2 SOCIOLOGICAL RESEARCH

Contents:

Learning Objectives

2.1 What is the scientific method?
2.2 What are the major research designs?
2.3 What are the ethics of social research?
2.4 How does technology influence sociological research?

Using the text boxes to stimulate discussion:

Research Today: Surveying Cell Phone Users. The text asks students to **Apply theTheory** by answering two questions: 1) What problems might result from excluding cell phone-only users from survey research? 2) Which of the problems that arise during telephone surveys might also arise during Internet surveys? Might Internet surveys involve some unique problems?

Social Policy and Sociological Research: Studying Human Sexuality. Have students read the text box and then encourage them to **Apply the Theory** by answering these three questions: 1) When studying human sexuality, what theoretical perspective(s) would advocate high levels of objectivity and neutrality? 2) Would you be willing to participate in a study related to sexuality if you were asked? 3) For feminist researchers, what might be a major goal or purpose of any study on human sexuality?

• Suggestions for in-class activities:

- **Blind spots/perception.** To illustrate how easily we can have "blind spots" in our perceptions, try this exercise from Reed Geertsen (1993) "Simulating the Blind Spots of Everyday Experience." *Teaching Sociology* 21: 392-396. You will write several words on the board, and tell students which words are "in" the pattern, and which ones are not. For example, in the first round, the words "in" the pattern might be words double letters: good, better, tree, etc. Mix these in with words that do not fit the pattern. As you write the words, tell students which ones are "in' and cross off the ones that are not. In the next round, change the pattern – included words might be three letter words, or words that begin with a vowel. Start out each round by telling students which words are "in" and which are not. Ask them for suggestions for words that fit the pattern. In the last round (usually two are enough, but you might go three rounds) – switch the pattern for inclusion to where *you* are standing when you write the words. For example, write three words while standing on the left side, and tell them all these words are "in." Ask for suggestions for words, write whatever they offer, and tell them they are

doing really well at getting the pattern. Then switch to the other side of the board, and ask for more suggestions – none of these words will fit the pattern (because your physical position has changed). Switch back to the left, and their suggestions are correct. Keep subtly switching from side to side until someone stops attending to the *words* and starts attending to *what you are doing*. You might have to exaggerate your movements for them to "get it" – but it is a powerful (and easy) demonstration of how once we decide we "know" what to look for, we can only see that, and stop perceiving other information.

- **Conceptualization and operationalization.** To demonstrate the concepts and difficulties involved with operationalizing variables, ask students (either individually or in groups) to create conceptual and operational definitions of a concept such as "love," "intelligence," "poverty," or "anxiety." They will soon realize that even seemingly simple concepts are hard to define, that they have many dimensions, and that it is very difficult to "measure" many concepts.

Video Suggestions

Obedience. Closed captioned, VHS, c 1965 , renewed 1993. This film documents Stanley Milgram's research on obedience to authority, using black and white film shot at Yale University in 1961 and 1962. Subjects thought that they were administering electric shocks of increasing severity to another person, who was supposed to be learning a list of random word pairs. Milgram was surprised that over 65% of the subjects administered what they believed to be lethal electrical shocks, simply because an experimenter told them it was "necessary" for them to continue. The film shows both obedient and defiant reactions, and subjects explain their actions after the experiment.
Application: The video can be used to raise many issues central to research methods, particularly ethics (it is a "classic" example of an *un*ethical experiment), research design, independent and dependent variables, operationalization, and control variables. For more information, see http://www.stanleymilgram.com/milgram.php . For the CSAA code of ethics, see http://www.csaa.ca/structure/Code.htm .

Ask a Silly Question. 1997, CBC, 48 minutes. This is a funny, lighthearted video with serious content. It can be used to illustrate many concepts related to research methods, especially opinion polling. It shows how people are eager to give answers, even to questions that make no sense at all. Students will learn that if poor questions are asked, you still get data – but it is very, very "bad" data. The video is a good choice to get students talking about validity and reliability, sampling, and survey methodology. It is also useful to pair the video with actual examples of opinion polls, especially if you have students find examples in the newspapers or on websites.

Key Points from the text:

The Scientific Method: The **scientific method** is a systematic, organized series of steps that ensures maximum objectivity and consistency in researching a problem. There are eight basic steps in the scientific method: defining the problem, reviewing the literature, formulating the hypothesis or research question , selecting the research method (design), selecting the sample, measuring the variables, collecting and analyzing data, and developing the conclusion.

Defining the Problem: The first step in any research project is to state as clearly as possible what you hope to investigate. An **operational definition** is an explanation of an abstract concept that is specific enough to allow a researcher to assess the concept. A **review of the literature**, concerning the problem under study, helps to refine the problem and reduce avoidable mistakes. (Try to help students to understand the difference between scholarly literature, magazines, and newspapers.)

Formulating the Hypothesis: After reviewing earlier research and drawing on the contributions of sociological theorists, the researchers formulate the **hypothesis**, a speculative statement about the relationship between two or more factors known as variables. A **variable** is a measurable trait or characteristic that is subject to change under different conditions. If one variable is hypothesized to cause or influence another one, social scientists

call the first variable the **independent variable**. The second is termed the **dependent variable** because it is believed to be influenced by the independent variable. A good way to remember the difference is to think of the independent variable as the "cause" and the dependent variable as "the effect."
Use the textbook: Have students look at Figure 2-2 on Causal Logic. Ask them to identify two or three variables that might "depend" on the independent variable "Number of alcoholic drinks consumed."

Collecting and Analyzing Data: In most studies, social scientists must carefully select what is known as a sample. The most frequently used representative sample is a **random sample** in which every member of the entire population has the same chance of being selected.

Validity and Reliability: The scientific method requires that research results be both valid and reliable. **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 provides consistent results.

Research design - *Surveys:* A **survey** is a study, generally in the form of an interview or questionnaire, which provides sociologists with information concerning how people think and act. Among Canada's best-known surveys of opinion are those by Ipsos-Reid and Environics. Surveys can be indispensable sources of information, but only if the sampling is done properly and the questions are worded correctly and without bias. The survey is an example of **quantitative research**, which collects and reports data primarily in numerical form.

Research Design – *Field Research:* **Qualitative research** relies on what is seen in the field and naturalistic settings and often focuses on small groups and communities rather than on large groups and whole nations. Investigators who collect information through direct participation in and/or observation of a group or community under study are engaged in **observation**. This method allows sociologists to examine certain behaviours and communities that could not be investigated through other research techniques. **Ethnography** refers to efforts to describe an entire social setting through extended, systematic observation. Typically, this description emphasizes how the subjects themselves view their social setting. In some cases, the sociologist actually "joins" a group for a period of time to gain an accurate sense of how it operates. This is called *participant observation*.

Research Design - *Experiments:* When sociologists want to study a possible cause-and-effect relationship, they may conduct experiments. An **experiment** is an artificially created situation that allows the researcher to manipulate variables. In the classic method of conducting an experiment, two groups of people are selected and matched for similar characteristics such as age or education. The **experimental group** is exposed to an independent variable; the **control group** is not.

Use of Existing Sources: Sociologists do not necessarily have to collect new data in order to conduct research and test hypotheses. The term **secondary analysis** refers to a variety of research techniques that make use of publicly accessible information and data. Many social scientists find it useful to study cultural, economic, and political documents, including newspapers, periodicals, radio and television tapes, the Internet, scripts, diaries, songs, folklore, and legal papers, to name a few examples. In examining these sources, researchers employ a technique known as **content analysis**, which is the systematic coding and objective recording of data, guided by some rationale.

Ethics of Research: In 1994, The Canadian Sociology and Anthropology Association, the professional society of the discipline, published its Code of Ethics. It includes the following basic principles: protect vulnerable or subordinate populations from harm incurred, respect the subject's right to privacy and dignity, protect subjects from personal harm, preserve confidentiality, seek informed consent from research participants, and non-deception of subjects.

Neutrality and Politics in Research: Max Weber believed that sociologists must practice value neutrality in their research. In his view, researchers cannot allow their personal feelings to influence the interpretation of data. Investigators have an obligation to accept research findings even when the data run contrary to their own personal views, to theoretically based explanations, or to widely accepted beliefs. The issue of value neutrality does not mean you can't have opinions, but it does mean you must work to overcome any biases, however unintentional, that you may bring to the research.

Technology and Sociological Research: The increased speed and capacity of computers have enabled sociologists to handle much larger sets of data, and anyone with a desktop computer and a modem can access information to learn more about social behaviour. The Internet is an inexpensive way to reach large numbers of potential respondents and get a quick return of responses. However, the ease of access to information has led to new research problems: How do you protect a respondent's anonymity and how do you define the potential audience?

Social Policy and Sociological Research: Studying Human Sexuality: Sometimes the process behind sociological inquiry is just as revealing as the research itself. Differing attitudes towards the study of human sexuality on the two sides of the 49th parallel can be seen as a reflection of some of the cultural differences between the United States and Canada. While the Americans prefer to leave this area of research to be funded privately by corporations, the Canadian government through Statistics Canada provides support directly. This reluctance to use public funds to study the intimate lives of Americans might be interpreted as representing conservative attitudes, or as a product of their preference for free market endeavors. On this side of the border, the apparently opposite policy is possibly evidence of our liberal nature or our status as a social democracy.

Additional Lecture Ideas

1: Useful Statistics

In their effort to better understand social behaviour, 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 Muslims, compared with Roman Catholics, contribute to their local mosques or 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 Muslim mosque and Roman Catholic churches, the absolute numbers of contributors from each group could be misleading if there were many more Muslims 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.

In Canada in 1999, the average male working full time full year, earned $45 800. In that same year, a female with the same work history earned an average of $32 026. The average difference between the two indicates that in 1999, Canadian women earned over $13 000 less than men. But, of course, not all women earned less than their male counterparts. Many women made much more than the average man. The picture painted by statistics cannot always be taken at face value.

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 essentially time-savers in sociological research and analysis.

2: How Would You Obtain a Representative Sample?

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 for developing a representative sample in their school's county that will be asked questions about a controversial subject . 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 college or university, 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 upon 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 can the "hat selection" process 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* (5th ed.). Belmont, CA: Wadsworth, 1989. 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.

3: Asking the Correct Questions

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 favor urban homesteading?	People may not understand the question.	Do you favor 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 a woman to obtain a legal abortion?	Too general.	Should it be possible for a woman to obtain a legal abortion if there is a strong chance of serious defect in her baby? If she became pregnant as a result of rape?
Do you favor making it legal for 18-year-olds to drink liquor and smoke marijuana?	Double-barreled (two questions in one).	Do you favor making it legal for 18-year-olds to drink liquor? Do you favor 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 confidence, or very little confidence in the press?

4: Observation Research

As part of Human Resources and Development Canada's *National Longitudinal Study of Children and Youth.* Dr. Richard Tremblay of the Université de Montréal, used observational methods to examine the behaviours of girls and boys in school playgrounds. He discovered that both sexes used intimidation as a weapon in their dealings with others, and that contrary to common perception, girls were as likely as their male counterparts to bully. The distinction between the two groups was found in the style of intimidation. Dr. Tremblay observed that boys used real or threatened physical violence as their primary weapon, girls were more circumspect, choosing less blatant, psychological methods of harming their targets. Tremblay's research has some important implications for programs designed to increase awareness of bullying in schools:

1. The programs should be aimed at both genders
2. The programs should provide a clear definition of what constitutes bullying, emphasizing that it is not necessarily limited to physical intimidation.
3. The programs should include examples of non-physical bullying demonstrating the very real potential for harm that they represent.

See : Richard E. Tremblay. *"When Children's Social Development Fails"* Human Resources Development Canada, HDWP-27, Revised:October,1998.

5: Unobtrusive Measures: Monitoring of CB Prostitutes

John Luxenburg found that the citizens' band, or CB, radio has been known to assist automobile and truck drivers in many respects, including sexual solicitation. At Buddy Park, truckers' slang for an interstate rest area in Oklahoma notorious for prostitution, the airwaves carry conversations between prostitutes and prospective customers. On one busy evening, the following conversation was monitored. The "handles" (air names) have been changed to protect the anonymity of the unknowing participants in this use of unobtrusive measures.

BABY DOLL (PROSTITUTE): "What's happening out in Buddy Park?"
RIVER RAT(DRIVER): "Oh, there ain't much goin' on there. Ah, how you be doin'?"
BABY DOLL: "I be doin' fine."
RIVER RAT: "I be sittin' down in the rest stop, if you ain't got nothin' to do."
BABY DOLL: "Come again?"
RIVER RAT: "I'm sittin' down at the rest area, if you ain't got nothin' to do."
BABY DOLL: "What truck are you in?"
RIVER RAT: "Look for the green trailer."
BABY DOLL: "I hope it's not a waste of my time."

From this conversation, it is apparent that the prostitute is able to be selective. For more specific directions and signaling, the prostitutes usually get an exact location within the test area and ask the driver to blink his lights. The prostitute then approaches the cab of the truck and discusses price.

Clearly Luxenburg used nonreactive measures in her research. Would your class consider them ethical or not? See Luxenburg and Klein, "CB Radio Prostitution: Technology and the Displacement of Deviance." *Journal of Offender Counseling, Service, and Rehabilitation*, 9(Fall/Winter 1984):71–87.

6: Content Analysis of the Coverage of the War on Terrorism

Writer Robert Hackett, in the Canadian Association of Journalists' Fall 2001 edition of Media, commented on the frenzy of reporting that had followed the terrorist attacks on the World Trade Center and the Pentagon on 9-11 :

> "Two weekends after the September 11 atrocity, I watched with appreciation the respected American journalist and media critic James Fallows. He was warning his colleagues in the attack's emotional aftermath that independent journalism was at risk of being swallowed by patriotism. Just one problem: Fallows was speaking not on an American network, but on Canada's national public broadcaster, the CBC." See Robert Hackett. "Covering Up the War on Terrorism: The master frame and the media chill." *Media.* Fall 2001.

Hackett's analysis focuses on the influence that patriotic sentiment played in defining the editorial agenda in the United States after September 11. He bemoans the lack of objective debate within the American media over the fundamental issues surrounding the attacks.

In his analysis, Hackett discusses a number of relevant areas that his research determined had received little or no coverage in the U.S. These include:

- The links between September 11 and other global events.
- Policy options beyond military response.
- A clear articulation of who comprises the enemy.

The level to which Islam could be held responsible for the attacks By contrast, Hackett points to the broad and inclusive coverage provided by the Canadian media, particularly the CBC; which incorporated the historical context of American involvement in Middle East affairs as part of the examination of events.

7: Content Analysis: Children's Books and Television Studies of children's books of the 1940s, 1950s, and 1960s found that females were greatly underrepresented in titles, central roles, and the illustrations in picture books. Books that were awarded the celebrated Caldecott Medal similarly stereotyped girls and women. Has the situation improved? There was a trend of decreasing sexism in children's books through the 1980s. The results are a bit more complex in terms of roles. Prior to 1970, virtually all females were shown as helpless, passive, incompetent, and in need of a male helper. Now females are sometimes shown to be active, but boys are engaged in active play three times as often as girls are.

Susan Brinson conducted a content analysis of prime-time television dramas (like *LA Law*) to see how the storylines handled an act of rape. She found that rape myths, she "asked for it," "wanted it," or "wasn't really hurt," were presented 132 times in the 26 incidents of rape. Such portrayals may cause the many rape victims watching television to question their own responsibility for the attack. Specific rejoinders to such myths occurred much less often.

See Susan L. Brinson, "The Use and Opposition of Rape Myths in Prime-Time Television Dramas," *Sex Roles*, 27(7/8)(1992):359–375; Carol M. Kortenhous and Jack Demarest. "Gender Role Stereotyping in Children's Literature: An Update," *Sex Roles*, 28 (3/4)(1993):219–232.

Class Discussion Topics

1. Stimulating Classroom Discussions about Observation Research: Questions for stimulating a classroom discussion about Elijah Anderson's study of "eye work" include these: Which sociological perspective is reflected in Anderson's work? Are there problems maintaining objectivity when using the types of research methods employed by Anderson? Can the results of a small community study have significance beyond the community in which the study was conducted? Does Anderson's race and the race of his subjects have any significance for the research findings? Does the social class background of the researcher and the social class background of the subjects have any significance for the research findings? Can studies of this type be reproduced (are they reliable)?

2. Scientific Method: Sociologist Raymond W. Mack assesses the role of the scientific method in "Science as a Frame of Reference," *Transaction* 2(1)(1964):24–25.

3. Social Science Fiction: Are Shere Hite (*The Hite Report on Male Sexuality*), Vance Packard, and Gail Sheehy (*Passages*) writers of sociology or "social science fiction"? Robert Asahina discusses this issue in the *New York Times Book Review* (August 3, 1981), p. 35.

4. 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* (3rd ed.). Washington, D.C.: American Sociological Association, 1993, pp. 121–122.

5. Surveys: Surveys, despite often being criticized, are very useful to both the general public and policymakers. See *Survey Research*. 1976 Social Science and Humanities Research Council of Canada. Ottawa. The Canada Council.

6. 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 Prime Minister?" 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 would be on data manipulation rather than on the accuracy of the sampling techniques.

7. Interviewing: This exercise has been designed by Theodore C. Wagenar at Miami University (Ohio) to develop an awareness of the problems that may arise in interviewing. See Technique No. 28 in Reed Geertsen (ed.). *Eight-One Techniques for Teaching Sociological Concepts*. Washington, D.C.: ASA Projects on Teaching Undergraduate Sociology, 1982.

8. 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): 6268.

9. 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).

10. Content Analysis of Greeting Cards: Using the technique of content analysis, sociologist Silberman-Federman examined 56 Hanukkah cards and used a panel of six judges to evaluate them. See Nancy Jo Silberman-Federman. "Jewish Humor, Self-Hatred, or Anti-Semitism: The Sociology of Hanukkah Cards in America," *Journal of Popular Culture*, 28(Spring 1995):211–229.

11. Content Analysis and Magazines: See Techniques Nos. 4 and 5 in Edward L. Kain and Robin Neas (eds.). *Innovative Techniques for Teaching Sociological Concepts* (3rd ed.). Washington, DC: American Sociological Association, 1993, pp. 6–8.

12. Ethical Standards: A survey found that most sociologists feel that their colleagues are not familiar with the ASA code, but at the same time they feel that the ASA should apply sanctions. What form should these sanctions take? Is violation widespread? See Janet Bokemeier and Keith Carter, "Ethics in Sociological Practice: A Survey of Sociologists," *Sociological Practice*, 3(Spring 1980):129–151.

13. Using the Web for Research: The web has become an ever increasingly popular source of social science research data. See McKie, Craig. *Using the Web for Social Research.* McGraw-Hill Ryerson. Toronto.

14. Using Humour: Several sociologists have used humor to illustrate material presented in this chapter. See David Adams, "Methods of Research." In *Using Humor in Teaching Sociology: A Handbook*. Washington: D.C.: ASA Teaching Resources Center. See also Joseph E. Faulkner "Studying Society." In *Sociology through Humor*. New York: West, 1987.

Topics For Student Research

1. **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.
2. **Hazards in Social Research:** Can scientific research come to the "wrong" conclusions? Jenne K. Britell (executive director of the Educational Testing Service) reviews the Westinghouse Learning Corporation and Ohio University study that jeopardized Project Head Start. See Britell, *New York Times* (September 1980): Educational Section, p. 18.
3. **Interviewing:** What are some of the problems and strategies of sociological interviewing? See Norman K. Denzin (ed.). *Sociological Methods: A Sourcebook*. New York: McGraw-Hill, 1978, pp. 171–202.
4. **Participant Observation and Ethical Issues:** See the special issue of *Social Problems*, 27(February, 1980).
5. **Content Analysis: Comic Superheroes:** See Thomas Young, "Are Comic Book Superheroes Sexist?" *Sociology and Social Research*, 75(July 1991):218.
6. **Content Analysis: Newspapers:** See Ben M. Crouch and Kelly R. Damphouse, "Newspapers and the Antisatanism Movement: A Content Analysis," *Sociological Spectrum*, 12(1)(1992):120.
7. **Social Theory:** See Robert K. Merton, "The Bearing of Empirical Research upon the Development of Social Theory," *American Sociological Review*, 12(5)(1969):505–515.
8. **Social Science and Research Council of Canada:** The Social Science and Research Council of Canada's web site is a great place to start your examination of social research in Canada. See http://www.sshrc.ca/

Audiovisual Materials

Ethnographic Filmmaking and the Social Life of a Sidewalk (2010, 60 m) This documentary directed by Barry Alexander is based on the ethnographic fieldwork of Mitchell Duneier in his 1999 book *Sidewalk. Sidewalk* chronicled the lives of homeless book vendors and magazine scavengers in New York City.

Scientific Method and Values (1993, 34m). Examines the development of scientific methods, looking at the contributions of Newton, Darwin, and Curie.

Thick Description: Contextualizing Social Interaction (YOUTUBE 2013, 5m). This video demonstrates the various meanings of gang signs and is useful in underscoring Clifford Geertz's discussion of the ethnographic technique "thick description." This video highlights the importance of social context in gaining an understanding of the meaning of social behaviour.

Sociological Thinking and Research (1991, 31m). The program describes how to structure a research study by defining the problem to be studied, reviewing the relevant literature, formulating a hypothesis, and selecting a research design. Sociologist William Kornblum explains his methods for studying the effects of planned renewal on the neighborhood around Times Square. The importance of going beyond common sense in developing sociological theory is emphasized.

Ben Goldacre: Battling Bad Science (TEDGlobal 2011, 18 m). Doctor and epidemiologist, Ben Goldacre, discusses how evidence can be distorted and how dodgy scientific claims can be made.

*Johanna Blakley: Social Media and the end of gender (*TEDWomen 2010, 18 m). Media and entertainment researcher Johanna Blakley examines the role of social media, changing research strategies, and the relationship to gender.

Chimamanda Ngozi Adichie: The Danger Of A Single Story (TED TALK 2011, 18 m). This TED TALK focuses on the importance of hearing and researching different perspectives and voices and the value that these varied perspectives and voices bring to any research question

Additional Readings

Alford, Robert R. *The Craft of Inquiry: Theories, Methods, Evidence*. New York: Oxford University, 1998. Alford, who won the 1997 Distinguished Contributions to Teaching Award from the American Sociological Association, has written a book to help students transform their ideas into research questions that integrate theory, methods, and evidence.

Babbie, Earl. *The Practice of Social Research* (13th ed.). Belmont, CA: Wadsworth, 2012. Covers inquiry and social research, the structuring of inquiry, types of observation, and analysis of data in qualitative and quantitative research methods.

Blumer, Martin (ed.). *Social Research Ethics.* New York: Macmillan, 1982. Describes four research projects open to criticism on ethical grounds; concludes with a series of papers by various sociologists on the philosophy of ethics in research.

Brown, Leslie and Susan Strega. Toronto: CSPI/WP, 2005. *Research as Resistance: Critical, Indigenous and Anti-Oppressive Approaches.* This book brings together the theory and practice of critical, Indigenous, and anti-oppressive approaches to social science research.

Canadian Sociological and Anthropology Association. *Canadian Review of Sociology and Anthropology*. Montreal: CSAA. Since its inception in 1964, the *Review* has provided peer-reviewed articles and critiques on topics of sociology and anthropology. This journal provides an excellent scholarly source for research about social issues in Canada.

Eichler, Margrit. *Nonsexist Research Methods: A Practical Guide*. Winchester, MA: Unwin Hyman, 1988. A book that complements the material presented in the text concerning the impact of gender and sexism on the research process.

Floyd, Richard. *Success in the Social Sciences: Writing and Research for Canadian Students.* 1995. Toronto: Harcourt Brace Canada. An excellent, step-by-step guide to the research process. Suitable for first year students in particular.

Hammersley, Martyn. *The Dilemma of Qualitative Method: Herbert Blumer and the Chicago Tradition*. New York, Routledge, 1990. Hammersley examines the strengths and weakness of the qualitative approach for sociological investigation.

Liebow, Elliot. *Tally's Corner*. Boston: Little, Brown, 1967. This classic participant observation study has a lengthy and valuable methodological introduction that explains the participant observation process.

Palys, Ted and Chris Atchinson. 2007. *Research Decisions: Quantitative and Qualitative Perspectives (4th editon).* Harcourt Brace Jovanovich Canada. A clear and comprehensive introduction to the role of decision making.

Savin-Baden, M. and C. Major. 2013. *Qualitative Research: The Essential Guide to Theory and Practice.* New York: Routledge.

Steinmetz, George (ed.) 2005. *The Politics of Method in the Human Sciences* . A group of essays that explore the alternatives to positivism in a number of disciplines.

Stoddart, Kenneth. (ed.). *Qualitative Methods: Syllabi and Instructional Materials*. Washington, DC: The American Sociological Association Teaching Resource Center, 1995. This volume contains various instructional materials that sociologists have used in their classes to teach topics such as epistemological issues, styles of inquiry, the rationale and theoretical underpinnings of qualitative methods, and data analysis techniques.

Thinking About Movies

Kinsey (Bill Condon, 2004)

In this film, based on the real-life researcher Alfred Kinsey (Liam Neeson) conducts the first wide-scale investigation of human sexuality in the U.S. We see Kinsey and his team interviewing subjects about their sexual practices, work that culminates in the publication of his controversial *Kinsey Report.* We see him struggle for funding and public acceptance of his work in the 1940's and 1950's, when candid talk about sex violated social norms.

One of only a few mainstream movies that show research in process, *Kinsey* illustrates the ethical challenges involved in researching human behaviour. Watch for scenes in which Kinsey's team strives to be value neutral by standardizing their interviewing method.

For class discussion, have students consider the following questions:

1. How did Kinsey's research team attempt to adhere to the code of ethics? How successful do you think they were?
2. How does the movie illustrate the attempt to establish validity and reliability in the research design?

And the Band Played On

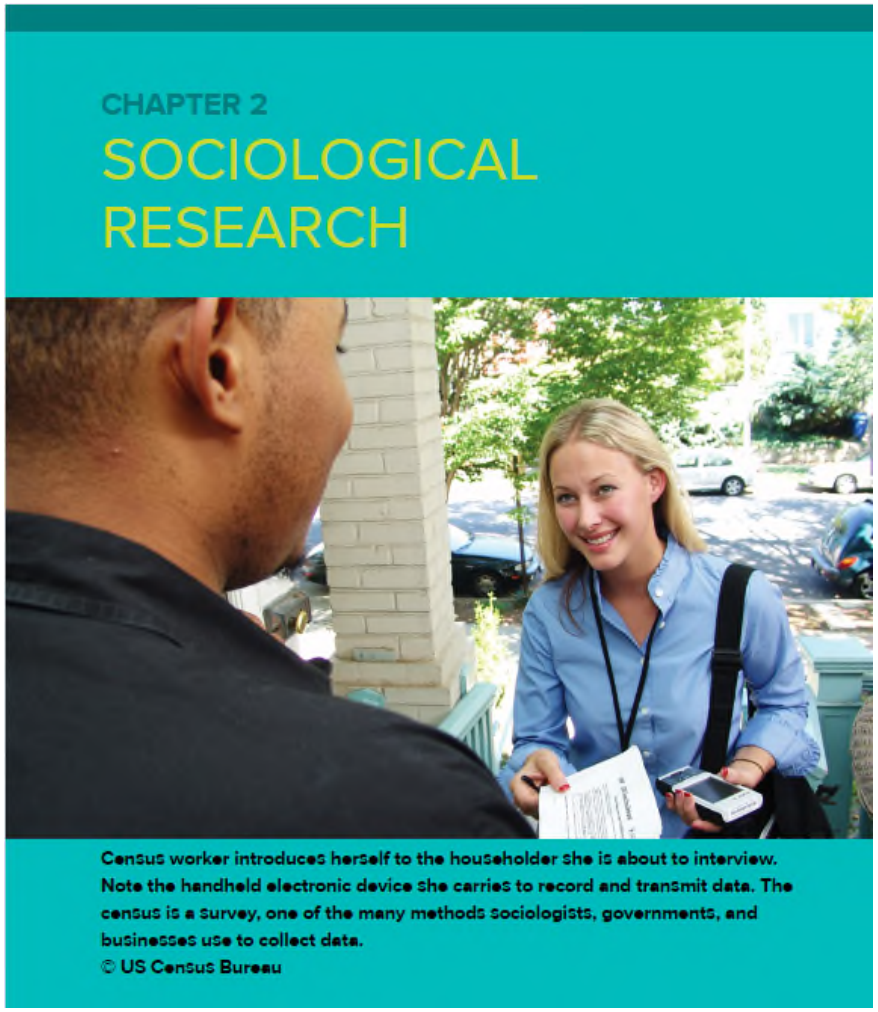
In the early years of the AIDS crisis, researchers employ the scientific method to understand how the disease is transmitted.

An Inconvenient Truth

In this documentary about global warming, Al Gore argues that certain social groups are already paying the price for climate change.

Experimenter (2015)

This biographical film drama is based on the true story of famed social psychologist Stanley Milgram. The first half of the film shows how his experiments are conducted. The second half shows how he struggles with public outcry about the ethics of the experiments and how his career is influenced by his early work.



Census worker introduces herself to the householder she is about to interview. Note the handheld electronic device she carries to record and transmit data. The census is a survey, one of the many methods sociologists, governments, and businesses use to collect data.
© US Census Bureau

Chapter 2
Sociological Research

LO 2.1 What Is the Scientific Method?

LO 2.2 What Are the Major Research Designs?

LO 2.3 What Are the Ethics of Research?

LO 2.4 How Does Technology Influence Sociological Research?

Microsoft® PowerPoint® Slides
designed by:
Brian Cowan

Sociological Research

Who? What? When? Where? Why? How?

Scientific studies do not aim to answer all the questions that can be raised about a particular subject.

Research findings often provide more questions than answers, prompting further ideas for sociological research.

The more I learn, the less I know.

Sociological Research

Research results about accepted beliefs can lead to changes in public policy and legislation.

- How do sociologists set up research projects?
- How can they ensure reliable and accurate results?
- Can they conduct research without violating the rights of the research subjects?

Scientific Method

The ***scientific method*** is a research methodology which allows sociologists to objectively and logically collect and evaluate data in a disciplined and consistent manner.

To ensure accurate, valid and ethical results, it follows a stringent design structure and set of procedures.

LINKS

Define

Review

Hypothesis

Design

Conclusion

Scientific Method

- subject for study (why study, what can be learned?)

- existing literature (existing related or similar studies)

- develop an idea that you want to prove

- design study and collect data

- was your hypothesis proved or not? Why?

Major Research Designs

LINKS

Define

Review

Hypothesis

Design

Conclusion

Define the Research Study

An ***operational definition*** of a study is an explanation of an abstract concept that is specific enough to allow a researcher to assess the concept.

- What do we want to learn?
- What can be gained from the study?

Initially, we take a Functionalist perspective (although we may end up incorporating or adopting other perspectives).

Major Research Designs

LINKS

Define

Review

Hypothesis

Design

Conclusion

Review the Literature

Consult relevant scholarly studies and information (books, publications, articles, data).

- What research has already been done?
- How does your research contribute to the body of knowledge?
- How have other researchers defined the problem under study?
- How to improve on previous research?

Major Research Designs

LINKS

Define

Review

Hypothesis

Design

Conclusion

Formulate a Hypothesis

Based on how we define our study and the Literature Review, we develop a hypothesis.

A ***hypothesis*** is a speculative statement about a relationship between two or more ***variables*** (e.g. income/spending, profession/political affiliation etc.).

The hypothesis must generally suggest how one aspect of human behaviour (*independent variable*) influences or affects another (*dependent variable*).

Major Research Designs

LINKS

Define

Review

Hypothesis

Design

Conclusion

Design the Study

Select a sample group to study.

Sample studies are used to formulate conclusions about the larger population.

A ***sample*** should be statistically representative of a population to ensure study ***validity and reliability***.

A ***random sample*** is a sample where every member of an entire population has an equal chance of being selected.

Major Research Designs

LINKS

Define

Review

Hypothesis

Design

Conclusion

Conclusion(s)

A Conclusion is a perceived ***correlation*** between the independent and dependent variable(s).

Research data do not always support the hypothesis.

Data refuting a hypothesis or unexpected results causes researchers to re-examine their methodology and make changes in the research design.

Conclusions should point to potential study biases or flaws and suggest improvements or areas for further study.

Major Research Designs

LINKS

Survey

Ethnography

Experiment

Existing Sources

Major Research Designs

A ***research design*** is a detailed plan or method for obtaining data scientifically. Research designs that sociologists regularly use include:

LINKS

Survey

Ethnography

Experiment

Existing Sources

Major Research Designs

A ***survey*** consist of a set of specific questions asked of a representative sample of the population.

Survey questions are simple, clear and easily understood, yet specific enough effectively interpret results.

Survey can be conducted by questionnaire or interview.

Surveys can be ***Quantitative or Qualitative*** research.

LINKS

Survey

Ethnography

Experiment

Existing Sources

Major Research Designs

Ethnography is the study of an entire social setting through extended systematic fieldwork. The researcher embeds into the group studied and observes.

Ethnographic research includes the conduct of in-person interviews and collection of historical information.

Although a relatively informal method, ethnographic researchers must take detailed notes while observing their subjects.

LINKS

Survey

Ethnography

Experiment

Existing Sources

Major Research Designs

An ***Experiment*** is an artificially created situation which allows researchers to manipulate variables.

Suited to study possible cause-and-effect relations using two groups selected and matched for similar traits.

Subjects are assigned to ***experimental group*** (exposed to independent variable) or ***control group*** (not exposed to independent variable) and differences noted.

LINKS

Survey

Ethnography

Experiment

Existing Sources

Major Research Designs

Research can existing data (e.g. articles, statistics, studies). Data may not be exactly what the researcher needs or may differently from the original researcher.

Secondary analysis - research using previously collected, publicly accessible data. It is considered *non-reactive*, since it does not influence people's behaviour.

Content analysis is the systematic coding and objective recording of data, guided by some defined rationale.

Ethics of Research

Ethics of Research

Ethical research is guided by the Canadian Sociology and Anthropology Association's (CSAA) *Statement of Professional Ethics* found at:

https://www.csa-scs.ca/files/www/csa/documents/codeofethics/2012Ethics.pdf

Codes of ethics arise from the need to protect vulnerable or subordinate populations from harm incurred, knowingly or unknowingly, by the intervention of researchers into their lives and cultures.

Ethics of Research

- Respect rights to privacy, confidentiality and anonymity of subjects.
- Do not expose subjects to harm.
- Deception must not expose subjects to risk/harm.
- Practice *value neutrality*. Do not taint research with personal views.

Technology & Research

- Access to vast stores of and data locally and internationally.
- Speed of literature review, collaboration.
- Crunching large amounts of data .
- Speeds surveys and interviews but research is limited to those with computers and internet.

Chapter 2 Summary

1. Studies seldom answer all questions about a subject.
2. *Scientific method* is a disciplined method of conducting consistent, accurate research: Define, Review, Hypothesis, Design, Conclusion.
3. The *operational definition* of a study is a concept explanation specific enough to research.
4. *Literature review* allows us to explore existing research on a subject.
5. The *hypothesis* is a speculative statement about a relationship between variables.

Chapter 2 Summary

6. A *sample* is a study group which is statistically representative of a population.
7. A *random sample* is a sample group composed of population members who all had an equal chance of being selected.
8. A *conclusion* is based on a perceived correlation between selected variables.
9. A *variable* is a measureable characteristic subject to change.
10. A *dependent variable* influences a dependent variable.

Chapter 2 Summary

11. *Validity* refers to the accuracy of study results.
12. *Reliability* refers to the level of repeatability of study results.
13. A *correlation* exists when a change in one variable causes a change in another.
14. A *positive correlation* exists when a change in one variable causes a corresponding change in another.
15. A *negative correlation* exists when a change in one variable causes an inverse change in another.

Chapter 2 Summary

16. *Quantitative research* tabulates study data by data quantity.
17. *Qualitative research* occurs in a more conversational situation.
18. A *research design* is a detailed plan to obtain data scientifically.
19. A *survey* is a set of specific questions asked of a representative sample.
20. *Ethnography* is the study of an entire social setting via field work.
21. An *experiment* is an artificial situation allowing manipulation of variables,

Chapter 2 Summary

22. *Secondary analysis* uses previously collected data for analysis.
23. *Content analysis* is systematic encoding of data according to a pre-defined rationale.
24. A *research design* is a detailed plan to obtain data scientifically.
25. *Research ethics* is a code of conduct to protect the privacy, confidentiality and safety of test subjects.
26. Technology has enhanced the speed of collection, analysis and sharing of data.

LINKS
Define
Review
Hypothesis
Design
Conclusion

Variables

A ***variable*** is a measurable characteristic subject to change.

An ***independent variable (x)*** may influence other variables. It is NOT influenced by the dependent variable.

The ***dependent variable*** (***y***) "depends" on the influence of the independent variable to change.

A ***control variable*** is a factor held constant to test the relative impact of the independent variable.

Major Research Designs

LINKS
Define
Review
Hypothesis
Design
Conclusion

Validity and Reliability

To be effective, research must yield results which are both valid and reliable.

- ***Validity*** refers to the degree to which a measure or scale accurately reflects the phenomenon under study. It is dependent on study design and data collection.
- ***Reliability*** refers to the extent to which a measure produces consistent, repeatable results.

Major Research Designs

LINKS
Define
Review
Hypothesis
Design
Conclusion

Correlation

A ***correlation*** exists when a change in one variable coincides with a change in the other. Correlations indicate ***causality*** or ***causal logic*** (one aspect causing another) *might* be present. For example:

Major Research Designs

LINKS
Define
Review
Hypothesis
Design
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Correlation

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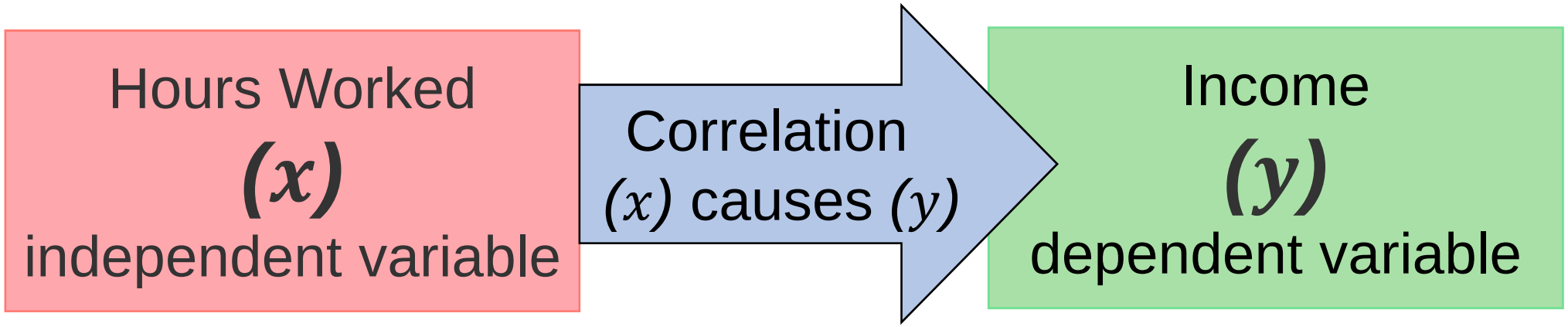

Major Research Designs

LINKS

Survey

Ethnography

Experiment

Existing Sources

Major Research Designs

Quantitative research collects and measures research primarily in numerical form (e.g.. 30% of those surveyed or 4 out 5 dentists etc.).

Qualitative research is like a conversational interview.

- suited to studying contexts.
- excels at illuminating *process* (how change affects daily procedures and interactions).
- can expose intended or unintended consequences.