How to Review the Literature and Conduct Ethical Studies

The Literature Review
Ethics in Social Research

Conclusion

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

In his field research study of a drug-dealing gang in Chicago housing projects, Venkatesh (2008:185–186) realized "Four years deep into my research, it came to my attention that I might get into a lot of trouble if I kept doing what I've been doing. . . . I did see a lawyer, and I learned a few important things. First, if I became aware of a plan to physically harm anyone, I was obligated to tell the police . . . there was no such thing as 'research-client confidentiality,' akin to the privilege conferred upon lawyers, doctors, or priests. This meant that if I were ever subpoenaed to testify against the gang, I would be legally obligated to participate. . . . This legal advice was ultimately helpful in that it led me to seriously take stock of my research. . . ."

You are ready to design a study on the topic of gangs. As you narrow the broad topic into a specific research question (e.g., Do drug-dealing gangs in a housing project provide services or protection to other residents or do they only exploit them?), you encounter two issues. First, are any past studies relevant to this question (i.e., review the scholarly literature on gangs)? In practice, the process of focusing a topic into a research question overlaps nicely with reviewing the literature. Second, as you gather data on gangs, what must you do to be ethical? Specific ethical concerns depend on the research question and the data collection technique. Human subject issues are most salient in survey research, experiments, and field research and least salient in existing documents, secondary data analysis, content analysis, or historical-comparative research. Ethical issues are more significant for controversial topics or areas that might violate a person's privacy or involve illegal behavior than for "safe topics." To study illegal gangs, you need not only to protect yourself from physical attack but also to be aware of the legal implications. Ideally, unlike Venkatesh's study mentioned in the opening box, you do not want to be doing research for four years before you learn about the legal-ethical issues of your research study and need to change direction.

In this chapter, we move to practical matters that you will encounter as you begin to do your own

research study: reviewing the literature, considering ethical issues, designing a study, measuring aspects of the social world, and deciding on what data to collect.

THE LITERATURE REVIEW

An early and essential step in doing a study is to review the accumulated knowledge on your research question. This applies to all research questions and all types of studies. As in other areas of life, it is wise to find out what others have already learned about an issue before you address it on your own. Clichés reinforce this advice: Do not waste time "reinventing the wheel" and remember to "do your homework" before beginning an endeavor. This holds true whether you are a consumer of research or will be beginning a study yourself.

We begin by looking at the various purposes the review might 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 what its place is in a research report.

Doing a literature review builds on the idea that knowledge accumulates and that we can learn from and build on what others have done. The review rests on the principle that scientific research is a collective effort, one in which many researchers contribute and share results with one another. Although some studies may be especially important and a few individual researchers may become famous, one study is just a tiny part of the overall process of creating knowledge. Today's studies build on those of yesterday. We read studies to learn from, compare, replicate, or criticize them.

Literature reviews vary in scope and depth. Different kinds of reviews are stronger at fulfilling one or another of four goals (see Expansion Box 1, Goals of a Literature Review). Doing an extensive professional summary review that covers all of the research literature on a broad question could take years by a skilled researcher. On the other hand, the same person could finish a narrowly focused review in a specialized area in a week. To begin a

review, you must pick a topic area or research question, determine how much time and effort you can devote to the study, settle on the appropriate level of depth, and decide on the best type of review for your situation (see Expansion Box 2, Six Types of Literature Reviews). You can combine features of each type in a specific review.

Literature Meta-Analysis

A literature **meta-analysis** is a special technique used to create an integrative review or a methodological review.[1] Meta-analysis involves gathering the details about a large number of previous studies

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 a 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. This review 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.

and synthesizing the results. A meta-analysis proceeds in five steps:

1. Locate all potential studies on a specific topic or research question
2. Develop consistent criteria and screen studies for relevance and/or quality
3. Identify and record relevant information for each study
4. Synthesize and analyze the information into broad findings
5. Draw summary conclusions based on the findings

For a meta-analysis of quantitative studies, relevant information in step 3 often includes sample size, measures of variables, methodological quality, and size of the effects of variables, and in step 4, this information is analyzed statistically (see Example Box 1, Meta-Analysis of Quantitative Studies). A meta-analysis of qualitative studies is a little different. The relevant information in step 3 includes qualitative descriptions that are coded into a set of categories, and in step 4 the results are synthesized qualitatively to reveal recurrent themes (see Example Box 2, Meta-Analysis of Qualitative Studies).

In addition to using meta-analysis to identify major findings across many studies, we can also use it to identify how contributors in a research case define and use major concepts. For example, Fulkerson and Thompson (2008) examined the concept of "social capital" over 18 years (1988–2006). They identified 1,218 articles in 450 academic journals with the term *social capital* in the title or abstract. They coded the articles in seven ways to define the concept and identified the "founding scholar" on the concept that the article cited. They also used statistical techniques to analyze the patterns that show use of definition across time and by specialty area.

Where to Find Research Literature

Researchers can find reports of research studies in several formats: books, scholarly journal articles, dissertations, government documents, and policy reports. Researchers also present findings as papers at the meetings of professional societies. This section discusses each format and provide a simple road map on how to access them.

> **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.

EXAMPLE BOX 1

Meta-Analysis of Quantitative Studies

Cheng and Chan (2008) conducted a meta-analysis of 133 studies on the issue of job insecurity. Their interest was in the impact of job insecurity on health outcomes. They considered three factors: job tenure (i.e., how long a person worked at a job), age, and gender. Their purpose was to learn how job tenure, age, and gender might weaken or intensify how job insecurity influenced outcomes. First, they identified possible relevant studies by searching the keywords *job security* and *job insecurity* in several databases of studies published from 1980 to 2006. They also manually searched fifteen academic journals, searched for unpublished dissertations, and contacted leading scholars about any unpublished studies they had conducted. Next the researchers screened the potential studies using selection criteria. To be included the study, a report had to be in English, use the term *job insecurity* in a way that matched the authors' definition, report certain types of statistical results, and include all variables of interest. After they had identified 133 acceptable studies, two graduate student raters coded results from each. Information coded included sample size, measures of key variables, correlations among variables, and size of statistical effects. Next Cheng and Chan statistically analyzed the coded information. From their statistical analysis of results, the authors concluded that compared to younger and less experienced employees, older employees and those with longer job tenure experience suffered more negative physical and psychological health outcomes due to job insecurity.

EXAMPLE BOX 2

Meta-Analysis of Qualitative Studies

Marston and King (2006) conducted a meta-analysis of 268 qualitative studies published between 1990 and 2004 of young people's sexual behavior. Their interest was in how sexual behaviors among young people might influence the spread of HIV infections because almost half of all such infections occur within this age group. The authors wanted to examine qualitative studies because they were interested in what happened during a sexual encounter, reasons for the behavior, and the context of the behavior. In contrast, most quantitative studies examined only simple, isolated questions such as the percentage of young people who use condoms. They identified all studies in English published between 1990 and 2004 that provided qualitative empirical evidence about sexual relations among persons 10–25 years old. The authors included studies that concentrated on other issues (e.g., drug use) but also included sexual behavior. They searched numerous databases of articles and books and investigated the catalogs of 150 academic libraries in the United Kingdom. They found 5,452 potential reports based on a search of titles but narrowed these to 2,202 based on relevance of the title. They narrowed them further to 268 studies (246 journal articles and 22 books) based on inclusion criteria: excluding studies on child sexual abuse and commercial sex work, or those that were not available in full. They also classified documents as primary and high quality (e.g., very specific descriptions of sexual encounters with contexts) and secondary (e.g., reports of attitudes, lacking evidence for statements made). Of the 268 documents, 121 were classified as primary. Martson and King used a method of comparative thematic analysis in which they reviewed and coded the documents/studies that represented themes found in the studies (e.g., violence against women, fear of embarrassment), and then collapsed these codes into broad overall themes. They identified seven broad themes, such as gender stereotypes that were critical in determining social expectations (e.g., women, not men, should be chaste; men are expected to seek physical pleasure and women romantic love).

Periodicals. Study results appear 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 you need to prepare a literature review. They are selected, condensed summaries prepared by journalists for a general audience. They lack many essential details that we require to seriously evaluate the study. Textbooks and encyclopedias also present condensed summaries as introductions to readers who are new to a topic. These too are inadequate for preparing a literature review because many essential details about the study are absent.

Navigating the world of published scholarly articles can be intimidating at first. When asked to do a "literature review," many beginning students Google the topic on the Internet or go to familiar nonprofessional, nonscholarly magazines or newspaper articles. 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 lay public (see Table 1). They need to move from lay public sources and rely on serious scholarly publications written for a professional audience.

Professional researchers present the results of 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. Simplified, abbreviated, and "predigested" versions of articles appear in textbooks written for students who are first learning about a topic or in journalistic summaries in publications for the public. Unfortunately, the simplified summaries can give an incomplete or distorted picture of a complete study. Researchers must locate the original scholarly journal article to see what the author said and the data show.

Upper-level undergraduates and graduate students writing a serious research paper should rely on the academic literature, that is, original articles published in academic scholarly journals. Unfortunately, students may find some of the scholarly articles too difficult or technical to follow. The upside is that the articles are the "real McCoy," or original reports, not another person's (mis)reading of the original.

Researchers also may find a type of nonresearch publication with commentaries on topics or research questions. These are discussion-opinion magazines (e.g., *American Prospect, Cato Journal, Commentary, Nation, National Review, New Republic, New York Review of Books, Policy Review,* and *Public Interest*). In them, professionals write essays expressing opinions, beliefs, value-based ideas, and speculation for the educated public or professionals. They do not contain original empirical research or actual scientific studies. They may be classified as "academic journals" (versus general magazines) and may be "peer reviewed," but they do not contain original reports of empirical research. For example, *Policy Review* covers many topics: law enforcement, criminal justice, defense and military, politics, government and international relations, and political science. The leading conservative "think tank," the Heritage Foundation, publishes material as a forum for conservative debate on major political issues. At times, professors or professional researchers who also conduct serious research studies contribute their opinions and speculation in such publications. These publications must be used with caution. They present debates, opinions, and judgments, not the official reports of serious empirical research. If you want to write a research paper based on empirical research (e.g., an experiment, survey data, field research), you need to rely on specialized sources. If you use an opinion essay article, you need to treat it as such and never confuse it with an empirical social science study.

Researchers use specialized computer-based search tools to locate articles in the scholarly literature. They also must learn the specialized formats or citation styles for referring to sources. Professional social scientists regularly use search tools to tap into and build on a growing body of research studies and scientific knowledge. Knowing how to locate studies; recognize, read, and evaluate studies; and properly cite scholarly sources is a very important skill for serious consumers of research and researchers to master.

Scholarly Journals. The primary source to use for a literature review is the scholarly journal. It is filled

TABLE 1 Types of Publications

TYPE	EXAMPLE	AUTHOR	PURPOSE	STRENGTH	WEAKNESS
Peer-reviewed scholarly journal	*Social Science Quarterly, Social Forces, Journal of Contemporary Ethnography*	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	*American Prospect, Society, American Demographics*	Professors, professional policymakers, 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	*Wall Street Journal, Christian Science Monitor, Newsweek, Time*	Respected journalists	Report on current events in an easy-to-read, accessible way for the lay public	Easy to read, accessible, very current	Semiaccurate, incomplete, distorted, or one-sided views
Serious opinion magazines	*Nation, Human Events, Public Interest, Commentary*	Professors, professional policymakers, politicians	Offer value-based ideas and opinions to the educated public	Carefully written and reasoned	One-sided view and highly value based
Popular magazines for the public	*Esquire, Ebony, Redbook, Forbes, Fortune*	Journalists, other writers	Entertain, present and discuss current events for lay public	Easy to read, easy to locate	Often shallow, inaccurate, and incomplete

with peer-reviewed reports of research. One can rarely find these journals outside of college and university libraries. Recal that most researchers disseminate new findings in scholarly journals. They are the heart of the scientific community's communication system.

Some scholarly journals are specialized and have only book reviews that provide commentary and evaluations on academic books (e.g., *Contemporary Sociology, Law and Politics Book Review*), or only literature review essays (e.g., *Annual Review of Sociology, Annual Review of Psychology, Annual Review of Anthropology*) in which researchers give a "state of the field" essay for others. Publications that specialize in literature reviews can offer useful introductions or overviews on a topic. Many scholarly journals include a mix of literature reviews, book reviews, reports on research studies, and theoretical essays.

No simple solution or "seal of approval" separates scholarly journals from other periodicals or instantly distinguishes a research study report from other types of articles. To identify a research study you need to develop judgment skills or ask experienced researchers or professional librarians. Nonetheless, learning to distinguish among types of publications is an essential skill to master. One of the best ways to distinguish among types of publications is to read many articles in scholarly journals.

The number of scholarly journals varies widely according to academic field. Psychology has more than 400 scholarly journals, sociology has about 250, political science and communication have fewer than sociology, anthropology-archaeology and social work each has about 100, urban studies and women's studies have about 50, and criminology has only about a dozen. The "pure" academic fields usually have more than the "applied" or practical fields such as marketing or social work. Each journal publishes from a few dozen to more than 100 articles each year.

You may wonder whether anyone ever reads all of these 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 6 years.[2] Scholarly journals vary by prestige and acceptance rates. Prestigious journals accept only 10 percent of the research reports submitted to them. Overall rejection rates are higher in the social sciences than in other academic fields and have been rising.[3] This does not mean that researchers are doing low-quality studies. Rather, the review process is becoming more rigorous, standards are rising, and more studies are being conducted. This means that the competition to publish an article in a highly respected journal has increased.

You can find the full text of many scholarly journal articles on the Internet. Usually, to access them you need to go through libraries that pay special subscription fees for online article searching services, or a source tool. Some journals or publishers offer limited articles or sell them. For example, I was able to view current articles in *Social Science Quarterly* (a respected scholarly journal) free on the Internet, but when I tried to read an article in *Politics and Society* online, I was asked to pay $25 per article; however, if I had access to it through my university library, the article was free.

Article search services may have full, exact copies of scholarly journal articles. For example, JSTOR and Project MUSE provide exact copies but only for a limited number of scholarly journals and only for past years. Other source tools, such as Anthrosource, Proquest, EBSCO HOST, or Wilson Web offer a full-text version of recent articles. Most articles are in the same format as their print versions. In addition to searching the database of articles using a source tool, you can also select a particular journal and browse its table of contents for particular issues. This 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. Each online source tool has its own search procedure and list of scholarly journals. None has all articles from all journals for all years.

Some recent Internet-only scholarly journals, called *e-journals* (e.g., *Sociological Research Online, Current Research in Social Psychology,* and *Journal of World Systems Research),* present peer-reviewed research studies. Eventually, the Internet format may replace print versions. But for now, about 95 percent of scholarly journals are available in print form and most are available in a full-text version over the Internet. Internet access nearly always requires that you use an online service through a library that pays an annual fee to use it. Certain journals and certain years are not yet available online.

Once you locate a scholarly journal that contains empirical research studies, you next locate specific articles. You need to make sure that a particular article presents the results of a study because journals often publish several other types of article. It is easier to identify quantitative studies because they usually have a methods or data section as well as 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 and experience in reading many articles.

Most college libraries have a section for scholarly journals and magazines, or, in some cases, they mix the journals with books. Look at a map of library facilities or ask a librarian to identify this section. The most recent issues, which look like magazines, are often physically separate in a "current periodicals" section where they are temporarily available until the library receives all issues of a volume.

Libraries place scholarly journals from many fields together with popular, nonscholarly 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 *The Atlantic*) next to journals for astronomy, chemistry, mathematics, literature, sociology, psychology, social work, and education. Libraries list journals in their catalog system by title and can provide 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, *Social Science Quarterly,* like other journals with the word *quarterly* in their title, is published four times a year. To assist in locating articles, each journal issue has 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 or lists of works cited. The very first issue of a journal begins with volume 1, number 1. It continues increasing the numbers thereafter. Most journals follow a similar system, but enough exceptions exist that you need to pay close attention to citation information. For most journals, each volume includes one year of articles. If you see a journal issue with volume 52, it probably means that the journal has been in existence for 52 years. Most, but not all, journals begin their publishing cycle in January.

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

Abstract   A short summary of a scholarly journal article that usually appears at its beginning; also a reference tool for locating journal articles.

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 one or two articles or as many as fifty. Most have eight to eighteen articles, which each may be five to fifty pages long. The articles often have **abstracts**, short summaries on the first page of the article or grouped together at the front of the issue.

Many libraries do not retain physical paper copies of older journals, but to save space and costs they keep only electronic or microfilm versions. Because each field may have hundreds of scholarly journals, with each costing the library $100 to $3,500 per year in subscription fees, only the large research libraries subscribe to most of them. You can also obtain a copy 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.

If you go to the library and locate the periodicals section, it is fun to 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 the journals alphabetically by title. However, journals sometimes change titles, creating confusion if they have been shelved under their original titles.

Scholarly journals 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 very broad field (e.g., social science, education, public affairs) and contain reports from the entire field. Others specialize in a subfield (e.g., the family, criminology, early childhood education, or comparative politics).

Citation Formats. An article's citation is the key to locating it. Suppose you want to read the study by Pampel on cultural taste, music, and smoking behavior. Its citation says the following: Pampel, Fred C. 2006. "Socioeconomic Distinction, Cultural Tastes, and Cigarette Smoking." *Social Science Quarterly,* 87(1):19–35. It tells you to go to an issue of the scholarly journal *Social Science Quarterly* published in 2006. The citation does not provide the month, but it gives the volume number (87), the issue as 1, and the page numbers (319–335).

Formats for citing literature vary in many ways. The most popular format in the text is the internal citation format of using an author's last name and date of publication in parentheses. A full citation appears in a separate bibliography or reference section. There are many 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 required form. 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 while 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 1).

Citation formats can be 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 two pages of style instructions, is widely followed.

Books. Books communicate many types of information, provoke thought, and entertain. The many types of books include picture books, textbooks, short story books, novels, popular fiction or nonfiction, religious books, and children's books. 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.

Distinguishing a book reporting on research from other books can be difficult. You are more likely to find such books in a college or university library. Some publishers, such as university presses, specialize in publishing research reports. Nevertheless, there is no guaranteed method for identifying one on research without reading it. Some types of 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. However, 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 no single source lists them.

Three types of books contain collections of articles or research reports. The first type, for teaching, called a *reader,* 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 gathers journal articles or may contain original research or theoretical essays on a specific topic. Some collections contain original research reports organized around a specialized topic in journals that are difficult to locate. 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, annual research books that are hybrids between scholarly journals and collections of articles contain reports on studies not found elsewhere. They

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FIGURE 1   Different Reference Citations for a Journal Article

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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 inter-course. *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 Inter-course." *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 inter-course." *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.

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appear year after year with a volume number 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*). No comprehensive list of these books is available as there is for scholarly journals. The only way to find out 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 doctor of philosophy (Ph.D.) degree are required to complete a work of original research, called a *dissertation thesis*. The dissertation is bound and shelved in the library of the university that granted the degree. 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 also 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. The organization of the index is by topic with an abstract of each dissertation. You can borrow most dissertations via interlibrary loan from the degree-granting university if it 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 someone 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, 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. If you are conducting a thorough literature review, you may look at these two sources. Some are on the Internet, but most 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) 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., anthropology, criminal justice, geography, political science, psychology, sociology) hold annual meetings. Thousands of researchers assemble to give, listen to, or discuss oral reports of recent research. Most oral reports are also available as written papers. 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. These people can write directly to the author and request a copy of the paper. Many, but not all, of the papers later appear as published articles. Sometime the papers are in online services (to be discussed).

How to Conduct a Systematic Literature Review

Define and Refine a Topic. Just as you must plan and clearly define a topic and research question as you begin 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 in the form of a research question. For example, "divorce" or "crime" is much too broad. A more appropriate review topic might be "What contributes to the stability of families with stepchildren?" or "Does economic inequality produce 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 to focus on 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 and how to take notes (e.g., in a notebook, on 3" × 5" cards, in a computer file). You should begin a file folder or computer file in which you can place possible sources and ideas for new sources. As your review proceeds, you should more narrowly focus on a specific research question or issue.

Locate Research Reports. Locating research reports depends on the type of report or research "outlet" for which you are searching. As a general rule, 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. With hundreds of journals, each containing hundreds of articles, an article search can be formidable. Luckily, online services and specialized publications make the task easier.

Perhaps you 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. More than one hundred such source tools are available now. With a source tool or online service, you can look up articles by title, author name, or subject.

It may sound as though all you have to do is to go find the source tool and look up a topic. Sometimes that is how it works, but at other times, things are more complicated. The subjects or topics in source tools 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, many times there is a 3- to 12-month time lag between the publication of an article and its appearance in a source tool.

Major research-oriented libraries subscribe to the *Social Science Citation Index (SSCI)* of the Institute for Scientific Information. This valuable resource has information on more than 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. The organization is 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 conduct an online search by author, by article title, by subject, or by keyword. A keyword is an important term for a topic and is often part of a title. You will want to use six to eight keywords in 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 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.

Years ago, I conducted a study on the way that 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.

Numerous computer-assisted search databases or systems are available. A person with a computer and an Internet hookup can search article index collections, the catalogs of libraries, and other information sources around the globe that are accessible 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 7 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 you will locate the same article in several source tool databases; however, if you use several for your search, you will see that one has articles not found in the others. A critical lesson is: "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 new excellent sources not in any databases by studying the bibliographies of the most relevant articles. My literature search process was fairly typical. Based on my keyword search, I quickly skimmed or scanned the titles or abstracts of more than 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 are included 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 of 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, such as checking journals that have book reviews and the bibliographies of articles.

Dissertations.   The publication *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 their topic of interest. 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 these documents. A useful index for publications issued by the U.S. federal government is the *Monthly Catalog of Government Documents,* which is often available online. 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 debates 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. Other indexes include 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.   Policy reports and presented conference papers are difficult to locate. You may see them listed in the bibliographies of published studies and in some source tools. Often you must write to research centers and ask for lists of their 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.

How to Evaluate Research Articles

After you locate a published study, you need to read and evaluate it. At first, this is difficult but becomes easier over time. Guidelines to help you read and evaluate reports you find and locate models for writing your own research reports follow.

1. *Examine the title.* 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 participants. An example of a good title is "Parental Involvement in Schooling and Reduced Discipline Problems among Junior High School Students in 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."

2. *Read the abstract.* A good abstract summarizes critical information about a study. It gives the study's purpose, identifies methods used, and highlights major findings. It avoids vague references to future implications. After an initial screening by title, you should be able to determine a report's relevance from a well-prepared abstract. In addition to screening for relevance, a title and abstract prepare you for examining a report in detail. I recommend a two-stage screening process. Use the title and abstract to determine the article's initial relevance. If it appears relevant, quickly scan the introduction and conclusion sections to decide whether it is a real "keeper" (i.e., worth investing in a slow, careful reading of the entire article). Most likely, you will discover a few articles that are central to your purpose and many that are tangential. They are only worth skimming to locate one or two specific relevant details. Exercise caution not to pull specific details out of context.

3. *Read the article.* Before reading the entire article, you may want to skim the first several paragraphs at the beginning and quickly read the conclusion. This will give you a picture of what the article is about. Certain factors affect the amount of time and effort and overall payoff from reading a scholarly article. The time and effort are lower and results higher under three conditions: (1) the article is a high-quality article with a well-defined purpose, clear writing, and smooth, logical organization, (2) you are sharply focused on a particular issue or question, and (3) you have a solid theoretical background, know a lot about the substantive topic, and are familiar with research methodology. As you see, a great deal depends on reader preparation. You can develop good reader preparation to quickly "size up" an article by recognizing the dimensions of a study, its use of theory, and the approach used. 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 students and scholars in several fields; or address policymakers, issue advocates, and applied professionals.

When you read a highly relevant article, begin with the introduction section. It has three purposes: (1) to introduce a broad topic and make a transition to a specific research question that will be the study's primary focus, (2) to establish the research question's significance (in terms of expanding knowledge, linking to past studies, or addressing an applied concern), and (3) to outline a theoretical framework and define major concepts. Sometimes an article blends the introduction with a context literature review; at other times the literature review is a separate section.

To perform a good literature review, you must be selective, comprehensive, critical, and current. By being selective, you do not list everything ever written on a topic, only the most relevant studies. By being comprehensive, you include past studies that are highly relevant and do not omit any important ones. More than merely recounting past studies, you should be critically evaluative, that is, you comment on the details of some specific studies and evaluate them as they relate to the current study. You will not know everything about your study until it is finished, so plan to fine-tune and rewrite it after it is completed.

You should include recent studies in your literature review. Depending on its size and complexity, you may distinguish among theory, methods, findings, and evaluation. For example, you might review theoretical issues and disputes, investigate the methods previous researchers used, and summarize the findings, highlighting any gaps or inconsistencies. An evaluation of past studies can help you to justify the importance of conducting the current study.

Depending on the type of research approach used in an article, a hypothesis or methods section may follow the literature review. These sections outline specific data sources or methods of data collection, describe how variables were measured, whether sampling was used, and, if so, the details about it. You may find these sections tightly written and packed with technical details. They are longer in quantitative than qualitative studies.

After a methods section comes the results section. If the study is quantitative research, it should do more than present a collection of statistical tables or coefficients and percentages. It should discuss what the tables and data show. If it is qualitative research, it should be more than a list of quotations or straight description. The organization of data presentation usually begins simply by 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. Just note major findings and any unexpected or unusual findings. In a good article, the author will guide the reader through the data, pointing out what is in the study, and show all data details. 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 inquire about it.

In some articles, the author combines the discussion and results sections. In others, they are separate. A discussion section moves beyond simple description. It elaborates on the implications of results for past findings, theory, or applied issues. The section may include implications for building past findings from the literature review, and

implications for the specific research question. The discussion section may also include commentary on any unexpected findings.

Most researchers include methodological limitations of the study in the discussion. This often includes how the specific measures, sampling, cases, location, or other factors restrict the generalizability of findings or are open to alternative explanations. Full candor and openness are expected. In a good article, the author is self-critical and shows an awareness of the study's weaknesses.

After you have read the discussion and results sections, read the article's conclusion or summary for a second time. A good conclusion/summary reviews the study's research question, major findings, and significant unexpected results. It also outlines future implications and directions to take. You may want to look for an appendix that may include additional study details and review the reference or bibliography section. An article's bibliography can give you leads to related studies or theoretical statements.

Reading and critically evaluating scholarly articles takes concentration and time, and it improves with practice. Despite the peer-review process and manuscript rejection rates, articles vary in quality. Some may contain errors, sloppy logic, or gaps. Be aware that a title and introduction may not mesh with specific details in the results section. Authors do not always describe all findings. The 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. As you evaluate an article, notice exactly how the study it reports was conducted, how logically its parts fit together, and whether the conclusions really flow from all of the findings.

How to Take Notes

As you gather the relevant research literature, you may feel overwhelmed by the quantity of information, so you need a system for taking notes. The old-fashioned note-taking approach was to write the notes onto index cards and then shift and sort

the note cards, place them in piles, and so forth while looking for connections among them or developing 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 new sources, you may want to create two file types for note cards or computer documents, a *source file* and a *content file.* Record *all* bibliographic information for each source in the source file even though you may not use some of it. Do not forget anything in a complete bibliographic citation, such as a page number or the name of the second author; if you do, 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 suggest creating two kinds of source files, or dividing 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 a new article's bibliography. Toward the end of writing a report, the potential file will disappear and the have file will become your bibliography.

The content file contains substantive information of interest from a source, usually its major findings, details of methodology, definitions of concepts, or interesting quotes. If you quote directly from a source or want to take some specific information from it, you must record the specific page number(s) on which it appears. Link the files by putting key source information, such as author and date, on each content file.

What to Record. You must 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, the measurement of major concepts, the main findings, the basic design of the research, the group or sample used, and ideas for future study (see Figure 2). It is wise to examine the report's bib-liography 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, but consider several facts 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 a large pile of articles can be cumbersome, especially if you want to use several different parts of a single article. Finally, unless you highlight carefully or take good notes, you may have to reread the entire article later.

Organize Notes. After you have gathered many references and notes, you need an organizing method. One approach is to group various studies or specific findings by skimming notes and creating a mental map of how they fit together. Try several organizational plans before you settle 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 any agreements and disagreements.

In the process of organizing notes, you will find that some references and notes do not fit anywhere. You should discard them as being irrelevant. You may discover gaps or areas and topics that are relevant but you have not examined yet. This necessitates return visits to the library.

The best organizational method 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 topic and, within each topic, by the design or method used. A *theoretical review* implies organizing studies by theories and major thinkers.

FIGURE 2   Example of Notes on an Article

FULL CITATION ON BIBLIOGRAPHY (SOURCE FILE)

Bearman, Peter, and Hannah Bückner. 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 Bückner 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 according to the age of the teen. In addition, pledging works only 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.

Planning and Writing the Review

A literature review requires planning and clear writing, and it requires rewriting. All rules of good writing (e.g., clear organizational structure, an introduction and conclusion, transitions between sections) apply to writing a literature review. Keep your purposes in mind when you write, and communicate clearly and effectively.

You want to communicate a review's purpose to readers by the review's 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. When I see these, I think that the review writer was sloppy and skipped over an important organizational step in writing the review. The *correct* way to write a review is to synthesize and organize common findings together. A well-accepted approach is to address the most important ideas first, logically link common statements or findings, and note discrepancies or weaknesses (see Example Box 3, Examples of Bad and Good Reviews).

How to Use the Internet for Social Research

The Internet has revolutionized how social researchers work. A little more than a decade ago, it was rarely used; today, all social researchers use the Internet regularly to help them review the literature, communicate with other researchers, and search for other information. The Internet continues to expand and change. However, it has been a mixed blessing, not the panacea that some people first thought it might be. It provides new, fast, and important ways to find information, but it remains one tool among others. Using the Internet for social research has its advantages and disadvantages.

The Advantages.

1. *The Internet is easy, fast, and cheap.* It is widely accessible, and can be used from many locations. This nearly free resource allows people to find source material from almost anywhere: local public libraries, homes, labs or classrooms, coffee shops, or anywhere a computer can connect to the Internet. It operates 24 hours a day, 7 days a week. With minimal training, most people can quickly perform searches and get information that a few years ago would have required them to take a trip to large research libraries. Searching a vast quantity of information electronically is easier and faster than a manual search. The Internet greatly expands the amount and variety of source material. 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 other sources of information.* Web sites, home pages, and other Internet resource pages have 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 the user to more information and provides access to cross-referenced material. Links embed one source within a network of related sources.

3. *The Internet greatly 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 national borders. Accessing some reports 10 years ago required waiting a week or month and spending some money; today you obtain them within seconds at no cost. Almost no restrictions limit who puts material on the Internet or what appears on it. This means that 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 provides access to a vast range of information sources, some in formats that are quite dynamic and interesting.* You can access a report in black-and-white text, as in traditional academic journals and sources, or with bright colors, graphics, moving images, photos, and even audio and video clips. Authors and other creators of information can be creative in their presentations.

The Disadvantages.

1. *There is no quality control over what can be put on the Internet.* Unlike standard academic

EXAMPLE BOX **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. The 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 to whom they gave 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 using 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 as well as 52 faculty members at the University of California at Santa Barbara. All three sample groups (two of students and one of faculty) 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 undergraduates at a medium-size university in groups of 15 to 25. They found disagreement and confusion among students.

EXAMPLE OF GOOD 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 et al., 1983; Benson and Thomson, 1982; Dziech and Weiner, 1990). For example, Adams et al. 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 et al., 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.

publications, information is subject to no peer-review or any other review process. Anyone can put almost anything on a Web site. It may be poor quality, undocumented, highly biased, invented fiction, or plain fraudulent. Once you locate material on the Internet, it takes skill to distinguish the "trash" from valid information. You need 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 drivel of a "nut" or be really valuable information. A less serious problem is that the "glitz" of bright colors, music, or moving images found on sites can distract unsophisticated users from serious content, and they may confuse glitz with high-caliber information. Also, the Internet is better for a quick look and short attention

EXPANSION BOX 3

Web Sites: Surfer Beware

The rapid diffusion of Internet access and increased reliance on the Internet for information have provided many benefits. The Internet is unregulated, so almost anyone can create a Web site saying almost anything. In 2000, over 60 million U.S. residents went online 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 ten English and four Spanish search engines looking for four 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 Web sites. 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.

spans rather than the slow, deliberative, careful reading and study of content (see Expansion Box 3, Websites: Surfer Beware).

2. *Many excellent sources and some critical resource materials are* not *available on the Internet.* 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.

3. *Finding sources on the Internet can be time consuming.* It is not easy to locate specific source materials. The several search engines (e.g., Google, Bing, Yahoo, Altavista, Lycos, AskJeeves.com) work somewhat differently and can produce very different results. I searched for the same term, *voter disenfranchisement,* using four different search engines, all within 5 minutes. I looked at the first three results for each engine. Each search engine produced one or more sites that the others missed. Only two Web sites appeared in more than one search engine; all of the others were unique. Of the two Web sites that were among the top three "hits" more than once, one of them was a broken link. Obviously, you want to use multiple search engines and go beyond the first page of results. Most search engines simply look for specific words in a short description of the Web page. Search engines can come up with tens of thousands of sources, far too many for anyone to examine. The ones at the "top" may be there because their short description had several versions of the search word. Your "best" Web source might be buried as the 150th item found in a search.

4. *Internet sources can be "unstable" and difficult to document.* You can conduct a Web search and find Web pages with useful information. You can return a week later and find that several of them have disappeared. Be sure to note the specific uniform resource locator (url) or "address" (usually starts http://) where the Web page resides. The address refers to an electronic file sitting in a computer somewhere. Unlike a journal article that will be stored on a shelf or on microfiche in hundreds of libraries for many decades to come and are available for anyone to read, Web pages can quickly vanish. This can make it impossible to easily check someone's Web references, verify a quote in a document, or go back to original materials. Also, it is easy to copy, modify, or distort a source and then reproduce copies of it. 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 ways to identify a worthwhile site takes time and practice.

There are few rules for locating the best sites on the Internet 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. Quality sources provide fuller or more complete information about the author, date, location, and so on.

ETHICS IN SOCIAL RESEARCH

We now turn to a second major concern that you need to address before designing a study. Social research has an ethical-moral dimension, although, different approaches to science address the values issue differently. All approaches recognize the ethical dimension to research. It is difficult to appreciate fully the ethical dilemmas until you are doing research, but waiting until the middle of doing a study is too late. You need to prepare and consider ethical concerns as you design a study so you can build sound ethical practice into the design.

Codes of ethics and other researchers provide guidance, but ethical conduct ultimately depends on an individual researcher. You have a moral and professional obligation to be ethical even when research participants are unaware of or unconcerned about ethics. Indeed, many participants are little concerned about protecting their privacy and other rights.[4]

The ethical issues are the concerns, dilemmas, and conflicts that arise over the proper way to conduct research. Ethics defines what is or is not legitimate to do or what "moral" research procedure involves. There are few ethical absolutes but there are many agreed-on principles. These principles may conflict in practice. Many ethical issues require you to balance two values: the pursuit of scientific knowledge and the rights of those being studied or of others in society. You must weigh potential benefits—such as advancing the understanding of social life, improving decision making,

or helping research participants— against potential costs—such as a loss of dignity, self-esteem, privacy, or democratic freedoms.

Ethical standards for doing research can be stricter than standards in many organizations (e.g., collection agencies, police departments, advertisers). Professional social research requires that you both know proper research techniques (e.g., sampling) and be sensitive to ethical concerns in research.

The Individual Researcher

Ethics begins and ends with you, the researcher. Your personal moral code is the best defense against unethical behavior. Before, during, and after conducting a study, you will have opportunities to and *should* reflect on research actions and consult your conscience. Ethical research depends on the integrity and values of individual researchers. "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).

Reasons for Being Ethical

Because most people who conduct social research are genuinely concerned about others, why would a researcher act in an ethically irresponsible manner? Except for the rare disturbed individual, the causes of most unethical behavior result from a lack of awareness and pressures to take ethical shortcuts. Many researchers face intense 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 end before completion. Moreover, written ethical standards are in the form of vague principles. In many situations, it is possible to act unethically, and the odds of getting caught are small.

Also, no one rewards you for being ethical and doing the right thing. The unethical researcher, if caught, faces public humiliation, a ruined career, and possible legal action, but the ethical researcher wins no praise. Most researchers internalize ethical

behavior during professional training, while having a professional role, and from having personal contact with other researchers. Moreover, the scientific community's norms of honesty and openness reinforce ethical behavior. Someone who is genuinely oriented toward a professional researcher role, who believes in the scientific ethos, and who interacts regularly with serious researchers is most likely to act ethically.

Scientific Misconduct. The research community opposes 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. Although 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.

> **Scientific misconduct** Action of someone who 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.

LEGAL	ETHICAL	
	Yes	*No*
Yes	Ethical and legal	Legal but unethical
No	Illegal but ethical	Unethical and illegal

FIGURE 3 Typology of Legal and Moral Actions in Social Research

    Plagiarism is fraud that involves someone stealing the ideas or writings of another or using 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].

    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 3.)

Power

The relationship between a researcher and research participants involves power and trust. The experimenter, survey director, or research investigator has power relative to participants and assistants. Credentials, expertise, training, and the role of science in modern society legitimate the power relation and trust. Some ethical issues involve an abuse of power and trust.

    A researcher's authority to conduct research comes with a responsibility to guide, protect, and oversee the interests of the people he or she is studying. For example, a physician was discovered to

have conducted experimental gynecological surgery on thirty-three women without their permission. This was both unethical and a breach of trust. The women had trusted the doctor, but he had abused the trust that his patient, the medical community, and society had placed in him.[8]

If you seek ethical guidance, you 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 than any other issue, the discussion of research ethics has focused on possible negative effects on research participants. Being ethical requires that we balance the value of advancing knowledge against the value of noninterference in the lives of other people. If research participants had an absolute right of noninterference, most empirical research would be impossible. If researchers had an absolute right of inquiry, it could nullify participants' basic human rights. The moral question is when, if ever, researchers are justified in taking risks with the people being studied, possibility causing embarrassment, loss of privacy, or some kind of harm.

The law and codes of ethics recognize a few clear prohibitions: Never cause unnecessary or irreversible harm to participants, 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 revelations of gross violations of basic human rights in the name of science. The most notorious violations were "medical experiments" that Nazi researchers conducted on Jews and others. In

these experiments, research scientists committed acts of terrible torture in the name of scientific research. People were placed in freezing water to see how long it took them to die, others were purposely starved to death, and children had limbs severed and transplanted onto others.[9]

Such human rights violations did not occur only in Germany, nor did they happen only long ago. The Tuskegee Syphilis Study, also known as Bad Blood, took place in the United States nearly 30 years after Nazi concentration camps had been closed. 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 or 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 provide health warnings to citizens who lived near the test areas. 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 physically, psychologically, legally, and economically, affecting a person's career or income.

Physical harm is rare, even in biomedical research, in which the intervention is much greater. Specific types of harm are more likely in different types of research (e.g., in experimental versus field research). Researchers must be aware of all types of harm and work to minimize them at all times.[12]

Physical Harm. A core ethical principle is that researchers should never cause physical harm to participants. This means we must anticipate risks before beginning research, including basic safety concerns (safe buildings, furniture, and equipment). We screen out high-risk subjects (those with heart conditions, mental illness, or seizure disorders) if the study involves stress, and anticipate the danger of injury and even physical attacks on research participants or assistants. We accept moral and legal responsibility for any injury that occurs as a result of research participation. This means that we must immediately terminate a study if we cannot guarantee the physical safety of particpants (see the Zimbardo study in Example Box 4, Three Cases of Ethical Controversy).

Psychological Abuse, Stress, or Loss of Self-Esteem. Although the risk of physical harm is rare, social researchers may place people in stressful, embarrassing, anxiety-producing, or unpleasant situations. To learn about how people respond in real-life, high anxiety-producing situations, social researchers have placed research participants in realistic situations of psychological discomfort or stress. The ethics of the famous Milgram obedience study is still debated (see Example Box 4). Some say that the precautions taken by Milgram and the knowledge gained outweighed the stress and potential psychological harm that research participants experienced. Others believe that the extreme stress and the risk of permanent harm were too great.

Some researchers have created high levels of anxiety or discomfort by 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 may place participants in emergency situations to see whether they will lend assistance to "victims." 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) wanted to see whether feelings of female self-worth affected romantic liking. She gave undergraduate women personality tests followed by phony feedback. She told some 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. He acted very interested in one woman and asked her out for a dinner date. Walster wanted to measure the woman's romantic attraction to the male. After the experiment, the woman learned that there was no date and the man was just working in an experiment and was not really 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 studies that induce 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., people with emotional problems or a weak heart), and arrange for emergency interventions or termination of the research if dangerous situations arise. Researchers should always obtain informed consent (to be discussed) before the research and debrief the subjects immediately afterward.

A core ethical principle is that researchers should never create *unnecessary* stress in participants. *Unnecessary* means beyond the minimal amount required to create the desired effect, or stress without a 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

EXAMPLE BOX **4**

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, the pupil 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' (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 homosexuals 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 would be allowed. In a simulated prison in the basement of a Stanford University building, prisoners were deindividualized (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; 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.

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stress might have long-term effects, a researcher should follow up and offer free counseling. Another danger is that researchers might develop a callous or manipulative attitude toward the research participants. Researchers report guilt and regret after conducting experiments that caused psychological harm to participants. Experiments that place research participants in anxiety-producing situations often produce discomfort for an ethical researcher.

Legal Harm. As researchers, we are responsible for protecting research participants from increased risk of arrest. The fact that participating in a research study increases the risk that a participant will face arrest will destroy trust in social scientific research, causing future participants not to be willing to participate in studies. 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 sometimes provides written waivers for researchers studying criminal behavior. However, as this chapter's opening box on the study of gangs suggests, the protection to researchers is limited, and researchers need to be cautious.

Potential legal harm is one criticism of the 1975 "tearoom trade" study by Humphreys (Example Box 4). In the New Jersey Negative Income Tax Experiment, some participants received income supplements. However, the researchers did not monitor whether they were also receiving public assistance checks. A local prosecuting attorney requested data on participants to identify "welfare cheats." In other words, participants were at legal risk because they were participating in the study. Eventually, the conflict was resolved, but it illustrates the need for researchers to be aware of potential legal issues while designing a study.

A related ethical issue arises when a researcher learns of illegal activity when collecting data. We must weigh the value of protecting the researcher–subject relationship and the benefits to future researchers against potential harm to innocent people. 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 patients 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 the abuse. After weighing the situation, he followed the latter course and is now an activist for the rights of mental institution patients.

The issue of protecting confidentiality (discussed later) complicated a similar ethical dilemma in a study of restaurants in New York. A sociology graduate student was conducting a participant observation study of waiters. During the study, the field site, a restaurant, burned down and arson was

suspected. Local legal authorities requested the researcher's field notes and wanted to interrogate him about activities in the restaurant. He had two choices: cooperate with the investigation and violate the trust of participants, confidentiality, and basic research ethics or uphold confidentiality and act ethically but face contempt of court and obstruction of justice penalties, including fines and jail. He wanted to behave ethically but 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. 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, participating in a survey interview may create anxiety and discomfort among people who are asked to recall unpleasant events. We need to be sensitive to any harm to participants, consider possible precautions, and weigh potential harm against potential benefits. Participants could face negative effects on their careers or incomes due to involvement with a study. For example, assume that a researcher surveys employees and concludes that the supervisor's performance is poor. As a consequence of the researcher's communication of this fact, the supervisor is discharged. Or a researcher studies people on public assistance. Based on the findings, some of them lose the benefits and their quality of life declines. What is the researcher's responsibility? We need to consider the consequences of research for those being studied, but there is no fixed answer to such questions. We 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? A major ethical tenet is the **principle of voluntary consent**: never force anyone to participate in research. A related ethical rule is do not lie to research participants unless it is required for legitimate research reasons. A very serious ethical standard is that participants should explicitly agree to participate in a study. The right not to participate becomes a critical issue when we use deception, disguise the research, or use covert research methods.[16]

Social researchers sometimes deceive or lie to participants in field and experimental research. We might misrepresent our 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 the researcher told the truth. Deception is never preferable if we can accomplish the same thing without deception.

Deception is acceptable only if it has a specific methodological purpose, and even then, we can use it only to the minimal degree necessary. If we use deception, we should obtain informed consent, never misrepresent risks, and always debrief the participants after the study. We can describe the basic procedures involved and conceal only some information about the study.

Informed Consent. A fundamental ethical principle is: Never coerce anyone into participating; all research participation *must* be voluntary. It is not enough to obtain permission; people need to know what they are being asked to participate in. Only then can they 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 have learned some basic details about the research procedure.

The U.S. federal government does not require informed consent in all research involving human subjects. Nevertheless, researchers should obtain

EXPANSION BOX 4
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 the location of information about participants' 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 participants and the number of subjects involved
8. An offer to provide a summary of findings

written consent unless there are good reasons for not doing so (e.g., covert field research, use of secondary data) as judged by an **institutional review board (IRB)** (see the later discussion of IRBs).

Informed consent statements provide specific information (see Expansion Box 4, Informed Consent).[17] A general statement about the procedures or questions involved and the uses of the data are

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.

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; examines study details before the research begins.

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. She found no significant differences between the groups in response rates. 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 ensuring confidentiality modestly improved responses when asking about highly sensitive topics. In other situations, extensive assurances of confidentiality failed to affect how or whether the subjects responded.

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

Covert Observation. Obtaining informed consent may be easy in survey and experimental research, but some field researchers believe that 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 so they could join a group seeking treatment to be able to study it. Field researchers have three choices blurring the line between informed consent and 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).

Some favor covert observation and exempting field research from informed consent (Herrera, 1999). One reason is that informed consent is impractical and disruptive in field research. It may even create some harm by disturbing the participants or the location by disrupting the ongoing activities. The difficulty with this reasoning is the moral principle that ensuring participant dignity outweighs practical expediency for researchers. The reasoning is self-serving; it places a higher value on doing research than on upholding honesty or privacy. It assumes that a researcher is better at judging study risks than the participants. The moral-ethical standard says we must respect the freedom/autonomy of all people we 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.

Another reason given for covert observations is that human communication and daily affairs are filled with covert activity. Daily 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? Using "everyone else is doing it" and "it would happen anyway" are not valid justifications for exemption. The issue here involves moral-ethical standards for doing research. Perhaps voyeurism, surveillance, and the use of undercover informants are increasing in some societies. Does that make them morally right and ensure personal privacy? Should we take them as a model for the ensuring integrity and trust in social research? Growing covert surveillance may increase public cynicism, distrust, and noncooperation. An absence of informed consent is an ethical gray area, and many believe that the moral-ethical risk of not getting informed consent is likely to cause greater harm than getting informed consent.

Covert research remains controversial, and many researchers believe that all covert research is unethical.[18] The code of ethics of the American Anthropological Association condemns such research as "impractical and undesirable." Even those who accept covert research as being ethical in some situations argue that it should be used only when overt observation is impossible. In addition, we 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 the victim. 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 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) in our study unless we have met two conditions: A legal guardian grants written permission, and we follow all ethical principles against harm to participants. For example, we want to conduct a survey of smoking and drug/alcohol use among high school students. If the study is conducted on school property, school officials must give permission. Written parental permission for all participants who are legal minors is also required. It is best to ask permission from each student as well.

Coercing people to participate, including offering them special benefits that they cannot otherwise attain, is unethical. 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, and 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 the researcher (e.g., an employer) coerced people (e.g., employees) to participate in research.

Determining whether coercion to participate is involved can be a complex issue, and we must evaluate each case. For example, a researcher offers a convicted criminal the alternative of continued imprisonment or participation in an experimental rehabilitation program. The convicted criminal may not believe in the benefits of the program, but the researcher believes 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 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 participants will benefit future students and society, and (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. It 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 possible harm is when one group of people is denied a service or benefit as a result of participation in a study. For example, say that you have a new treatment for subjects with a terrible disease, such as acquired immune deficiency syndrome (AIDS). To learn the effects of the new treatment, you provide

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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.

it to some individuals but give others a placebo, or empty pill. The study is designed to demonstrate whether the drug is effective, but participants who get the placebo may die. Of course, those receiving the drug may also die until more is known about whether the drug is effective. Is it ethical for you to deny a potential lifesaving treatment to people who have been randomly assigned in a study to learn more?

We can reduce new inequality among research participants in three ways. First, participants who do not receive the "new, improved" treatment continue to receive the best previously acceptable treatment. In other words, no one is denied all assistance, but everyone receives the best treatment available prior to the new one being tested. This ensures that no one suffers in absolute terms even if they temporarily fall behind others in relative terms. Second, we can use **crossover designs**, whereby a control group (i.e., those who do not get the new treatment) for a first phase of the study receive it in the second phase, and vice versa. Finally, we carefully and continuously monitor results. If it appears early in the study that the new treatment is highly effective, we give the new treatment to everyone. Also, in high-risk studies 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 participants' privacy.

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

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

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 participants. 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 can 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 the participants. 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), 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 some situations, the law protects privacy. 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 researchers took precautions, a Congressional investigation followed and passed a law 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 uses a fictitious name and location of the individual and alters some characteristics. The person's identity is protected, and the individual is unknown or anonymous. Survey and experimental researchers discard the names or addresses of participants 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 who failed to respond, the respondent's anonymity is not being protected fully. In panel studies, in which the same individuals are tracked 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, they 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. In the famous Middletown study of Muncie, Indiana, people recognized their town. A researcher who protects the identities of individuals with fictitious information, however, creates a gap between what was studied and what is reported to others. This raises questions about what a researcher found and what he or she made up.

Confidentiality. Even if anonymity is not possible, we should protect confidentiality. Anonymity protects the identity of specific individuals from being known. **Confidentiality** means that we may attach names to information, but we hold it in confidence or keep it secret from the public. We never release the information in a way that permits linking specific individuals to it. We present results publicly only in an aggregate form (e.g., percentages, means).

We can provide anonymity without confidentiality, or vice versa, although the two usually go together. Anonymity without confidentiality

happens if we make details about a specific individual public but withhold the individual's name and certain details that would make it possible to identify the individual. Confidentiality without anonymity happens if we do not release individual data public but privately link individual names to data on specific individuals.

Researchers have undertaken elaborate procedures to protect the identity of participants from public disclosure: eliciting anonymous responses, using a third-party list custodian who holds the key to coded lists, or using the random-response technique. Past abuses suggest that such measures may be necessary. 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 and threatened to destroy all records rather than release any of them. Eventually, the government agencies backed down. The moral and ethical duty of researchers obligated them to destroy the records to protect confidentiality.

Confidentiality may protect participants from physical harm. For example, I met a researcher who had 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 research participants, he wrote all notes in code and kept all records secretly locked away. Although he resided in the United States, he received physical threats by the foreign government and discovered attempts to burglarize his office. In other situations, some principles may take precedence over protecting confidentiality.

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).

Some researchers 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 had already published one book on the subject. He had interviewed a research participant who was suspected of leading a group that had broken 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? Research participants have knowledge about them taken and analyzed by others. The information can then be used for a number of purposes, including actions against the subjects' interests. Large businesses collect, buy, sell, analyze, and exchange information on people everyday. Private businesses and government agencies use information about buying habits, personal taste, spending patterns, credit ratings, voting patterns, Internet surfing, and the like. 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 their time and information to a researcher for little or no compensation, yet concerns about privacy and the collection of information make it reasonable to consider personal information as private property. If it is private property, a person clearly has the right to keep, sell, or give it away. The ethical issue is strongest in situations in which someone could use the information in ways that participants would disapprove of if they were fully informed. For example, a group of committed nonsmokers participate in a study about their habits and psychological profiles. A market research

firm obtains the information, and a tobacco company asks the market research firm to design a campaign that promotes smoking to the nonsmokers. Had the nonsmokers been informed about the uses of their responses, they might have chosen not to participate. Ethical researchers can increase protections by offering participants a copy of the findings and describing all 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. Positivism implies the collection and use of information by experts separate from research participants and the ordinary citizen. Each of the two alternatives to positivism in its own way argues 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 that 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 uses of human subjects. Researchers and community members staff the IRB. 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 when a study is 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. However, they incorporate ethical concerns into research because it is morally and socially responsible. Doing so also helps 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 research participants. The principles in the Nuremberg code focused on medical experimentation. They have become the foundation 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

EXPANSION BOX 5

Basic Principles of Ethical Social Research

- Recognize that ethical responsibility rests with the individual researcher.
- Do not exploit research participants 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 research participants.
- 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.

Declaration of Helsinki, also have implications for social researchers.[27] (See Expansion Box 5, Basic Principles of Ethical Social Research.)

Professional social science associations (e.g., the American Psychological Association, American Anthropological Association, American Political Science Association, and American Sociological

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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 adopted after the war crime trials of World War II in response to inhumane Nazi medical experiments; was the beginning of codes of ethics for human research.

Association) adopted codes of ethics beginning in the 1960s or 1970s. Professional social science associations have committees that review codes of ethics and hear about possible violations but does not strictly enforcement the codes. The penalty for a minor violation rarely goes beyond a letter. If no laws are 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 systemize thinking and provide guidance; they also help universities and other institutions defend ethical research. For example, after interviewing twenty-four 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 its staff had talked to the researcher with implications that there could be reprisals to those employees. The university administration defended the researcher and refused to release the information, citing widely accepted codes that protect human research participants.[28]

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 you to conduct research. Special ethical prob-

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

lems can arise when someone else is paying for a study, especially if it is applied research. You may be asked to compromise ethical or professional research standards as a condition for receiving a contract or for continued employment. This means that you must set ethical boundaries beyond which you will refuse sponsor demands. When confronted with an illegitimate demand, you have three basic choices: be loyal to an organization or larger group, exit from the situation, or voice opposition.[29] These three choices present themselves as caving in to the sponsor, quitting, or becoming a **whistle-blower**. You must choose your 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 by 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 (not making an organization look bad or sensationalizing the problem) 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 Example Box 5, The Story of a Whistle-Blower). 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, an issue may take a long time to be resolved and create great emotional strain. By acting morally, a whistle-blower needs to be prepared to make sacrifices: losing a job or promotions, receiving lower pay or an 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.

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 4 months on the job but was threatened should he reveal anything about the company. It took 7 years to settle his whistle-blower legal case against the firm.

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

Applied social researchers in sponsored research settings must think seriously about their professional roles and maintain a degree of independence from their 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 your results should be? 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 contacting a newspaper and exposing 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 some conditions on research techniques used (e.g., survey versus experiment) and limit costs for research. However, we must follow generally accepted research methods. We 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**, as 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 receive a contract by bidding what the research actually costs. Once the research begins, we may need to redesign the project, to lower costs. The contract procedure makes midstream changes difficult. We may find that we are forced by the contract to use research procedures that are less than ideal. We then confront a dilemma: Complete the contract and do low-quality research or fail to fulfill the contract and lose money and future jobs.

You should refuse to continue work on a study if you cannot uphold generally accepted standards of research. If a sponsor wants biased samples or leading questions, to be ethical, you must refuse to cooperate. If legitimate research shows the sponsor's pet idea or project to be a bad course of action, you may even anticipate the end of employment or pressure to violate professional research standards. In the long run, you, the sponsor, the scientific community, and the larger society would be harmed by the violation of sound research practice. You must decide whether you are a "hired hand" who will give 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.

We should ask why sponsors would want the social research conducted if they are not interested in using the findings or in the truth. The answer is that such sponsors do not view social research as a means to knowledge or truth. They see it only as a cover they can use to legitimate a decision or practice that they could not otherwise do easily. These sponsors are abusing the researcher's status as being a serious trustworthy professional by being deceit-

> **Contract research** A type of applied research that is sponsored (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.

ful and trying to "cash in" on the reputation of the scientific researchers' honesty and integrity. When this occurs, the ethical course of action is to expose and end the abuse.

Suppressing Findings. What happens if you conduct research and the findings make the sponsor look bad or the sponsor refuses 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 it 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 had been delayed and underestimated by the U.S. government agency that provided statistics. Before information could be released, it had to go through an office headed by a political appointee. The researcher charged that the political appointee was most interested in protecting the administration's foreign policy. In another example, the U.S. Defense Department ordered the destruction of studies that

showed 10 percent of the U.S. military to be a person who is gay or lesbian and the military provided no support for the banning of gays from the military. In 2005, the White House threatened the head of the little-known Bureau of Justice Statistics with dismissal and eventually demoted him for releasing law enforcement data on racial profiling. The government agency produces dozens of reports each year on crime patterns, drug use, police tactics, and prison populations. The data documented clear disparities in how racial groups were treated once they were stopped by the police. Political supervisors demanded deleting references to the disparities from reports. The data were based on interviews with 80,000 people in 2002. It showed that White, Black, and Hispanic drivers nationwide were stopped by the police that year at about the same rate, roughly 9 percent. However, once the police had made a stop, what happened next differed depending on driver's race and ethnicity.[34]

In sponsored research, we 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, we 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 Expansion Box 6, Common Types of Misuse in Evaluation Research.)

Concealing the True Sponsor. Is it ethical to keep the identity of a sponsor secret? For example, an

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EXPANSION BOX 6

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.

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abortion clinic funds a study on the attitudes of religious groups opposed to abortion. We 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 survey respondents may depend on its sponsor. 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 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 view most ethical debates, codes of ethics, and review boards as inadequate and rooted in positivist assumptions. 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, 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 rests 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 phrased in terms of the participants' everyday life experiences. Researchers must 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 still in an early 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 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. We discussed two issues that are part of the preparation for designing a study: the literature review and ethical concerns. Both involve placing your study in the context of the larger community of researchers and attaching a specific study to larger concerns.

We discussed the distinctive contribution of science to society and the ways in which 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—to yourself, your sponsors, the community of researchers, and 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. The truthfulness of knowledge produced by social research and its use or misuse depends on individual researchers like you, reflecting on their actions and on how social research fits into society.

KEY TERMS

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

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 locate a Ph.D. dissertation?
4. What distinguishes a strong from a weak literature review?
5. What are the major advantages and disadvantages of using the Internet for social research?
6. What is the primary defense against unethical conduct in research?
7. How do deceiving and coercing individuals 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. See research fraud discussion in Broad and Wade (1982), Diener 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.
8. See "Doctor Is Accused of 'Immoral' Tests,'" *New York Times* (December 9, 1988). For a more general discussion of power and trust, see Reynolds (1979:32).
9. Lifton (1986) provided an account of Nazi medical experimentation.
10. See Jones (1981) and Mitchell (1997) on the Bad Blood case.
11. Diener and Crandall (1978:128) discuss these examples.
12. See Warwick (1982) on types of harm to research participants. See Reynolds (1979:62–68) on rates of harm in biomedical research. Kelman (1982) discusses different types of harm from different types of research.
13. College counselors report that anxiety and low self-esteem over dating are major problems among college women (Diener and Crandall, 1978:21–22). Also see Kidder and Judd (1986:481–484).
14. See Dooley (1984:330) and Kidder and Judd (1986: 477–484).
15. See Hallowell (1985) and "Threat to Confidentiality of Fieldnotes," *ASA Footnotes,* 12:6.

16. For more on the general issue of the right not to be researched, see Barnes (1979), Boruch (1982), Moore (1973), and Sagarin (1973).

17. Informed consent requirements and regulations are discussed in detail in Maloney (1984). Also see Capron (1982) and Diener and Crandall (1978:64–66).

18. The debate over covert research is discussed in Denzin and Erikson (1982), Homan (1980), and Sieber (1982). Also see Miller and Tewksbury (2000), especially Sections 1 and 4.3.

19. See Diener and Crandall (1978:87) and Warwick (1982:112).

20. See Diener and Crandall (1978:173–177) and Kidder and Judd (1986:469).

21. See Boruch (1982), Caplan (1982), Katz (1972), and Vaughan (1967) on privacy.

22. For more on the Wichita Jury Study, see Dooley (1984:338–339), Gray (1982), Robertson (1982), Tropp (1982:391), and Vaughan (1967).

23. See Monaghan (1993a, 1993b, 1993c).

24. See Gustavsen (1986).

25. IRBs are discussed in Maloney (1984) and Chadwick and associates (1984:20). See Taylor (1994) for an international survey of ethical standards.

26. See Abbott (1988), Brint (1994), and Freidson (1986, 1994) on professionals.

27. See Beecher (1970:227–228) and Reynolds (1979: 28–31, 428–441).

28. See "UW Protects Dissertation Sources," *Capital Times* (December 19, 1994):4. 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."

29. See Hirschman (1970) on loyalty, exit, and voice. Also see Rubin (1983:24–40) on ethical issues in applied research.

30. Additional discussion can be found in Schmeling and Miller (1988).

31. See Fiske (1989), Koretz (1988), and Weiss and Gruber (1987) on educational statistics.

32. See "State Sought, Got Author's Changes in Lottery Report," *Capital Times* (July 28, 1989), p. 21.

33. See Chambers (1986).

34. See Dale W. Nelson, "Analyst: War Death Counts Falsified," *Wisconsin State Journal* (April 14, 1992:3A); "Ex-Official Says Pentagon Dumped Findings on Gays," *Capital Times* (April 1, 1993); and Eric Lichtblau, "Profiling Report Leads to a Clash and a Demotion, " *New York Times* (August 24, 2005).

35. See Adler and Adler (1993).