

## CHAPTER 2: SOCIOLOGICAL RESEARCH

### How Do We Learn about Society and Social Behaviour?

#### Overview of Opening Excerpt

Eileen Barker, “The Scientific Study of Religion? You Must Be Joking!” in Lorne L. Dawson, ed. *Cults and New Religious Movements: A Reader* (Oxford: Blackwell Publishing, 2003).

Sociologists study all kinds of social groups. Eileen Barker’s research has focused on New Religious Movements (NRMs), which she often studied as a participant observer. This experience led her to reflect on the challenge of sociological research. In studying controversial groups like cults, it is even more important that the social researcher be objective and scientific in his/her study. This chapter introduces some of the methods and processes used in social science research as well as some of the issues associated with researching people in society.

Essay question: What are some of the challenges in conducting social science research?

#### Chapter Outline

##### 1. WHAT ARE RESEARCH METHODS?

###### A. Objectivity

###### B. Scientific Method: What Are the Six Steps of Social Research?

- a. Decide on a Topic
- b. Review the Literature
- c. Develop a Hypothesis
  - i. Variables
  - ii. Concepts and Operationalizing Variables
  - iii. Cause and Correlation
- d. Collect Data
  - i. Comparative, Cross-Sectional, and Longitudinal Studies
  - ii. Quantitative and Qualitative Data
  - iii. Populations

iv. Samples

v. Surveys

Make Connections: Country Music and Suicide

Go Global: Serious Pot Problems: North America versus Europe

i. Selection Effects and Samples of Convenience

ii. Experiments

Think Sociologically: Milgram Obedience Study

i. Hawthorne Effect

ii. Field Research

iii. Participant Observation

iv. Case Studies

v. Ethnography

vi. Secondary Data Analysis

vii. Evaluating Web Sources

viii. Triangulation

b. Analyze Results

i. Measures of Central Tendency

ii. Mean

iii. Median

iv. Mode

c. Evaluating Data

i. How to Read a Table

d. Share and Publish Results

i. Ethical Concerns

ii. Research Ethics in Operation

2. HOW DO SOCIOLOGISTS USE RESEARCH METHODS?

A. Research Methods and the Four Paradigms

3. HOW IS RESEARCH INVOLVED IN SOCIAL POLICY?

A. Social Policy and Statistics

## Chapter Overview

Research methods are the scientific procedures that sociologists use to conduct research and develop knowledge about a particular topic. The first step in thinking like a sociologist involves understanding certain terms and research methods. It is important for researchers to use objectivity when studying social groups. Weber used the term *verstehen* to describe the act of understanding the meaning of action from the actor's point of view. Sociological researchers need to understand variables, cause and correlation. They also use the six steps of the scientific method for social research.

Researchers use many types of research methods. A survey is an investigation of the opinions or experience of a group of people by asking them questions. In experiments, researchers hope to control variables to test causes and effects. Field research is conducted in a natural setting. Examples of field research include participant observation, case studies, and ethnographies. Some research involves secondary data analysis. Common measures of central tendency are the mean, median and mode. Ethics is a system of values or principles that guide one's behaviour. In Canada, the Tri-Council Policy Statement is the primary guideline for social science research.

Qualitative data includes words, pictures, photos, or any other type of information that comes to the researcher in a non-numeric form. A common qualitative research method is content analysis, a type of research in which the sociologist looks for common words or themes in newspapers, books, or structured interviews. Data based on numbers is called quantitative data. Sociologists use both qualitative and quantitative methods.

No single research method applies only to functionalism, conflict theory, symbolic interactionism, or feminist theory. But these theoretical frameworks do lend themselves to using types of data in different ways. Triangulation helps researchers use the strengths of one approach to compensate for the weaknesses in another. Social research helps in the development of social policy.

## Chapter Learning Objectives

- What are research methods?
- How do sociologists use research methods?
- How is research involved in social policy?

### Student Goals

- Understand the meaning of sociological research.
- Understand the ethical issues associated with sociological research.
- Explain the difference between reliability and validity.
- Identify the different research methods and the strengths and weaknesses of each.
- Explain Weber's concept of *verstehen* and how it applies to research.
- Identify and describe the six steps of social research or scientific method.
- Identify and give examples of the different types of sampling procedures.
- Describe the differences between participant observation, case studies, ethnography and secondary data analysis.
- Explain why triangulation is important in sociological research.
- Understand quantitative and qualitative research.
- Explain how working on social policies and participating in community-learning projects are ways sociologists can better the community.

### In-Classroom Activities

1. This activity is designed to help students understand the research process. Help students construct a short questionnaire about a topic of their choice. Have them collect data from ten individuals. Help them to analyze the data. They should write a short paper discussing their findings.
2. The purpose of this exercise is to do a content analysis of the advertisements in two weekly magazines. After creating a coding grid, go through an entire issue of *The Economist* or some other business magazine and count the number of advertisements that contain the words **business**, **commerce**, **money**, or **finance**. Record these in your grid. Also record the number of advertisements that contain the words **people**, **beauty**, **imagination**, and **create**. Note: You should also count variations of these words, for example, for create, you can also count creation, creativity, and creator. Repeat this process for an entire issue of *Maclean's* or some other popular magazine.
3. Locate two or three basic percentage tables. Help students understand how to interpret basic percentage tables.

### **Out-of-Classroom Activities**

1. Assign, or allow students to choose, a research topic. Students will describe the six steps of social research as if they were actually going to conduct the study.
2. Review with students the concept of secondary data analysis. Have students locate possible secondary data sources available in the library (this includes books and online databases). If possible, arrange a visit to the library for a workshop on secondary analysis research.
3. After discussing field research, send students to a public area to observe social behaviour in a sociological manner. They should write a report on what they saw, and present or share their observations with other students.
4. Ask students to pick three songs within a particular genre, (i.e., hip-hop, rock, pop) and examine their lyrics. Do these songs express anything about the culture in which we live? If so, how do you think this affects people who listen to this type of music?

### **Discussion Questions**

1. Can country music (or any kind of music) lead someone to commit suicide?
2. Is there ever a justification for social researchers to deceive their subjects under study?
3. What should sociologists be aware of when comparing research data, such as marijuana use, from different countries?
4. Why might people behave differently if they know they are part of an experiment or under observation?
5. Should researchers only publish their research findings if their hypotheses were supported or their results significant?

### **Essay Topics**

1. What are the different types of variables?
2. Discuss the six steps of social research.
3. Explain the relationship between cause and correlation.
4. What are the different types of research methods?
5. Explain the ethical principles as outlined by the Tri-Council Policy Statement
6. What is the difference between quantitative and qualitative methods of research?
7. What are three measures of central tendency?

### Key Words and Terms

**research methods** are the scientific procedures that sociologists use to conduct research and collect data about a particular topic.

**objectivity** is the ability to conduct research without allowing personal biases or prejudices to influence them.

**verstehen** means understanding the meaning of action from the actor's point of view.

**literature review** is a study of relevant academic articles and information.

**hypothesis** is a statement about how variables relate.

**variable** is a characteristic or trait that can be measured.

**independent variables** are variables that are deliberately manipulated in an experiment.

**dependent variables** are the response to the manipulated variable.

**control variables** are variables that are kept constant to accurately test the impact of an independent variable.

**concepts** are abstract ideas that refer to objects, ideas, or behaviours.

**operationalizing** is turning abstract ideas into something measurable.

**reliable** means you get consistent results each time you measure.

**validity** means that you're actually measuring the thing you set out to measure.

**causal relationship** is a relationship in which one condition or variable leads to a certain consequence.

**correlation** is an indication that when one factor changes, so does another.

**positive correlation** describes two variables that move in the same direction.

**negative correlation** describes two variables that move in opposite directions.

**spurious correlation** occurs when two variables appear to be related, but both may have an underlying cause.

**research design** refers to the process used to collect data.

**comparative studies** use data from different sources in order to compare them against each other.

**cross-sectional studies** look at an event at a single point in time.

**longitudinal studies** include data from observations over time using a cohort.

**cohort** is a specific group of people used in a study.

**quantitative data** refer to data based on numbers.

**qualitative data** include words, pictures, photos, or any other type of information that comes to the researcher in a non-numeric form.

**population** is the entire group of people you wish to describe.

**parameter** is a number that describes the population.

**sample** is a subset of the population.

**statistic** is a number that describes a sample.

**representative sample** is one in which the relevant characteristics of the sample are the same as the characteristics of the population.

**generalization** is the extent that what is learned from a sample can be applied to the population from which the sample is taken.

**random sample** is a sample chosen so that each member of the population has the same chance of being selected.

**convenience sample** is a nonrandom sample of people conveniently or easily available to the researcher.

**bias** is the likelihood that a non-representative sample may lead to inaccurate results.

A **survey** is an investigation of the opinions or behaviours of a group of people by asking them questions.

An **experiment** is a method in which researchers control variables in order to test causes and effects.

**Hawthorne effect** occurs when people behave differently because they know they are being studied.

**field research** is research conducted in a natural setting.

**participant observation** is a type of field research in which the researcher poses as a person who is normally in the environment.

**case studies** are investigations of one person or event in detail.

**ethnography** is a research method that aims to understand the social perspective and cultural values of a particular group by participating in or getting to know their activities in detail.

**secondary data analysis** is the process of using and analyzing data that others have collected.

**content analysis** is a type of research in which the sociologist looks for common words or themes in newspapers, books, or structured interviews.

**triangulation** is the process of using multiple approaches to study a phenomenon.

**central tendency** is the middle of the distribution of a variable.

**mean** is an average.

**median** refers to the midpoint in a distribution of numbers.

**mode** refers to the most common value in a distribution.

**ethics** is a system of values or principles that guide one's behaviour.

### Lecture Suggestions

1. Have the students pick a topic that you can use as an example for discussing the research process. Using this topic, walk the students through the six steps of the social research. Discuss the process of research and how it needs to include each of the six steps of the scientific method.
2. Arrange for a librarian to come to your class, or have your class go to the library. Ask the librarian to show students the resources that can be used in sociological research.
3. Locate a research article that has been published by any of the major sociological journals. Discuss the article with the class. Identify beforehand some ethical concerns that may be raised with the research project. Show the class the Tri-Council Policy Statement. Discuss how the Tri-Council Policy Statement addresses the ethical concerns.



### **Suggested Readings**

Lawrence W. Neuman and Karen Robson, *Basics of Social Research: Qualitative and Quantitative Approaches, Second Canadian Edition* (Toronto: Pearson Education Canada, 2012).

Jeffrey O. Bennett, William L. Briggs, and Mario F. Triola, *Statistical Reasoning for Everyday Life, 3<sup>rd</sup> edition* (Toronto: Pearson Education Canada, 2009).

Martin Bulmer, *Sociological Research Methods: An Introduction* (New York: The Macmillan Press Ltd, 2003).

Winston Jackson and Norine Verberg, *Methods: Doing Social Research, 4<sup>th</sup> edition* (Toronto: Pearson Education Canada, 2009).

### **Review Questions**

1. What are research methods?
2. How do sociologists use research methods?
3. How is research involved in social policy?
4. What is the difference between quantitative and qualitative research methods?
5. What do sociologists learn about society through sociological research?

### **Critical Thinking Questions**

1. Is it possible for sociologists to be objective when conducting research?
2. Why is correlation not always the same as causation?
3. If you were involved in Milgram's research on obedience and conformity, how would you have responded?
4. What ethical concerns put restrictions on the way human subjects can be used?
5. Are there any topics in sociology that should not be studied?

### **Discover Sociology in Action**

Have students pair up with someone in the class to work on this two-part project.

Part one: Work together to research a recent social policy that has been implemented in your community. What types of statistics were used in reporting this issue to the public? Were these statistics used properly in reporting to the public? Look up any definitions with which you are not familiar. Find out who funded the study. Does this organization or association have an agenda for or against the social policy? When reading about the causes of the social policy, look for other factors or variables that may be causing the event. Do local community leaders or politicians quote these statistics to push their agenda?

Part two: Find a topic in your local community for which you can conduct a needs assessment. You can either focus on a particular program (afterschool program) or a specific population (adolescents in a particular neighbourhood). Answer the following three questions:

- What information is needed?
- What is the background of this situation?
- How will we collect this information?

Students do not need to actually conduct the needs assessment but should go through the steps listed above. Have them write up their findings in a paper which they will present to the class.

# THINK

Second Canadian Edition

## SOCIOLOGY

CARL • BÉLANGER





# Chapter 2

Sociological Research:  
How Do We Learn About  
Society and Social Behaviour?



## Learning Objectives

- What are research methods?
- How do sociologists use research methods?
- How is research involved in social policy?



## What are Research Methods?

- **Research methods** are the scientific procedures that sociologists use to conduct research and develop knowledge about a particular topic
- The first concept sociologist must take into consideration is **objectivity** which is the ability to conduct research without allowing personal biases or prejudices to influence you
  - Max Weber applied the term ***verstehen***- understanding the meaning or actions from the actor's point of view



## Scientific Methods Six Steps of Social Research

- Sociology requires a logical and organized series of steps
- There are six basic steps of **social research** or investigation conducted by social scientists



## Scientific Methods - Step 1 and 2

### 1. Decide on a Topic

- The first stage of the research model involves determining what you want to study.
- Sociologists select topics on the basis of importance, personal interest or the availability of research

### 2. Review the Literature

- After selection of a topic you will need to perform a **literature review** which is a study of relevant academic articles and information



# THINK

## Scientific Methods Step 3

### 3. Develop a hypothesis

- After the literature review one needs to develop a **hypothesis** which is a statement about how two or more variables relate
- It should not be confused with a **theory** which is a comprehensive and systematic explanation of events that lead to testable predictions



## Variables

- In sociological research one uses **variables** – a characteristic or trait that can be measured
  - **Independent variables** are variables that are deliberately manipulated in an experiment
  - **Dependent variables** are the response to the manipulated variable
  - **Control variables** are variables that are kept constant to accurately test the impact of an independent variable



## Concepts and Operationalizing Variables

- How should one measure these variables? Social scientists use concepts and operationalizing variables
- **Concepts** are abstract ideas that are important to measure
- **Operationalizing** means turning abstract ideas into something measurable
- The measures you use need to be **reliable** which means it can be trusted and have **validity** which means you are actually measuring the thing you set out to measure in the first place



## Cause and Correlation

- **Causal relationship** is one in which a condition or variable leads to a certain consequence
- **Causation** is the relationship between cause and effect
- **Correlation** is an indication that when one factor changes, so does another
  - **Positive correlation**
  - **Negative correlation**
  - **Spurious correlation**

# THINK

## Scientific Methods Step 4

### 4. **Select a Research Design and Collect Data**

- **Research design** refers to the process used to collect data



## Comparative, Cross-Sectional and Longitudinal Studies

- In collecting data sociologists use a variety of data
  - **Comparative studies** use data from different sources in order to compare them against each other
  - **Cross-sectional studies** look at one event at a single point in time
  - **Longitudinal studies** include data from observations over time using a cohort. A **cohort** is a specific group of people used in a study



## Quantitative and Qualitative Methods

- **Quantitative data** refers to data based on numbers
- **Qualitative data** includes words, pictures, photos, or any other type of information that come to the researcher in a non-numeric form
- **Populations** are target groups from which researchers want to gain information
- **Parameter** – number that describes the population

# THINK

## Samples

- Because some populations are large, sociologists get their data from a **sample** of the population
  - **Representative sample** is one in which the relevant characteristics of the sample are the same as the characteristics of the population
  - **Generalization** is the extent that what is learned from a sample can be applied to the population from which the sample is taken
  - A **random sample** is a sample chosen so that each member of the population has the same chance of being selected





## Convenience Samples

- **Convenience sample** is a non-random sample of people conveniently available to the researcher
- Convenience samples often suffer from **bias**; the likelihood that a non-representative sample may lead to inaccurate results



## Survey

- A **survey** is an investigation of the opinions or behaviours of a group of people by asking them questions
  - Surveys include questionnaires and interview
  - Surveys are usually targeted at particular populations
  - Surveys measure what people say, not what they do

# THINK

## Experiments

- Sociologists use **experiments** to test ideas.
- In an experiment researchers control variables in order to test causes and effects
- **Hawthorne effect** occurs when people behave differently because they know they are part of an experiment
- When conducting experiments and studies, sociologists must make sure that the Hawthorne effect does not influence their findings.

# THINK

## Field Research

- **Field research** is research conducted in a natural setting
  - **Participant observation** is a type of field research where the researchers pose as a person who is normally in the environment
  - **Case Studies** are investigations of one person or event in detail
  - **Ethnography** is a research method that aims to understand the social perspective and cultural values of a particular group by participation with or getting to know their activities in detail



## Secondary Data Analysis

- Sociologists do not always have to collect new data sometimes they access secondary data
  - **Secondary data** is data that others have already collected and published
  - **Secondary data analysis** is the process of using and analyzing data that others have collected
  - **Content analysis** is a type of research in which the sociologist looks for common words or themes in newspapers, books, or structured interviews



## Triangulation

- **Triangulation** is the process of using multiple approaches to study a phenomenon
  - Use triangulation by using both quantitative and qualitative methods



## Research Methods Step 5

### 5. Analyze Results

- Statistical analysis is often used to analyze the results, which includes
  - **Central Tendency** is the middle of the distribution of a variable
  - **Mean** is an average
  - **Median** refers to the midpoint in a distribution of numbers
  - **Mode** refers to the most common value in a distribution

# THINK

## Scientific Methods Step 6

### 6. Share and Publish Results

- Sharing your results allows others to read and use your findings in their own research
- This expands the base of knowledge
- Most sociologists adopt the American Sociological Association style





## Ethical Concerns

- **Ethics** are a system of values or principles that guide one's behaviour
- In Canada, document known as the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* or TCPS identifies 3 core principles in research ethics
  1. Respect for Persons
  2. Concern for Welfare
  3. Justice



## Research Ethics in Operation

- In order to avoid **ethical dilemmas** it is important to get the consent of your subjects
  - Hand out an informed consent form before the study begins.
  - Informed consent means that the research subject understands the general purpose of the study and its main features
  - Subjects must know that they can cease their participation at any time without risk to themselves



## Research Methods and the Four Paradigms

- Although the theoretical paradigm does not affect the research method, it does affect how one interprets the data
  - **Functionalists** would examine how an issue functions or has consequences in the society
  - **Conflict** theorists would study how the unequal distribution of goods affects society
  - **Symbolic Interactionists** focus more on how the issue affected people on the individual level
  - **Feminist Theorists** would focus on the inequality of women relative to men

# THINK

## How is research involved in social policy?

- Social policies arise because people recognize a problem and take action to deal with it. When consuming statistical evidence, it's important that you:
  - Beware the Headline
  - Check Term Definitions
  - Find Out Who Funded the Study
  - Look for Spuriousness and Selection Effect
  - Look for Agendas