organizations.
- William F. Whyte's work is a classic example of participant observation research, when he moved into a low-income Italian neighbourhood in Boston (1930s).
- **Ethnography** is the study of an entire social setting through extended systematic observation.

C. Experiments

- Artificially created situations. Typically involve use of an **experimental group** exposed to an independent variable, and a **control group**, which is not exposed to the independent variable.
- A disadvantage of experiments is known as the **Hawthorne effect**, which refers to subjects of research who deviate from typical behaviour because they are under observation.
- Researchers do sometimes try to approximate experimental conditions in the field. **Example:** Devah Pager's experiment to assess the impact of a criminal background on individuals' employment opportunities.

D. Use of Existing Sources

- **Secondary analysis** refers to making use of previously collected or publicly accessible information and data. **Example:** census data.
- Existing data is nonreactive, since it does not influence people's behaviour; thus, researchers can avoid the Hawthorne effect by using secondary analysis. **Example:** Durkheim's research on suicide.
- **Content analysis** is the systematic coding and objective recording of data. **Example:** Analyzing the content of commercials aired during children's television programs to determine whether unhealthy eating practices are being promoted.

III. Research Ethics (LO 5)

- **Code of Ethics** adopted in 1994 by the Canadian Sociological Association
- Among its principles: protect the integrity of the research process; respect citizens' rights to privacy, confidentiality, and anonymity; obtain informed consent; and refusing grants, contracts, or research assignments that may require violation of the principles.
- Ethical issues of past research, such as the respective work of Laud Humphreys and Stanley Milgram

A. Confidentiality

- Russel Ogden was pressured to violate confidentiality of those interviewed in his research on assisted suicide.
- His case served to highlight the challenges of maintaining the integrity and neutrality of social research.

B. Research Funding

- When accepting funding for their research, sociologists must be careful that the funding source does not taint the objectivity of the research. **Example:** Exxon funded research on jury deliberations after the *Valdez* disaster.

C. Value Neutrality

- Weber on value neutrality in research. Sociologists must work to overcome any biases, however unintentional, that they may bring to their analysis.

D. Feminist Methodology

- Sociologists using the feminist perspective have had the greatest impact on the current generation of social researchers.
- Feminist theorists reject the notion that work and family are separate spheres, and have drawn attention to researchers' tendency to overlook women in sociological studies.
- Sociologist Dorothy Smith's *standpoint theory* an important contribution.

KEY TERMS

Causal logic The relationship between a condition or variable and a particular consequence, with one event leading to the other.

Code of ethics The standards of acceptable behaviour developed by and for members of a profession.

Content analysis The systematic coding and objective recording of data, guided by some rationale.

Control group The subjects in an experiment who are not introduced to the independent variable by the researcher.

Control variable A factor that is held constant to test the relative impact of an independent variable.

Correlation A relationship between two variables in which a change in one coincides with a change in the other.

Dependent variable The variable in a causal relationship that is subject to the influence of another variable.

Ethnography The study of an entire social setting through extended systematic observation.

Experiment An artificially created situation that allows a researcher to manipulate variables.

Experimental group The subjects in an experiment who are exposed to an independent variable introduced by a researcher.

Hawthorne effect The unintended influence that observers of experiments can have on their subjects.

Hypothesis A testable statement about the relationship between two or more variables.

Independent variable The variable in a causal relationship that causes or influences a change in a second variable.

Interview A face-to-face or telephone questioning of a respondent to obtain desired information.

Mean A number calculated by adding a series of values and then dividing by the number of values.

Median The midpoint or number that divides a series of values into two groups of equal numbers of values.

Mode The single most common value in a series of scores.

Observation A research technique in which an investigator collects information through direct participation and/or closely watching a group or community.

Operational definition Transformation of an abstract concept into indicators that are observable and measurable.

Qualitative research Research that relies on what is seen in field or naturalistic settings more than on statistical data.

Quantitative research Research that collects and reports data primarily in numerical form.

Questionnaire A printed or written form used to obtain information from a respondent.

Random sample A sample for which every member of an entire population has the same chance of being selected.

Reliability The extent to which a measure produces consistent results.

Research design A detailed plan or method for obtaining data scientifically.

Sample A selection from a larger population that is statistically representative of that population.

Scientific method A systematic, organized series of steps that ensures maximum objectivity and consistency in researching a problem.

Secondary analysis A variety of research techniques that make use of previously collected and publicly accessible information and data.

Survey A study, generally in the form of an interview or questionnaire, that provides researchers with information about how people think and act.

Validity The degree to which a measure or scale truly reflects the phenomenon under study.

Value neutrality Max Weber's term for objectivity of sociologists in the interpretation of data.

Variable A measurable trait or characteristic that is subject to change under different conditions.

ADDITIONAL LECTURE IDEAS

2-1: How Would You Obtain a Representative Sample? (LO 1, LO3)

Students and their instructors have typically been saturated with telephone and shopping mall surveys. But do students know why they have been selected, and whether their selection is part of a representative sample? Suggest to the class that they have been given the responsibility of developing a representative sample in their school's county that will be asking questions about a controversial subject (e.g., euthanasia). How would they go about selecting a representative sample of county residents for this study? Student responses will tend to gravitate toward the following: shopping malls, telephone interviews, birth certificates, tax reports, grocery stores, bus depots, their school, and other suggestions that will not generate a representative sample. Each response should be met with an explanation of why the suggestion is not representative.

Students will generally suggest that members of the sample population should be selected based on their characteristics, which is a good place to introduce a discussion of variables and quota samples and the weaknesses of this type of sample. Finally, the students should be asked, "If I were trying to select a random sample of this class, a sample in which every member of the class has the same chance of being selected, how could I do this?" Almost immediately, students will suggest placing names into a hat and pulling out one or more names at random. At that point, students can be led through a discussion of how the "hat selection" process can be used for a large population in order that everyone in the county has a chance to have their names "pulled out of a hat."

See Earl Babbie. *The Practice of Social Research*, 10th ed. Belmont, CA: Wadsworth, 2003. See also Peter Rossi et al. *Handbook of Survey Research*. New York: Basic Books, 1983;

and Morton M. Hunt. *Profiles of Social Research: The Scientific Study of Human Interactions*. New York: Russell Sage, 1986.

2-2: Asking the Correct Questions (LO 2, LO 3, LO 4)

Sociologists try to phrase questions carefully so that there will be no misunderstanding on the part of the respondents. If a question is improperly worded (or biased), the results are useless for the researchers.

Poor Question	Problem	Better Question
Do you favour urban homesteading?	People may not understand the question.	Do you favour a government program that encourages families to improve inner city housing?
Did your mother ever work?	Misleading.	Did your mother ever work for pay outside the home?
Should it be possible for students to refuse to do assignments?	Too general.	Should it be possible for a student to refuse to do assignments on topics that contravene their personal beliefs?
Do you favour making it legal for 18-year-olds to drink liquor and smoke marijuana?	Double-barreled (two questions in one).	Do you favour making it legal for 18-year-olds to drink liquor? Do you favour making it legal for 18-year-olds to smoke marijuana?
Don't you think that the press is slanted and that we should distrust whatever it says?	Biased question; leads people toward a particular response.	Would you say that you have a great deal of confidence, some, or very little confidence in the press?

2-3: Framing Survey Questions about Interracial Relationships (LO 2, LO 3, LO 4)

Do White people really have close Black friends, and vice versa? Many surveys have attempted to gauge the amount of White–Black interaction. But unless the questions are phrased carefully, it is possible to overestimate just how much “racial togetherness” is taking place.

Sociologist Tom Smith noticed that a high proportion of Whites and African Americans indicate they have close friends of the other race. But is this in fact true? When Smith and his fellow researchers analyzed data from the 1998 General Social Survey they found that response rates varied according to how the question was phrased.

For example, when asked whether any of their friends that they feel close to was Black, 42.1 percent of Whites said “yes.” Yet when asked to give the names of friends they feel close to, only 6 percent of Whites listed a close friend of a different race or ethnicity.

2-4: The Personal Implications of Ethnographic Research (LO3, LO 4, LO5)

Ethnography is one of the most fascinating methods of data collection open to social scientists—so much so that it is worthy of sociological analysis itself. For one, ethnography requires an unusually long and intense period of observation, interviewing, and participation. It is also a method of study that involves an inherent dialogue between researcher and subject. In contrast to a survey or an experiment, those under observation in an ethnographic study can always “talk back” in ways that are unexpected for the researcher, thereby changing the scope and content of the research project as it moves along. For most practitioners, an ethnographic study also requires a long period in which the ethnographer is removed from familiar social settings, and is immersed in a very different culture or subculture. Often, one unintended consequence is that the ethnographer finds himself or herself personally changed by the research process. In contemporary ethnographies, it is now common for one or more chapters to reflect upon these personal implications of ethnographic work.

Crafting Selves is Dorinne K. Kondo’s ethnography of a Tokyo confectionary. Kondo, a Japanese-American with native fluency in Japanese, was often able to pass as Japanese. Because of her ethnicity and language abilities, she also found that her research subjects increasingly held her to the behavioural expectations of a young Japanese woman, rather than an American ethnographer. As a result, Kondo gradually found herself possessing two distinct “selves”: the “American self” and the “Japanese self,” with the Japanese self becoming increasingly dominant. This process came to a head one day when Kondo unexpectedly saw her reflection in a mirrored surface, but failed for a moment to realize that she was seeing herself rather than an unknown Japanese woman. In this moment, Kondo felt that her American identity had collapsed completely, and that her Japanese identity had taken over in its absence. Shaken, she realized that it would be necessary in the coming months to extricate herself somewhat from the environment into which she had so fully immersed herself (Kondo 1990).

In many cases, the ethnographer not only reports on the personal impact of ethnographic fieldwork, but also uses the experience to better analyze the social context under study. One of the most well known examples is in the work of Renato Rosaldo. While Rosaldo and his wife were studying the Ilongot people of the Philippines, Rosaldo’s wife, Michelle Zimbalist Rosaldo, accidentally fell from a cliff to her death. In his essay “Grief and a Headhunter’s Rage,” Rosaldo describes how the immense grief he experienced gave him new insight into the emotional motivations for headhunting among the Ilongot (Rosaldo 1989).

Such “vulnerable writing”—in which the ethnographer explicitly incorporates personal experiences into his or her work—can also lead to a new level of understanding for the reader of that ethnography, according to Ruth Behar (1996). When Behar wrote a book in which she compared the life of a Mexican peddler to her own experience in the academic tenure process, several readers wrote to tell her that they found the comparison to be a vital element of the book. It had allowed them to identify better with the peddler’s experiences.

Not surprisingly, there is growing interest among ethnographers—especially anthropologists—in a type of ethnography called autoethnography. While this term has been defined in a number of different ways, *autoethnography* can refer to a type of ethnographic text in which the writer explicitly addresses his or her own personal identity and history, and how it is linked to his or her work as an ethnographer (Reed-Danahay 1997).

Sources used for this essay and additional reading ideas include: Ruth Behar. *The Vulnerable Observer*. Boston: Beacon Press, 1996; Dorinne K. Kondo. *Crafting Selves: Power, Gender, and Discourses of Identity in a Japanese Workplace*. Chicago: University of Chicago Press, 1990; Annette Lareau and Jeffrey Schultz. *Journeys through Ethnography*. Boulder: Westview, 1996; Deborah E. Reed-Danahay (ed.). *Auto/Ethnography: Rewriting the Self and the Social*. New York: Berg, 1997; Renato Rosaldo, "Grief and a Headhunter's Rage" in *Culture and Truth: The Remaking of Social Analysis*. Boston: Beacon Press, 1989, pp. 1–21.

2-5: Useful Statistics (LO 1, LO 3, LO 4)

In their effort to understand social behaviour better, sociologists rely heavily on numbers and statistics. How large is the typical household today compared with the typical household of 1970? If a community were to introduce drug education into its elementary schools, what would be the cost per pupil? What proportion of Presbyterians, compared to that of Roman Catholics, contributes to their local churches? Such questions, and many others, are most easily answered in numerical terms that summarize the actions or attitudes of many persons.

The most common summary measures used by sociologists are percentages, means, modes, and medians. A *percentage* shows the portion of 100. Use of percentages allows us to compare groups of different sizes. For example, if we were comparing contributors to a town's Presbyterian and Roman Catholic churches, the absolute numbers of contributors from each group could be misleading if there were many more Presbyterians than Catholics living in the town. However, percentages would give us a more meaningful comparison, showing the proportion of persons in each group who contribute to churches.

The *mean*, or *average*, is a number calculated by adding a series of values and then dividing by the number of values. For example, to find the mean of the numbers 5, 19, and 27, we add them together for a total of 51. We then divide by the number of values (3), and discover that the mean is 17.

The *mode* is the single most common value in a series of scores. Suppose we are looking at the following scores on a 10-point quiz:

10 10 9 9 8 8 7 7 7 6 6

The *mode* – the most frequent score on the quiz – is 7. While the mode is easier to identify than other summary measures, it tells sociologists little about all the other values. Therefore, we use it much less frequently in this book than we do the mean and median.

The *median* is the midpoint, or number that divides a series of values into two groups of equal numbers of values. For the quiz discussed above, the median, or central value, is 8. The mean would be 86 (the sum of all scores) divided by 11 (the total number of scores), or 7.8.

According to Statistics Canada, the median family income for the year 2013 was \$76,550; this indicates that half of all families had incomes above \$63,800, while the other half had lower incomes. In many respects, the median is the most characteristic value. Although it may not reflect the full range of scores, it does approximate the value in a set of scores. Also, it is not affected by extreme scores.

Some of these statistics may seem confusing at first. But think about how difficult it is to study an endless list of numbers in order to identify a pattern or central tendency. Percentages, means, modes, and medians are essential time savers in sociological research and analysis.

CLASSROOM DISCUSSION TOPICS

- 2-1. **Theory and Research**: The important tie between theory and research is reinforced by this classroom exercise. See Technique No. 73 in Edward L. Kain and Robin Neas (eds.). *Innovative Techniques for Teaching Sociological Concepts*. Washington, DC: American Sociological Association, 1993. (LO 1)
- 2-2. **Defending Surveys**: Surveys, despite often being criticized, are very useful to both the general public and policy makers. See Andrew Greeley, "In Defense of Surveys," *Society* 33 (May/June 1996): 26–29. (LO 2, LO3)
- 2-3. **Statistics Canada and the Internet**: Students can access the data from the General Social Survey, which has been conducted annually since 1985, with each year focusing on a particular topic. Recent surveys have included research into social engagement and the use of technology. Census data is also widely available in both text and table form via www.statcan.gc.ca, much of it free of cost. (LO 2, LO 3)
- 2-4. **Coding**: Have members of the class ask people on campus a question of contemporary interest, for example, "What do you like or dislike about the current government?" or "What causes crime?" Then have the students (individually or as a class) classify the responses and assign codes to them. The emphasis in this project is on data manipulation rather than on the accuracy of the sampling techniques. (LO 3, LO 4)
- 2-5. **Ethnographies**: The author explains the use of motion pictures as the basis for teaching ethnographic research methods. See Lauraine LeBlanc, "Observing Reel Life: Using Feature Films to Teach Ethnographic Methods," *Teaching Sociology* 25 (January 1997): 62–68. (LO 2, LO 3)
- 2-6. **Role Conflict and Observation Research**: Two sociologists describe their dilemma of role definition: the pressure to go "native," and the public pressure to take a stand while doing participant observation in the Unification Church. See Arson D. Shupe Jr., and David G. Bromley, "Walking a Tightrope," *Qualitative Sociology* 2 (1980). (LO 3, LO 5)
- 2-7. **Content Analysis of Children's Book—A Class Activity**: Bring enough children's books to class for each student (or for every two students if the class is large). Have the class set up a very simple code sheet and conduct a content analysis of the books. For example, they could simply count the number of times boys appear in the books as compared with the number of times girls appear in the book; they could look for

presentation of traditional gender roles (i.e., girls playing with dolls, boys with trucks); or they could count the number of times racial or ethnic children appear in the book. This activity will be most effective if the books you bring were published over the last 20 years. (LO 1, LO 2, LO 3)

- 2-8. **Content Analysis and Magazines**: See Techniques Nos. 4 and 5 in Edward L. Kain and Robin Neas (eds.). *Innovative Techniques for Teaching Sociological Concepts*. Washington, DC: American Sociological Association, 1993. (LO 1, LO 2, LO 3)
- 2-9. **Content Analysis and Personal Ads**: This exercise guides students through a research project that teaches them about content analysis through the analysis of personal ads. Beth Rushing and Idee Winfield, "Learning about Sampling and Measurement by Doing Content Analysis of Personal Advertisements," *Teaching Sociology* 27 (April 1999): 159–166. (LO 1, LO2, LO 3)
- 2-10. **Teaching the Ethics of Sociological Research**: This exercise, developed by Stephen Sweet, is an interesting way to draw students into a discussion of research ethics. See Stephen Sweet, "Using a Mock Institutional Review Board to Teach Ethics in Sociological Research," *Teaching Sociology* 27 (January 1999): 55–59. (LO 5)
- 2-11. **Using Humour**: Joseph E. Faulkner has produced a monograph that includes funny examples that could be incorporated into lectures associated with Chapter 2. See Chapter 1 of Faulkner. *Sociology Through Humor*. New York: West, 1987. This book is out of print, but used copies are readily available. (LO 1)

TOPICS FOR STUDENT RESEARCH AND CLASSROOM DISCUSSION

- 1. Ask students to provide an operational definition of an abstract notion, such as the influence of poverty on crime. Students can also provide a hypothesis statement concerning the nature of any relationship. (LO 1)
- 2. Ask students to bring a mail-back survey (from a product recently purchased) into class, and have students discuss what the researchers may be trying to measure or ascertain from the survey. (LO 2, LO 3)
- 3. Ask students to examine a mail-back survey form or online survey form for any indications of misleading, double-barreled, or biased questions, and discuss how the questions could be revised to avoid these problems. (LO 2, LO 3, LO 4)
- 4. Ask students to replicate a small-scale study similar to that of Erving Goffman in which students explore newspapers and magazines for evidence of women being portrayed as subservient to men. Discuss the impact of such research on social policy. (LO 2, LO 3)

5. Ask students to discuss why policy makers and corporations may intentionally refute some research findings revealed by sociologists, or attempt to cover up research findings. (LO 5)

ESSAY QUESTIONS

1. Identify and briefly explain the basic steps in the scientific method. (LO 1)
2. How is a sociological analysis of whether it pays to go to college or university different from a study conducted by a television station or magazine? (LO 1, LO 4)
3. Distinguish among independent variables, dependent variables, causal logic, and correlations. (LO 1, LO 4)
4. Explain why surveys conducted by radio and television stations, in which viewers and listeners are encouraged to call toll-free to give their views, do not use a representative sample. (LO 1, LO 4)
5. Explain the difference between validity and reliability. (LO 4)
6. Why are control variables useful in testing hypotheses? (LO 1, LO 4)
7. Identify and briefly describe the four different types of research designs for collecting data presented in the text. (LO 2, LO 3)
8. Why is the framing of survey questions an important issue? (LO 2, LO 4)
9. What are the advantages of interviews and questionnaires as forms of survey research? (LO 2, LO 3)
10. What are the strengths and difficulties of the observation method of research? (LO 2, LO 3, LO 4)
11. Which type of sociological research is considered to be better, qualitative or quantitative? (LO 2)
12. What conclusions can be drawn from William F. Whyte's participant observation research in a low-income neighbourhood? (LO 2, LO 4, LO 5)
13. Explain the origin of the Hawthorne effect and its significance for researchers. (LO 2, LO 4)
14. In what types of situations do researchers find secondary analysis useful? (LO 1, LO 2, LO 3)
15. What are the principles put forth by the Canadian Sociological Association in its *Code of Ethics*? (LO 5)
16. Describe the ideal of *value neutrality* as developed by Max Weber. (LO 4, LO 5)
17. What are the ethical concerns of receiving funding from corporate sources? (LO 5)

CRITICAL THINKING QUESTIONS

1. Discuss how social research may affect the quality of human life. Include an explanation of how dispelling social myths could be considered by some critics as a threat to social order. (LO 4, LO 5)
2. Consider various ways in which you might try to disguise your identity in performing a participant observation study of street gangs, and whether or not it would be ethical to do so. Discuss the value of obtaining qualitative data compared to obtaining quantitative data. (LO 2, LO 4, LO 5)
3. Provide examples of any societal dangers that might occur when the results of poor research are publicized. Can you recall any recent instances of this? (LO 4)
4. Discuss how social research could provide assistance in fighting the war on terrorism. What type of research design would one employ to research terrorism? (LO 2, LO 4)
5. Describe how social research could aid in the passage of laws and potentially prevent the enactment of poor laws. (LO 2, LO 4)

TOPICS AND SOURCES FOR STUDENT RESEARCH AND ASSIGNMENTS

1. **Social Theory:** See Robert K. Merton, “The Bearing of Empirical Research upon the Development of Social Theory,” *American Sociological Review* 12 (October 1969): 505–515.
2. **Content Analysis—Comic Superheroes:** See Thomas Young, “Are Comic Book Superheroes Sexist?” *Sociology and Social Research* 75 (July 1991): 218.
3. **Content Analysis—Newspapers:** See Ben M. Crouch and Kelly R. Damphouse, “Newspapers and the Antisemitism Movement: A Content Analysis,” *Sociological Spectrum* 12 (January–March 1992): 1–20.
4. **Feminist Methodology:** See Marjorie L. DeVault, “Talking Back to Sociology: Distinctive Contributions of Feminist Methodology,” in John Hagan (ed.) *Annual Review of Sociology* 1996. Palo Alto, CA: Annual Reviews, 1996, pp. 29–50.
5. **Social Policy:** The Canadian Council on Social Development website includes reports on issues such as poverty, labour, and income security. See <http://www.ccsd.ca>

FEATURED 5: MOVIES ON RESEARCH

Kinsey

The father of modern sexual research employs individual case studies.

Thank You for Smoking

A satire about the tobacco industry, showing how statistics can lie.

Supersize Me

Eating at McDonald's for one month reveals the dangers of the fast-food industry.

56 Up

A British documentary series following 14 children from age 7 to 56.

Devil's Playground

Amish teens experiment during rumspringa in this documentary.

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ADDITIONAL READINGS

Best, Joel. 2001. *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. Berkeley: University of California Press. A sociologist demonstrates the value of careful interpretation of data, but also shows how statistics can be used to mislead people about social issues.

Denzin, Norman K., and Yvonna S. Lincoln, eds. 2005. *Handbook of Qualitative Research*, 3rd ed. Thousand Oaks, CA: Sage. The 44 articles in this anthology cover newer techniques used in conducting observation and biographical research, as well as ethical issues facing researchers.

Erickson, Julia A. 1999. *Kiss and Tell: Surveying Sex in the Twentieth Century*. Cambridge, MA: Harvard University Press. Evaluates the methodology of the hundreds of surveys of human sexuality conducted by sociologists and other social scientists.

Gladwell, Malcolm. 2000. *The Tipping Point*. Boston: Little, Brown. A journalist examines how certain benchmarks or milestones are portrayed in news-breaking stories, such as drops in crime, the impact of smoking, and the influence of children's television programming.

Gubrium, Jaber F., James A. Holstein, Amir B. Marvasti, and Karyn D. McKinney, eds. 2012. *The SAGE Handbook of Interview Research: The Complexity of the Craft*. Thousand Oaks, CA: Sage. Drawing on a variety of disciplines, the editors examine all facets of appropriate interview techniques, including a how to/instructional approach to interviewing through empirically and theoretically informed discussions.

Huff, Darrell. 1954. *How to Lie with Statistics*. New York: Norton. "Figures don't lie, but liars do figure" is an adage that points to the way that statistics can be abused. In this classic book, Huff offers guidance to the reader in how to better understand numbers, graphs, and tables.

Paulos, John Allen. 1988. *Innumeracy*. Harmondsworth, England: Penguin. This brief book considers how important basic mathematics is in everyday life.

Van den Hoonaard, Will C., ed. 2002. *Walking the Tightrope: Ethical Issues for Qualitative Researchers*. Toronto: University of Toronto Press. This is a multidisciplinary assessment of the special ethical considerations in qualitative research. Contributors to the volume draw on their own research encounters with ethical issues.

JOURNALS

Among the journals that focus on methods of sociological and other social scientific research are the following: *IRB: A Review of Human Subjects Research* (founded in 1979), *Journal of Contemporary Ethnography* (1971), *Qualitative Sociology* (1977), *Social Science Research* (1972), and *Sociological Methods and Research* (1972).

Many sociological journals are now available on the Internet, but one specific journal on research is available only online. You can locate *Sociological Research Online* at <http://www.socresonline.org.uk/home.html>.

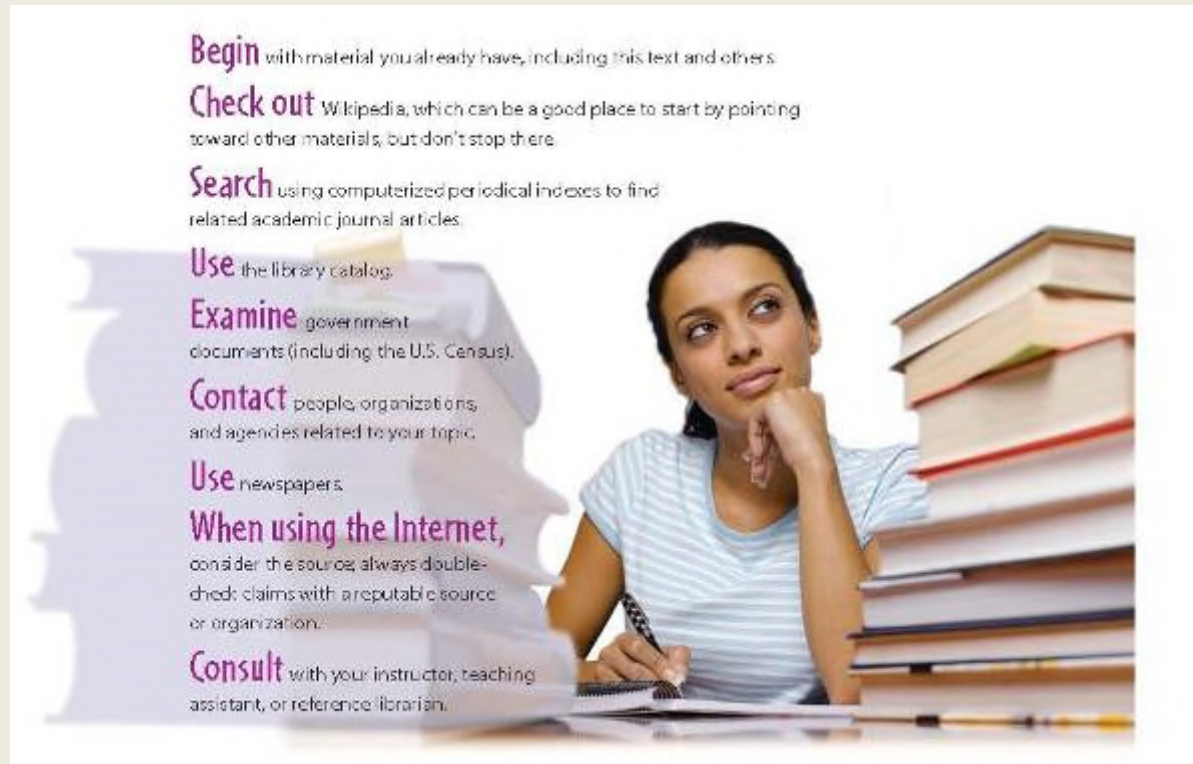


Jon Witt

Alana Hermiston

SOC

3rd Canadian Edition



SOCIOLOGICAL RESEARCH

2

Learning Objectives

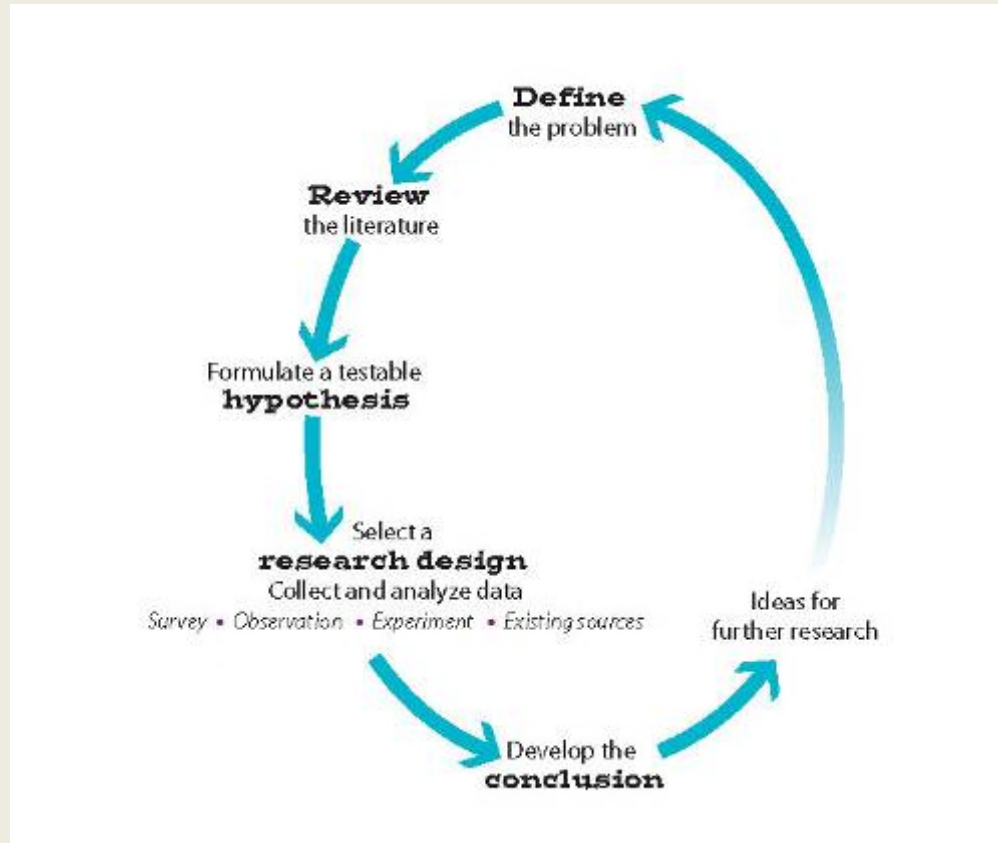
1. Identify the different steps in the research process.
2. Gain an understanding of the different kinds of research sociologists conduct and the designs used to do so.
3. Identify the techniques used to collect data.
4. Recognize the importance of validity and reliability in research findings.
5. Assess the ethics of social research.

Steps in the Research Process

Scientific Method

- systematic
- organized series of steps

The Scientific Method



Steps in the Research Process

Defining the Problem

- Clearly state what you hope to investigate
- Operational definition - transforms an abstract concept into indicators that are observable and measurable, allowing researchers to assess the concept

Steps in the Research Process

Reviewing the Literature

- Investigates previous research conducted by sociologists and others regarding the concepts we wish to study.

Steps in the Research Process

Formulating the Hypothesis:

Hypothesis

- testable statement about relationship between two or more variables

Variable

- measurable trait or characteristic subject to change under different conditions

Independent variable

- variable hypothesized to cause or influence another

Dependent variable

- variable subject to the influence of another variable

Steps in the Research Process

Formulating the Hypothesis

Causal logic: relationship between a condition or variable and a particular consequence, with one event leading to the other

Correlation: relationship between two variables in which a change in one coincides with a change in the other.

Correlation does not necessarily indicate causation.

Causal Logic



Collecting and Analyzing Data

Selecting the Sample

- Sample
- Random sample

Collecting and Analyzing Data

Ensuring Validity and Reliability

- Validity
- Reliability

Developing the Conclusion

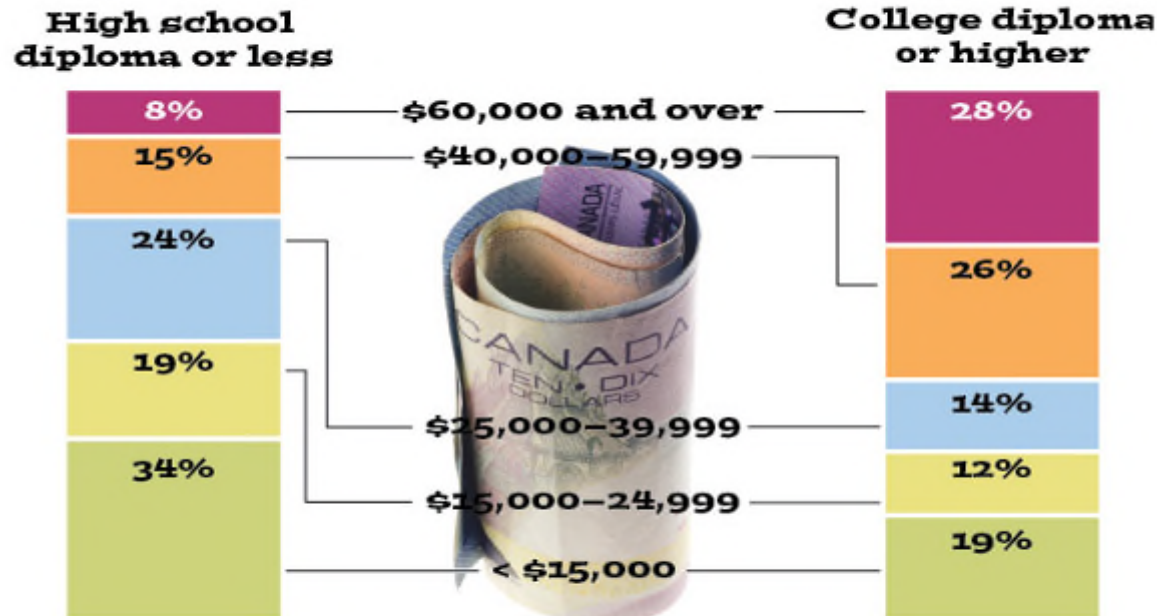
Supporting Hypotheses

- Sociological studies do not always generate data that support the original hypothesis

Controlling for Other Factors

- Control variable: factor that is held constant to test the relative impact of an independent variable

Impact of a Post-Secondary Education on Income



Source: Schaefer, Smith, Grekul, *Sociology*, Second Canadian Edition, McGraw-Hill Ryerson, 2009.

Fifty-three percent of people with a high school diploma or less (left) earn under \$25,000 a year, while only 23 percent earn \$40,000 or more. In contrast, 54 percent of those with a college diploma or higher (right) earn \$40,000 or more, while only 31 percent earn less than \$25,000.

Major Research Designs

Research design: detailed plan or method for obtaining data scientifically

- Surveys
- Observation
- Experiments
- Existing sources

Quantitative and Qualitative Research

Quantitative Research – collects and reports data primarily in numerical form.

Mean: calculated by adding a series of values and dividing by the number of values

Median: number that divides a series of values into two groups of equal numbers of values

Mode: single most common value in a series

Qualitative Research – relies on what is seen in field or naturalistic settings.

Surveys

Survey

- generally in the form of an interview or questionnaire

Researchers must ensure:

- statistically representative of the population
- worded carefully
- bias free

Types of Surveys

Interview

- face to face
- via telephone

Questionnaire

- form
- less expensive

Top 12 Reasons Why Men and Women Had Sex

Top 12 Reasons Why Men and Women Have Sex

Men	Reason	Women
1	I was attracted to the person	1
2	It feels good	3
3	I wanted to experience the physical pleasure	2
4	It's fun	8
5	I wanted to show my affection to the person	4
6	I was sexually aroused and wanted the release	6
7	I was "horny"	7
8	I wanted to express my love for the person	5
9	I wanted to achieve an orgasm	14
10	I wanted to please my partner	11
17	I realized I was in love	9
13	I was "in the heat of the moment"	10

Source: Meston and Buss 2007:506.



Observation

Observation

- collecting information through direct participation and/or by closely watching a group or community
- *Participant observation*: when a sociologist joins a group for a period to get an accurate sense of how it operates

Ethnography

- study of an entire social setting through extended systematic observation

Experiments

Experiment: artificially created situation that allows researcher to manipulate variables

Experimental group

- exposed to independent variable

Control group

- not exposed to independent variable

Hawthorne effect

- unintended influence of observers of experiments on subjects

Use of Existing Sources

Secondary Analysis

- research techniques that make use of previously collected and publicly accessible information and data
- data is nonreactive and does not influence what researchers find

Use of Existing Sources

Content Analysis

- systematic coding and objective recording of data, guided by some rationale
- allows better understanding of our cultural practices

Major Research Designs

Method	Examples	Advantages	Limitations
Survey	Questionnaires Interviews	Yields information about specific issues	Can be expensive and time-consuming
Observation	Ethnography	Yields detailed information about specific groups or organizations	Involves months if not years of labor-intensive data collection
Experiment	Deliberate manipulation of people's social behavior	Yields direct measures of people's behavior	Has ethical limitations on the degree to which subjects' behavior can be manipulated
Existing sources/ Secondary analysis	Analysis of census or health data Analysis of films or TV commercials	Cost-efficiency	Limited to data collected for some other purpose

Research Methods

Create a study to look at:

1. Use of social networking sites
2. Student addiction
3. Impact of over-use of social networking sites

Research Ethics

Code of Ethics: first published by ASA in 1994

1. Maintain objectivity and integrity in research
2. Respect subject's right to privacy and dignity
3. Protect subjects from personal harm
4. Preserve confidentiality
5. Seek informed consent
6. Acknowledge research collaboration and assistance
7. Disclose all sources of financial support

Research Ethics

Confidentiality

- Supreme Court has failed to clarify rights of scholars

Research Funding

- funding source should not taint objectivity of research

Value Neutrality

- researchers should not allow personal feelings to influence interpretation of data

Feminist Methodology

- has influenced current generation of social researchers
- work and family
- has drawn attention to researchers' tendency to overlook women in sociological studies