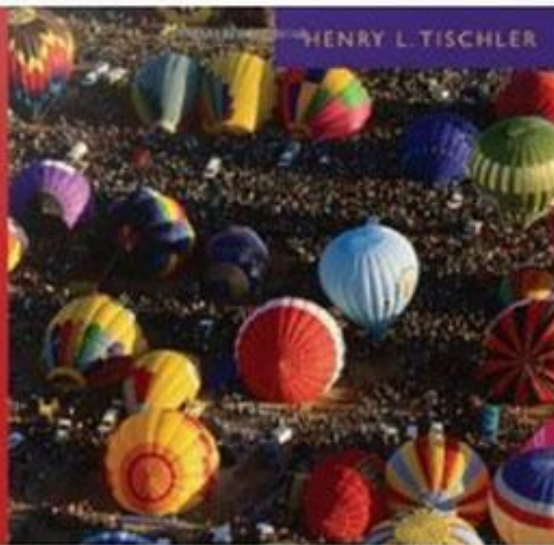


SOLUTIONS MANUAL



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9

INTRODUCTION TO SOCIOLOGY



NINTH EDITION

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CHAPTER TWO: Doing Sociology: Research Methods

BRIEF CHAPTER OUTLINE

The Research Process

Objectivity in Sociological Research

Ethical Issues in Sociological Research

Summary

LEARNING OBJECTIVES

- Explain the steps in the sociological research process.
- Analyze the strengths and weaknesses of the various research designs.
- Know what independent and dependent variables are.
- Know what sampling is and how to create a representative sample.
- Recognize researcher bias and how it can invalidate a study.
- Explain the strengths and weaknesses of the various measures of central tendency.
- Read and understand the contents of a table.
- Explain the concepts of reliability and validity.
- Understand the problems of objectivity and ethical issues that arise in sociological research.

KEY CONCEPTS

The Research Process

research process: a sequence of steps that is followed when designing and carrying out a research project. (32)

empirical question: a question that can be answered by observing and analyzing the world as it is known. (32)

operational definition: a definition of an abstract concept in terms of the observable features that describe the thing being investigated. (33)

hypothesis: a testable statement about the relationships between two or more empirical variables. (34)

variable: anything that can change (vary). (34)

statement of causality: a declaration that some factor brings about, influences, or changes something else. (34)

statement of association: a declaration that changes in one thing are related to changes in another, but that one does not necessarily cause the other. (34)

independent variable: a factor that causes or changes another variable. (34)

dependent variable: a factor that is influenced by the independent variable. (34)

survey: a research method in which a population, or a portion thereof, is questioned in order to reveal specific facts about itself. (36)

cross-sectional study: an examination of a population at a given point in time. (36)

longitudinal study: research that investigates a population over a period of time. (36)

interview: a conversation between two (or occasionally more) individuals in which one party attempts to gain information from the other(s) by asking a series of questions. (36)

structured interview: a research interview entirely predetermined by a questionnaire (or so-called interview schedule) that is followed rigidly. (36)

semi-structured or open-ended interview: a form of research conversation in which the investigator asks a list of questions but is free to vary them or even to make up new questions on topics that take on importance in the course of the interview. (36)

participant observation: researchers enter into a group's activities and observe the group members as a method for investigating the group. (37)

experiment: investigation in which the variables being studied are controlled and the researcher obtains the results through precise observation and measurement. (38)

secondary analysis: the process of making use of data that has been collected by others. (38)

sample: the particular subset of the population chosen for study. (38)

sampling: a research technique through which investigators study a manageable subset of people selected from the population under study. (38)

representative sample: a subset of the population that exhibits, in equivalent proportion, the significant variables that characterize the population as a whole. (38)

sampling error: the result of failing to achieve a representative sample. (38)

random sample: method of selecting subjects so that each individual in the population has an equal chance of being chosen. (38)

stratified random sample: a method used to prevent certain groups from being underor over-represented in a sample. (39)

researcher bias: the tendency for researchers to select data that support, and to ignore data that seem to go against, their hypotheses. (41)

blind investigators: investigators who do not know whether a specific subject belongs to the group of actual cases being investigated or to a comparison group. (43)

double-blind investigators: investigators who are kept uninformed not only of the kinds of subjects they are studying but also of the hypotheses being tested. (43)

analysis: the process through which large and complicated collections of scientific data are organized so that comparisons can be made and conclusions drawn. (43)

validity: the extent to which a study tests what it was intended to test. (45)

reliability: the extent to which the findings of a study are repeatable. (45)

DETAILED CHAPTER OUTLINE

The Research Process

Define the Problem

Review Previous Research

Develop One or More Hypotheses

Determine the Research Design

Define the Sample and Collect Data

NEWS YOU CAN USE

How to Spot a Bogus Poll

Analyze the Data and Draw Conclusions

CONTROVERSIES IN SOCIOLOGY

Truth on the Courtroom versus Truth in the Social Sciences

Prepare the Research Report

NEWS YOU CAN USE

How to Read a Table

Objectivity in Sociological Research

Ethical Issues in Sociological Research

CONTROVERSIES IN SOCIOLOGY

Famous Research Studies You Cannot Do Today

Summary

LECTURE SUGGESTIONS

1. The Research Process. Choose a research study with which you are familiar. Select a topic you believe will appeal to students and follow it through each of the steps of the research process. You may want to construct a flowchart to emphasize the decisions and tradeoffs that are made at each step of the process. A handout that can be used to reinforce the information on the research process may be found in the Resources section at the end of this chapter. It is important to convey to students the contingent nature of research. Too often, the findings in textbooks hide the process from students and make it all seem cut-and-dried. An excellent source for insights, examples, and references regarding the research process is Julia A. Erickson, *Kiss and Tell: Surveying Sex in the Twentieth.*

2. Students and the Research Process. After you have modeled the process for students, see if they can do it. Have the class agree on a particular problem they want to know more about. Then have them generate hypotheses, think about measurement and research design, etc. (If your class is a large lecture one, I think this activity can be done in small groups as well. Just allow more organization time as well as time for them to get together as there will be more time conflicts with greater numbers of participants.)

3. Sociologists as Detectives. Tischler suggests in his introduction to *The Research Process* that sociological research and detective work have a lot in common. Use this metaphor to model the research process. You may want to draw explicitly on famous detectives from literature, film, or television. Not only does this make for a lively class, but also it connects sociological knowledge to things the students already know.

Whenever you can make this kind of connection you are engaged in a proven effective teaching and learning technique.

4. Item Validity. Make students aware of the biases that can be built into questions, especially on surveys - too vague, too difficult, too sensitive, too confusing, easily misinterpreted, socially appropriate answers, etc. The best way to do this is to provide them with examples (preferably drawn from popular research), then see if they can generate some examples on their own.

5. Researcher Bias. Discuss the phenomenon of the self-fulfilling prophecy, showing both how it introduces biases into research and how it can be controlled for through techniques like random selection and blind and double-blind investigations. Pose situations to the class in which a researcher's objectivity may potentially be compromised even for laudable reasons (e.g., wanting desperately to find a cure for AIDS, desiring to find a magnitude and seriousness in the problem of homelessness such that politicians will be forced to take action, etc.).

6. Ethical Issues in Research. Pose some ethical dilemmas in research to the class; it usually is not hard to get a lively discussion going on this issue. Laud Humphrey's famous study, described in the Study Guide, is always a good bet. Also, you may want to talk about the problem of reactive effects and efforts to research humans in a naturalistic setting. Given that the technology of "snooping" is highly advanced today, how far can we justifiably go in invading people's privacy, even in public places? Even when this invasion generates highly reliable data about people's social behavior?

ACTIVITIES

1. Decoding Popular Presentations of Research. Find relatively detailed presentations of social research findings in newspapers and magazines. (This isn't always that easy to do! Opinion poll results are usually a readily available example, though.) Copy and pass this information out to the class after you have covered the research process. Then have the students go through it (collectively, in small groups, or individually as a writing assignment) and assess the strengths and weaknesses of the research along each step of the process. Be sure to remind them to review Tischler's, *Sociology at Work*, *How to Spot a Bogus Poll*. This experience makes them far more critical consumers of social science data.

2. Generating Hypotheses. Prepare in advance a number of lists of variables that may indeed be related, but do not indicate that relationship - simply list the variables. In class, divide students into groups and give each group a list of variables. Ask them to generate hypotheses around this list. They should be encouraged to begin by brainstorming - no idea is too wild or far out to be listed. This usually gets their creativity moving, particularly if you encourage consideration of virtually all hypotheses regardless of how farfetched they might seem initially.

3. Evaluating Research Designs. Pose a hypothesis to the students (or have them come up with one) and then, in small groups, have them discuss and write up how they would research the identical hypothesis using *each* of the three designs presented by in the text.

4. Representative Samples and Sampling Bias. Bring in examples of research reported in newspapers and magazines. Copy and pass it out to students. Then ask them to evaluate (possibly as a writing assignment) the representativeness of the samples used. Be sure you have some reasonably good as well as trashy examples. In the class discussion, make sure that students become aware of the whole range of possible biases (e.g., response rates and reactive effects of mail vs. phone vs. in person interviews etc.).

Give students as many examples and as much practice as possible in evaluating samples and thinking about how to ensure randomness. Unless you bring this abstract concept down to a practical level, most students won't get it, and it is vital that they do if they are to be educated consumers of social science research.

5. Reading Tables. Copy one or more data tables of interest and hand them out to the class. Good sources of tables include the *Statistical Almanac of the U.S.*, *Current Population Reports* from the U.S. Census, and *Monthly Labor Review*, which includes data on employment and income. As a writing assignment and/or in small groups, have the students analyze the data according to the criteria laid out by Tischler in the box, *How to Read a Table*. Another possibility is to ask students to generate hypotheses that are capable of being tested with the data you have given them. This is a pretty sophisticated application of knowledge and skills. If you use table analysis as a writing assignment, it is a good candidate for peer critique. Have students read each other's papers and give feedback on whether the table is summarized and analyzed clearly and accurately. This provides an alternate method for learning and reinforcing the necessary skill of table reading.

RESOURCES:

Norman K. Denzin and Yvonna S. Lincoln (eds.), *Handbook of Qualitative Research, 2 ed.* Thousand Oaks, CA: Sage, 2000.

Often instructors devote more time to quantitative research as opposed to qualitative varieties. This anthology contains more than three dozen articles ranging from ethical issues in research to the techniques of observation.

Julia A. Erickson, *Kiss and Tell: Surveying Sex in the Twentieth Century*, Cambridge, MA: Harvard University Press, 1999.

This is an incredibly neat book capturing an area of considerable interest to virtually all students. There is a wealth of material in her evaluations of the methodologies used in the multitude of surveys conducted by sociologists and others. This book provides examples of strong and weak research as well as a terrific source for replication studies with your own class. The material reviewed also offers a nice launching point for a discussion of ethics in research as well as the importance of subject consent and the role of campus human subjects committees.