

CHAPTER 5

The Literature Review and Ethical Concerns

The Literature Review

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But since we do not as yet live in a period free from mundane troubles and beyond history, our problem is not how to deal with a kind of knowledge which shall be "truth in itself," but rather how man deals with his problems of knowing, bound as he is in his knowledge by his position in time and society.

—Karl Mannheim, *Ideology and Utopia*, p. 188

is getting ready to design a study on race relations. As he focuses his topic into a specific research question (e.g., Do children attending elementary school for three or more years in classes in which at least one-third of the students are of other races see the world differently from those in single-race classes?), he confronts two issues. First, he must find out what others have said, or review the scholarly literature on race relations. In practice, the process of focusing a topic into a research question overlaps nicely with reviewing the literature. Second, Jorge needs to think about how to treat the respondents of his study in an ethical manner. Specific ethical concerns become salient depending on the research question he examines and the data collection technique he employs. Human subject issues are more salient in survey research, experiments, and field research than in reading documents, secondary data analysis, content analysis, or historical-comparative research. They are more significant for controversial topics or

areas that might violate a person's privacy (e.g., illegal behavior, sexuality) than for "safe topics" that raise few privacy concerns. The topic of race can evoke intense emotions and be controversial depending on the research question asked.

In previous chapters, we looked at the norms of the scientific community, steps in the research process, various types of studies, the place of theory, and basic approaches to social science. In this chapter, we move to more concrete and practical concerns that a person will encounter early as he or she designs a study. We will examine literature reviews and human subject protection. The researcher needs to conduct a literature review and think about human-subject considerations as he or she starts to design a study.

THE LITERATURE REVIEW

Reviewing the accumulated knowledge about a question is an essential early step in the research

process, no matter which approach to social science you adopt. As in other areas of life, it is best to find out what is already known about a question before trying to answer it yourself. The cliché about wasting time reinventing the wheel is a reminder to do your homework before beginning an endeavor that requires an investment of time and effort. This is true for the consumer of research and for the professional researcher beginning a study.

We begin by looking at the various purposes the review can serve. We will also discuss what the *literature* is, where to find it, and what it contains. Next, we will explore techniques for systematically conducting a review. Finally, we will look at how to write a review and its place in a research report.

A literature review is based on the assumption that knowledge accumulates and that people learn from and build on what others have done. Scientific research is a collective effort of many researchers who share their results with one another as a community. Although some studies may be especially important and individual researchers may become famous, a specific research project is just a tiny part of the overall process of creating knowledge. Today's studies build on those of yesterday. Researchers read studies to compare, replicate, or criticize them for weaknesses.

Reviews vary in scope and depth. Different kinds of reviews are stronger at fulfilling one or another of four goals (see Box 5.1). It may take a researcher over a year to complete an extensive professional summary review of all the literature on a broad question. The same researcher might complete a highly focused review in a very specialized area in a week. When beginning a review, a researcher decides on a topic, how much depth to go into, and the kind of review to conduct. The six kinds listed in Box 5.2 are ideal types. A specific review often combines features of several kinds.

A meta-analysis is a special technique to create an integrative review, or more often, a methodological review.¹ The researcher gathers the details about a large number of research projects (e.g., sample size, when published, size of the effects of variables) and then statistically analyzes this information.

Cox and Davidson (1995) used meta-analysis to examine findings on whether alternative educa-

BOX 5.1 Goals of a Literature Review

1. *To demonstrate a familiarity with a body of knowledge and establish credibility.* A review tells a reader that the researcher knows the research in an area and knows the major issues. A good review increases a reader's confidence in the researcher's professional competence, ability, and background.
2. *To show the path of prior research and how a current project is linked to it.* A review outlines the direction of research on a question and shows the development of knowledge. A good review places a research project in a context and demonstrates its relevance by making connections to a body of knowledge.
3. *To integrate and summarize what is known in an area.* A review pulls together and synthesizes different results. A good review points out areas where prior studies agree, where they disagree, and where major questions remain. It collects what is known up to a point in time and indicates the direction for future research.
4. *To learn from others and stimulate new ideas.* A review tells what others have found so that a researcher can benefit from the efforts of others. A good review identifies blind alleys and suggests hypotheses for replication. It divulges procedures, techniques, and research designs worth copying so that a researcher can better focus hypotheses and gain new insights.

tion programs help juvenile delinquents. These non-traditional programs are designed specifically for troubled youth, using low student/teacher ratios, an unstructured environment, and individualized learning. They looked for all articles that mentioned alternative education programs for youth and found 241. They next read each to see whether the article met three criteria: (1) mentioned a separate curriculum, (2) was held in a separate location or building, (3) included quantitative measures of program outcomes. Of the 241 studies, only 87 met all three criteria. The researchers then checked whether the

Meta-analysis A special type of literature review in which a writer organizes the results from many studies and uses statistical techniques to identify common findings in them.

5.2 Six Types of Literature Reviews

1. **Context review.** A common type of review in which the author links a specific study to a larger body of knowledge. It often appears at the beginning of a research report and introduces the study by situating it within a broader framework and showing how it continues or builds on a developing line of thought or study.
2. **Historical review.** A specialized review in which the author traces an issue over time. It can be merged with a theoretical or methodological review to show how concept, theory, or research method developed over time.
3. **Integrative review.** A common type of review in which the author presents and summarizes the current state of knowledge on a topic, highlighting agreements and disagreements within it. It is often combined with a context review or may be published as an independent article as a service to other researchers.
4. **Methodological review.** A specialized type of integrative review in which the author compares and evaluates the relative methodological strength of various studies and shows how different methodologies (e.g., research designs, measures, samples) account for different results.
5. **Self-study review.** A review in which an author demonstrates his or her familiarity with a subject area. It is often part of an educational program or course requirement.
6. **Theoretical review.** A specialized review in which the author presents several theories or concepts focused on the same topic and compares them on the basis of assumptions, logical consistency, and scope of explanation.

studies used specific statistical measures or tests; they found that 57 studies had the statistics. After statistically analyzing the results of the 57 studies, the authors learned that such programs slightly improve school performance and self-esteem but do not directly reduce delinquent behavior.

Although most meta-analyses summarize quantitative research, Hodson (1998) conducted a meta-analysis of qualitative field research case studies on workplace settings. He initially examined hundreds of case studies in books and articles using

three criteria for inclusion: (1) It used direct ethnographic observation over a period of at least six months, (2) it focused on a single organizational setting, and (3) it focused on at least one clearly identified group of workers (an assembly line, a typing pool, a task group, etc.). He located 83 publications, but because some were books with multiple case studies, the 83 publications generated 108 cases.

Over a period of six months, a team of four researchers read and coded eight case studies. After coding each, they met to decide whether to keep or remove items and how to develop response categories. In this process, they created a coding instrument with a list of concepts. Next, members of a graduate research practicum read the entire collection of 108 case studies. All coders were trained on a common case study and met twice weekly to discuss questions. After a coder finished a book, he or she was debriefed by a member of the research staff to check the accuracy of the codings and review codings in detail. Three of the coders independently read and coded each book to ensure consistency. Coders recorded passages and looked for behavioral indicators or specific descriptions for each category. They did not rely on the ethnographers' summary statements or evaluations. They coded items such as how well an organization was run, whether work was based on a traditional craft, the degree of job autonomy, and the prevalence of injuries. The researchers next turned the codes into quantitative data and subjected them to statistical analysis.

Where to Find Research Literature

Researchers report their research projects in several forms: books, scholarly journal articles, dissertations, government documents, or policy reports. They also present them as papers at the meetings of professional societies. This section briefly discusses each type and gives you a simple road map on how to access them.

Periodicals. You can find the results of social research in newspapers, in popular magazines, on television or radio broadcasts, and in Internet news summaries, but these are not the full, complete reports of research required to prepare a literature re-

CHART 5.1 Types of Publications

TYPE OF PUBLICATION	EXAMPLES	AUTHORS	PURPOSE	STRENGTHS	WEAKNESSES
Peer-reviewed scholarly journal	<i>Social Science Quarterly, Social Forces, Journal of Contemporary Ethnography</i>	Professional researchers	Report on empirical research studies to professionals and build knowledge	Highest quality, most accurate, and most objective with complete details	Technical, difficult to read, requires background knowledge, not always current issues
Semischolarly professional publication	<i>American Prospect, Society, American Demographics</i>	Professors, professional policy-makers, or politicians	Share and discuss new findings and implications with the educated public	Generally accurate, somewhat easy to read	Lacks full detail and explanation, often includes opinion mixed in with discussion
Newsmagazines and newspapers	<i>Wall Street Journal, Christian Science Monitor, Newsweek, Time</i>	Respected journalists	Report on current events in an easy-to-read, accessible way for the lay public	Easy to read, accessible, very current	Semi-accurate, incomplete, distorted or one-sided views may be presented
Serious opinion magazines	<i>ination, Human Events, Public Interest, Commentary</i>	Professors, professional policy-makers, politicians	Offer value-based ideas and opinions to the educated public	Carefully written and reasoned	One-sided views and highly value based
Popular magazines for the public	<i>Esquire, Ebony, Redbook, Forbes, Fortune</i>	Journalists, other writers	Entertain; present and discuss current events for lay public	Easy to read, easy to locate	Often shallow, inaccurate, and incomplete

view. They are selected, condensed summaries prepared by journalists for a general audience, and they lack many essential details needed for a serious evaluation of the study. Textbooks and encyclopedias also present condensed summaries as introductions to readers who are new to a topic, but, again, these are inadequate for preparing a literature review because many essential details about the study are absent.

Navigating published articles often confuses beginning research students. This is not surprising. When asked to do a "literature review," many stu-

dents first go to familiar nonprofessional, nonscholarly magazine or newspaper articles they may have used for a high school term paper or freshman-level report. Social science students need to learn to distinguish between scholarly publications that report on research studies and popular or layperson entertainment or news articles for the general public (see Chart 5.1). They should move away from lay public sources and instead begin to rely on scholarly publications written for a professional audience.

Professional researchers present the results of empirical studies in one of several forms: academic

research books (often called monographs), articles in scholarly journals, chapters in edited academic books, and papers presented at professional meetings. One can also read about these studies, in a summarized, simplified, abbreviated, and “pre-digested” form, in textbooks written for students who are first learning about a topic and in magazines or newspapers articles written for the general public. The simplified summaries, especially in publications for the general public, often give an incomplete or distorted picture of the full original study. Whenever possible, go to the original scholarly journal article to see what the author said and the data show.

Upper-level students writing a term paper or a serious research paper should rely on the academic literature, that is, original articles in academic scholarly journals. A downside is that students will find some of the scholarly articles too difficult or technical to follow. The upside is that the articles are original reports—and not another person’s (mis)reading of the original. Also, they have been carefully screened for professional use and are of high quality—and are not the sloppy, inaccurate, or incomplete low-quality reports on research that often appear in publications for the general public.

Another type of nonresearch publication is the opinion magazine. Professionals of various types and others write in these magazines for the educated public or professionals. They do not contain original empirical research or actual scientific studies. Instead, they have essays expressing individuals’ opinions, beliefs, value-based ideas, and speculation. A student can use them for term papers—but with caution—because they present an individual’s opinions and judgments not empirical research. When writing a research paper that uses empirical research (e.g., an experiment, survey data, field research), it is best to rely on empirical studies or official statistical documents (e.g., Census Bureau). If one uses an opinion essay article, it should be treated as such and never confused with an empirically based study or data.

Specialized computer-based search tools help one locate articles in the scholarly literature, and there are specialized formats or styles for referring to sources. It is important to learn how to use the

search tools and how to refer correctly to sources through citation styles and bibliographic reference formats. Professional social scientists use the search tools to tap into and build on a growing body of research studies and scientifically based knowledge. Knowing how to locate the studies, recognize and read an empirical research study, and properly cite scholarly articles as sources are important skills for students to learn.

Scholarly Journals. The primary type of periodical to use for a literature review is the scholarly journal filled with peer-reviewed reports of research. (See the back inside cover of this book for a list.) One rarely finds them outside of college and university libraries. Recall from Chapter 1 that scholarly journals are where most researchers disseminate findings of new studies, and they are the heart of the scientific community’s communication system.

Some scholarly journals are specialized. Instead of reports of research studies, they have only book reviews that provide commentary and evaluations on a book (e.g., *Contemporary Sociology*), or they contain only literature review essays (e.g., *Annual Review of Sociology*, *Annual Review of Psychology*, and *Annual Review of Anthropology*) in which researchers give a “state of the field” essay for others. Publications that specialize in literature reviews can be helpful if an article was recently published on a topic of interest. Many scholarly journals have a mix of literature reviews, book reviews, reports on research studies, and theoretical essays.

No simple solution or “seal of approval” distinguishes scholarly journals from other periodicals, or instantly distinguishes the report on a research study from other types of articles. One needs to develop judgment or ask experienced researchers or professional librarians. Nonetheless, distinguishing among types of publications is essential to build on a body of research. One of the best ways to distinguish among types of publications is to read many articles in scholarly journals.

The number of journals varies by field. Psychology has over 400 journals, whereas sociology has about 250 scholarly journals, political science and communication have slightly fewer than soci-

ology, anthropology-archaeology and social work have about 100, urban studies and women’s studies have about 50, and there are about a dozen journals in criminology. Each publishes from a few dozen to over 100 articles a year.

You may wonder if anyone ever reads all the articles. One study found that in a sample of 379 sociology articles, 43 percent were cited in another study in the first year after publication and 83 percent within six years.² As mentioned in Chapter 1, scholarly journals vary by prestige and acceptance rates, with some prestigious journals rejecting as much as 90 percent of the reports submitted to them. Overall rejection rates are higher in the social science than in other academic fields and have been rising.³ This does not mean that researchers are doing lower-quality studies. Rather, the review process is becoming more rigorous, standards are rising, and more researchers are conducting studies, thus increasing the competition to publish in a well-respected journal.

Many, but not all, scholarly journals may be viewed via the Internet. Usually, this is limited to selected years and to libraries that paid special subscription fees. A few Internet services provide full, exact copies of scholarly journal articles over the Internet. For example, JSTOR provides exact copies, but only for a small number of scholarly journals and only for past years. Other Internet services, such as Proquest or EBSCO HOST, offer a full-text version of recent articles for a limited number of scholarly journals, but they are not always in the same format as a print version of an article. This can make it impossible to find a specific page number or see an exact copy of a chart. It is best to visit the library and see what a full-print version of the scholarly article looks like. An added benefit is that makes it easy for you to browse the table of contents of the journals. Browsing can be very useful for generating new ideas for research topics, seeing an established topic in creative ways, or expanding an idea into new areas. Only a tiny handful of new Internet-only scholarly journals, called *e-journals*, present peer-reviewed research studies (e.g., *Sociological Research Online*, *Current Research in Social Psychology*, and *Journal of World Systems Research*). Eventually, the Internet format may re-

place print versions. But for now, 99 percent of scholarly journals are available in print form and less than one-half of these are also available in a full-text version over the Internet, only for some years, and only then if a library pays for a special on-line subscription service.

Once you locate a scholarly journal with research studies, you need to make sure that a particular article presents the results of a study, because the journal may have other types of articles. It is easier to identify quantitative studies because they usually have a methods or data section and charts, statistical formulas, and tables of numbers. Qualitative research articles are more difficult to identify, and many students confuse them with theoretical essays, literature review articles, idea-discussion essays, policy recommendations, book reviews, and legal case analyses. To distinguish among these types requires a grasp of the varieties of research as well as experience in reading many articles.

Your college library has a section for scholarly journals and magazines, or, in some cases, they may be mixed with books. Look at a map of library facilities or ask a librarian to find this section. The most recent issues, which look like magazines, are often physically separate in a “current periodicals” section. This is done to store them temporarily and make them available until the library receives all the issues of a volume. Most often, libraries bind all issues of a volume together as a book before adding it to their permanent collection.

Scholarly journals from many different fields are placed together with popular magazines. All are periodicals, or serials in the jargon of librarians. Thus, you will find popular magazines (e.g., *Time*, *Road and Track*, *Cosmopolitan*, and *Atlantic Monthly*) next to journals for astronomy, chemistry, mathematics, literature, and philosophy as well as sociology, psychology, social work, and education. Some fields have more scholarly journals than others. The “pure” academic fields usually have more than the “applied” or practical fields such as marketing or social work. The journals are listed by title in a card catalog or a computerized catalog system. Libraries can provide you with a list of the periodicals to which they subscribe.

Scholarly journals are published as rarely as once a year or as frequently as weekly. Most appear four to six times a year. For example, *Sociological Quarterly* appears four times a year. To assist in locating articles, scholars have a system for tracking scholarly journals and the articles in them. Each issue is assigned a date, volume number, and issue number. This information makes it easier to locate an article. Such information—along with details such as author, title, and page number—is called an article's *citation* and is used in bibliographies. When a journal is first published, it begins with volume 1, number 1, and continues increasing the numbers thereafter. Although most journals follow a similar system, there are enough exceptions that you have to pay close attention to citation information. For most journals, each volume is one year. If you see a journal issue with volume 52, for example, it probably means that the journal has been in existence for 52 years. Most, but not all, journals begin their publishing cycle in January.

Most journals number pages by volume, not by issue. The first issue of a volume usually begins with page 1, and page numbering continues throughout the entire volume. For example, the first page of volume 52, issue 4, may be page 547. Most journals have an index for each volume and a table of contents for each issue that lists the title, the author's or authors' names, and the page on which the article begins. Issues contain as few as 1 or 2 articles or as many as 50. Most have 8 to 18 articles, which each may be 5 to 50 pages long. The articles often have abstracts, short summaries on the first page of the article or grouped together at the beginning of the issue.

Many libraries do not retain physical paper copies of older journals. To save space and costs, they retain only microfilm versions. There are hundreds of scholarly journals in most academic fields, with each costing \$75 to \$2,500 per year. Only the large

Citation Details of a scholarly publication's location that helps people to find it quickly.

Abstract A term with two meanings: a short summary of a scholarly journal article that usually appears at its beginning, and a reference tool for locating journal articles.

research libraries subscribe to all of them. You may have to borrow a journal or photocopy of an article from a distant library through an *interlibrary loan service*, a system by which libraries lend books or materials to other libraries. Few libraries allow people to check out recent issues of scholarly journals. You should plan to use these in the library. Some, not all, scholarly journals are available via the Internet.

Once you find the periodicals section, wander down the aisles and skim what is on the shelves. You will see volumes containing many research reports. Each title of a scholarly journal has a call number like that of a regular library book. Libraries often arrange them alphabetically by title. Because journals change titles, it may create confusion if the journal is shelved under its original title.

Scholarly journals differ by field and by type. Most contain articles on research in an academic field. Thus, most mathematics journals contain reports on new mathematical studies or proofs, literature journals contain commentary and literary criticism on works of literature, and sociology journals contain reports of sociological research. Some journals cover a broad field (e.g., sociology, psychology, education, political science) and contain reports from the entire field. Others specialize in a subfield (e.g., the family, criminology, early childhood education, comparative politics).

Citation Formats. An article's citation is the key to locating it. Suppose you want to read the study on student cheating discussed in Chapter 2. This book's bibliography says the following:

McCabe, Donald L. (1992). The influence of situational ethics on cheating among college students. *Sociological Inquiry*, 62:365–374.

It tells you to go to an issue of the scholarly journal *Sociological Inquiry* published in 1992. The citation does not provide the issue or months, but it gives the volume number (62) and the page numbers (365–374).

There are many ways to cite the literature. Formats for citing literature in the text itself vary, with the internal citation format of using an author's last name and date of publication in parentheses being very popular. The full citation appears in a separate bibliography or reference section. There are many

FIGURE 5.1 Different Reference Citations for a Journal Article

The oldest journal of sociology in the United States, *American Journal of Sociology*, reports on a study of virginity pledges by Peter Bearman and Hannah Bückner. It appeared on pages 859 to 912 of the January 2001 issue (number 4) of the journal, which begins counting issues in March. It was in volume 106, or the journal's 106th year. Here are ways to cite the article. Two very popular styles are those of *American Sociological Review* (ASR) and *American Psychological Association* (APA).

ASR STYLE

Bearman, Peter and Hannah Bückner. 2001. "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology* 106:859–912.

APA STYLE

Bearman, P., and Bückner, H. (2001). Promising the future: Virginity pledges and first intercourse. *American Journal of Sociology* 106, 859–912.

OTHER STYLES

Bearman, P., and H. Bückner. "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology* 106 (2001), 859–912.

Bearman, Peter and Hannah Bückner, 2001.

"Promising the future: Virginity pledges and first intercourse." *Am. J. of Sociol.* 106:859–912.

Bearman, P. and Bückner, H. (2001). "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology* 106 (January): 859–912.

Bearman, Peter and Hannah Bückner. 2001.

"Promising the future: Virginity pledges and first intercourse." *American Journal of Sociology* 106 (4):859–912.

Bearman, P. and H. Bückner. (2001). "Promising the future: Virginity pledges and first intercourse." *American Journal of Sociology* 106, 859–912.

Peter Bearman and Hannah Bückner, "Promising the Future: Virginity Pledges and First Intercourse," *American Journal of Sociology* 106, no. 4 (2001): 859–912.

styles for full citations of journal articles, with books and other types of works each having a separate style. When citing articles, it is best to check with an instructor, journal, or other outlet for the desired format. Almost all include the names of authors, article title, journal name, and volume and page numbers. Beyond these basic elements, there is great variety. Some include the authors' first names, others use initials only. Some include all authors; others give only the first one. Some include information on the issue or month of publication; others do not (see Figure 5.1).

Citation formats can get complex. Two major reference tools on the topic in social science are *Chicago Manual of Style*, which has nearly 80 pages on bibliographies and reference formats, and *American Psychological Association Publication Manual*, which devotes about 60 pages to the topic. In sociology, the *American Sociological Review* style, with 2 pages of style instructions, is widely followed.

Books. Books communicate many types of information, provoke thought, and entertain. There are

many types of books: picture books, textbooks, short story books, novels, popular fiction or nonfiction, religious books, children's books, and others. Our concern here is with those books containing reports of original research or collections of research articles. Libraries shelve these books and assign call numbers to them, as they do with other types of books. You can find citation information on them (e.g., title, author, publisher) in the library's catalog system.

It is not easy to distinguish a book that reports on research from other books. You are more likely to find such books in a college or university library. Some publishers, such as university presses, specialize in publishing them. Nevertheless, there is no guaranteed method for identifying one without reading it.

Some types of social research are more likely to appear in book form than others. For example, studies by anthropologists and historians are more likely to appear in book-length reports than are those of economists or psychologists. Yet, some anthropological and historical studies are reported in articles, and some economic and psychological studies appear as books. In education, social work, sociology, and political science, the results of long, complex studies may appear both in two or three articles and in book form. Studies that involve detailed clinical or ethnographic descriptions and complex theoretical or philosophical discussions usually appear as books. Finally, an author who wants to communicate to scholarly peers and to the educated public may write a book that bridges the scholarly, academic style and a popular nonfiction style.

Locating original research articles in books can be difficult because there is no single source listing them. Three types of books contain collections of articles or research reports. The first is designed for teaching purposes. Such books, called *readers*, may include original research reports. Usually, articles on a topic from scholarly journals are gathered and edited to be easier for students to read and understand.

The second type of collection is designed for scholars and may gather journal articles or may contain original research or theoretical essays on a specific topic. Some collections contain articles from journals that are difficult to locate. They may include original research reports organized around a

specialized topic. The table of contents lists the titles and authors. Libraries shelve these collections with other books, and some library catalog systems include article or chapter titles.

Finally, there are annual research books that contain reports on studies that are not found elsewhere. These are hybrids between scholarly journals and collections of articles: They appear year after year, with volume numbers for each year. These volumes, such as the *Review of Research in Political Sociology* and *Comparative Social Research*, are shelved with books. Some annual books specialize in literature reviews (e.g., *Annual Review of Sociology* and *Annual Review of Anthropology*). There is no comprehensive list of these books as there is for scholarly journals. The only way someone new to an area can find out about them is by spending a lot of time in the library or asking a researcher who is already familiar with a topic area.

Citations or references to books are shorter than article citations. They include the author's name, book title, year and place of publication, and publisher's name.

Dissertations. All graduate students who receive the Ph.D. degree are required to complete a work of original research, which they write up as a dissertation thesis. The dissertation is bound and shelved in the library of the university that granted the Ph.D. About half of all dissertations are eventually published as books or articles. Because dissertations report on original research, they can be valuable sources of information. Some students who receive the master's degree conduct original research and write a master's thesis, but fewer master's theses involve serious research, and they are much more difficult to locate than unpublished dissertations.

Specialized indexes list dissertations completed by students at accredited universities. For example, *Dissertation Abstracts International* lists dissertations with their authors, titles, and universities. This index is organized by topic and contains an abstract of each dissertation. You can borrow most dissertations via interlibrary loan from the degree-granting university if the university permits this. An alternative is to purchase a copy from a national dissertation microfilm/photocopy center such

as the one at the University of Michigan, Ann Arbor, for U.S. universities. Some large research libraries contain copies of dissertations from other libraries if others have previously requested them.

Government Documents. The federal government of the United States, the governments of other nations, state or provincial-level governments, the United Nations, and other international agencies such as the World Bank, all sponsor studies and publish reports of the research. Many college and university libraries have these documents in their holdings, usually in a special "government documents" section. These reports are rarely found in the catalog system. You must use specialized lists of publications and indexes, usually with the help of a librarian, to locate these reports. Most college and university libraries hold only the most frequently requested documents and reports.

Policy Reports and Presented Papers. A researcher conducting a thorough review of the literature will examine these two sources, which are difficult for all but the trained specialist to obtain. Research institutes and policy centers (e.g., Brookings Institute, Institute for Research on Poverty, Rand Corporation, etc.) publish papers and reports. Some major research libraries purchase these and shelve them with books. The only way to be sure of what has been published is to write directly to the institute or center and request a list of reports.

Each year, the professional associations in academic fields (e.g., sociology, political science, psychology) hold annual meetings. Thousands of researchers assemble to give, listen to, or discuss oral reports of recent research. Most of these oral reports are available as written papers to those attending the meeting. People who do not attend the meetings but who are members of the association receive a program of the meeting, listing each paper to be presented with its title, author, and author's place of employment. They can write directly to the author and request a copy of the paper. Many, but not all, of the papers are later published as articles. The papers may be listed in indexes or abstract services (to be discussed).

How to Conduct a Systematic Literature Review

Define and Refine a Topic. Just as a researcher must plan and clearly define a topic and research question when beginning a research project, you need to begin a literature review with a clearly defined, well-focused research question and a plan. A good review topic should be as focused as a research question. For example, "divorce" or "crime" is much too broad. A more appropriate review topic might be "the stability of families with stepchildren" or "economic inequality and crime rates across nations." If you conduct a context review for a research project, it should be slightly broader than the specific research question being examined. Often, a researcher will not finalize a specific research question for a study until he or she has reviewed the literature. The review usually helps bring greater focus to the research question.

Design a Search. After choosing a focused research question for the review, the next step is to plan a search strategy. You must decide on the type of review, its extensiveness, and the types of materials to include. The key is to be careful, systematic, and organized. Set parameters on your search: how much time you will devote to it, how far back in time you will look, the minimum number of research reports you will examine, how many libraries you will visit, and so forth.

Also, decide how to record the bibliographic citation for each reference you find and how to take notes (e.g., in a notebook, on 3 × 5 cards, in a computer file). Develop a schedule, because several visits are usually necessary. You should begin a file folder or computer file in which you can place possible sources and ideas for new sources. As the review proceeds, it should become more focused.

Locate Research Reports. Locating research reports depends on the type of report or "outlet" of research being searched. As a general rule, you should use multiple search strategies to counteract the limitations of a single search method.

Articles in Scholarly Journals. As discussed earlier, most social research is published in scholarly

journals. There are dozens of journals, each containing many articles. The task of searching for articles can be formidable. Luckily, specialized publications and source tools make the task easier.

You may have used an index for general publications, such as *Reader's Guide to Periodical Literature*. Many academic fields have "abstracts" or "indexes" for the scholarly literature (e.g., *Psychological Abstracts*, *Social Sciences Index*, *Sociological Abstracts*, and *Gerontological Abstracts*). For education-related topics, the Educational Resources Information Center (ERIC) system is especially valuable. There are over 100 such source tools. You can usually find them in the reference section of a library or available via computer access.

Source tools are updated on a regular basis (monthly, six times a year, etc.) and allow a reader to look up articles by author name or subject. The journals covered by the source tool are listed in it. An index, such as the *Social Sciences Index*, lists only the citation, whereas an abstract, such as *Sociological Abstracts*, lists the citation and has a copy of the article's abstract. Abstracts do not give you all the findings and details of a research project. Researchers use abstracts to screen articles for relevance, then locate the more relevant articles. Abstracts may also include papers presented at professional meetings.

It may sound as though all you have to do is to go find the source tool and look up a topic. Unfortunately, things are more complicated than that. The subjects or topics listed in the abstracts or indexes are broad. The specific research question that interests you may fit into several subject areas. You should check each one. For example, for the topic of illegal drugs in high schools, you might look up these subjects: drug addiction, drug abuse, substance abuse, drug laws, illegal drugs, high schools, and secondary schools. Many of the articles under a subject area will not be relevant for your literature review. Also, there is a 3- to 12-month time lag between the publication of an article and its appearance in the abstracts or indexes. Unless you are at a major research library, the most useful article may not be available in your library. You can obtain it only by using an interlibrary loan service, or it may be in a foreign language that you do not read.

Most research-oriented libraries subscribe to the *Social Science Citation Index (SSCI)* of the Institute for Scientific Information. This is a valuable resource with information on over 1,400 journals. It is similar to other indexes and abstracts, but it takes time to learn how to use it. The SSCI comes in four books. One is a source index, which provides complete citation information on journal articles. The other three books refer to articles in the source book. They are organized by subject, by university or research center for which the researcher works, or by authors who are cited in the reference sections of other articles.

You can begin a SSCI search in one of three ways: (1) with a subject (e.g., alcohol use among children); (2) with a known research center (e.g., the Center for Alcohol Studies at Rutgers, the State University of New Jersey); or (3) with an earlier article (e.g., Kandel's "Drug and Drinking Behavior among Youth" in the 1980 *Annual Review of Sociology*). The first search directs you to the authors of current research reports. The second search identifies all authors from the same research center who published articles. The third search directs you to all citations included in earlier article's reference section. This last type of search is important when a researcher wants to trace research that influenced other research. For example, you find a 1980 article relevant. The SSCI tells you all articles published since 1980 that listed it in their reference sections. Even if your library does not have the *Social Science Citation Index*, a good search principle is to examine the bibliography of articles to find additional articles or books on a topic.

Researchers organize computerized searches in several ways—by author, by article title, by subject, or by keyword. A keyword is an important term for a topic that is likely to be found in a title. You will want to use six to eight keywords in most computer-based searches and consider several synonyms. The computer's searching method can vary and most look for a keyword only in a title or abstract. If you choose too few words or very narrow terms, you will miss a lot of relevant articles. If you choose too many words or very broad terms, you will get a huge number of irrelevant articles. The best way to learn the appropriate breadth and number of keywords is by trial and error.

In a study I conducted on how college students define *sexual harassment* (Neuman, 1992), I used the following keywords: *sexual harassment*, *sexual assault*, *harassment*, *gender equity*, *gender fairness*, and *sex discrimination*. I later discovered a few important studies that lacked any of these keywords in their titles. I also tried the keywords *college student* and *rape*, but got huge numbers of unrelated articles that I could not even skim.

There are numerous computer-assisted search databases or systems. A person with a computer and an Internet hookup can search some article index collections, the catalogs of libraries, and other information sources around the globe if they are available on the Internet.

All computerized searching methods share a similar logic, but each has its own method of operation to learn. In my study, I looked for sources in the previous seven years and used five computerized databases of scholarly literature: *Social Science Index*, *CARL (Colorado Area Research Library)*, *Sociofile*, *Social Science Citation Index*, and *PsychLit*.

Often, the same articles will appear in multiple scholarly literature databases, but each database may identify a few new articles not found in the others. This points to a critical lesson: "Do not rely exclusively on computerized literature searches, on abstracting services, [or] on the literature in a single discipline, or on an arbitrarily defined time period" (Bausell, 1994:24). For example, I discovered several excellent sources not listed in any of the computerized databases that had been published in earlier years by studying the bibliographies of the relevant articles.

The process in my study was fairly typical. Based on my keyword search, I quickly skimmed or scanned the titles or abstracts of over 200 sources. From these, I selected about 80 articles, reports, and books to read. I found about 49 of the 80 sources valuable, and they appear in the bibliography of the published article.

Scholarly Books. Finding scholarly books on a subject can be difficult. The subject topics of library catalog systems are usually incomplete and too broad to be useful. Moreover, they list only books

that are in a particular library system, although you may be able to search other libraries for interlibrary loan books. Libraries organize books by call numbers based on subject matter. Again, the subject matter classifications may not reflect the subjects of interest to you or all the subjects discussed in a book. Librarians can help you locate books from other libraries. For example, the *Library of Congress National Union Catalog* lists all books in the U.S. Library of Congress. Librarians have access to sources that list books at other libraries, or you can use the Internet. There is no surefire way to locate relevant books. Use multiple search methods, including a look at journals that have book reviews and the bibliographies of articles.

Dissertations. A publication called *Dissertation Abstracts International* lists most dissertations. Like the indexes and abstracts for journal articles, it organizes dissertations by broad subject category, author, and date. Researchers look up all titles in the subject areas that include a topic. Unfortunately, after you have located the dissertation title and abstract, you may find that obtaining a copy of it takes time and involves added costs.

Government Documents. The "government documents" sections of libraries contain specialized lists of government documents. A useful index for documents issued by the U.S. federal government is the *Monthly Catalog of Government Documents*, which is often available on computer. It has been issued since 1885, but other supplemental sources should be used for research into documents more than a decade old. The catalog has an annual index, and monthly issues have subject, title, and author indexes. *Indexes to Congressional Hearings*, another useful source, lists committees and subjects going back to the late 1930s. The *Congressional Record* contains debate of the U.S. Congress with synopses of bills, voting records, and changes in bills. *United States Statutes* lists each individual U.S. federal law by year and subject. The *Federal Register*, a daily publication of the U.S. government, contains all rules, regulations, and announcements of federal agencies. It has both monthly and annual indexes. There are other indexes that cover treaties, technical announcements, and so forth. Other

governments have similar lists. For example, the British government's *Government Publications Index* lists government publications issued during a year. *Parliamentary Papers* lists official social and economic studies going back 200 years. It is usually best to rely on the expertise of librarians for assistance in using these specialized indexes. The topics used by index makers may not be the best ones for your specific research question.

Policy Reports and Presented Papers. The most difficult sources to locate are policy reports and presented papers. They are listed in some bibliographies of published studies; some are listed in the abstracts or indexes. To locate these studies, try several methods: Write to research centers and ask for lists of publications, obtain lists of papers presented at professional meetings, and so forth. Once you locate a research report, try writing to the relevant author or institute.

Evaluating Research Articles

After you locate published studies, you need to read and evaluate them. At first, this is not easy, but it gets easier over time. Here are general guidelines to help you read and evaluate reports you find and locate models for writing your own research reports. First, look at the title carefully. A good title is specific, indicates the nature of the research without describing the results, and avoids asking a yes or no question. It describes the topic, may mention one or two major variables, and tells about the setting or people being studied. An example of a good title is "Parental involvement in schooling and reduced discipline problems among junior high school students in the Singapore." A good title informs readers about a study whereas a bad title either is vague or overemphasizes technical details or jargon. The same study could have been titled "A three-step correlation analysis of factors that affect segmented behavioral anxiety reduction."

Next read the abstract. A good abstract summarizes critical information about a study. It gives the study's purpose, tells methods used, and highlights major findings. It will avoid vague references to future implications. After an initial screening by title, a reader should be able to decide a report's rel-

evance from a well-prepared abstract. In addition to screening for relevance, a title and abstract prepare the interested reader for examining a report in detail.

I recommend a two-stage screening process. Use the title and abstract to determine initial relevance. If it appears relevant, quickly scan the introduction and conclusion sections to decide whether it is a real "keeper" and worth investing in a slow, careful reading of the entire article or picking out a few details. Most likely, you will discover a few articles are very central to your purpose and many others with tangential relevance that are only worth skimming to locate one or two specific relevant details. Exercise caution not to pull specific details out of context.

Three factors will influence the amount of time and effort and overall payoff from reading a scholarly article. The time and effort are lower and results greater when (1) the article is of high quality with a well-defined purpose, clear writing, and smooth, logical organization; (2) the reader is sharply focused on a particular research issue or question; and (3) the reader has a solid background on the theoretical issues, knows a great deal about the substantive topic, and is familiar with multiple research methodologies. A great deal depends on reader preparation. A reader who can quickly "size up" an article by recognizing the dimensions of a study (see Chapter 2), its use of theory (Chapter 3), and the author's approach to doing research (Chapter 4) will find it less burdensome to read, evaluate, and extract information from a scholarly article. Also, be aware that authors write with different audiences in mind. They may target a narrow, highly specialized sector of the scientific community; write for a broad cross section of interested students and scholars in one or more academic disciplines; or address policymakers, issue advocates, and applied professionals.

When you read a highly relevant article, begin with the introduction section. The introduction section has three purposes: (1) introduce a broad topic and show a transition to a specific research question that is the primary focus of the study, (2) establish the significance of the problem (in terms of expanding knowledge, linking to past studies, or addressing an applied concern), and (3) outline the

theoretical framework and define major concepts being used. Sometimes an article blends the introduction with a context literature review; at other times the literature review is a separate section.

A good literature review is selective, comprehensive, critical, and current. By being selective, it does not list everything ever written on a topic, but picks the most relevant past studies. By being comprehensive, it includes past studies that are highly relevant and does not omit any important ones. More than merely recounting past studies, the review should be critical-evaluative. This means it comments on the details of some specific studies and evaluates them as they relate to current study. Because the writer does not know everything about a study until it is done, a literature review prepared before conducting a study must be fine-tuned and rewritten after the study is completed.

Literature reviews should include recent studies, those published in the past year. Depending on its size and complexity, a review may distinguish among theory, methods, findings, and evaluation. For example, one section may review theoretical issues and disputes, another cover the methods used in prior studies used, and another summarize findings, highlighting any gaps or inconsistencies. An evaluation often serves to justify the importance of conducting the current study.

Depending on the type of research study, a hypothesis or methods section may follow the literature review. They outline what will be examined in detail, inform readers of specific data sources or methods of data collection, describe how variables were measured and whether sampling was used, and if so, details about it. These sections are usually tightly written and packed with technical details. They are often longer in quantitative than qualitative studies.

After a methods section come the results or findings. The results section is a descriptive essay. If it is quantitative research, it needs to do more than present a collection of statistical tables or coefficients and percentages. If it is qualitative research, it should be more than a list of quotations or straight description.

Each paragraph flows sequentially, describing results in a logical order determined by the author.

The organization of data presentation usually begins simply, painting a broad scope, and then goes into complexities and specific findings. Data presentation includes a straightforward discussion of the central findings and notes their significance. In quantitative research, it is not necessary to discuss every detail in a table or chart, but to note major findings and any unexpected or unusual findings. The author guides the reader through the data, pointing out what is in the study, but lets the reader see details for him or herself. In qualitative research, the organization of data often "tells a story" or presents a line of reasoning. Readers follow the author's story but are free to make inquiries of it.

Some researchers combine a discussion section with a results section; others keep them separate. A discussion section goes beyond straight description to elaborating on the implications of results for past findings, theory, or applied issues. Implications and interpretation take two forms: (1) implications for the building of knowledge as outlined in the literature review, and (2) implications for the specific research question of this study, as well as what was unexpected.

Researchers usually include methodological limitations in the discussion. An author may state how the specific measures, sampling, cases, location, or other factors restrict the generalizability of findings or open up alternative explanations. Full candor and openness are expected. An author should show readers that he or she was self-critical and has thought through the results and is aware of what is in them. This is not the place to include new references, but terms, theories, or ideas from the introduction and literature review will be used.

Last, read through the conclusion or summary at the end. A good conclusion/summary reviews the research problem, major findings, and significant unexpected results. It also outlines future implications and directions. It is sometimes useful to read the introduction and skim the conclusion before reading through the entire report step by step. Also look for an appendix that may include additional study details. You might also want to review the reference or bibliography section. An article's bibliography may give you some leads to related studies or theoretical statements.

Reading and critically evaluating scholarly articles improves with practice. Despite the peer-review process and manuscript rejection rates, articles vary in quality and may contain errors, sloppy logic, or gaps. Beware that a title and introduction may not mesh with specific details in the results section. Authors do not always describe all the findings, and a reader with a clearly focused purpose may notice new details in the findings by carefully poring over an article. For example, an author may not mention important results evident in a statistical table or chart or may place too much attention on minor or marginal results. A careful reader will evaluate how the study was done, how logically tight the parts of an article fit together, and whether the major conclusions really flow from all the findings.

Taking Notes

As you gather the relevant research literature, it is easy to feel overwhelmed by the quantity of information, so you need a system for taking notes. The old-fashioned approach was to write notes onto index cards. You then shifted and sorted the note cards, placed them in piles, and so forth as you looked for connections among them or developed an outline for a report or paper. This method still works. Today, however, most people use word-processing software and gather photocopies or printed versions of many articles.

As you discover sources, it is a good idea to create two kinds of files for your note cards or computer documents: a *Source File* and a *Content File*. Record *all* the bibliographic information for *each* source in the Source File, even though you may not use some and later erase them. Do not forget anything in a complete bibliographic citation, such as a page number or the name of the second author; you will regret it later. It is far easier to erase a source you do not use than to try to locate bibliographic information later for a source you discover that you need or from which you forgot one detail.

I recommend creating two kinds of Source Files, or divide a master file into two parts: *Have File* and *Potential File*. The Have File is for sources that you have found and for which you have already taken content notes. The Potential File is for leads

and possible new sources that you have yet to track down or read. You can add to the Potential File anytime you come across a new source or in the bibliography of something you read. Toward the end of writing a report, the Potential File will disappear while the Have File will become your bibliography.

Your note cards or computer documents go into the Content File. This file contains substantive information of interest from a source, usually its major findings, details of methodology, definitions of concepts, or interesting quotes. If you directly quote from a source or want to take some specific information from a source, you need to record the specific page number(s) on which the quote appears. Link the files by putting key source information, such as author and date, on each content file.

What to Record. Researchers have to decide what to record about an article, book, or other source. It is better to err in the direction of recording too much rather than too little. In general, record the hypotheses tested, how major concepts were measured, the main findings, the basic design of the research, the group or sample used, and ideas for future study (see Figure 5.2). It is wise to examine the report's bibliography and note sources that you can add to your search.

Photocopying all relevant articles or reports will save you time recording notes and will ensure that you will have an entire report. Also, you can make notes on the photocopy. There are several warnings about this practice. First, photocopying can be expensive for a large literature search. Second, be aware of and obey copyright laws. U.S. copyright laws permit photocopying for personal research use. Third, remember to record or photocopy the entire article, including all citation information. Fourth, organizing entire articles can be cumbersome, especially if several different parts of a single article are being used. Finally, unless you highlight carefully or take good notes, you may have to reread the entire article later.

Organize Notes. After gathering a large number of references and notes, you need an organizing scheme. One approach is to group studies or specific findings by skimming notes and creating a

FIGURE 5.2 Example of Notes on an Article

FULL CITATION ON BIBLIOGRAPHY (SOURCE FILE)

Bearman, Peter, and Hannah Büchner. 2001. "Promising the Future: Virginity Pledges and First Intercourse." *American Journal of Sociology* 106:859–912. (January, issue no. 4).

NOTE CARD (CONTENT FILE)

Bearman and Büchner 2001

Topics: Teen pregnancy & sexuality, pledges/promises, virginity, first sexual intercourse, S. Baptists, identity movement

Since 1993, the Southern Baptist Church sponsored a movement among teens whereby the teens make a public pledge to remain virgins until marriage. Over 2.5 million teens have made the pledge. This study examines whether the pledge affected the timing of sexual intercourse and whether pledging teens differ from nonpledging teens. Critics of the movement are uncomfortable with it because pledge supporters often reject sex education, hold an overly romanticized view of marriage, and adhere to traditional gender roles.

Hypothesis

Adolescents will engage in behavior that adults enjoy but that is forbidden to them based on the amount of social controls that constrain opportunities to engage in forbidden behavior. Teens in nontraditional families with greater freedom and less supervision are more likely to engage in forbidden behavior (sex). Teens in traditional families and who are closer to their parents will delay sexual activity. Teens closely tied to "identity movements" outside the family will modify behavior based on norms the movements teach.

Method

Data are from a national health survey of U.S. teens in grades 7–12 who were in public or private schools in 1994–1995. A total of 90,000 students in 141 schools completed questionnaires. A second questionnaire was completed by 20,000 of the 90,000 students. The questionnaire asked about a pledge, importance of religion, and sexual activity.

Findings

The study found a substantial delay in the timing of first intercourse among pledgers. Yet, the effect of pledging varies by the age of the teen. In addition, pledging only works in some social contexts (i.e., where it is at least partially a social norm). Pledgers tend to be more religious, less developed physically, and from more traditional social and family backgrounds.

mental map of how they fit together. Try several organizing schemes before settling on a final one. Organizing is a skill that improves with practice. For example, place notes into piles representing common themes, or draw charts comparing what different reports state about the same question, noting agreements and disagreements.

In the process of organizing notes, you will find that some references and notes do not fit and should be discarded as irrelevant. Also, you may discover gaps or areas and topics that are relevant but that you did not examine. This necessitates return visits to the library.

There are many organizing schemes. The best one depends on the purpose of the review. A context review implies organizing recent reports around a specific research question. A historical review implies organizing studies by major theme and by the date of publication. An integrative review implies organizing studies around core common findings of a field and the main hypotheses tested. A methodological review implies organizing studies by the topic and, within topic, by the design or method used. A theoretical review implies organizing studies by the theories and major thinkers being examined.

What Does a Good Review Look Like?

A literature review requires planning and clear writing, which requires a lot of rewriting. This step is often merged with organizing notes. All the rules of good writing (e.g., clear organizational structure, an introduction and conclusion, transitions between sections, etc.) apply to writing a literature review. Keep your purposes in mind when you write, and communicate clearly and effectively.

An author should communicate a review's purpose to the reader by its organization. The *wrong* way to write a review is to list a series of research reports with a summary of the findings of each. This fails to communicate a sense of purpose. It reads as a set of notes strung together. Perhaps the reviewer got sloppy and skipped over the important organizing step in writing the review. The *right* way to write a review is to organize common findings or arguments together. A well-accepted approach is to address the most important ideas first, to logically link statements

or findings, and to note discrepancies or weaknesses in the research (see Box 5.3 for an example).

Using the Internet for Social Research

The Internet has revolutionized how social researchers work. Only a decade ago, it was rarely used; today, most social researchers use the Internet regularly to help them review the literature, to communicate with other researchers, and to search for other information sources. The Internet continues to expand and change at an explosive rate.

The Internet has been a mixed blessing for social research, but it has not proved to be the panacea that some people first thought it might be. It provides new and important ways to find information, but it remains one tool among others. It can quickly make some specific pieces of information accessible. The Internet is best thought of as a supplement rather than as a replacement for traditional library research. There are "up" and "down" sides to using the Internet for social research.

The Upside

1. The Internet is easy, fast, and cheap. It is widely accessible and can be used from many locations. This near-free resource allows people to find source material from almost anywhere—local public libraries, homes, labs or classrooms, or anywhere a computer is connected to the Internet system. Also, the Internet does not close; it operates 24 hours a day, 7 days a week. With minimal training, most people can quickly perform searches and get information on their computer screens that would have required them to take a major trip to large research libraries a few years ago. Searching a vast quantity of information electronically is easier and faster than a manual search, and the Internet greatly expands the amount and variety of source material. More and more information (e.g., *Statistical Abstract of the United States*) is available on the Internet. In addition, once the information is located, a researcher can often store it electronically or print it at a local site.

2. The Internet has "links" that provide additional ways to find and connect to many other sources of information. Many websites, home pages, and other

BOX 5.3 Examples of Bad and Good Reviews

EXAMPLE OF BAD REVIEW

Sexual harassment has many consequences. Adams, Kottke, and Padgitt (1983) found that some women students said they avoided taking a class or working with certain professors because of the risk of harassment. They also found that men and women students reacted differently. Their research was a survey of 1,000 men and women graduate and undergraduate students. Benson and Thomson's study in *Social Problems* (1982) lists many problems created by sexual harassment. In their excellent book, *The Lecherous Professor*, Dziech and Weiner (1990) give a long list of difficulties that victims have suffered.

Researchers study the topic in different ways. Hunter and McClelland (1991) conducted a study of undergraduates at a small liberal arts college. They had a sample of 300 students and students were given multiple vignettes that varied by the reaction of the victim and the situation. Jaschik and Fretz (1991) showed 90 women students at a mideastern university a videotape with a classic example of sexual harassment by a teaching assistant. Before it was labeled as *sexual harassment*, few women called it that. When asked whether it was sexual harassment, 98 percent agreed. Weber-Burdin and Rossi (1982) replicated a previous study on sexual harassment, only they used students at the University of Massachusetts. They had 59 students rate 40 hypothetical situations. Reilley, Carpenter, Dull, and Bartlett (1982) conducted a study of 250 female and 150 male undergraduates at the University of California at Santa Barbara. They also had a sample of 52 faculty. Both samples completed a questionnaire in which respondents were presented vignettes of sexual-harassing situations that they were to rate. Popovich et al. (1986) created a nine-item scale of sexual harassment. They studied 209 undergradu-

ates at a medium-sized university in groups of 15 to 25. They found disagreement and confusion among students.

EXAMPLE OF BETTER REVIEW

The victims of sexual harassment suffer a range of consequences, from lowered self-esteem and loss of self-confidence to withdrawal from social interaction, changed career goals, and depression (Adams, Kottke, and Padgitt, 1983; Benson and Thomson, 1982; Dziech and Weiner, 1990). For example, Adams, Kottke, and Padgitt (1983) noted that 13 percent of women students said they avoided taking a class or working with certain professors because of the risk of harassment.

Research into campus sexual harassment has taken several approaches. In addition to survey research, many have experimented with vignettes or presented hypothetical scenarios (Hunter and McClelland, 1991; Jaschik and Fretz, 1991; Popovich et al., 1986; Reilley, Carpenter, Dull, and Bartlett, 1982; Rossi and Anderson, 1982; Valentine-French and Radtke, 1989; Weber-Burdin and Rossi, 1982). Victim verbal responses and situational factors appear to affect whether observers label a behavior as harassment. There is confusion over the application of a sexual harassment label for inappropriate behavior. For example, Jaschik and Fretz (1991) found that only 3 percent of the women students shown a videotape with a classic example of sexual harassment by a teaching assistant initially labeled it as *sexual harassment*. Instead, they called it "sexist," "rude," "unprofessional," or "demeaning." When asked whether it was sexual harassment, 98 percent agreed. Roscoe et al. (1987) reported similar labeling difficulties.

Internet resource pages have "hot links" that can call up information from related sites or sources simply by clicking on the link indicator (usually a button or a highlighted word or phrase). This connects people to more information and provides "instant" access to cross-referenced material. Links make embedding one source within a network of related sources easy.

3. The Internet speeds the flow of information around the globe and has a "democratizing" effect. It provides rapid transmission of information (e.g., text, news, data, and photos) across long distances and international borders. Instead of waiting a week for a report or having to send off for a foreign publication and wait for a month, the information is often available in seconds at no cost. There are

BOX 5.4 Websites: Surfer Beware

The rapid diffusion of Internet access and increased reliance on the Internet for information has provided many benefits. The Internet is unregulated, so almost anyone can create a website saying almost anything. In 2000, over 60 million U.S. residents went on-line in search of health information. Among those who use the Internet, more than 70 percent report the health information they find will influence a decision about treatment. A study (Berland et al., 2001) on health information available on the Internet found that health information is often incomplete or inaccurate. The researchers used 10 English and 4 Spanish search engines looking for 4 search terms: breast cancer, childhood asthma, depression, and obesity.

They found that less than one-fourth of the linked background information on health web pages provided valid, relevant information.

Thirty-four physicians evaluated the quality of 25 health websites. They concluded that less than one-half more than minimally covered a topic and were completely accurate. The researchers found that, more than half the time, information in one part of a site contradicted information elsewhere on the same site and same topic. They also found wide variation in whether the site provided full source documentation. On average, only 65 percent of the site provided accurate documentation of the author and date of its sources.

virtually no restrictions on who can put material on the Internet or what appears on it, so many people who had difficulty publishing or disseminating materials can now do so with ease. Because of its openness, the Internet reinforces the norm of universalism.

4. The Internet is the provider of a very wide range of information sources, some in formats that are more dynamic and interesting. It can send and be a resource for more than straight black-and-white text, as in traditional academic journals and sources. It transmits information in the form of bright colors, graphics, "action" images, audio (e.g., music, voices, sounds), photos, and even video clips. Authors and other creators of information can be creative in their presentations.

The Downside.

1. There is no quality control over what gets on the Internet. Unlike standard academic publications, there is no peer-review process or any review. Anyone can put almost anything on a website. It may be poor quality, undocumented, highly biased, totally made up, or plain fraudulent. There is a lot of real "trash" out there! Once a person finds material, the real work is to distinguish the "trash" from valid information. One needs to treat a web page with the same caution that one applies to a paper flyer someone hands out on the street; it could contain the dri-

vel of a "nut" or be really valuable information. A less serious problem is that the "glitz" of bright colors, music, or moving images found in sites can distract unsophisticated users. The "glitz" may attract them more than serious content, and they may confuse glitz for high-caliber information. The Internet is better designed for a quick look and short attention spans rather than the slow, deliberative, careful reading and study of content (see Box 5.4).

2. Many excellent sources and some of the most important resource materials (research studies and data) for social research are *not* available on the Internet (e.g., *Sociofile*, GSS datafiles, and recent journal articles). Much information is available only through special subscription services that can be expensive. Contrary to popular belief, the Internet has *not* made all information free and accessible to everyone. Often, what is free is limited, and fuller information is available only to those who pay. In fact, because some libraries redirected funds to buy computers for the Internet and cut the purchases for books and paper copies of documents, the Internet's overall impact may have actually reduced what is available for some users.

3. Finding sources on the Internet can be very difficult and time consuming. It is not easy to locate specific source materials. Also, different "search engines" can produce very different results. It is wise to use multiple search engines because they work

differently. Most search engines simply look for specific words in a short description of the web page. This description may not reveal the full content of the source, just as a title does not fully tell what a book or article is about. In addition, search engines often come up with tens of thousands of sources, far too many for anyone to examine. The ones at the "top" may be there because they were recently added to the Internet or because their short description had several versions of the search word. The "best" or most relevant source might be buried as the 150th item found in a search. Also, one must often wade through a lot of commercials and advertisements to locate "real" information.

4. Internet sources can be "unstable" and difficult to document. After one conducts a search on the Internet and locates web pages with information, it is important to note the specific "address" (usually it starts <http://>) where it resides. This address refers to an electronic file sitting in a computer somewhere. If the computer file is moved, it may not be at the same address two weeks later. Unlike a journal article that will be stored on a shelf or on microfiche in hundreds of libraries for many decades to come and available for anyone to read, web pages can quickly vanish. This means it may not be possible to check someone's web references easily, verify a quote in a document, or go back to original materials and read them for ideas or to build on them. Also, it is easy to copy, modify, or distort, then reproduce copies of a source. For example, a person could alter a text passage or a photo image and then create a new web page to disseminate the false information. This raises issues about copyright protection and the authenticity of source material.

Understanding the Internet, its jargon and how to identify a worthwhile site takes time and practice. There are few rules for locating the best sites on the Internet—ones that have useful and truthful information. Sources that originate at universities, research institutes, or government agencies usually are more trustworthy for research purposes than ones that are individual home pages of unspecified origin or location, or that a commercial organization or a political/social issue advocacy group sponsors. In addition to moving or disappearing, many

web pages or sources fail to provide complete information to make citation easy. Better sources provide fuller or more complete information about the author, date, location, and so on.

ETHICS IN SOCIAL RESEARCH

We now turn from reviewing the literature to a second major concern one needs to address before designing a study. Research has an ethical-moral dimension, although as you saw in Chapter 4, different approaches to science address each concern somewhat differently. All approaches recognize an ethical dimension to research. It is difficult to appreciate the ethical dilemmas that researchers face until one is doing research, but waiting until the middle of doing a study is too late. Researchers need to prepare themselves and consider ethical concerns as they design a study so that sound ethical practice is built in to the study design.

Codes of ethics and other researchers provide guidance, but ethical conduct ultimately depends on the individual researcher. The researcher has a moral and professional obligation to be ethical, even when research subjects are unaware of or unconcerned about ethics. Indeed, many subjects are less concerned about protecting their privacy and other rights than are researchers.⁴

The ethical issues are the concerns, dilemmas, and conflicts that arise over the proper way to conduct research. Ethics define what is or is not legitimate to do, or what "moral" research procedure involves. There are few ethical absolutes. Although there are few fixed rules, there are agreed-on principles. These principles may conflict in practice. Many ethical issues involve a balance between two values: the pursuit of scientific knowledge and the rights of those being studied or of others in society. Potential benefits—such as advancing the understanding of social life, improving decision making, or helping research participants—must be weighed against potential costs—such as a loss of dignity, self-esteem, privacy, or democratic freedoms.

The standards for ethical research are stricter than those in many other areas (e.g., collection agencies, police departments, advertisers, etc.). Professional social research requires both knowledge of

proper research techniques (e.g., sampling) and sensitivity to ethical concerns in research. This is not easy.

The Individual Researcher

Ethics begin and end with you, the researcher. A researcher's personal moral code is the best defense against unethical behavior. Before, during, and after conducting a study, a researcher has opportunities to, and *should*, reflect on research actions and consult his or her conscience. Ethical research depends on the integrity of the individual researcher and his or her values. "If values are to be taken seriously, they cannot be expressed and laid aside but must instead be guides to actions for the sociologist. They determine who will be investigated, for what purpose and in whose service" (Sagarin, 1973:63).

Why Be Ethical?

Given that most people who conduct social research are genuinely concerned about others, why would a researcher act in an ethically irresponsible manner? Outside of the rare disturbed individual, most unethical behavior results from a lack of awareness and pressures on researchers to take ethical shortcuts. Researchers face pressures to build a career, publish, advance knowledge, gain prestige, impress family and friends, hold on to a job, and so forth. Ethical research takes longer to complete, costs more money, is more complicated, and is more likely to be terminated before completion. Moreover, written ethical standards are in the form of vague principles. There are many places where it is possible to act unethically, and the odds of getting caught are small.

There are few rewards available for ethical research. The unethical researcher, if caught, faces

Scientific misconduct When someone engages in research fraud, plagiarism, or other unethical conduct that significantly deviates from the accepted practices for conducting and reporting research established by the scientific community.

Research fraud A type of unethical behavior in which a researcher fakes or creates false data, or falsely reports on the research procedure.

public humiliation, a ruined career, and possible legal action, but the ethical researcher wins no praise. Ethical behavior arises from a sensitivity to ethical concerns that researchers internalize during their professional training, from a professional role, and from personal contact with other researchers. Moreover, the norms of the scientific community reinforce ethical behavior with an emphasis on honesty and openness. Researchers who are oriented toward their professional role, who are committed to the scientific ethos, and who interact regularly with other researchers are likely to act ethically.

Scientific Misconduct. The research community and agencies that fund research oppose unethical behavior called scientific misconduct, which includes research fraud and plagiarism. **Scientific misconduct** occurs when a researcher falsifies or distorts the data or the methods of data collection, or plagiarizes the work of others. It also includes significant departures from the generally accepted practices of the scientific community for doing or reporting on research. Research institutes and universities have policies and procedures to detect misconduct, report it to the scientific community and funding agencies, and penalize researchers who engage in it (e.g., through a pay cut or loss of job).⁵

Research fraud occurs when a researcher fakes or invents data that were not really collected, or falsely reports how research was conducted. Though rare, it is treated very seriously. The most famous case of fraud was that of Sir Cyril Burt, the father of British educational psychology. Burt died in 1971 as an esteemed researcher who was famous for his studies with twins that showed a genetic basis of intelligence. In 1976, it was discovered that he had falsified data and the names of coauthors. Unfortunately, the scientific community had been misled for nearly 30 years.

Plagiarism is fraud that occurs when a researcher steals the ideas or writings of another or uses them without citing the source. A special type of plagiarism is stealing the work of another researcher, an assistant, or a student, and misrepresenting it as one's own. These are serious breaches of ethical standards.⁶ Plagiarism is discussed further in Chapter 16.

Unethical but Legal. Behavior may be unethical but not break the law. The distinction between legal and ethical behavior is illustrated in a plagiarism case. The American Sociological Association documented that a 1988 book without footnotes by a dean from Eastern New Mexico University contained large sections of a 1978 dissertation written by a sociology professor at Tufts University. The copying was not *illegal*; it did not violate copyright law because the sociologist's dissertation did not have a copyright filed with the U.S. government. Nevertheless, it was clearly *unethical* according to standards of professional behavior.⁷ (See Figure 5.3 for relations between legal and moral actions.)

Power

The relationship between the researcher and subjects or employee-assistants involves power and trust. The experimenter, survey director, or research investigator has power relative to subjects or assistants. The power is legitimated by credentials, expertise, training, and the role of science in modern society. Some ethical issues involve an abuse of power and trust.

The researcher's authority to conduct research, granted by professional communities and the larger society, is accompanied by a responsibility to guide, protect, and oversee the interests of the people being studied. For example, a physician was discovered to have conducted experimental gynecological surgery on 33 women without their permission. The women had trusted the doctor, but he had abused the trust that the women, the professional community, and society placed in him.⁸

The researcher seeking ethical guidance is not alone. He or she can turn to a number of resources: professional colleagues, ethical advisory committees, institutional review boards or human subjects committees at a college or institution, codes of ethics from professional associations, and writings on ethics in research.

Ethical Issues Involving Research Participants

Have you ever been a participant in a research study? If so, how were you treated? More attention is fo-

LEGAL	ETHICAL	
	Yes	No
Yes	Moral and Legal	Legal but Immoral
No	Illegal but Moral	Immoral and Illegal

FIGURE 5.3 Typology of Legal and Moral Actions in Social Research

cused on the possible negative effects of research on those being studied than any other ethical issue, beginning with concerns about biomedical research. Ethical research requires balancing the value of advancing knowledge against the value of noninterference in the lives of others. Giving research subjects absolute rights of noninterference could make empirical research impossible, but giving researchers absolute rights of inquiry could nullify participants' basic human rights. The moral question becomes: When, if ever, are researchers justified in risking physical harm or injury to those being studied, causing them great embarrassment, or frightening them?

The law and codes of ethics recognize some clear prohibitions: Never cause unnecessary or irreversible harm to subjects; secure prior voluntary consent when possible; and never unnecessarily humiliate, degrade, or release harmful information about specific individuals that was collected for research purposes. These are minimal standards and are subject to interpretation (e.g., what does *unnecessary* mean in a specific situation?).

Origins of Research Participant Protection

Concern over the treatment of research participants arose after the revelation of gross violations of basic human rights in the name of science. The most notorious violations were "medical experiments" conducted on Jews and others in Nazi Germany. In these experiments, terrible tortures were committed. For example, people were placed in freezing water to see how long it took them to die, people were purposely starved to death, and limbs were severed from children and transplanted onto others.

Such human rights violations do not occur only in Germany, nor did they happen only long ago. A

symbol of unethical research is the Tuskegee Syphilis Study, also known as *Bad Blood*. Until the 1970s, when a newspaper report caused a scandal to erupt, the U.S. Public Health Service sponsored a study in which poor, uneducated African American men in Alabama suffered and died of untreated syphilis, while researchers studied the severe physical disabilities that appear in advanced stages of the disease. The study began in 1929, before penicillin was available to treat the disease, but it continued long after treatment was available. Despite their unethical treatment of the subjects, the researchers were able to publish their results for 40 years. The study ended in 1972, but the president of the United States did not admit wrongdoing and formally apologize to the participant-victims until 1997.¹⁰

Unfortunately, the Bad Blood scandal is not unique. During the Cold War era, the U.S. government periodically compromised ethical research principles for military and political goals. In 1995, reports revealed that the government authorized injecting unknowing people with radioactive material in the late 1940s. In the 1950s, the government warned Eastman Kodak and other film manufacturers about nuclear fallout from atomic tests to prevent fogged film, but it did not warn nearby citizens of health hazards. In the 1960s, the U.S. army gave unsuspecting soldiers LSD (a hallucinogenic drug), causing serious trauma. Today, these are widely recognized to be violations of two fundamental ethical principles: avoid physical harm and get informed consent.¹¹

Physical Harm, Psychological Abuse, and Legal Jeopardy. Social research can harm a research participant in several ways: physical harm, psychological harm, legal harm, and harm to a person's career or income. Physical harm is rare, even in biomedical research, in which the intervention is much greater; 3 to 5 percent of studies involved any person who suffered any harm. Different types of harm are more likely in different types of research (e.g., in experiments versus field research). Researchers need to be aware of all types of harm and minimize them at all times.¹²

Physical Harm. A straightforward ethical principle is that researchers should not cause physical

harm. An ethical researcher anticipates risks before beginning research, including basic safety concerns (safe buildings, furniture, and equipment). He or she screens out high-risk subjects (those with heart conditions, mental breakdown, or seizures) if stress is involved and anticipates the danger of injury or physical attacks on research participants or assistants. The researcher accepts moral and legal responsibility for injury due to participation in research and terminates a project immediately if he or she can no longer guarantee the physical safety of the people involved (see the Zimbardo study in Box 5.5).

Psychological Abuse, Stress, or Loss of Self-Esteem. The risk of physical harm is rare, but researchers may place people in stressful, embarrassing, anxiety-producing, or unpleasant situations. Researchers learn about how people respond in real-life, highly anxiety-producing situations by placing subjects in realistic situations of psychological discomfort or stress. Is it unethical to cause discomfort? The ethics of the famous Milgram obedience study are still debated (see Box 5.5). Some say that the precautions taken and the knowledge gained outweighed the stress and potential psychological harm that subjects experienced. Others believe that the extreme stress and the risk of permanent harm were too great.

Social researchers have created high levels of anxiety or discomfort: exposing participants to gruesome photos; falsely telling male students that they have strongly feminine personality traits; falsely telling students that they have failed; creating a situation of high fear (e.g., smoke entering a room in which the door is locked); asking participants to harm others; placing people in a situation in which they face social pressure to deny their convictions; and having participants lie, cheat, or steal.¹³ Researchers who study helping behavior often place participants in emergency situations to see whether they will lend assistance. For example, Piliavin and associates (1969) studied helping behavior in subways by faking someone's collapse onto the floor. In the field experiment, the riders in the subway car were unaware of the experiment and did not volunteer to participate in it.

A sensitive researcher is also aware of harm to a person's self-esteem. For example, Walster (1965)

BOX 5.5 Three Cases of Ethical Controversy

Stanley Milgram's *obedience study* (Milgram, 1963, 1965, 1974) attempted to discover how the horrors of the Holocaust under the Nazis could have occurred by examining the strength of social pressure to obey authority. After signing "informed consent forms," subjects were assigned, in rigged random selection, to be a "teacher" while a confederate was the "pupil." The teacher was to test the pupil's memory of word lists and increase the electric shock level if the pupil made mistakes. The pupil was located in a nearby room, so the teacher could hear but not see the pupil. The shock apparatus was clearly labeled with increasing voltage. As the pupil made mistakes and the teacher turned switches, she or he also made noises as if in severe pain. The researcher was present and made comments such as "You must go on" to the teacher. Milgram reported, "Subjects were observed to sweat, tremble, stutter, bite their lips, groan and dig their fingernails into their flesh. These were characteristic rather than exceptional responses to the experiment" (Milgram, 1963:375). The percentage of subjects who would shock to dangerous levels was dramatically higher than expected. Ethical concerns arose over the use of deception and the extreme emotional stress experienced by subjects.

In Laud Humphreys's (Humphreys, 1975) *tearoom trade study* (a study of male homosexual encounters in public restrooms), about 100 men were observed engaging in sexual acts as Humphreys pretended to be a "watchqueen" (a voyeur and lookout). Subjects were followed to their cars, and their license numbers were secretly recorded. Names and addresses were obtained from police registers when Humphreys posed as a market researcher. One year later, in disguise, Humphreys

used a deceptive story about a health survey to interview the subjects in their homes. Humphreys was careful to keep names in safety deposit boxes, and identifiers with subject names were burned. He significantly advanced knowledge of homosexual who frequent "tearooms" and overturned previous false beliefs about them. There has been controversy over the study: The subjects never consented; deception was used; and the names could have been used to blackmail subjects, to end marriages, or to initiate criminal prosecution.

In the *Zimbardo prison experiment* (Zimbardo, 1972, 1973; Zimbardo et al., 1973, 1974), male students were divided into two role-playing groups: guards and prisoners. Before the experiment, volunteer students were given personality tests, and only those in the "normal" range were chosen. Volunteers signed up for two weeks, and prisoners were told that they would be under surveillance and would have some civil rights suspended, but that no physical abuse was allowed. In a simulated prison in the basement of a Stanford University building, prisoners were deindividuated (dressed in standard uniforms and called only by their numbers) and guards were militarized (with uniforms, nightsticks, and reflective sunglasses). Guards were told to maintain a reasonable degree of order and served 8-hour shifts, while prisoners were locked up 24 hours per day. Unexpectedly, the volunteers became too caught up in their roles. Prisoners became passive and disorganized, while guards became aggressive, arbitrary, and dehumanizing. By the sixth day, Zimbardo called off the experiment for ethical reasons. The risk of permanent psychological harm, and even physical harm, was too great.

wanted to see whether changes in feelings of female self-worth affect romantic liking. In her experiment, undergraduate women were given personality tests followed by phony feedback. Some were told that they lacked imagination and creativity. Next, a handsome male graduate student who pretended to be another research participant struck up a conversation with the women. The student acted very interested in one woman and asked her out for a dinner date. The researcher wanted to measure the

woman's romantic attraction to the male. After the experiment, the woman was told of the hoax; there was no date and the man was not interested in her. Although the participants were debriefed, they suffered a loss of self-esteem and possible psychological harm.¹⁴

Only experienced researchers who take precautions before inducing anxiety or discomfort should consider conducting experiments that induce significant stress or anxiety. They should consult

with others who have conducted similar studies and mental health professionals when planning the study, screen out high-risk populations (e.g., those with emotional problems or a weak heart), and arrange for emergency interventions or termination of the research if dangerous situations arise. Researchers should always get informed consent (to be discussed) before the research and debrief subjects immediately afterward.

Researchers should never create *unnecessary* stress, beyond the minimal amount needed to create the desired effect, or stress that has no direct, legitimate research purpose. Knowing the minimal amount comes with experience. It is better to begin with too little stress, risking finding no effect, than to create too much. If the level of stress could have long-term effects, the researcher should follow up and offer free psychological counseling.

Research that creates stress and anxiety also carries the danger that experimenters will develop a callous or manipulative attitude toward others. Researchers report guilt and regrets after conducting experiments that caused psychological harm to subjects. Experiments that place subjects in anxiety-producing situations may produce discomfort for the ethical researcher.

Legal Harm. A researcher is responsible for protecting research participants from increased risk of arrest. If participation in research increases the risk of arrest, individuals will distrust researchers and be unwilling to participate in future research. Researchers may be able to secure clearance from law enforcement authorities before conducting certain types of research. For example, the U.S. Department of Justice provides written waivers for researchers studying criminal behavior.

Potential legal harm is one criticism of the 1975 “tearoom trade” study by Humphreys (see Box 5.5). In the New Jersey Negative Income Tax Experiment, those participating in the experiment received income supplements, but no explicit provision was made for monitoring whether they also received welfare checks. A local prosecuting attorney requested data on participants to identify “welfare cheats.” In other words, subjects were at legal risk

because they had participated in the experiment. Eventually, the conflict was resolved, but it illustrates that researchers should be aware of potential legal problems.

A related ethical issue arises when a researcher learns of illegal activity when collecting data. A researcher must weigh the value of protecting the researcher–subject relationship and the benefits to future researchers against potential harm to innocent people. A researcher bears the cost of his or her judgment. For example, in his field research on police, Van Maanen (1982:114–115) reported seeing police beat people and witnessing illegal acts and irregular procedures, but said, “On and following these troublesome incidents . . . I followed police custom: I kept my mouth shut.”

Field researchers often face difficult ethical decisions. For example, when studying a mental institution, Taylor (1987) discovered the mistreatment and abuse of inmates by the staff. He had two choices: Abandon the study and call for an investigation, or keep quiet and continue with the study for several months, publicize the findings afterward, and then advocate an end to abuse. After weighing the situation, he followed the latter course and is now an activist for the rights of mental institution inmates.

A similar ethical dilemma is illustrated by the case of a New York restaurant fire that was complicated by the issue of confidentiality. A sociology graduate student was conducting a participant observation study of waiters. During the research project, the field site, a restaurant, burned down, and arson was suspected. Local legal authorities requested the field notes and wanted to interrogate the researcher about activity in the restaurant. The researcher faced a dilemma: He could cooperate with the investigation and violate the trust, confidentiality, and integrity of ethical research, or he could uphold confidentiality and protect his subjects but face contempt of court and obstruction of justice penalties, including fines and jail. He wanted to behave ethically but he also wanted to stay out of jail. After years of legal battles, the situation was resolved with limited cooperation by the researcher and a judicial ruling upholding the confidentiality of field notes.

Nevertheless, the issue took years to resolve, and the researcher bore substantial financial and personal costs.¹⁵

Observing illegal behavior may be central to a research project. A researcher who covertly observes and records illegal behavior and then supplies information to law enforcement authorities, violates ethical standards regarding research participants and undermines future research. Yet, a researcher who fails to report illegal behavior indirectly permits criminal behavior and could be charged as an accessory to a crime. Is the researcher a professional seeking knowledge or a freelance undercover informant?

Other Harm to Participants. Research participants may face other types of harm. For example, a survey interview may create anxiety and discomfort among people who are asked to recall unpleasant events. The ethical researcher is sensitive to any harm to participants, considers possible precautions, and weighs potential harm against potential benefits. Another risk of harm to subjects is that of a negative effect on their careers or incomes. For example, a researcher conducts a survey of employees and concludes that the supervisor’s performance is poor. As a consequence, the supervisor loses her job. Or a researcher studies welfare recipients. As a consequence, the recipients lose their health insurance and their quality of life declines. What is the researcher’s responsibility? The ethical researcher considers the consequences of research for those being studied. But there is no fixed answer to such questions. A researcher must evaluate each case, weigh potential harm against potential benefits, and bear the responsibility for the decision.

Deception. Has anyone ever told you a half-truth or lie to get you to do something? How did you feel about it? Social researchers follow the ethical **principle of voluntary consent**: Never force anyone to participate in research, and do not lie unless it is required for legitimate research reasons. The people who participate in social research should explicitly agree to participate. The right of a person not to participate becomes a critical issue whenever the re-

searcher uses deception, disguises the research, or uses covert research methods.¹⁶

Social researchers sometimes deceive or lie to participants in field and experimental research. A researcher might misrepresent his or her actions or true intentions for legitimate methodological reasons: If participants knew the true purpose, they would modify their behavior, making it impossible to learn of their real behavior, or access to a research site might be impossible if he or she told the truth. Deception is never preferable if the researcher could accomplish the same thing without deception. Experimental researchers often deceive subjects to prevent them from learning the true hypothesis and to reduce reactive effects.

Deception is acceptable only if there is a specific methodological purpose for it, and even then, it should be used only to the minimal degree necessary. A researcher who uses deception should obtain informed consent, never misrepresent risks, and always debrief the participants afterward. He or she can describe the basic procedures involved and conceal only specific information about hypotheses being tested.

Informed Consent. A fundamental ethical principle of social research is: Never coerce anyone into participating; participation *must* be voluntary. It is not enough to get permission from people; they need to know what they are being asked to participate in so that they can make an informed decision. Participants can become aware of their rights and what they are getting involved in when they read and sign a statement giving **informed consent**, a written agreement to participate given by people after they learn something about the research procedure.

Principle of voluntary consent An ethical principle that people should never participate in research unless they explicitly and freely agree to participate.

Informed consent A statement, usually written, that explains aspects of a study to participants and asks for their voluntary agreement to participate before the study begins.

Box 5.6 Informed Consent

informed consent statements contain the following:

1. A brief description of the purpose and procedure of the research, including the expected duration of the study
2. A statement of any risks or discomfort associated with participation
3. A guarantee of anonymity and the confidentiality of records
4. The identification of the researcher and of where to receive information about subjects' rights or questions about the study
5. A statement that participation is completely voluntary and can be terminated at any time without penalty
6. A statement of alternative procedures that may be used
7. A statement of any benefits or compensation provided to subjects and the number of subjects involved
8. An offer to provide a summary of findings

The U.S. federal government does not require informed consent in all research involving human subjects. Nevertheless, researchers should get written consent unless there are good reasons for not obtaining it (e.g., covert field research, use of secondary data, etc.) as judged by an institutional review board (IRB) (see the later discussion of IRBs).

Informed consent statements provide specific information (see Box 5.6).¹⁷ A general statement about the kinds of procedures or questions involved and the uses of the data are sufficient for informed consent. In a study by Singer (1978), one random group of survey respondents received a detailed informed consent statement and another did not. No significant differences were discovered. If anything, people who refused to sign such a statement were more likely to guess or answer "no response" to questions.

In their analysis of the literature, Singer and colleagues (1995) found that assuring confidentiality modestly improved responses when researchers asked about highly sensitive topics. In other situa-

tions, extensive assurances of confidentiality failed to affect how or whether subjects responded.

Signed informed consent statements are optional for most survey, field, and secondary data research, but are often mandated for experimental research. They are impossible to obtain in documentary research and in most telephone interview studies. The general rule is: The greater the risk of potential harm to subjects, the greater the need for a written consent statement. In sum, there are many reasons to get informed consent and few reasons not to get it.

Covert Observation. Obtaining informed consent may be easy in survey and experimental research, but some field researchers feel it is inappropriate when observing real-life field settings, and say they could not gain entry or conduct a study unless it were covert. In the past, field researchers used covert observation, such as feigning alcoholism to present a false cover story to join a group seeking treatment so it could be studied. Field researchers have three choices blurring the line between informed consent and a not fully informed acquiescence. Borrowing from the language of espionage, Fine (1980) distinguished deep cover (the researcher tells nothing of the research role but acts as a full participant), shallow cover (the researcher reveals that research is taking place but is vague about details), and explicit cover (the researcher fully reveals his or her purpose and asks permission).

Two arguments are made in favor of covert observation and exempting field research from informed consent (Herrera, 1999). The first is that informed consent is impractical and disruptive in field research, and may even create some harm by disturbing the participants or the setting by upsetting the ongoing flow of activities. The problem with this reasoning is the moral principle that ensuring participant dignity outweighs practical expediency for researchers. This reasoning is self-serving; it puts a higher value on doing research than on upholding honesty or privacy, and it assumes that researchers are better at judging the risk of being in study than are the participants. The moral-ethical standard is that researchers need to respect the freedom/autonomy of all the people they study and let

them make their own decisions. Participants may not remain naïve and may be offended once they learn of an unauthorized invasion of their "privacy" for research purposes.

A second argument favoring covert observations is that human communication and daily affairs are already filled with covert activity. Ordinary activities involve some amount of covert activity with many "people watchers" or harmless eavesdroppers. Covert and deceptive behaviors are pervasive in daily life by many retail sales outlets, law enforcement, or security personnel and people almost expect it. It is expected and harmless, so why must social researchers act differently? Opposing this reason for exemption is that "everyone else is doing it" and "it would happen anyway" are not valid justifications on which to base a morally sound professional research role. The issue here is setting moral-ethical standards for the professional researcher. Perhaps voyeurism, surveillance, and the use of undercover informants are increasing in some societies. Are they models for building greater respect and trust for the higher goals of social research? More likely they lead to public cynicism, distrust, and noncooperation in research. An absence of informed consent is an ethical gray area, and many feel that the moral-ethical risk of not getting informed consent is likely to cause greater harm.

Covert research remains controversial, and many researchers feel that all covert research is unethical.¹⁸ The code of ethics of the American Anthropological Association condemns it as "impractical and undesirable." Even those who accept covert research as ethical in some situations argue that it should be used only when overt observation is impossible. In addition, the researcher should inform participants afterward and give them an opportunity to express concerns.

Deception and covert research may increase mistrust and cynicism, and diminish public respect for social research. Misrepresentation in field research is analogous to being an undercover agent or informer in nondemocratic societies. Deception can increase distrust by people who are frequently studied. In one case, the frequent use of deception reduced helping behavior. When a student was shot at the University of Washington in Seattle in 1973,

students crossing the campus made no attempt to assist. Later, it was discovered that many of the bystanders did not help because they thought that the shooting was staged as part of an experiment.¹⁹

Special Populations and New Inequalities

Special Populations and Coercion. Some populations or groups of research participants are not capable of giving true voluntary informed consent. **Special populations** may lack the necessary competency or may be indirectly coerced. Students, prison inmates, employees, military personnel, the homeless, welfare recipients, children, or the mentally disabled may agree to participate in research. Yet, they may not be fully capable of making a decision, or may agree to participate only because some desired good—such as higher grades, early parole, promotions, or additional services—requires an agreement to participate.

It is unethical to involve "incompetent" people (e.g., children, mentally disabled, etc.) in research unless two conditions are met: A legal guardian grants written permission, and the researcher follows all ethical principles against harm to participants. For example, a researcher wants to conduct a survey of smoking and drug/alcohol use among high school students. If it is conducted on school property, school officials must give permission, and written parental permission is needed for any subject who is a legal minor. It is best to ask permission from each student, as well.

It is unethical to coerce people to participate, including offering them special benefits that they cannot otherwise attain. For example, it is unethical for a commanding officer to order a soldier to participate in a study, for a professor to require a student to be a research subject in order to pass a course, or for an employer to expect an employee to complete a survey as a condition of continued employment. It is unethical even if someone other than

Special population Research participants who, because of age, incarceration, potential coercion, or less than full physical, mental, emotional, or other capabilities, may lack complete freedom or awareness to grant voluntary consent to participate in a study.

the researcher (e.g., an employer) coerced people (e.g., employees) to participate in research.

Whether coercion to participate is involved can be a complex issue, and a researcher must evaluate each case. For example, a convicted criminal is given the alternative of imprisonment or participation in an experimental rehabilitation program. The convicted criminal may not believe in the benefits of the program, but the researcher may believe that it will help the criminal. This is a case of coercion, but the researcher must judge whether the benefits to the subject and to society outweigh the ethical prohibition on coercion.

Teachers sometimes require students in social science courses to participate as subjects in research projects. This is a special case of coercion. Three arguments have been made in favor of requiring participation: (1) It would be difficult and prohibitively expensive to get participants otherwise; (2) the knowledge created from research with students serving as subjects will benefit future students and society; (3) students will learn more about research by experiencing it directly in a realistic research setting. Of the three arguments, only the third justifies limited coercion. Limited coercion is acceptable only as long as it has a clear educational objective, the students are given a choice of research experience, and all other ethical principles are upheld.²⁰

Creating New Inequalities. Another type of harm occurs when one group of people is denied a service or benefit as a result of participation in a research project. For example, a researcher might have a new treatment for subjects with a terrible disease, such as acquired immune deficiency syndrome (AIDS). In order to determine the effects of the new treatment, some individuals receive it while others are given a placebo. The design will show whether the drug is effective, but subjects in the control group who receive the placebo may die. Of course, those receiving the drug may also die, until more is known about whether it is effective. Is it eth-

Crossover design A type of experimental design in which all groups receive the treatment so that discomfort or benefits are shared and inequality is not created.

ical to deny people who have been randomly assigned to the control group the potentially lifesaving treatment? What if a clear, definitive test of whether the drug is effective requires a control group that receives a placebo?

A researcher can reduce new inequality among research participants in three ways. First, subjects who do not receive the “new, improved” treatment continue to receive the best previously acceptable treatment. In other words, the control group is not denied all assistance, but they receive the best treatment available prior to the new one being tested. This ensures that people in the control group will not suffer in absolute terms, even if they temporarily fall behind in relative terms. Second, researchers can use **crossover designs**, whereby the control group for the first phase of the experiment becomes the experimental group in the second phase, and vice versa. Finally, the researcher carefully and continuously monitors results. If it appears early in the experiment that the new treatment is highly effective, the new treatment should be offered to those in the control group. Also, in high-risk experiments with medical treatments or possible physical harm, researchers may use animal or other surrogates for humans.

Privacy, Anonymity, and Confidentiality.

How would you feel if private details about your personal life were shared with the public without your knowledge? Because social researchers transgress the privacy of subjects in order to study social behavior, they must take precautions to protect subjects’ privacy.

Privacy. Survey researchers invade a person’s privacy when they probe into beliefs, backgrounds, and behaviors in a way that reveals intimate private details. Experimental researchers sometimes use two-way mirrors or hidden microphones to “spy” on subjects. Even if people are told they are being studied, they are unaware of what the experimenter is looking for. Field researchers may observe very private aspects of another’s behavior or eavesdrop on conversations. In field experimentation and ethnographic field research, privacy may be violated without advance warning. When Humphreys (1975)

served as a “watchqueen” in a public restroom where homosexual contacts took place, he observed very private behavior without informing subjects. When Piliavin and colleagues (1969) had people collapse on subways to study helping behavior, those in the subway car had the privacy of their ride violated. People have been studied in public places (e.g., in waiting rooms, walking down the street, in classrooms, etc.), but some “public” places are more private than others (consider, for example, the use of periscopes to observe people who thought they were alone in a public toilet stall).²¹

The ethical researcher violates privacy only to the minimum degree necessary and only for legitimate research purposes. In addition, he or she protects the information on research participants from public disclosure.

In a few situations, privacy is protected by law. One case of the invasion of privacy led to the passage of a federal law. In the *Wichita Jury Study* of 1954, University of Chicago Law School researchers recorded jury discussions to examine group processes in jury deliberations. Although the findings were significant and great precautions were taken, a congressional investigation followed and a law was passed in 1956 to prohibit the “bugging” of any grand or petit jury for any purpose, even with the jurors’ consent.²²

Anonymity. Researchers protect privacy by not disclosing a participant’s identity after information is gathered. This takes two forms: anonymity and confidentiality.

Anonymity means that people remain anonymous, or nameless. For example, a field researcher provides a social picture of a particular individual, but gives a fictitious name and location, and alters some characteristics. The subject’s identity is protected, and the individual is unknown or anonymous. Survey and experimental researchers discard the names or addresses of subjects as soon as possible and refer to participants by a code number only, to protect anonymity. If a researcher using a mail survey includes a code on the questionnaire to determine which respondents failed to respond, the respondent’s anonymity is not being fully protected. In panel studies, where the same individuals are

traced over time, anonymity is not possible. Likewise, historical researchers use specific names in historical or documentary research. They may do so if the original information was from public sources; if the sources were not publicly available, a researcher must obtain written permission from the owner of the documents to use specific names.

It is difficult to protect research participant anonymity. In one study about a fictitious town, “Springdale,” in *Small Town in Mass Society* (Vidich and Bensman, 1968), it was easy to identify the town and specific individuals in it. Town residents became upset about how the researchers portrayed them and staged a parade mocking the researchers. As in the famous Middletown study of Muncie, Indiana, people often recognize the towns studied in community research. Yet, if a researcher protects the identities of individuals with fictitious information, the gap between what was studied and what is reported to others raises questions about what was found and what was made up.

Confidentiality. Even if anonymity is not possible, researchers should protect confidentiality. Anonymity protects the identity of specific individuals from being known. Confidentiality means that information may have names attached to it, but the researcher holds it in confidence or keeps it secret from the public. The information is not released in a way that permits linking specific individuals to responses and is publicly presented only in an aggregate form (e.g., percentages, means, etc.).

A researcher may provide anonymity without confidentiality, or vice versa, although they usually go together. Anonymity without confidentiality means that all the details about a specific individual

Anonymity The ethical protection that participants remain nameless; their identity is protected from disclosure and remains unknown.

Confidentiality The ethical protection for those who are studied by holding research data in confidence or keeping them secret from the public; not releasing information in a way that permits linking specific individuals to specific responses. Researchers do this by presenting data only in an aggregate form (e.g., percentages, means, etc.).

are made public, but the individual's name is withheld. Confidentiality without anonymity means that information is not made public, but a researcher privately links individual names to specific responses.

Attempts to protect the identity of subjects from public disclosure has resulted in elaborate procedures: eliciting anonymous responses, using a third-party list custodian who holds the key to coded lists, or using the random-response technique (discussed in Chapter 10). Past abuses suggest that such measures may be necessary. For example, Diener and Crandall (1978:70) reported that during the 1950s, the U.S. State Department and the FBI requested research records on individuals who had been involved in the famous Kinsey sex study. The Kinsey Sex Institute refused to comply with the government. The institute threatened to destroy all records rather than release any. Eventually, the government agencies backed down. The moral duty and ethical code of the researchers obligated them to destroy the records to protect confidentiality.

Confidentiality may protect participants from physical harm. For example, I met a researcher who studied the inner workings of the secret police in a nondemocratic society. Had he released the names of informants, they would have faced certain death or imprisonment. To protect the subjects, he wrote all notes in code and kept all records secretly locked away. Although he resided in the United States, he was physically threatened by the foreign government and discovered attempts to burglarize his office. In other situations, other principles may take precedence over protecting confidentiality. For example, when studying patients in a mental hospital, a researcher discovers that a patient is preparing to kill an attendant. The researcher must weigh the benefit of confidentiality against the potential harm to the attendant.

Social researchers can pay high personal costs for being ethical. Although he was never accused or convicted of breaking any law and he closely followed the ethical principles outlined by the American Sociological Association, Rik Scarce, a doctoral sociology student at Washington State University, spent 16 weeks in a Spokane jail for contempt of court. He was jailed because he refused to testify before a grand jury and break the confidentiality of

social research data. Scarce had been studying radical animal liberation groups and already published one book on the subject. He had interviewed a research participant who was suspected of leading a group that broke into animal facilities and caused \$150,000 damage. Two judges refused to acknowledge the confidentiality of social research data.²³

Participants' Information as Private Property. If you freely give information about yourself for research purposes, do you lose all rights to it? Can it be used against you? People who participate in research have knowledge about them taken away and analyzed by others. The information can then be used for a number of purposes, including actions against the subjects' interests.

Information about people is collected, bought, sold, analyzed, and exchanged by large organizations. Information about buying habits, personal taste, spending patterns, credit ratings, voting patterns, and the like is used by many private and public organizations. Information is a form of private property. Like other "intellectual" property (copyrights, software, patents, etc.) and unlike most physical property, information continues to have value after it is exchanged.

Most people give a researcher their time and information for little or no compensation. Yet, concerns about privacy and the collection of information make it reasonable to see personal information as private property. If it is private property, a person's right to keep, sell, or give it away becomes clear. The ethical issue is strongest where the information could be used against subjects or used in ways they would disapprove of if they were fully informed.

For example, a group of committed nonsmokers is studied to learn about their habits and psychological profiles. A market research firm obtains the information and is hired by a tobacco company to design a campaign to promote smoking among nonsmokers. Had the nonsmokers been informed about the use of their responses, they might have chosen not to participate. A researcher can increase fairness by giving subjects a copy of the findings and describing the sponsor and the uses to which the information will be put in an informed consent statement.

The issue of who controls data on research participants is relevant to the approaches to social science outlined in Chapter 4. Positivism implies the collection and use of information by experts separate from research participants and the ordinary citizen. The two alternatives to positivism, each in its own way, argue for the involvement and participation of those who are studied in the research process and in the use of research data and findings.²⁴

Mandated Protections of Research Participants. The U.S. federal government and governments of other nations have regulations and laws to protect research participants and their rights. In the United States the legal restraint is found in rules and regulations issued by the U.S. Department of Health and Human Services Office for the Protection from Research Risks. Although this is only one federal agency, most researchers and other government agencies look to it for guidance. Current U.S. government regulations evolved from Public Health Service policies adopted in 1966 and expanded in 1971. The National Research Act (1974) established the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research, which significantly expanded regulations, and required informed consent in most social research. The responsibility for safeguarding ethical standards was assigned to research institutes and universities. The Department of Health and Human Services issued regulations in 1981, which are still in force. Regulations on scientific misconduct and protection of data confidentiality were expanded in 1989.

Federal regulations follow a biomedical model and protect subjects from physical harm. Other rules require **institutional review boards (IRBs)** at all research institutes, colleges, and universities to review all use of human subjects. The IRB is staffed by researchers and community members. Similar committees oversee the use of animals in research. The board also oversees, monitors, and reviews the impact of all research procedures on human participants and applies ethical guidelines. The board also reviews research procedures at the preliminary stage when first proposed. Educational tests, "normal educational practice," most surveys, most observation of public behavior, and studies of existing data in

which individuals cannot be identified are exempt from the IRB.²⁵

Ethics and the Scientific Community

Physicians, attorneys, counselors, and other professionals have a **code of ethics** and peer review boards or licensing regulations. The codes formalize professional standards and provide guidance when questions arise in practice.²⁶ Social researchers do not provide a service for a fee, receive limited ethical training, and are rarely licensed. They incorporate ethical concerns into research because it is morally and socially responsible, and to protect social research from charges of insensitivity or abusing people.

Professional social science associations around the world have codes of ethics. The codes state proper and improper behavior and represent a consensus of professionals on ethics. All researchers may not agree on all ethical issues, and ethical rules are subject to interpretation, but researchers are expected to uphold ethical standards as part of their membership in a professional community.

Codes of research ethics can be traced to the **Nuremberg code**, which was adopted during the Nuremberg Military Tribunal on Nazi war crimes held by the Allied Powers immediately after World War II. The code, developed as a response to the cruelty of concentration camp experiments, outlines ethical principles and rights of human subjects.

Institutional review board (IRB) A committee at U.S. colleges, hospitals, and research institutes required by federal law to ensure that research involving humans is conducted in a responsible, ethical manner. It examines study details before the research begins.

Code of ethics Principles and guidelines developed by professional organizations to guide research practice and clarify the line between ethical and unethical behavior.

Nuremberg code An international code of moral, ethical behavior that was the beginning of codes of ethics for human research. It was adopted after the war crime trials of World War II in response to inhumane Nazi medical experiments.

BOX 5.7 Basic Principles of Ethical Social Research

- Ethical responsibility rests with the individual researcher.
- Do not exploit subjects or students for personal gain.
- Some form of informed consent is highly recommended or required.
- Honor all guarantees of privacy, confidentiality, and anonymity.
- Do not coerce or humiliate subjects.
- Use deception only if needed, and always accompany it with debriefing.
- Use a research method that is appropriate to the topic.
- Detect and remove undesirable consequences to research subjects.
- Anticipate repercussions of the research or publication of results.
- Identify the sponsor who funded the research.
- Cooperate with host nations when doing comparative research.
- Release the details of the study design with the results.
- Make interpretations of results consistent with the data.
- Use high methodological standards and strive for accuracy.
- Do not conduct secret research.

The principles in the Nuremberg code dealt with the treatment of human subjects and focused on medical experimentation, but they became the basis for the ethical codes in social research. Similar codes of human rights, such as the 1948 Universal Declaration of Human Rights by the United Nations and the 1964 Declaration of Helsinki, also have implications for social researchers.²⁷ Box 5.7 lists some of the basic principles of ethical social research.

Whistle-blower A person who recognizes unethical or illegal practices in an organization and voices opposition to them. He or she attempts to stop the practices through organizational channels but is not successful and may be punished for the attempt. He or she continues to voice opposition to the unethical or illegal practices beyond the organization.

Professional social science associations (e.g., the American Psychological Association, American Anthropological Association, American Political Science Association, and American Sociological Association) adopted codes of ethics beginning in the 1960s or 1970s. A copy of the code of ethics for the American Sociological Association is provided in Appendix A.

Professional social science associations have committees that review codes of ethics and hear about possible violations, but there is no strict enforcement of the codes. The penalty for a minor violation rarely goes beyond a letter. If laws have not been violated, the main penalty is the negative publicity surrounding a well-documented and serious ethical violation. The publicity may result in the loss of employment, a refusal to publish research findings in scholarly journals, and a prohibition from receiving funding for research—in other words, banishment from the community of professional researchers.

Codes of ethics do more than codify thinking and provide guidance; they also help universities and other institutions defend ethical research against abuses. For example, after interviewing 24 staff members and conducting observations, a researcher in 1994 documented that the staff at the Milwaukee Public Defenders Office were seriously overworked and could not effectively provide legal defense for poor people. Learning of the findings, top officials at the office contacted the university and demanded to know who on their staff had talked to the researcher, with implications that there might be reprisals. The university administration defended the researcher and refused to release the information, citing widely accepted codes that protect human research subjects.²⁸

Among the codes of ethics, Greenwald (1992: 585–586) remarked, “Sociology stands out among the learned professions as critical of the authority of established institutions such as government or large business firms” and in its provision to “explicitly state the shortcoming of methodologies and the openness of findings to varying interpretations.”

Ethics and the Sponsors of Research

Whistle-blowing. You might find a job in which you do research for a sponsor—an employer, a

government agency, or a private firm that contracts with a researcher to conduct research. Special ethical problems arise when a sponsor pays for research, especially applied research. Researchers may be asked to compromise ethical or professional research standards as a condition for receiving a contract or for continued employment. Researchers need to set ethical boundaries beyond which they will refuse sponsor demands. When confronted with an illegitimate demand, a researcher has three basic choices: loyalty to an organization or larger group, exiting from the situation, or voicing opposition.²⁹ These present themselves as caving in to the sponsor, quitting, or becoming a whistle-blower. The researcher must choose his or her own course of action, but it is best to consider ethical issues early in a relationship with a sponsor and to express concerns up front.

Whistle-blowing can be strenuous and risky. Three parties are involved: the researcher who sees ethical wrongdoing, an external agency or the media, and supervisors in an employing organization. The researcher must be convinced that the breach of ethics is serious and approved of in the organization. After exhausting internal avenues to resolve the issue, he or she turns to outsiders. The outsiders may or may not be interested in the problem or able to help. Outsiders often have their own priorities (making an organization look bad, sensationalizing the problem, etc.)—ones that differ from the researcher’s main concern (ending unethical behavior). Supervisors or managers may try to discredit or punish anyone who exposes problems and acts disloyal (see Box 5.8). As Frechette-Schrader (1994:78) noted, “An act of whistle blowing is a special kind of organizational disobedience or, rather, obedience to a higher principle than loyalty to an employer.” Under the best of conditions, the issue may take a long time to resolve and create great emotional strain. By acting moral, a whistle-blower needs to be prepared to make sacrifices—losing a job or promotions, lowered pay or undesirable transfer, being abandoned by friends at work, or incurring legal costs. There is no guarantee that doing the right thing will change the unethical behavior or protect the researcher from retaliation.

BOX 5.8 The Story of a Whistle-Blower

A Ph.D. microbiologist, David Franklin, was hired by Warner-Lambert to be a medical liaison. His job was to gain the trust of physicians and provide them with scientific information to sell pharmaceuticals. During his training, he was asked to make false claims about a drug and told how to circumvent legal-ethical rules to increase sales. He was also told to exaggerate the results of studies that did show a few benefits of the drug and hide reports of side effects. When he raised concerns and showed published reports of dangerous side effects to his superiors, his complaints were dismissed. He observed that the company paid tens of thousands of dollars to physicians to give testimonials as to the drug’s benefits or to be the authors of articles that were actually written by the firm’s marketing department. He felt that the company was acting illegally and endangering people. He resigned after just four months on the job, but was threatened not to reveal anything about the company. It took seven years to settle his whistle-blower legal case against the firm.

Source: Melody Petersen, “Doctor Explains Why He Blew the Whistle,” *New York Times* (March 12, 2003).

Applied social researchers in sponsored research settings need to think seriously about their professional roles and maintain some independence from an employer. Many find a defense against sponsor pressures by participating in professional organizations (e.g., the Evaluation Research Society), maintaining regular contacts with researchers outside the sponsoring organization, and staying current with the best research practices. The researcher least likely to uphold ethical standards in a sponsored setting is someone who is isolated and professionally insecure. Whatever the situation, unethical behavior is never justified by the argument, “If I didn’t do it, someone else would have.”

Arriving at Particular Findings. What should you do if a sponsor tells you, directly or indirectly, what results you should come up with? An ethical researcher refuses to participate if he or she must arrive at specific results as a precondition for doing research. All research should be conducted without

restrictions on the findings that the research yields. For example, a survey organization obtained a contract to conduct research for a shopping mall association. The association was engaged in a court battle with a political group that wanted to demonstrate at a mall. An interviewer in the survey organization objected to many survey questions that he believed were invalid and slanted to favor the shopping mall association. After he contacted a newspaper and exposed the biased questions, the interviewer was fired. Several years later, however, in a "whistle-blower lawsuit," the interviewer was awarded more than \$60,000 for back pay, mental anguish, and punitive damages against the survey organization.³⁰

Another example of pressure to arrive at particular findings is in the area of educational testing. Standardized tests to measure achievement by U.S. school children have come under criticism. For example, children in about 90 percent of school districts in the United States score "above average" on such tests. This was called the *Lake Wobegon effect* after the mythical town of Lake Wobegon, where, according to radio show host Garrison Keillor, "all the children are above average." The main reason for this finding was that the researchers compared current students to standards based on tests taken by students many years ago. The researchers faced pressure from teachers, school principals, superintendents, and school boards for results that would allow them to report to parents and voters that their school district was "above average."³¹

Limits on How to Conduct Studies. Can a sponsor limit research by defining what can be studied or by limiting the techniques used, either directly or indirectly (by limiting funding)? Sponsors can legitimately set conditions on research techniques used (e.g., survey versus experiment) and limit costs for research. However, the researcher must follow generally accepted research methods.

Researchers should give a realistic appraisal of what can be accomplished for a given level of funding.

The issue of limits is common in **contract research**, when a firm or government agency asks for work on a particular research project. A trade-off may develop between quality and cost in contract research. Abt (1979), the president of a major private social research firm, Abt Associates, argued that it is difficult to get a contract by bidding what the research actually costs. Once the research begins, a researcher may need to redesign the project, or costs may be higher. The contract procedure makes midstream changes difficult. A researcher may find that he or she is forced by the contract to use research procedures or methods that are less than ideal. The researcher then confronts a dilemma: Complete the contract and do low-quality research, or fail to fulfill the contract and lose money and future jobs.

A researcher should refuse to continue if he or she cannot uphold generally accepted standards of research. If a sponsor wants biased samples or leading questions, the ethical researcher refuses to cooperate. If legitimate research shows the sponsor's pet idea or project to be a bad course of action, a researcher may anticipate the end of employment or pressure to violate professional research standards. In the long run, the sponsor, the researcher, the scientific community, and the larger society are harmed by the violation of sound research practice. The researcher has to decide whether he or she is a "hired hand" who gives the sponsors whatever they want, even if it is ethically wrong, or a professional who is obligated to teach, guide, or even oppose sponsors in the service of higher moral principles.

A researcher should ask: Why would sponsors want the social research conducted if they are not interested in using the findings or in the truth? The answer is that such sponsors see social research only as a cover they can use to legitimate a decision or practice that they could not otherwise carry out. They are abusing the researcher's status as a professional, being deceitful, and trying to "cash in" on the reputation of social research for honesty and integrity. When it occurs, an ethical researcher has a moral responsibility to expose and stop the abuse.

Contract research A type of applied research that is sponsored, that is, paid for by a government agency, foundation, company, and so on. The researcher agrees to conduct a study on the sponsor's research question and finish the study by a set deadline for a fixed price.

Suppressing Findings. What happens if you conduct research and the findings make the sponsor look bad or the sponsor does not want to release the results? This is not an uncommon situation. For example, a sociologist conducted a study for the Wisconsin Lottery Commission on the effects of state government-sponsored gambling. After she completed the report, but before the report was released to the public, the commission asked her to remove sections that outlined many negative social effects of gambling and to eliminate her recommendations to create social services to help compulsive gamblers. The researcher was in a difficult position. Which ethical value took precedence: covering up for the sponsor that had paid for the research, or revealing the truth for all to see but then suffering the consequences?³² A Roman Catholic priest who surveyed American bishops on their dissatisfaction with official church policy was ordered by his superiors to suppress findings and destroy the questionnaires. Instead, he resigned after 24 years in the priesthood and made his results public.³³ Researchers pay high personal and economic costs for being ethical.

Government agencies may suppress scientific information that contradicts official policy or embarrasses high officials. Retaliation against social researchers employed by government agencies who make the information public also occurs. For example, a social researcher employed by the U.S. Census Bureau who studied deaths caused by the 1991 Gulf War against Iraq reported that government officials suppressed findings for political reasons. The researcher, whom the agency attempted to fire, reported that findings of high death rates were delayed and underestimated by the U.S. government's agency for statistics. Before information could be released, it had to go through an office headed by a political appointee. She charged that the political appointee was most interested in protecting the administration's foreign policy. In another example, the U.S. Defense Department ordered studies destroyed that showed 10 percent of the U.S. military to be gay or lesbian and that showed no support for the banning of gays from the military.³⁴

In sponsored research a researcher can negotiate conditions for releasing findings *prior to beginning* the study and sign a contract to that effect.

It may be unwise to conduct the study without such a guarantee, although competing researchers who have fewer ethical scruples may do so. Alternatively, a researcher can accept the sponsor's criticism and hostility and release the findings over the sponsor's objections. Most researchers prefer the first choice, because the second one may scare away future sponsors.

Social researchers sometimes restrict or delay the release of findings to protect the identity of informants, to maintain access to a research site, to hold on to their jobs, or to protect the personal safety of themselves or of family members.³⁵ This is a less disturbing type of censorship because it is not imposed by an outside power. It is done by someone who is close to the research and who is knowledgeable about possible consequences. Researchers shoulder the ultimate responsibility for their research. Often, they can draw on many different resources but they face many competing pressures, as well (see Box 5.9).

BOX 5.9 Common Types of Misuse in Evaluation Research

- Asking "wrong" research questions (e.g., asking summative yes/no questions when formulative questions are most appropriate or asking questions that exclude major stakeholders)
- Requesting an evaluation study after a decision on a program has been made, using the study only as a way to delay or justify the decision already made
- Demanding the use of a research design/data collection technique that is inappropriate for the program evaluation task
- Interfering with the research design or data collection process to ensure that it produces desired results
- Continuing a program when the evaluation results unambiguously show it to be ineffective or ending a program when the results unambiguously show it to be highly effective
- Suppressing/deleting positive results to eliminate/reduce a program, or suppressing/deleting negative results to continue/expand a program

Source: Adapted from Stevens and Dial (1994), who also provide examples of misuse.

Concealing the True Sponsor. Is it ethical to keep the identity of a sponsor secret? For example, an abortion clinic funds a study on the attitudes of religious groups opposed to abortion. The researcher must balance the ethical value of making the sponsor's identity public to subjects and releasing results against the sponsor's desire for confidentiality and the likelihood of reduced cooperation from subjects. If the results are published, there is a clear overriding ethical mandate to reveal the true sponsor. There is less agreement on the ethical issue of revealing the true sponsor to subjects. Presser and colleagues (1992) found that the answers given by respondents may depend on the sponsor of a survey. If a respondent believes a survey is conducted by a newspaper that has taken a strong position on an issue, the respondent is less likely to contradict the newspaper's public stand on the issue. This is less of a problem if the respondent believes the survey sponsor is a neutral academic organization. It is ethical to inform the subjects of the sponsor unless one has a good methodological reason for not doing so.

Feminist Communitarian Research: Ethics

Some researchers who adopt the interpretative or critical social science approaches (see Chapter 4) view most ethical debates, codes of ethics, and review boards as inadequate and rooted in positivist assumptions about individual rationality. They propose a feminist communitarian model of research ethics as an alternative to research ethics based on formal procedures and a rational utilitarian balancing of costs versus benefits and abstract principles of moral good. They hold that "the moral task cannot be reduced to professional ethics" (Christians 2003:232). Aligned with participatory action research (see Chapter 2), they argue that research participants should have a say in how research is conducted and be actively involved in conducting it. Ethics should reflect the ultimate purpose of research—to empower research participants in terms of their own everyday experiences and advance the goal of human freedom.

The feminist communitarian model is based on three moral principles. First, ethical research is multivocal, that is, it recognizes a diversity of human

experiences and incorporates that diversity. It begins with the premise that all human life is situated in the socially constructed contexts of gender, race, class, and religion. People live in multiple communities and each has something important to say. Second, ethical research requires engaging in a dialogue over moral concerns that is phased in terms of the participants' everyday life experiences. Researchers have to engage and participate in the ongoing moral debates and discussions occurring within the communities of the people they wish to study, and they should not superimpose their own abstract legalistic rights or principles. Third, research processes that involve researchers and participants on open, equal terms will unmask power relations and generate social criticism that can facilitate greater reflection and mutual awareness. In the end, a collaborative relationship between researcher and participant will emerge in which "invasion of privacy, informed consent, and deception are non-issues" (Christians 2003:234).

The feminist communitarian model of research ethics is in a preliminary stage of development and has yet to be implemented. Nonetheless, it critiques the dominant approach to research ethics for being overly formal-legalistic, procedure based, and abstract. It also highlights how an approach to social sciences, as outlined in Chapter 4, is connected with moral issues in research ethics.

CONCLUSION

This chapter is a transition between the general foundation of social research and the specifics of study design. As such, it has discussed two issues that are part of the preparation for designing a study: the literature review and ethical concerns. Both involve placing one's study in the context of the larger community of researchers and attaching a specific study to larger concerns.

In Chapter 1, we discussed the distinctive contribution of science to society and how social research is a source of knowledge about the social world. The perspectives and techniques of social research can be powerful tools for understanding the world. Nevertheless, with that power comes responsibility—a responsibility to yourself, a

responsibility to your sponsors, a responsibility to the community of researchers, and a responsibility to the larger society. These responsibilities can and do come into conflict with each other at times.

Ultimately, you personally must decide to conduct research in an ethical manner, to uphold and defend the principles of the social science approach you adopt, and to demand ethical conduct by others.

KEY TERMS

abstract	crossover design	principle of voluntary consent
anonymity	informed consent	research fraud
citation	institutional review board (IRB)	scientific misconduct
code of ethics	meta-analysis	special population
confidentiality	Nuremberg code	whistle-blower
contract research		

REVIEW QUESTIONS

1. What are the four major goals of a literature review?
2. Which outlets of research are easiest to locate and which are the most difficult?
3. How would you go about locating a Ph.D. dissertation?
4. What distinguishes a strong from a weak literature review?
5. What are the major strengths and weaknesses of using the Internet for social research?
6. What is the primary defense against unethical conduct in research?
7. How do deception and coercion to participate in research conflict with the principle of voluntary consent?
8. Explain the ethical issues in the Milgram, Humphreys, and Zimbardo examples.
9. What is *informed consent*, and how does it protect research subjects?
10. What is the difference between *anonymity* and *confidentiality*?

NOTES

1. See Hunt (1997) and Hunter and associates (1982).
2. From Hargens (1988).
3. Based on Hargens (1991).
4. See Reynolds (1979:56–57) and Sieber (1993).
5. Research fraud is discussed by Broad and Wade (1982), Djener and Crandall (1978:154–158), and Weinstein (1979). Also see Hearnshaw (1979) and Wade (1976) on Cyril Burt. Kusserow (1989) and the September 1, 1989, issue of the National Institutes of Health weekly *Guide* summarize some recent scientific misconduct issues.
6. See "Noted Harvard Psychiatrist Resigns Post after Faculty Group Finds He Plagiarized," *Chronicle of Higher Education* (December 7, 1988).
7. See Blum (1989) and D'Antonio (1989) on this case of plagiarism.