

by calculating the percentages of students who favored or opposed each of the several different versions of abortion rights. Taken together, these several percentages would provide a good picture of student opinion on the issue.

Moving beyond simple description, you might describe the opinions of subsets of the student body, such as different college majors. Provided that your design called for trapping other information about respondents, you could also look at men versus women; frosh, sophomores, juniors, seniors, and graduate students; or other categories that you have included. The description of subgroups could then lead you into an explanatory analysis.

Application

The final stage of the research process involves the uses made of the research you've conducted and of the conclusions you've reached. To start, you'll probably want to communicate your findings, so that others will know what you've learned. It may be appropriate to prepare—and even publish—a written report. Perhaps you will make oral presentations, such as papers delivered to professional and scientific meetings. Other students would also be interested in hearing what you have learned about them.

You may want to go beyond simply reporting what you have learned to discussing the implications of your findings. Do they say anything about actions that might be taken in support of policy goals? Both the proponents and the opponents of abortion rights would be interested.

Finally, be sure to consider what your research suggests in regard to further research on your subject. What mistakes should be corrected in future studies? What avenues—opened up slightly in your study—should be pursued further in later investigations? This aspect of the research process will be discussed in Chapter 19.

Research Design in Review

As this overview shows, research design involves a set of decisions regarding what topic is to be studied among which population with which research

methods for what purpose. Although you'll want to consider many ways of studying a subject—and use your imagination as well as your knowledge of a variety of methods—research design is the process of narrowing your choices and focusing your perspective for the purposes of a particular study.

If you're doing a research project for one of your courses, many aspects of research design may be specified for you in advance, including the method (such as an experiment) or the topic (as in a course on a particular subject, such as prejudice). The following summary assumes that you're free to choose both your topic and your research strategy.

In designing a research project, you'll find it useful to begin by assessing three things: your interests, your abilities, and the available resources. Each of these considerations will suggest a large number of possible studies.

Simulate the beginning of a somewhat conventional research project: Ask yourself what you're interested in understanding. Surely you have several questions about social behavior and attitudes. Why are some people politically liberal and others politically conservative? Why are some people more religious than others? Why do people join militia groups? Do colleges and universities still discriminate against minority faculty members? Why would a woman stay in an abusive relationship? Spend some time thinking about the kinds of questions that interest and concern you.

Once you have a few questions you'd be interested in answering for yourself, think about the kind of information needed to answer them. What research units of analysis would provide the most relevant information: college students, young adult women, neighborhoods, cities, or corporations? This question will probably be inseparable in your thoughts from the question of research topics. Then ask which aspects of the units of analysis would provide the information you need to answer your research question.

Once you have some ideas about the kind of information relevant to your purpose, ask yourself how you might go about getting that information. Are the relevant data likely to be already available somewhere (say, in a government publication), or would you have to collect them yourself? If you

have to collect the data, how would you go about it? Would you need to survey a large number of people or interview a few people in depth? Could you learn what you need to know by attending meetings of certain groups? Could you glean the data you need from books in the library?

As you answer these questions, you will find yourself well into the process of research design. Keep in mind your own research abilities and the resources available to you. There's little point in designing a perfect study that you can't actually carry out. You may want to try a research method you have not used before so you can learn from it, but be careful not to put yourself at too great a disadvantage.

Once you have an idea of what you want to study and how, carefully review previous research in journals and books to see how other researchers have addressed the topic and what they have learned about it. Your review of the literature may lead you to revise your research design: Perhaps you'll decide to use a previous researcher's method or even replicate an earlier study. The independent replication of research projects is a standard procedure in the physical sciences, and it's just as important in the social sciences, although social scientists tend to overlook that. Or, you might want to go beyond replication and study some aspect of the topic that you feel previous researchers have overlooked.

Here's another approach you might take. Suppose a topic has been studied previously using field research methods. Can you design an experiment that would test the findings those earlier researchers produced? Or, can you think of existing statistics that could be used to test their conclusions? Did a mass survey yield results that you'd like to explore in greater detail through some on-the-spot observations and in-depth interviews? The use of several different research methods to test the same finding is sometimes called *triangulation*, and you should always keep it in mind as a valuable research strategy. Because each research method has particular strengths and weaknesses, there is always a danger that research findings will reflect, at least in part, the method of inquiry. In the best of all worlds, your own research design should bring more than one research method to bear on the topic.

The Research Proposal

Quite often, in the design of a research project, you will have to lay out the details of your plan for someone else's review and/or approval. In the case of a course project, for example, your instructor might very well want to see a "proposal" before you set off to work. Later in your career, if you wanted to undertake a major project, you might need to obtain funding from a foundation or government agency, who would most definitely want a detailed proposal that describes how you would spend their money.

This chapter concludes with a brief discussion of how you might prepare such a proposal. This will give you one more overview of the research process, which the rest of this book details.

Elements of a Research Proposal

Although some funding agencies (or your instructor, for that matter) may have specific requirements for the elements or structure of a research proposal, here are some basic elements you should include.

Problem or Objective

What exactly do you want to study? Why is it worth studying? Does the proposed study have practical significance? Does it contribute to the construction of social theories?

Literature Review

What have others said about this topic? What theories address it and what do they say? What research has been done previously? Are there consistent findings, or do past studies disagree? Are there flaws in the body of existing research that you feel you can remedy?

Subjects for Study

Whom or what will you study in order to collect data? First, identify the subjects in general, theoretical terms; then, in specific, more concrete terms, identify who is available for study and how

you'll reach them. Will it be appropriate to select a sample? If so, how will you do that? If there is any possibility that your research will affect those you study, how will you insure that the research does not harm them?

Measurement

What are the key variables in your study? How will you define and measure them? Do your definitions and measurement methods duplicate or differ from those of previous research on this topic? If you have already developed your measurement device (a questionnaire, for example) or will be using something previously developed by others, it might be appropriate to include a copy in an appendix to your proposal.

Data-Collection Methods

How will you actually collect the data for your study? Will you conduct an experiment or a survey? Will you undertake field research or will you focus on the reanalysis of statistics already created by others? Perhaps you will use more than one method.

Analysis

Indicate the kind of analysis you plan to conduct. Spell out the purpose and logic of your analysis. Are you interested in precise description? Do you intend to explain why things are the way they are? Do you plan to account for variations in some quality: for example, why some students are more liberal than others? What possible explanatory variables will your analysis consider, and how will you know if you've explained variations adequately?

Schedule

It is often appropriate to provide a schedule for the various stages of research. Even if you don't do this for the proposal, do it for yourself. Unless you have a timeline for accomplishing the several stages of research and keeping in touch with how you're doing, you may end up in trouble.

Budget

When you ask someone to cover the costs of your research, you need to provide a budget that specifies where the money will go. Large, expensive projects include budgetary categories such as personnel, equipment, supplies, telephones, and postage. Even for a project you will pay for yourself, it's a good idea to spend some time anticipating expenses: office supplies, photocopying, computer disks, telephone calls, transportation, and so on.

As you can see, if you were interested in conducting a social science research project, it would be a good idea to prepare a research proposal for your own purposes, even if you weren't required to do so by your instructor or a funding agency. If you're going to invest your time and energy in such a project, you should do what you can to insure a return on that investment.

Now that you've had a broad overview of social research, let's move on to the remaining chapters in this book and learn exactly how to design and execute each specific step. If you've found a research topic that really interests you, you'll want to keep it in mind as you see how you might go about studying it.

MAIN POINTS

- The principal purposes of social research include exploration, description, and explanation. Research studies often combine more than one purpose.
- Exploration is the attempt to develop an initial, rough understanding of some phenomenon.
- Description is the precise reporting and/or measurement of the characteristics of some population or phenomenon under study.
- Explanation is the discovery and reporting of relationships among different aspects of the phenomenon under study. Whereas descriptive studies answer the question "What's so?" explanatory ones tend to answer the question "Why?"

- Units of analysis are the people or things whose characteristics social researchers observe, describe, and explain. Typically, the unit of analysis in social research is the individual person, but it may also be a social group, a formal organization, a social artifact, or some other phenomenon such as lifestyles or social interactions.
- The ecological fallacy involves conclusions drawn from the analysis of the attributes of groups (e.g., neighborhoods) that are then assumed to apply to individuals (e.g., specific residents of different neighborhoods).
- Reductionism is the attempt to understand a complex phenomenon in terms of a narrow set of concepts, such as attempting to explain the American Revolution solely in terms of economics (or political idealism or psychology).
- Research into processes that occur over time presents social challenges that can be addressed through cross-sectional studies or longitudinal studies.
- Cross-sectional studies are based on observations made at one time. Although such studies are limited by this characteristic, researchers can sometimes make inferences about processes that occur over time.
- In longitudinal studies, observations are made at many times. Such observations may be made of samples drawn from general populations (trend studies), samples drawn from more specific subpopulations (cohort studies), or the same sample of people each time (panel studies).
- Research design starts with an initial interest, idea, or theoretical expectation and proceeds through a series of interrelated steps to narrow the focus of the study so that concepts, methods, and procedures are well defined. A good research plan accounts for all these steps in advance.
- At the outset, a researcher specifies the meaning of the concepts or variables to be studied (conceptualization), chooses a research method or methods (e.g., experiments versus surveys), and specifies the population to be studied and, if applicable, how it will be sampled.

- The researcher operationalizes the concepts to be studied by stating precisely how variables in the study will be measured. Research then proceeds through observation, processing the data, analysis, and application, such as reporting the results and assessing their implications.
- A research proposal provides a preview of why a study will be undertaken and how it will be conducted. A research project is often required to get permission or necessary resources. Even when not required, a proposal is a useful device for planning.

KEY TERMS

units of analysis	longitudinal study
social artifact	trend study
ecological fallacy	cohort study
reductionism	panel study
cross-sectional study	

REVIEW QUESTIONS AND EXERCISES

1. Using InfoTrac or the library, select a research report that illustrates exploration, description, or explanation. Identify which of these three purposes the report illustrates and briefly justify your judgment in that regard.
2. Here are some examples of real research topics. For each one, name the unit of analysis. (The answers are at the end of this chapter.)
 - a. Women watch TV more than men because they are likely to work fewer hours outside the home than men. . . . Black people watch an average of approximately three-quarters of an hour more television per day than white people. (Hughes 1980:290)
 - b. Of the 130 incorporated U.S. cities with more than 100,000 inhabitants in 1960, 126 had at least two short-term nonproprietary general hospitals accredited by the American Hospital Association. (Turk 1980:317)
 - c. The early TM [transcendental meditation] organizations were small and informal. The Los Angeles group, begun in June 1959, met at a member's house where, incidentally, Maharishi was living. (Johnston 1980:337)

- d. However, it appears that the nursing staffs exercise strong influence over . . . a decision to change the nursing care system. . . . Conversely, among those decisions dominated by the administration and the medical staffs . . . (Comstock 1980:77)
- e. Though 667,000 out of 2 million farmers in the United States are women, women historically have not been viewed as farmers, but rather, as the farmer's wife. (Votaw 1979:8)
- f. The analysis of community opposition to group homes for the mentally handicapped . . . indicates that deteriorating neighborhoods are most likely to organize in opposition, but that upper-middle class neighborhoods are most likely to enjoy private access to local officials. (Graham and Hogan 1990:513)
- g. Some analysts during the 1960s predicted that the rise of economic ambition and political militancy among blacks would foster discontent with the "otherworldly" black mainline churches. (Ellison and Sherkat 1990:551)
- h. This analysis explores whether propositions and empirical findings of contemporary theories of organizations directly apply to both private product producing organizations (PPOs) and public human service organizations (PSOs). (Schiflett and Zey 1990:569)
- i. This paper examines variations in job title structures across work roles. Analyzing 3,173 job titles in the California civil service system in 1985, we investigate how and why lines of work vary in the proliferation of job categories that differentiate ranks, functions, or particular organizational locations. (Strang and Baron 1990:479)
3. Look through an academic research journal until you find examples of at least three different units of analysis. Identify each and present quotations from the journal to justify your conclusions.
4. Make up a research example—different from those discussed in the text—that illustrates a researcher falling into the trap of the ecological fallacy. Then modify the example to avoid this trap.
5. Drop in at the Russell Sage Foundation (<http://www.epn.org/sage.html>) and look at their publications. Select one that illustrates a cross-sectional, trend, cohort, or panel study design. Justify your choice.


ADDITIONAL READINGS

- Bart, Pauline, and Linda Frankel. 1986. *The Student Sociologist's Handbook*. Morristown, NJ: General Learning Press. A handy little reference book to help you get started on a research project. Written from the standpoint of a student term paper, this volume offers a particularly good guide to the periodical literature of the social sciences available in a good library.
- Casley, D. J., and D. A. Lury. 1987. *Data Collection in Developing Countries*. Oxford: Clarendon Press. This book discusses the special problems of research in the developing world.
- Cooper, Harris M. 1989. *Integrating Research: A Guide for Literature Reviews*. Newbury Park, CA: Sage. The author leads you through each step in the literature review process.
- Hunt, Morton. 1985. *Profiles of Social Research: The Scientific Study of Human Interactions*. New York: Basic Books. An engaging and informative series of project biographies: James Coleman's study of segregated schools is presented, as well as several other major projects that illustrate the elements of social research in practice.
- Iversen, Gudmund R. 1991. *Contextual Analysis*. Newbury Park, CA: Sage. Contextual analysis examines the impact of socioenvironmental factors on individual behavior. Durkheim's study of suicide offers a good example of this, identifying social contexts that affect the likelihood of self-destruction.
- Maxwell, Joseph A. 1996. *Qualitative Research Design: An Interactive Approach*. Newbury Park, CA: Sage. Maxwell covers many of the same topics that this chapter does but with attention devoted specifically to qualitative research projects.
- Menard, Scott. 1991. *Longitudinal Research*. Newbury Park, CA: Sage. Beginning by explaining why researchers conduct longitudinal research, the author goes on to detail a variety of study designs as well as suggestions for the analysis of longitudinal data.
- Miller, Delbert. 1991. *Handbook of Research Design and Social Measurement*. Newbury Park, CA: Sage. A useful reference for introducing or reviewing numerous issues involved in design and measurement. In addition, the book contains a wealth of practical information relating to foundations, journals, and professional associations.

ANSWERS TO REVIEW QUESTIONS AND EXERCISES, ITEM 2

- Men and women, black and white people (individuals)
- Incorporated U.S. cities (groups)
- Transcendental meditation organizations (groups)
- Nursing staffs (groups)
- Farmers (individuals)
- Neighborhoods (groups)
- Blacks (individuals)
- Service and production organizations (formal organizations)
- Job titles (artifacts)


SOCIOLOGY WEB SITE

 See the Wadsworth Sociology Resource Center, Virtual Society, for additional links, Internet exercises by chapter, quizzes by chapter, and Microcase-related materials:

<http://www.sociology.wadsworth.com>

INFOTRAC COLLEGE EDITION

SEARCH WORD SUMMARY

 Go to the Wadsworth Sociology Resource Center, Virtual Society, to find a list of search words for each chapter. Using the search words, go to InfoTrac College Edition, an online library of over 900 journals where you can do online research and find readings related to your studies. To aid in your search and to gain useful tips, see the Student Guide to InfoTrac College Edition on the Virtual Society Web site:

<http://www.sociology.wadsworth.com>