Writing the Research Report and the Politics of Social Research

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The Research Report The Politics of Social Research Objectivity and Value Freedom Conclusion

But that's our business: to arrange ideas in so rational an order that another person can make sense of them. We have to deal with that problem on two levels. We have to arrange the ideas in a theory or narrative, to describe causes and conditions that lead to the effects that we want to explain, and do it in an order that is logically and empirically correct. . . . Finally, we want our prose to make the order we have constructed clear. We don't want imperfection in our prose to interfere with our readers' understanding. These two jobs converge and cannot be separated. —Howard Becker, Writing for Social Scientists, p. 133

Communicating results and describing in detail how you conducted a study are critical last steps in the research process. The form is usually a written report. The norm of communalism emphasizes that we make public how we conducted research and its complete findings. This chapter focuses on writing a research report.

Conducting a study and reporting its results can create controversy. Doing research can raise contentious ethical issues that largely involve protecting research participants, maintaining integrity while doing research, and dealing with pressure from research sponsors. Social research also involves political issues that can be even more contentious. The politics of social research can affect the possibility of conducting a study and disseminating findings from it as well as how others may try to misuse research findings.

This chapter combines two topics: writing a research report and the politics of social research. The writing requires mastering relatively straightforward, noncontroversial rules and skills. The issues in the politics of social research are not straightforward, however. They include issues such as the freedom to conduct a study and to prepare the report without interference from powerful social groups. There are rules for writing reports and codes of ethics, but there is no code or rules for research politics.

Social research may be imperfect, but its ultimate goal is to discover knowledge, expand understanding, and seek truth. We want to investigate all topics and fully share the method and findings of research with the scientific community and beyond without barriers. Political controversies develop when powerful groups or institutions try to block inquiry, prevent the free flow of new knowledge, place limits on the search for truth, or misuse and selectively ignore research findings. The groups or institutions usually do so to advance their own nonscientific goals and purposes.

The first part of this chapter examines how to write both quantitative and qualitative reports. Research reports require you to take the writing process very seriously. You must explain both how you conducted a study and its findings. The second part of the chapter focuses on the politics of social research. We consider attempts by powerful groups or governments to limit what researchers study, how they conduct a research study, and where they disseminate results. We end by considering the concepts of objectivity and value freedom.

THE RESEARCH REPORT

Reasons for Writing a Report

After you complete a study or a significant phase of a large project, it is time to communicate the findings to others through a research report. You can learn much about writing a research report by reading many published articles and taking a course in scientific and technical writing.

A research report is a written document (or oral presentation based on a written document) that communicates the methods and findings of a research project to others. It is more than a summary of findings; it is a detailed record of the research process.

Do not wait until the research is finished before thinking about the report; you must think ahead to the report and keep careful records while conducting research. In addition to findings, the report includes the reasons for initiating the project, a description of the project's steps, a presentation of data, and a discussion of how the data relate to the research question or topic.

The report tells others what you, the researcher, did and what you discovered. It is a way of disseminating knowledge. The report plays a significant role in binding together the scientific community. Other reasons for writing a report are to fulfill a class or job assignment, to meet an obligation to an organization that paid for the study, to persuade a professional group to address specific aspects of a problem, or to tell the general public about findings. Communicating with the public is rarely the primary method for communication of scientific results; it is usually a second stage of dissemination that comes after communicating with other researchers.

The Writing Process

Your Audience. Professional writers say you must always know for whom you are writing. This is because communication is most effective when it is tailored to a specific audience. You should write a research report differently, depending on whether the primary audience is an instructor, students, professional social scientists, practitioners, or the general public. It goes without saying that the writing should be clear, accurate, and well organized.

Instructors assign a report for different reasons and may place requirements on how to write it. In general, instructors want to see the writing and the organization that reflect clear, logical thinking. Student reports should demonstrate a solid grasp of substantive and methodological concepts. A good way to do this is to use technical terms explicitly *when appropriate;* they should not be used excessively or incorrectly.

When writing for students, you need to define technical terms and label each part of the report. The discussion should proceed in a logical, step-by-step manner with many specific examples. Use straightforward language to explain how and why you conducted the various steps of the research project. One strategy is to begin with the research question and then structure the report as an answer.

Scholars do not need definitions of technical terms or explanations of why you used standard procedures (e.g., random sampling). They are most interested in how the research advances theory or previous findings in the literature. They want a condensed, detailed description of the research design. They pay close attention to how you gathered data, measured variables, and analyzed the data. Scholars desire a compact, tightly written but extensive section on data analysis with a meticulous discussion of results.

Practitioners prefer a short summary of how you conducted the study and the results presented in a few simple charts and graphs. They are less

interested in details of the study design, measurement, data collection, or findings. They like to see an outline of alternative paths of action implied by results with the practical outcomes of pursuing each path. It is important for writers to caution practitioners not to overgeneralize from the results of one study. Although few practitioners demand it, you should place the details of research design and results in an appendix to the report.

When writing for the public, you want to use simple language, provide concrete examples, and focus on the practical implications of findings for current social problems. Do not include details of research design or results, and be careful not to make unsupported claims when writing for the public. Informing the public is an important service that can help nonspecialists make better judgments about public issues.

Style and Tone. We write research reports in a narrow range of styles with a distinct tone. The purpose of the report is to communicate the research method and findings clearly, directly, and honestly.

Style refers to the types of words the writer chooses and the length and form of sentences or paragraphs he/she uses. Tone is the writer's attitude or relation to the subject matter. For example, an informal, conversational style (e.g., colloquial words, idioms, clichés, and incomplete sentences) with a personal tone (e.g., these are my feelings) is appropriate for writing a letter to a close friend but not for research reports. The style for research reports is to be formal and succinct (saying a lot in few words). The tone expresses some distance from the subject matter; it is professional and serious. Field researchers sometimes use an informal style and a personal tone, but this is the exception. Moralizing and flowery language should be avoided; the primary goal is to inform, not to advocate a position, to moralize, or to entertain.

A research report should be objective, accurate, and clear. Check and recheck details (e.g., page references in citations) and fully disclose how you conducted the study. If readers detect carelessness in writing, they may question the research itself. The details of a research project can be complex, and such complexity means that confusion is always a danger so writing clearly is essential. The way to achieve clear writing is to have clear thinking, which means carefully rethinking the research problem and design, explicitly defining terms, writing with short declarative sentences, and limiting conclusions to what the evidence supports.

Organizing Thoughts. Writing does not happen magically or simply flow out of a person when he or she puts pen to paper (or fingers to keyboard) although some people have such an illusion. Rather, writing is hard work that requires diligence and involves following a sequence of steps that ultimately result in a final product. Writing a research report is not radically different from other types of writing. Although some steps differ and the level of complexity may be increased, most of what a good writer does when writing a long and complex letter, a poem, a set of instructions, or a short story applies to writing a research report.

First, a writer needs something about which to write. The "something" in the research report includes the topic, research question, design and measures, data collection techniques, results, and implications. With so many parts to write about, good organization is essential. The most basic tool for organizing writing is the outline. Outlines help a writer to ensure that all ideas are included and that the relationship among them is clear. Outlines are made up of topics (words or phrases) or sentences. Most of us are familiar with the basic form of an outline (see Figure 1).

Outlines can help the writer, but they can become a barrier if you use them improperly. An outline is simply a tool to help organize ideas. It helps (1) to put ideas in a sequence (e.g., what will be said first, second, and third), (2) to group related ideas together (e.g., these are similar to each other but differ from those), and (3) to separate the more general, or higher-level, ideas from more specific ideas, and the specific ideas from very specific details.

Some students believe that they need a complete outline before writing and that once an outline is prepared, deviations from it are impossible. Few good writers begin with a complete, detailed outline. The initial outline is often sketchy because until they write everything down, it is impossible to put all ideas in a

FIGURE 1 Form of Outline

I. First major topic	One of the most important
A. Subtopic of topic I	Second level of importance
1. Subtopic of A	Third level of importance
a. Subtopic of 1	Fourth level of importance
b. Subtopic of 1	"
(1) Subtopic of b	Fifth level of importance
(2) Subtopic of b	"
(a) Subtopic of (2)	Sixth level of importance
(b) Subtopic of (2)	"
i. Subtopic of (b)	Seventh level of importance
ii. Subtopic of (b)	"
2. Subtopic of A	Third level of importance
B. Subtopic of topic I	Second level of importance
II. Second major topic	One of the most important

sequence, group them together, or separate the general from the specific. For most writers, new ideas develop or become clearer during the process of writing.

A beginning outline may differ from the final outline by more than degree of completeness. The process of writing may not only reveal or clarify ideas for the writer but also stimulate new ideas, new connections between ideas, a different sequence, or new relations between the general and the specific. In addition, the process of writing may stimulate a reanalysis or reexamination of the literature or findings. This does not mean that beginning all over is necessary. Rather, it means the writer needs to keep an open mind to new insights and be candid about all aspects of the research project.

Back to the Library. You should be familiar with the literature before beginning a project, but most likely, you will need to return to the literature after completing data collection and analysis. This happens for several reasons. First, time has passed between the beginning and the end of a research project, and new studies may have been published. Second, after completing a research project, you will know better what is or is not central to the study and may have new questions in mind when rereading studies in the literature. Finally, when writing the report, you may find that your notes are not complete enough or a detail is missing in the citation of a reference

source. The visit to the library after data collection is less extensive and more selective or focused than the one you conducted at the beginning of research.

When writing a research report, most of us discard some of the notes and sources that we gathered prior to completing the research project. This does not mean that the initial library work and literature review were a waste of time and effort. We can expect that some of the notes (e.g., 25 percent) we took before completing the project will become irrelevant as the project gains focus. We do not include notes on the literature or references that are no longer relevant because they distract from the flow of ideas and reduce clarity.

Returning to the library to verify and expand references can focus your ideas. It also helps avoid plagiarism. **Plagiarism**, a serious form of cheating, is the use of another person's exact words without properly citing the original source. Many universities expel students who are caught engaging in it. If a professional ever plagiarizes in a scholarly journal, the entire scholarly scientific peer community treats the person as if he or she had committed a very serious offense.¹ Take careful notes and identify the

Plagiarism Theft of another person's ideas by using his or her exact words and the ideas without properly documenting the original source.

exact source of phrases or ideas to avoid unintentional plagiarism. Cite the sources of both directly quoted words and paraphrased ideas. For direct quotes, include the location of the quote with page numbers in the citation.

It is wrong to use another's written words and fail to give credit, but paraphrasing is less clear. **Paraphrasing** does not use another's exact words, but restates another's ideas in your own words while condensing. We regularly paraphrase, and good paraphrasing requires us to really understand what we are paraphrasing. This means that we do more than replace another's words with synonyms; paraphrasing is borrowing an idea, boiling it down to its essence, and giving credit to the source.²

The Writing Process

Writing is a process. The only way to learn to write is by writing.³ It takes time and effort, and it improves with practice. There is no single correct way to write, but some methods are associated with good writing. The process has three steps:

- 1. *Prewriting*. Prepare to write by arranging notes on the literature, making lists of ideas, outlining, completing bibliographic citations, and organizing comments on data analysis.
- 2. *Composing.* Get your ideas onto paper as a first draft, a complete report from beginning to end, not a few rough notes or an outline, by freewriting, drawing up the bibliography and footnotes, preparing data for presentation, and forming an introduction and conclusion.
- **3.** *Rewriting.* Evaluate and polish the report by improving coherence, proofreading for

Paraphrasing Restating an author's ideas in one's own words and giving proper credit to the original source.

Prewriting An early step in the writing process during which a writer organizes notes, makes lists of ideas, outlines thoughts, and makes certain that bibliographic citations are complete.

Freewriting An initial step in the writing process in which the writer tries to get his or her ideas down on paper as quickly as possible, not worrying about grammar or spelling.

mechanical errors, checking citations, and reviewing voice and usage.

Many people find that getting started is difficult. Beginning writers often jump to the second step and end there, which results in poor-quality writing. **Prewriting** means that you begin with a file folder full of notes, outlines, and lists. You think about the form of the report and audience. Thinking time is important. It often occurs in spurts over a period of time before the bulk of composing begins.

Some people become afflicted with a strange ailment when they sit down to compose writing: a temporary inability to write known as *writer's block*. The mind goes blank, the fingers freeze, and panic sets in. Writers from beginners through experts occasionally experience it. If you do, calm down and work on overcoming it (see Expansion Box 1, Suggestions for Ending Writer's Block).

Numerous writers begin to compose by **freewriting**, a process of writing down everything you can as quickly as it enters into your mind. Freewriting establishes a link between a rapid flow of ideas in the mind and writing. When you freewrite, you do not stop to reread what you wrote, you do not ponder the best word, you do not worry about correct grammar, spelling, or punctuation. You just put ideas on paper as quickly as possible to get and keep the creative juices or ideas flowing. You can later clean up what you wrote.

Writing and thinking are so intertwined that it is impossible to know where one ends and the other begins. This means that if you plan to sit and stare at the wall, the computer output, the sky, or whatever until all thoughts become totally clear before beginning, you will rarely get anything written. The thinking process can be ignited during the writing itself.

Rewriting. Perhaps one in a million writers is a creative genius who can produce a first draft that communicates with astounding accuracy and clarity. For the rest of us mortals, writing means that rewriting—and rewriting again—is necessary. For example, Ernest Hemingway is reported to have rewritten the end of *Farewell to Arms* thirty-nine times.⁴ It is not unusual for a professional researcher

EXPANSION BOX

Suggestions for Ending Writer's Block

- Begin early. Do not procrastinate or wait until the last minute. Beginning early not only gives you time to come back to the task but also reduces the tension because you have time to write a poor-quality first draft that can be improved upon. Shafer (1980:205) chided, "Writing is hard work, and the excuses authors find for postponing it are legendary." Set yourself a deadline for a first draft that is at least a week before the final deadline, and keep it!
- 2. Take a break and then return. Some writers find that if they take a walk, get a snack, read a newspaper, and come back to the task a half hour later, the block is gone. Small diversions, if they remain small and short term, can help on occasion.
- 3. *Begin in the middle*. You do not have to begin at the beginning. Begin in the middle and just start writing, even if does not seem to be directly relevant. It may

to rewrite a report a dozen times. Do not become discouraged. If anything, rewriting reduces the pressure; it means you can start writing soon and get out a rough draft that you can polish later. Plan to rewrite a draft at least three or four times.

Rewriting can help you express yourself with increased clarity, smoothness, and precision and an economy of words. When rewriting, the focus is on clear communication, not pompous or complicated language. As Leggett et al. (1965:330) stated, "Never be ashamed to express a simple idea in simple language. Remember that the use of complicated language is not in itself a sign of intelligence."

Rewriting means slowly reading what you have written and, if necessary, read it out loud to see whether it sounds right. It is a good idea to share your writing with others. Professional writers have others read and criticize their writing. New writers soon learn that friendly, constructive criticism is very valuable. Sharing your writing with others may be difficult at first. It means exposing your written thoughts and encouraging criticism of them, yet the purpose of the criticism is to clarify writing, and the critic is doing you a favor.

Rewriting involves two processes: revising and editing. **Revising** is inserting new ideas, adding

be easier to get to your topic once the writing/thinking process is moving.

- 4. Engage in personal magic rituals. Some people have unusual habits or rituals that they engage in before writing (e.g., washing dishes, clearing a desk, sharpening pencils). These can serve as mental triggers to help you get started. Do what gets you started writing.
- 5. *Break the writing into small parts.* Do not feel that you have to sit down and complete the writing task as a whole. Begin with pieces that come easily to you and stitch together the pieces later.
- 6. Do not expect perfection. Write a draft, which means that you can throw away, revise, and change what you wrote. It is always easier to revise a rough draft than to create perfect writing the first time.

supporting evidence, deleting or changing ideas, moving sentences around to clarify meaning, or strengthening transitions and links between ideas. **Editing** is cleaning up the more mechanical aspects of writing, such as spelling, grammar, usage, verb agreement and tense, sentence length, and paragraph organization. When you rewrite, go over a draft and revise it brutally to improve it. This is easier if some time passes between a writing draft and rewriting it. Phrases that seemed satisfactory in a draft may look fuzzy or poorly connected after a week or two (see Expansion Box 2, Suggestions for Rewriting).

Even if you have not acquired typing skills, it is a good idea to type, or print out if you use a word processor, at least one draft before the final draft

Revising Correcting process that is part of rewriting, in which a writer adds ideas or evidence and deletes, rearranges, or changes ideas to improve clarity and better communicate meaning.

Editing A step in the writing process, part of rewriting, in which a writer cleans up and tightens the language, checks grammar (e.g., verb agreement, usage), adjusts sentence length, and reorganizes paragraphs to improve communication and strengthen style.

EXPANSION BOX 2 Suggestions for Rewriting

- Mechanics. Check grammar, spelling, punctuation, verb agreement, verb tense, and verb/subject separation with each rewrite. Remember that each time new text is added, new errors can creep in. Mistakes are not only distracting but also weaken the confidence readers place in the ideas you express.
- 2. Usage. Reexamine terms, especially key terms, when rewriting to see whether you are using the exact word that expresses your intended meaning. Do not use technical terms or long words unnecessarily. Use the plain word that best expresses meaning. Get and use a thesaurus, an essential reference tool, like a dictionary, that contains words of similar meaning and can help you locate the exact word for a meaning you want to express. Precise thinking and expression require precise language. Do not say average if you use the mean. Do not say mankind or policeman when you intend people or police officer. Do not use principal for principle.
- 3. Voice. Writers of research reports often make the mistake of using the passive instead of the active voice. It may appear more authoritative, but passive voice obscures the actor or subject of action. For example, the passive, *The relationship between grade in school and more definite career plans was confirmed by the data*, is better stated as the active, *The data confirm the relationship between grade in school and more definite career plans.* The passive, *Respondent attitude toward abortion was recorded by an interviewer* reads easier in the active voice: *An interviewer recorded respondent attitude toward abortion.* Also avoid unnecessary qualifying language, such as *seems to* or *appears to*.
- 4. Coherence. Sequence, steps, and transitions should be logically tight. Try reading the entire report one paragraph at a time. Does the paragraph contain a unified idea? A topic sentence? Is there a transition between paragraphs within the report?

- 5. Repetition. Remove repeated ideas, wordiness, and unnecessary phrases. Ideas are best stated once, forcefully, instead of repeatedly in an unclear way. When revising, eliminate deadwood (words that add nothing) and circumlocution (the use of several words when one more precise word will do). Directness is preferable to wordiness. The wordy phrase, To summarize the above, it is our conclusion in light of the data that X has a positive effect of considerable magnitude on the occurrence of Y, notwithstanding the fact that Y occurs only on rare occasions, is better stated, In sum, we conclude that X has a large positive effect on Y but Y occurs infrequently. As Selvin and Wilson (1984) warned, verbose and excessive words or qualifiers make it difficult to understand what is written.
- Structure. Research reports should have a transparent organization. Move sections around as necessary to fit the organization better, and use headings and subheadings. A reader should be able to follow the logical structure of a report.
- 7. *Abstraction*. A good research report mixes abstract ideas and concrete examples. A long string of abstractions without the specifics is difficult to read. Likewise, a mass of specific concrete details without periodic generalization also loses readers.
- 8. *Metaphors*. Many writers use metaphors to express ideas. Phrases such as *the cutting edge, the bottom line,* and *penetrating to the heart* are used to express ideas by borrowing images from other contexts. Metaphors can be an effective method of communication, but they need to be used sparingly and with care. A few well-chosen, fresh metaphors can communicate ideas quickly and effectively; however, their excessive use, especially overused metaphors (e.g., *the bottom line*), is a sloppy, unimaginative method of expression.

because it is easier to see errors and organization problems in a clean, typed draft. Feel free to cut and paste, cross out words, or move phrases on the printed copy.

Good typing skills and an ability to use a word processor are extremely valuable when writing reports and other documents. Serious professionals find that the time they invest in building typing skills and learning to use a word processor pays huge dividends later. Word processing makes editing much easier. You can also check spelling, find synonyms in an attached thesaurus, and check grammar. You cannot rely on the computer program to do all the work, but it makes writing easier. The speed and ease that a word processor offers is so dramatic that few people who become skilled at using one ever go back to writing by hand or typing.

One last suggestion: Rewrite the introduction and title after you complete a draft so that they accurately reflect what you said.⁵ Titles should be short and descriptive, communicating the topic and the major variables to readers. They can describe the type of research (e.g., "an experiment on . . .") but should not have unnecessary words or phrases (e.g., "an investigation into the . . .").

The Quantitative Research Report

The principles of good writing apply to all reports, but the parts of a report differ depending on whether the research is quantitative or qualitative. Before writing any report, read reports on the same type of research for models.

We begin with the quantitative research report. The sections of the report roughly follow the sequence of steps of a research project.⁶

Abstract or Executive Summary. Quantitative research reports begin with a short summary or abstract. The length of an abstract varies; it can be as few as fifty words (this paragraph has seventy-five words) or as long as a full page. Most scholarly journal articles place abstracts on the first page of the article. The abstract has information on the topic, the research problem, the basic findings, and any unusual research design or data collection features.

Reports of applied research that are written for practitioners have a longer summary called the **executive summary**. It contains more detail than an article abstract and includes the implications of research and major recommendations made in the report. Although it is longer than an abstract, an executive summary rarely exceeds four or five pages.

Abstracts and executive summaries serve several functions: For the less interested reader, they tell what is in a report; for readers looking for specific information, they help the reader determine whether the full report contains important information. Readers use the abstract or summary to screen information and decide whether they will read the entire report. It gives serious readers who intend to read the full report a quick mental picture of the report, which makes reading the report easier and faster.

Presentation of the Problem. The first section of the report defines the research problem. It can be placed in one or more sections with titles such as "Introduction," "Problem Definition," "Literature Review," "Hypotheses," or "Background Assumptions." Although the subheadings vary, the first section should include a statement of the research problem and a rationale for what is being examined. It also provides an explanation of the significance of and a background to the research question. The first section explains the significance of the research by showing how different solutions to the problem lead to different applications or theoretical conclusions. Introductory sections frequently include a context literature review and link the problem to theory. Introductory sections also define key concepts and present conceptual hypotheses.

Description of the Methods. The next section of the report describes how you designed the study and collected the data. It goes by several names (e.g., "Methods," "Research Design," or "Data") and may be subdivided into other parts (e.g., "Measures," "Sampling," or "Manipulations"). It is the most important section for evaluating the methodology of the project. The section answers several questions for the reader:

- **1.** What type of study (e.g., experiment, survey) was conducted?
- **2.** Exactly how were data collected (e.g., study design, type of survey, time and location of data collection, experimental design used)?
- **3.** How were variables measured? Are the measures reliable and valid?
- **4.** What is the sample? How many participants or respondents are involved in the study? How were they selected?

Executive summary A synopsis of a research project's findings placed at the beginning of a report for an applied, nonspecialist audience; is usually a little longer than an abstract.

5. How were ethical issues and specific concerns of the design handled?

Results and Tables. After describing how data were collected, methods of sampling, and measurement, you then present the data. This section presents the data but does not discuss, analyze, or interpret them. Some researchers combine the "Results" section with the next section called "Discussion" or "Findings."

You must make choices in how to present the data.⁷ When analyzing the data, you look at dozens of univariate, bivariate, and multivariate tables and statistics to get a feel for the data. This does not mean that you include every statistic or table in a final report. Instead, select the minimum number of charts or tables that fully inform the reader. Use data analysis techniques to summarize the data and test hypotheses (e.g., frequency distributions, tables with means and standard deviations, correlations, and other statistics).

You want to give a complete picture of the data without overwhelming the reader by providing data in excessive detail or presenting irrelevant data. Readers can make their own interpretations. Detailed summary statistics belong in appendixes.

Discussion. In the discussion section, give the reader a concise, unambiguous interpretation of its meaning. The discussion is not a selective emphasis or partisan interpretation; rather, it is a candid discussion of what is in the results section. The discussion section is separated from the results so that a reader can examine the data and arrive at different interpretations. Grosof and Sardy (1985:386) warned, "The arrangement of your presentation should reflect a strict separation between data (the record of your observations) and their summary and analysis on one hand, and your interpretations, conclusion, and comment on the other."

Beginning researchers often find it difficult to organize a discussion section. One approach is to

Error of segregation A mistake made when writing qualitative research in which a writer creates too large a separation between empirical details and abstract theorizing.

organize the discussion according to hypotheses, discussing how the data relate to each hypothesis. In addition, you should discuss unanticipated findings, possible alternative explanations of results, and weaknesses or limitations.

Conclusions. You should restate the research question and summarize findings in the conclusion. Its purpose is to summarize the report, and it is sometimes titled "Summary." The only sections after the conclusion are the references and appendixes. The references section contain only sources that you referred to in the text or notes of the report. Appendixes, if used, usually contain additional information on methods of data collection (e.g., questionnaire wording) or results (e.g., descriptive statistics). The footnotes or endnotes in quantitative research reports expand or elaborate on information in the text. Use them sparingly to provide secondary information that clarifies the text. They should not distract from the flow of the reading.

The Qualitative Research Report

Compared to quantitative research, most people find writing a report on qualitative research more difficult. There are fewer rules and less structure. Nevertheless, the purpose is the same: to communicate the research process and the data collected through the process. Quantitative reports present hypotheses and evidence in a logically tight and condensed style. By contrast, qualitative reports tend to be longer, and book-length reports are common (see Expansion Box 3, Why Qualitative Research Reports Are Longer).

Field Research. Field research reports rarely follow a fixed format with standard sections, and theoretical generalizations and data are not separated into distinct sections.⁸ Generalizations are intertwined with the evidence, which takes the form of detailed description with frequent quotes. Although there is no one way to write a field research report (see Expansion Box 4, Four Genres and Rhetorical Forms of Ethnographic Writing), most follow some general pattern.

Field research reports generally try to balance data presentation and analysis to avoid an excessive separation of the two, called the **error of segregation**. This occurs when we separate data

EXPANSION BOX 3 Why Qualitative Research Reports

Are Longer

- The data in a qualitative report are more difficult to condense in comparison with a quantitative report. Data are in the form of words, pictures, or sentences and include many quotes and examples.
- 2. Qualitative researchers try to create a subjective sense of empathy and understanding among readers in addition to presenting factual evidence and analytic interpretations. Detailed descriptions of specific settings and situations help readers better understand or get a feel for settings. Researchers attempt to transport the reader into the subjective worldview and meaning system of a social setting.
- 3. Qualitative researchers use less standardized techniques of gathering data, creating analytic categories, and organizing evidence than quantitative researchers. The techniques applied may be particular to individual researchers or unique settings. Thus, researchers explain what they did and why because it has not been done before.
- 4. Exploring new settings or constructing new theory is a common goal in qualitative research. The development of new concepts and examination of relationships among them adds to the length of reports. Theory flows out of evidence, and detailed descriptions demonstrate how the researcher created interpretations.
- 5. Qualitative researchers may use more varied writing styles, which increases length. They have more freedom to employ literary devices to tell a story or recount a tale.

from analysis so much that readers cannot see the connection. $^{9}\,$

The tone of field research reports tends to be less objective and formal and more personal than quantitative studies. Often, they are in the first person (i.e., using the pronoun *I*) because the researcher was directly involved in the setting, interacted with the people studied, and was the measurement "instrument." The researcher's decisions or indecisions, feelings, reactions, and personal experiences are essential features of the field research process.

Field research reports often face more skepticism than quantitative reports do. This makes assessing an audience's demands for evidence and establishing credibility essential. The key is to give readers enough evidence so that they believe the recounted events and accept the interpretations as plausible. In field research, readers expect a degree of selective observation, so the critical issue is whether other observers could reach the same conclusion had they been in the same field site and examined the same data.¹⁰

In presenting field research evidence, authors often have a data reduction dilemma. Most data are in the form of an enormous volume of field notes, but the authors cannot directly share all the observations or recorded conversations with the readers. For example, in their study of medical students, Boys in White, Becker et al. (1961) had about 5,000 pages of single-spaced field notes. Field researchers often include only about 5 percent of their field notes in a report as quotes. The remaining 95 percent is not wasted; there is just no room for it. Thus, writers select quotes and indirectly convey the rest of the data to readers. A field research report has no fixed organization to follow, although a literature review often appears near the beginning. There are many acceptable organizational forms. Lofland (1976) suggests the following:

- 1. Introduction
 - a. Most general aspects of situation
 - b. Main contours of the general situation
 - c. How materials were collected
 - **d.** Details about the setting
 - e. How the report is organized
- **2.** The situation
 - a. Analytic categories
 - **b.** Contrast between situation and other situations
 - c. Development of situation over time
- 3. Strategies
- 4. Summary and implications

Devices for organizing evidence and analysis also vary a great deal.¹¹ For example, writers can organize the report in terms of a *natural history*, an unfolding of events as the writer discovered them, or as a chronology, following the developmental cycle or career of an aspect of the setting or people in it. Another possibility is to organize the report as

EXPANSION BOX

Four Genres and Rhetorical Forms of Ethnographic Writing

Adler and Adler (2008) identified four genres and rhetorical forms used in field research-ethnographic writing: classical, mainstream, postmodern, and public ethnography.

The *classical* style is the oldest and is found in scholarly journals devoted to field research. It stresses readability and accessibility, to avoid overloading readers with a high-level vocabulary or long and complex sentences. Most often, the author will use an active rather than a passive voice and write simply to make the report accessible to an educated lay audience. The report starts with a topic or theoretical issue and a short literature review. The methods section is a personal story of the researcher's journey through the settings, the people met, and the relationships forged. Authors describe what they encountered in the field and how they gathered data in a specific time and place. Readers often get a subjective view and a sense that the researcher was "really there." Sometimes a discussion of data analysis is presented, but many classical works do not offer a detailed analysis. The data section frequently follows a progression: present a specific concept, next elaborate on it, and then offer data description. The data often are in a narrative form. The conclusions advance knowledge by adding to, going beyond, and/or modifying existing theory and often involve a shift to a more formal style. Writers often organize the report around building theory from the ground up.

Mainstream styles appear in mainstream scholarly journals. Because peer reviewers in these publications may be unfamiliar with the qualitative/interpretive sociology, they may push a positivist orientation onto ethnographic writers. As with the classical style, the author portrays a world accessed by gathering indepth, firsthand, naturalistic data. However, the mainstream style frames the discussion differently than the classical style does. The mainstream style has more distance from readers and more of a tone of expert authority than the classical style. The introduction tends to be tighter, stiffer, and more formal than in the classical style. Instead of accessibility, the emphasis is conformity to standard social scientific rhetoric, often mimicking the positivist, quantitative research report. The introduction sections tend to be much longer than those in the classical style. In these sections,

authors define terms and provide a different type of literature review, which is longer and in more depth and often has multiple subsections. The extensive literature review implies that knowledge advances in a uniform, linear progression and builds on prior scholarly contributions that are consistent with a more positivist orientation. The methods section is also longer than in the classical style. It may elaborate to justify the use of qualitative methods and to explain their epistemological bases. Researchers rarely discuss personal connections to their topics, participants, and settings because mainstream audiences may interpret such statements as evidence of bias. Authors often present the research process as if it was preplanned rather than inductive and emergent. They use the passive voice with a tone of objectivity and neutrality. There is often a discussion of specific techniques or computer programs used instead of the vague, impressionistic discussion of method found in the classical style. The data or results section of mainstream style tends to have a subheading and often includes charts or tables of some form. The form of rhetoric removes the researcher and presents data in a detached form.

A postmodern style has been used only since the 1990s and tends to appear in a few scholarly journals that share a postmodern orientation. Compared to the classical style, it rejects attempts at objectivity, principles of validity and reliability, and notions of researcher authority. Instead, it rests on a belief that there is no fixed or single standard for doing or writing field research. To the extent the postmodern style has principles, they are ones of substantive empirical contribution, aesthetic merit, reflexivity, impact on the audience, and credibility of a person's lived experience. Writing leans toward a humanistic or artistic form. Often it is a story-telling narrative written in a colloquial manner with a plot, a moral, and a point to make. The subjective voice of the researcher-author is common with a high level of self-exposure and self-awareness or reflectivity. The postmodern style may have first-person accounts of the author's experiences interspersed with semidetached discussions of those personal experiences. The primary or only source of data may be the author's personal experiences. Often the postmodern style flows in a nonlinear, unpredictable manner with frequent shifts in tone and direction and no

EXPANSION BOX 4

(continued)

clearly outlined structure or organization to the overall report.

The *public ethnography* style is the most recent form. It self-consciously tries to bring the social science findings to an educated lay audience. Its goal is to educate the public about social scientific knowledge. It usually relies on ethnographic or field research because this form of study is most easily accessible to the public. The style is found in booklength studies designed to be sold in the nonfiction sections of bookstores, appear as editorials in

a **zoom lens**, that is, to begin broadly and then increasingly focus narrowly on a specific topic. Statements can move from universal statements about all cultures, to general statements about a specific culture, to statements about a specific cultural scene, to specific statements about an aspect of culture, to specific statements about an expectific incidents.¹²

Researchers often organize the field research report around key concepts and themes. They may choose between using abstract analytic themes and themes taken from the people studied. The latter gives readers a vivid description of the setting and displays knowledge of the language, concepts, categories, and beliefs of the people being written about.¹³

Field researchers discuss their method in the report, but its location and form vary. One technique is to interweave a description of the setting, the means of gaining access, the role of the researcher, and the participant/researcher relationship into the discussion of evidence and analysis. This is intensified if the writer adopts what Van Maanen (1988:73) called a "confessional" style of writing. A chronological, zoom lens, or theme-based organization allows placing the data collection method near the beginning or the end. In book-length reports, writers usually put methodological issues in a separate appendix.

Many field research reports contain transcriptions of tape recordings, maps, photographs, or charts illustrating analytic categories. To suppleop-ed pages of national newspapers, or as articles in more high-brow, intellectual magazines. In a booklength version, the author tries to draw in readers using visual maps, photographs, and rich descriptions. The discussions of methods are short and informal. There may not be a literature review. Authors relegate the methodology or literature citations to footnotes or appendices. The writing style is novelistic with very long quotes and very detailed descriptions. Theory is either absent or very limited in this style.

ment the data, we usually place them near the data discussion that they complement. Photographs give a visual inventory of the settings described in the text and present their meanings in the terms of the people studied. For example, field research articles have appeared in the form of all photographs, a script for a play, and a documentary film.¹⁴

Direct, personal involvement in the intimate details of a social setting heightens ethical concerns. We write in a manner that protects the privacy of those we study and help prevent the publication of a report from harming the people we studied.¹⁵ We usually change the names of members and exact locations in field reports. Personal involvement in field research leads many researchers to include a short autobiography. For example, in the appendix to Street Corner Society the author, William Foote Whyte (1955), gave a detailed account of the occupations of his father and grandfather, his own hobbies and interests, the jobs he had held, how he ended up going to graduate school, and how his research had been affected by his getting married.

Zoom lens A method of organizing a field research report in which the author begins broadly with a topic and then increasingly focuses it more narrowly and specifically. *Historical-Comparative Research*. There is no single way to write a report on historicalcomparative research. Most frequently, researchers "tell a story" or describe details in general analytic categories. The writing usually goes beyond description and includes limited generalizations and abstract concepts.

Few historical-comparative (H-C) reports describe their methods in detail. Explicit sections of the report or an appendix describing methods are uncommon. Occasionally, a book-length report has a bibliographic essay that describes major sources used. More often, numerous detailed footnotes or endnotes identify sources and other evidence. For example, a twenty-page report on quantitative or field research typically has five to ten notes, whereas an H-C research report of equal length may have forty to sixty notes.

Historical-comparative reports can include photographs, maps, diagrams, charts, and tables of statistics throughout. They appear in the section that discusses the evidence to which they relate. The charts, tables, and so forth supplement a discussion and offer readers a feel for the places and people being described. These graphics can appear in conjunction with frequent quotes. Few H-C reports include tests of specific hypotheses as quantitative research does. Instead, authors try to build a web of meaning or descriptive detail and organize the evidence in a way to convey interpretations and generalizations.

Two basic modes of organizing historicalcomparative research reports are by topic and chronological order. Most writers mix the two types. For example, they can organize information chronologically within topics or organized by topic within chronological periods. They occasionally use other forms of organization by place, individual person, or major events. If the report is truly comparative, the writer has additional options, such as making comparisons within topics (see Expansion Box 5, Features to Consider in the Historical-Comparative Research Report).¹⁶

Some H-C researchers mimic the quantitative research report and use quantitative research techniques in writing their studies. They extend quantitative research rather than adopt a distinct historical-comparative research method. Their reports follow the model of a quantitative research report.

Researchers who use narrative analysis often adopt a narrative style of report writing. They organize data chronologically and try to "tell a story" around specific individuals and events.

The Research Proposal

What Is the Proposal? A research proposal is a document that presents a plan for a project to reviewers for evaluation. It can be a supervised project submitted to instructors as part of an educational degree (e.g., a master's thesis or a Ph.D. dissertation), or it can be a research project proposed to a funding agency. Its purpose is to convince reviewers that the researcher is capable of successfully conducting the proposed research project. Reviewers have more confidence that a planned project will be successfully completed if the proposal is well written and organized and demonstrates careful planning.

The proposal is similar to a research report, but is written before beginning research. A proposal describes the research question and its importance, offers a literature review, and provides a detailed account of the techniques and methods that will be used and why they are appropriate.

A quantitative research proposal has most of the parts of a research report: a title, an abstract, a problem statement, a literature review, a method or design section, and a bibliography. It lacks the results, discussion, and conclusion sections. The proposal includes a plan for data collection and analysis (e.g., types of statistics). It frequently includes a time schedule of the steps to be undertaken and an estimate of the time required for each step.

Proposals for qualitative research are more difficult to write because the research process itself is less structured and preplanned. You prepare a topic/problem statement, literature review, and bibliography. You can demonstrate your ability to complete a proposed qualitative project in two ways. First, you prepare a well-written proposal with an extensive discussion of the literature, significance of the problem, and sources. This shows reviewers your familiarity with qualitative research and the

EXPANSION BOX 5

Features to Consider in the Historical-Comparative Research Report

- Sequence. Historical-comparative researchers are sensitive to the temporal order of events and place them in a series to describe a process. For example, a researcher studying the passage of a law or the evolution of a social norm may break the process into a set of sequential steps.
- Comparison. Comparing similarities and differences lies at the heart of historical-comparative research. Make comparisons explicit and identify both similarities and differences. For example, a researcher comparing the family in two historical periods or countries begins by listing shared and nonshared traits of the family in each setting.
- Contingency. Researchers often discover that one event, action, or situation depends on or is conditioned by others. Outlining the linkages of how one event was contingent on others is critical. For example, a researcher examining the rise of local newspapers notes that it depended on the spread of literacy.
- 4. Origins and consequences. Historical-comparative researchers trace the origins of an event, action, organization, or social relationship back in time or follow its consequences into subsequent time periods. For example, a researcher explaining the end of slavery traces its origins to many movements, speeches, laws, and actions in the preceding 50 years.
- 5. Sensitivity to incompatible meaning. Meanings change over time and vary across cultures. Historical-comparative researchers ask themselves whether a word or social category had the same meaning in the past as in the present or whether a word in one culture has a direct translation in another culture. For example, a college degree had a different meaning in a historical era when it was extremely expensive and less than 1 percent of the 18- to 22-year-old population received a degree compared to the late twentieth century, when college became relatively accessible.
- 6. Limited generalization. Overgeneralization is always a potential problem in historical-comparative research. Few researchers seek rigid, fixed laws in historical, comparative explanation. They qualify statements or avoid strict determination. For

example, instead of a blanket statement that the destruction of the native cultures in areas settled by European Whites was the inevitable consequence of advanced technological culture, a researcher may list the specific factors that combined to explain the destruction in particular social-historical settings.

- 7. Association. The concept of association is used in all forms of social research. As in other areas, historical-comparative researchers identify factors that appear together in time and place. For example, a researcher examining a city's nineteenth century crime rate asks whether years of increased migration into the city are associated with high crime rates and whether those arrested tended to be recent immigrants.
- 8. Part and whole. Placing events in their context is important. Writers of historical-comparative research sketch linkages between parts of a process, organization, or event and the larger context in which it is found. For example, a researcher studying a particular political ritual in an eighteenth century setting describes how the ritual fit within the eighteenth century political system.
- Analogy. Analogies can be useful, but their overuse or inappropriate use is dangerous. For example, a researcher examines feelings about divorce in country X and describes them as "like feelings about death" in country Y. This analogy requires a description of "feelings about death" in country Y.
- 10. Synthesis. Historical-comparative researchers often synthesize many specific events and details into a comprehensive whole. Synthesis results from weaving together many smaller generalizations and interpretations into coherent main themes. For example, a researcher studying the French Revolution synthesizes specific generalizations about changes in social structure, international pressures, agricultural dislocation, shifting popular beliefs, and problems with government finances into a compact, coherent explanation. Researchers using the narrative form summarize the argument in an introduction or conclusion. It is a motif or theme embedded within the description. Thus, theoretical generalizations are intertwined with the evidence and appear to flow inductively out of the detailed evidence.

appropriateness of the method for studying the problem. Second, you describe a qualitative pilot study. This demonstrates motivation, familiarity with research techniques, and ability to complete a report about unstructured research.

Proposals to Fund Research. A research grant provides the resources required to complete a worthy project. Researchers whose primary goal is to use funding for personal benefit or prestige, to escape from other activities, or to build an "empire" are less successful. The strategies of proposal writing and getting grants has become an industry called **grantsmanship**.

There are many sources of funding for research proposals. Colleges, private foundations, and government agencies have programs to award grants to researchers. Researchers use the funds to purchase equipment, to pay a salary or hire assistants, for research supplies, for travel to collect data, or for help with the publication of results. The degree of competition for a grant varies a great deal, depending on the source. Some sources fund more than three out of four proposals they receive, but others fund fewer than one in twenty.

Although many sources of funding for social research exist, there might be no source willing to fund a specific project. You need to investigate funding sources and ask questions: What types of projects do they fund: applied versus basic research, specific topics, or specific research techniques? What are the deadlines? What type of proposal (e.g., length, degree of detail) is necessary? How large are most grants? What aspects (e.g., equipment, personnel, travel) of a project are or are not funded? There are many sources of information on funding

Grantsmanship The use of strategies and skills in locating appropriate funding sources and preparing quality proposals to fund research.

Request for proposals (RFP) An announcement by a funding organization that it is soliciting written plans of research projects to fund.

Principal investigator (PI) The person who is primarily in charge of research on a project that is sponsored or funded by an organization. sources. Librarians or officials responsible for research grants at a college are good resources. For example, private foundations are listed in the annual publication *The Foundation Directory. The Guide to Federal Funding for Social Scientists* lists sources in the U.S. government. In the United States, subscribers can search for funding sources in numerous newsletters on funding sources and national computerized databases. Some agencies periodically issue **requests for proposals (RFPs)** that ask for proposals to conduct research on a specific issue. Researchers need to learn about funding sources because it is essential to send the proposal to an appropriate source in order to be successful.¹⁷

You need to show a track record of past success in the proposal, especially if you are going to be in charge of the project. The person in charge of a research project is the **principal investigator (PI)**, sometimes called the *project director*. Proposals usually include the PI's curriculum vitae or academic résumé, letters of support from other researchers, and a record of past research. Reviewers feel safer investing funds in a project headed by someone with substantial research experience rather than an inexperienced novice. You can build a track record with small research projects and by assisting an experienced researcher before you seek funding as a PI.

The reviewers who evaluate a proposal judge whether a proposal project is appropriate for the funding source's goals. Most sources have guidelines that state the types of projects they will fund. For example, programs that fund basic research have the advancement of knowledge as a goal. Programs to fund applied research often have improvements in the delivery of services as a goal. Instructions for submission specify page length, number of copies, deadlines, and the like. Follow all instructions exactly. Why would reviewers give thousands of dollars to a researcher to carry out a complicated research project if he or she cannot even follow instructions on the page length of a proposal?

Proposals should be neat and professional looking. The instructions usually ask for a detailed plan for the use of time, services, and personnel. These should be clearly stated and realistic for the

project. Excessively high or low estimates, unnecessary add-ons, or omitted essentials will lower reviewers' evaluation of a proposal. Creating a budget for a proposed project is complicated and usually requires technical assistance. For example, pay rates, fringe benefit rates, and so on may not be easy to obtain. It is best to consult a grants officer at a college or an experienced proposal writer. In addition, endorsements or clearances of regulations are often necessary (e.g., IRB approval). Proposals should also include specific plans for disseminating results (e.g., publications, presentations before professional groups) and a plan for evaluating whether the project met its objectives (see Chart 1).

The proposal is a type of contract between a researcher and the funding source. Funding agencies require a final report that must include details on what the funds were spent for, study findings, and an evaluation of whether the project met its objectives. Failure to spend funds properly, to complete

CHART 1 Factors Associated with a Successful Research Proposal

- It addresses an important research question. It builds on prior knowledge and represents a substantial advance of knowledge for basic research. It documents a major social problem and holds promise for solutions for applied research.
- 2. It follows all instructions, is well written, and is easy to follow with clearly stated objectives.
- It completely describes research procedures that include high standards of research methodology, and it applies research techniques that are appropriate to the research question.
- It includes specific plans for disseminating the results and evaluating whether the project has met its objectives.
- It indicates that the project is well designed and shows serious planning. It has realistic budgets and schedules.
- It notes that the researcher has the necessary experience or background to complete the project successfully.

the project described in the proposal, or to file a final report may result in serious consequences. The researcher may be banned from receiving future funding or face legal action. A serious misuse of funds may result in the entire institution (e.g., university, business, hospital) fined and banned from receiving future funding.

The process of reviewing proposals after they are submitted to a funding source takes anywhere from a few weeks to almost a year, depending on the funding source. In most cases, reviewers rank a large group of proposals and fund only highly ranked proposals. A proposal often undergoes a peer review in which the reviewers know the proposer from the vitae in the proposal, but the proposer does not know the reviewers. Sometimes nonspecialists or nonresearchers review the proposals. Instructions on preparing a proposal indicate whether to write for specialists in a field or for an educated general audience, or both. In general, proposals that ask for large amounts of money receive closer review.

If your proposal is funded, celebrate, but only for a short time. If it is rejected, which is more likely, do not despair. Most proposals are rejected the first or second time they are submitted. Many funding sources provide written reviewer evaluations of the proposal. Always request them if they are provided. Sometimes a courteous talk on the telephone with a person at the funding source will reveal the reasons for rejection. Strengthen and resubmit a proposal based on reviewer comments. Most funding sources accept resubmissions of revised proposals. Reviewed proposals are often stronger in subsequent competitions.

THE POLITICS OF SOCIAL RESEARCH

A naïve, innocent view of social research suggests that conducting and writing about research is a pure process that operates in a sociopolitical vacuum, totally insulated from the pressures or concerns of the larger society. A more realistic view is that we face an array of ethical and political concerns when doing social research. Ethical researchers protect research participants, conduct research honestly in accordance with codes of ethics, avoid interference from sponsors, and disseminate results in an open, clear manner. The politics of social research overlaps with many issues in sponsored research. In addition, many social researchers face economically or politically powerful groups who attempt to limit what they study, how they conduct research, or how they disseminate the findings.

Limits on What Researchers Study

Direct Limits on Research. Governments or powerful groups in society may try to restrict free scientific inquiry. Some limits on research have always existed but in particular times or places they become very restrictive. In nondemocratic societies, control over or censorship of social research is the rule, not the exception. This is particularly the case with politically sensitive topics including public opinion surveys. Thus, during the late twentieth century in China, eastern Europe, South Africa, and Taiwan, for example, social researchers were suspect, limited to "safe" topics, or forced to support official government policy.¹⁸ In a number of countries, the study of sociology itself was banned as subversive after a military coup. In an extreme case, 40 percent of German scientists were dismissed from their jobs for political reasons when the Nazis "purified" universities and research centers in 1937.19 Hundreds of professors and researchers in the United States who did not publicly swear to anticommunism and cooperate with the McCarthy investigations of the 1950s were purged. At that time, people who objected to mandatory loyalty oaths, supported racial integration, or advocated the teaching of sex education were suspected of subversion and threatened with dismissal. For instance, at the University of California alone, twenty-five professors were fired for refusing to sign a loyalty oath.²⁰

Two limitations on social research are (1) gatekeepers who control access to data or subjects and (2) controls over how official statistics are collected. Gatekeepers can limit what we study and may try to protect themselves or their organizations from criticism or embarrassment. They often limit access to subjects or areas with which they have concerns. For example, in 1997, the U.S. Army dropped several questions from a 153-item questionnaire on sexual harassment to be sent to 9,000 soldiers. The reason for eliminating the six questions was that "senior Army officials feared that the responses could be highly embarrassing to the Army" (Schmitt, 1997). A social anthropologist and a law professor who were consultants on the project were upset and noted that preliminary results from an early version of the questionnaire suggested that sexual harassment at military bases was correlated with questions that asked about certain soldier behaviors (e.g., going to strip clubs, watching X-rated movies). Gatekeeper army officials did not want such questions because the answers could prove embarrassing to widespread practices on military bases.

Another limitation involves official or existing statistics that government or other large organizations collect. Whether agencies decide to collect information and how they collect it can affect research findings. Political factors often determine how phenomena (e.g., unemployment, income, educational success, poverty level) are defined in official statistics and whether such data are collected.²¹

Hundreds of social scientists regularly rely on the data collected by the U.S. Census Bureau for conducting demographic, economic, and other studies. The original purpose of a census was to allocate elected representatives among states and districts. Later the Census Bureau began to gather information for making policy decisions, providing social programs, and distributing government funds based on the population in an area. The Census Bureau has become a major source of social science information and a clearinghouse for official statistics on many topics. Serious distortions (e.g., systematic overcounts or undercounts of some people or areas) in Census Bureau statistics weaken research findings based on them, prevent full democratic representation, and undermine a fair distribution of social programs or funds.

Researchers who rely on existing statistics depend on the government to supply information or documents. In the United States, the Paperwork Reduction Act of 1980 created the Office of Information and Regulatory Affairs to determine whether

collecting information and maintaining records were necessary. The act resulted in fewer publications from government-sponsored research. In addition, the law had been "used on occasion to restrict information not supportive of executive branch policy goals" (Shattuck and Spence, 1988:47). For example, in the health field, research projects with an environmental focus that indirectly criticized business or government policy had a higher chance of being rejected for publication under "paperwork reduction" justification than projects with a traditional disease focus that indirectly blamed the victim. In the name of cost cutting, government agencies stopped collecting information, removed information from public circulation, and shifted information collection to private businesses. Officials cut U.S. government publishing offices and raised prices of their documents. Bureaucratic decisions not to collect certain information can have research information and policy implications.

Limits Due to the Influence of Politicians. Unfortunately, some people outside the scientific community attack social research when it disagrees with their social or political values. A politician or journalist may hear about a research project in a controversial area, misinterpret it, and then use the occasion to attract publicity. For example, Professor Harris Rubin at the University of Southern Illinois intended to investigate the effects of THC (the active agent in marijuana) on sexual arousal. Only contradictory myths, and almost no scientific evidence, existed at the time. He very carefully followed all required procedures and obtained all clearances, and the National Institute of Mental Health decided to fund the research project after scientific peer review. However, a conservative member of Congress learned of the research topic from nearby newspapers and introduced an amendment to prohibit further funding. In addition, Dr. Rubin had to repay all funds for the project to the federal government. Despite arguments by the scientific community that politicians should not interfere with legitimate research, the funding was cut. Politicians might fear supporting social research if an opposing candidate could tell voters that the government was paying for students to "get stoned and watch porno

films."²² In 1989, members of Congress blocked funding for a major national survey on sexual behavior to combat the AIDS epidemic because they did not believe that it was proper for social researchers to inquire into human sexual behavior (also see Example Box 1, U.S. Congressmen Question Research Funding).²³

The U.S. Senate canceled a research project on teenage sex conducted by the National Institutes of Health (NIH). The study was to survey 24,000 teens about their social activities, family lives, and sexual behaviors to provide background for understanding AIDS and other sexually transmitted diseases. Many researchers said they did not want to speak out on the issue for fear that they would become the target of attacks by political groups. Some who

EXAMPLE BOX 1

U.S. Congressmen Question Research Funding

In 1998, Representative Marshall Sanford of South Carolina said he wanted to cut National Science Foundation (NSF) funding for studies of guestionable "scientific value." Apparently believing he was a better judge of scientific value than the scientific community, he cited studies about automatic teller machines and billiards. NSF officials observed that the research to which the congressman referred, the abbreviated ATM for asynchronous transfer modes, a high-speech data technique, not automatic teller machines, and billiards is a term physicists use in atomic theory for a subatomic particle, not the game as the congressman had assumed. Representative Sanford, along with a representative from California, indicated a desire to punish the NSF for supporting what they deemed unnecessary, wasteful studies. These studies included those that investigated why people risk their resources to join social groups, differences between the social behavior of men and women, and why potential political candidates decide to run for office. Other Congress members defended the NSF and noted that such criticisms were the result of faulty, sloppy research by the politicians, not the type of research the NSF supports through its peer review process (Lederman, 1998).

spoke out said that the ability of a small minority with an extreme political ideology to kill important research was "a scandalous act" and "frightening." One researcher noted that the project was not canceled because of questions about its scientific quality or importance but because of an ideologically based decision that "we don't need to know this."²⁴

Attacks on social research, even noncontroversial but misunderstood research, hurts all researchers. Politicians may try to stop research that the scientific community recognizes as legitimate, or they promote pet projects that have little scientific value. Researchers who apply for government funds will sometimes restate their project in terms that do not attract attention. The public ridicule of researchers or the denial of research funds also encourages self-censorship and fosters a negative public opinion about social research (see Example Box 2, Political Attacks Had "Chilling Effect" on Research).

National Security and Limits on Social Research. Military secrecy and national security became major issues in the United States during World War I and World War II. Most of the concern involved technology to create weapons, but some researchers have been limited in their study of foreign nations, issues of military interest, and research into government itself. U.S. security agencies such as the National Security Administration and the Central Intelligence Agency (CIA) influenced social and natural science research into the cold war period of the 1950s.

Government control over U.S. social science research about non-Western societies was strict during the cold war era, especially from the late 1940s to the mid-1960s. Intelligence and security agencies worked closely and clandestinely with most research centers and scholarly associations. During that period, security and military government agencies and a few politicized foundations provided most funds for social research about other societies, and officials

Project Camelot A controversial social research project in Chile funded by the U.S. Army in the 1960s that violated ethical principles and raised major political concerns.

EXAMPLE BOX 2

Political Attacks Had "Chilling Effect" on Research

During the early years of the twenty-first century, U.S. Congressional representatives known as the Traditional Values Coalition targeted social and medical researchers who were to receive National Institutes of Health (NIH)-funded grants on a range of topics. As a result, the researchers report that they now engage in self-censorship. Kempner (2008) conducted two surveys in 2005 and 2006. One involved interviews with a random sample of thirty principal investigators (Pls) named in these controversies, and the other survey was a questionnaire sent to all PIs involved in these controversies (eighty-six responded). She found that a majority changed their research practices as a result of the political controversy. After the political attacks, the researchers avoided using certain terms in their research proposals or changed the focus of their research investigations to less politically sensitive topics.

monitored researchers' writings and statements for conformity with government policy. Scholars who secretly worked for or cooperated with the government agencies rapidly received research funding and see their careers advance. Independent researchers or those who asked questions about official policy rarely saw research funds and faced career limitations. Conducting research that contradicted official policy was almost impossible.²⁵

One government research project in the 1960s created a great controversy. The U.S. Army funded **Project Camelot**, which involved respected social researchers who went to Chile to study political insurgency and mobilization. Several aspects of the project created controversy. First, the project's goal was to determine how to prevent peasants and disadvantaged groups in Third World countries from taking independent political action to oppose a dictator. The CIA usually conducted such counterinsurgency research. The researchers were accused of using their skills and knowledge to advance military interests against disadvantaged Third World people. Second, some researchers were unaware of the source of funds. Third, officials did not inform

the research participants of the government of Chile about the project. Once Chileans discovered it, they asked that it end and that all researchers leave.²⁶

By the late 1960s and 1970s, freedom to conduct research expanded, restrictions on cross-cultural researchers were relaxed, and the government classified fewer documents. The U.S. Congress passed the *Freedom of Information Act* (FOIA) in 1966 and strengthened it in 1974. The law opened many government documents to scholars and members of the public if they filed requests with the proper government agencies. The trend toward openness and freedom of research lasted for about fifteen years, then reversed in the 1980s.

By the late 1980s the U.S. federal government expanded the range of classified documents and reduced publicly available information.²⁷ The government broadened its definition of national security, expanded the system for classifying government documents, and imposed new limits on research into "sensitive areas" even if no government agency or funds were involved. New rules made classifying information and documents already in the public domain easier. In addition, military and security officials could restrict foreign researchers from attending scholarly meetings or visiting U.S. classrooms, libraries, and research centers.²⁸

In the cold war era, CIA undercover agents often posed as social researchers to find information in foreign nations. Until 1986, the CIA had a blanket rule barring researchers from disclosing CIA sponsorship of their research. At that time, the rule was loosened to cover only cases about which the CIA believed such disclosure could harm the United States. For example, a Harvard professor had a contract with the CIA not to reveal that the agency paid for the research for a scholarly book on U.S. foreign policy.²⁹

Cross-national research involves unique issues. The scientific community condemns the use of undercover agents in the guise of researchers and the practice of hiding the source of funding for such research. Ethical guidelines for conduct in other nations specify the cooperation with host officials, the protection of research participants, and the requirement to leave information in the host nation. Nevertheless, a researcher may find interference from his-her own government, or protecting the basic human rights of the people being studied in a nondemocratic society may lead him or her to hide information from the host government involved.³⁰

After the cold war, worldwide social researchers had increased independence and academic freedom to study various societies. However, political changes in the United States that have occurred since the September 11, 2001, terrorist attacks may produce more government monitoring and influence over cross-national research.

Indirect Limits through Control over Research Funding. The most common way that politics shapes social research is through control over funds for research. This is similar to the issues involved in sponsored research. Large-scale research projects can be expensive, costing as much as \$1 million, and the funds often come from private sources or governments.

Most officials recognize that an open and autonomous social scientific community is the best path to unbiased, valid knowledge. The peerreview process promotes autonomous research. Researchers submit proposals to a government agency for funds to conduct research. Peer researchers evaluate the proposal on a proposal's scientific merit for the government agency. Although the government funds most basic research, researchers at many colleges, universities, and research centers across the nation conduct the research.

The sums for social research are tiny compared with the amounts that large corporations spend on research or with government funding of other activities. In the United States, most social research funding comes from the federal government, with university and private foundations funding projects that are limited in amount, scope, and number. Thus, for large projects, researchers go to the government for funds.

Prior to World War II in the United States, a few private foundations set up by wealthy families (Carnegie, Ford, Rockefeller, and Sage) funded most social research. The foundations sought information about the serious social problems that appeared with early industrialism. They also wanted to discourage links between radicals and social researchers and to

protect established social institutions. After a number of years, "the production of social science research thus becomes regularized or routinized, and its connection with sponsoring organizations becomes obscured from the public's view" (Seybold, 1987:197). Private foundation funds redirected social research efforts away from its early applied, action-oriented, critical, neighborhood-centered focus that involved local participation and toward detached, professional, positivist, and academic research. After World War II, government research funding expanded. Private foundations maintained a role setting research priorities through the 1960s when federal government funds surpassed private funds.³¹ Government research funds increased, but funding for the social sciences and sociology remained tiny. In the United States, research funding for sociology has been less than 1 percent of federal funding for basic research.

In the United States, social research funding is available from several federal agencies including the National Science Foundation; the Departments of Defense, Justice, Labor, Commerce, Housing and Urban Development, and Education; the National Endowment for the Humanities; Small Business Administration; and the many institutes under the Department of Health and Human Services. The federal government itself employs researchers, but most social research is conducted at colleges and universities or independent research institutes.

Early in their histories, the primary funding sources for social research in the United States (the National Science Foundation and National Institutes of Health) supported only basic positivist research for political reasons. Social scientists agreed to exclude nonpositivist social research and applied studies to win backing from natural scientists, to counter popular perceptions that social science was "fluff," and to repel charges by ideological conservatives that social science was "left-wing." In addition, the NSF avoided funding research on controversial topics (e.g., sex, political power) due to a fear in the political climate of the 1950s and 1960s that the study of such topics could jeopardize public support for social science research.

Political processes determine how much money goes to various agencies for social research and the applied/basic split. Although the scientific review committees within agencies evaluate the scientific merit of submitted proposals, political officials decide the total amount of funds available. Politicians set the priorities based on political party or ideological interests. This affects the amount of research funding available (see Example Box 3, Political Influence on Crime Research in the United States).

Ideological criticisms of social research caused reduced funding for social science research in the National Science Foundation by 24 percent between 1976 and 1980 in constant dollars. Despite an outcry by researchers, funding dropped another 17 percent

EXAMPLE BOX **3** Political Influence on Crime Research in the United States

Savelsberg and colleagues (2002) asked whether political pressures in the United States altered the direction of social research on crime issues between 1951 and 1993. They looked at scholarly journal articles and asked whether shifts in politics affected research through providing funds for research and whether changing the organization of academic fields in colleges and universities influenced the theories used (i.e., individual problems versus social forces or inequalities), topics examined (e.g., street crime and illegal drugs versus white-collar crimes) and the crime perspectives applied (i.e., micro-level enforcement versus macro level or understanding criminal behavior). They found that funding by agencies that tried to advance a political agenda and new academic departments created to be better aligned and more responsive to political interests rather than acting as an independent research community both had an effect on the types of studies conducted. Nonetheless, while funding and new organizational units affected which topics researchers studied and which theories they tested, these factors did not affect whether data supported the theories. Thus, political forces did influence the theories, topics, and perspectives to which researchers devoted attention and efforts, but political factors did not influence how researchers designed or conducted the research studies or the results they determined.

between 1980 and 1983. Some political leaders believed that the research results supported the policies of their ideological opponents. Politicians also cut applied research funds. In response, the professional associations of several social science disciplines joined together to form a lobbying organization, the Consortium of Social Science Associations (COSSA).³²

The overall level of funding for social research may have remained unchanged for 90 years. Funds from the private Social Science Research Council in the late 1920s, once adjusted for inflation and the size of the academic profession, probably totaled more than funding for social science research from the National Science Foundation given now.³³

Political values can limit the questions researchers can examine and set research priorities. By focusing on some research questions and limiting alternatives, advocacy groups try to shape the research conducted, and the information that we have about society. For example, politicians may allocate funds for applied research to demonstrate how "burdensome" the costs of regulation are for large corporations but reject funding for research to investigate the benefits of regulation for consumers. Politicians can increase funds to study crime committed by drug addicts but eliminate funds to study crime committed by corporate executives. Politicians may provide funds for research on how to promote entrepreneurship while cutting funds to study the human consequences of social program cutbacks.34

Political-ideological interference into all scientific research increased between 2001 and 2008. A 2004 statement by the Union of Concerned Scientists and endorsed by 8,000 leading scientists said that the George W. Bush administration had politicized science to an egregious degree, sharply departing from the long-standing practices of presidents and administrators of both parties (Kevlevs, 2006:761).

Social researchers address issues that bear directly on social beliefs, values, and policies. The priorities of advocacy groups and ideologically committed politicians for these issues are distinct from the priorities of the scientific community. This has both positive and negative effects on the ability of social research to address societal needs and advance knowledge. It ensures that the concerns of politicians and vocal public groups are addressed and that issues defined as crucial to politically influential groups are researched. However, even if scientific research does not support a popular public myth (e.g., that capital punishment has a deterrent effect), politicians and advocacy groups press repeatedly to allocate funds to try to discover evidence that confirms their nonscientific, popular beliefs. At the same time, issues central to the scientific community may go unfunded.

The scientific community has some freedom to decide research questions, but issues affecting politically marginal social groups or issues for which there is no organized lobby receive limited research funding. This imbalance of funding creates an imbalance in knowledge across issues. Eventually, we have knowledge on the issues of most interest to powerful political groups but know little from the standpoint of the nonpowerful sectors of society.

In the United States, politicians can reject research proposals that have undergone rigorous peer review for scientific merit even if the politicians never read the proposal but dislike its research topic for political-ideological reasons.35 For example, in 2005 the House of Representatives withheld funding from two peer-reviewed research projects at the National Institute of Mental Health (NIMH). One grant dealt with visual perception in pigeons; the other examined how psychological traits contribute to successful marriages. The request to block funds from these studies came from a congressman who was a real estate developer in Texas without scientific expertise. Such political interferences damage the peer-review process. In fact, the same congressman tried unsuccessfully to prohibit NIMH from funding two grants to study people's selfexpression and value systems.36

Earmarked or "Pork Barrel" Funding for Research. Beginning in the 1990s, U.S. politicians increasingly circumvented the scientific peerreview process to allocate government financial support for research. The politicians "earmarked" or targeted money for specific projects at particular

universities and research institutes. They allocated funds based on political favoritism rather than on competition among proposals based on research quality or merit as evaluated by informed members of the scientific community. It appears that "pork barrel" politics—the process by which a politician distributes money to major government projects not based on importance or high priority but because those projects bring money to the businesses and supporters in the politician's home district—had spread to the funding of research.

Increasingly, researchers in some states or electoral districts receive substantial funding while others get almost nothing, based on political connections rather than on scientific merit. For example, the State University of New York at Buffalo received \$12 million to conduct research on traffic injuries as the result of a noncompetitive, political decision. The amount of research funds politically earmarked doubled between 1989 and 1993; it then remained stable for a few years. Since 1996 it has increased fivefold to roughly \$2 billion per year.

The politicized allocation of government research funds pressures universities and research institutes to court favor with influential politicians. For example, in 1995, New Hampshire received no earmarked research funds. After New Hampshire Republican Senator Judd Gregg became the chairman of an appropriations subcommittee 4 years later, New Hampshire researchers benefited as their state became the seventh highest to receive government funds. When Senator John McCain tried to end pork barrel spending for research in 2001, the U.S. Senate defeated his measure 87 to 12. Many politicians are "proud of pork" and brag about the money they "bring home" based on political favoritism rather than scientific merit. To obtain research funds, universities and research institutes increasingly must devote efforts to courting political favor and lobbying rather than encouraging research proposals that will be competitive in the merit-based peer review process.37

As the April 29, 2010, issue of *Inside Higher Ed* reported, "The leading recipients of earmarks in academe resided, not surprisingly, in states represented by some of the most powerful people in Congress. Four Mississippi institutions . . . were among the top 25 recipients of academic earmarks, due in large part to the fact that Sen. Thad Cochran, the state's senior senator, is the top Republican on the Senate Appropriations Committee" (see Table 1). One study suggests that earmarks may increase research publications by people at universities that receive them but lower the overall quality of increased number of publications (Payne, 2002).

Many research institutes and universities have turned to private donors (wealthy individuals, corporations, or foundations) for research funds. Private funding often comes with strings attached. For example, a private donor withdrew \$450,000 because a researcher at the university that received the money had publicly criticized a policy that the donor favored.38 Some donors want to support independent research with no strings, but many others use the donated funds to create subtle pressure to advance a pet policy position, ideological stand, or political agenda. Universities and research institutes try to avoid limitations on research funding from private donators, but they must balance needed hard cash from a donor against abstract ideals, such as a researcher's freedom to conduct and publish any research that advances knowledge. Some universities and research institutes might resolve the difficulty of returning or rejecting a donor's funds by agreeing to limits on open, free inquiry.

Limits on the Dissemination of Knowledge. A major norm of the scientific community is to publicly distribute knowledge. Powerful groups or institutions can impinge on social research by limiting the flow of information, restricting publication, or silencing researchers.

A 1997 news report illustrates the suppression of research findings.³⁹ A pharmaceutical company that produced a widely used drug for thyroid problems prohibited a university research team from publishing its research results that showed the drug to be ineffective. In exchange for the research funds, the researchers had signed a contract giving the company a right to veto publications of the results. Other studies show that when drug companies fund research, 98 percent of the published findings show

TABLE 1 Fifteen Top Higher Education Recipients of Congressional Earmarks in 2010

HIGHER EDUCATION INSTITUTION	TOTAL EARMARK
1. University of Alabama at Tuscaloosa	\$58,755,000
2. Mississippi State University	\$47,919,000
3. Texas A&M University	\$40,150,000
4. University of North Dakota	\$39,660,000
5. North Dakota State University	\$37,040,000
6. University of Mississippi	\$33,655,000
7. University of Hawaii	\$33,503,000
8. University of Massachusetts at Boston	\$33,002,000
9. Utah State University	\$27,190,000
10. New Mexico Institute of Mining and Technology	\$27,000,000
11. Louisiana State University	\$26,650,000
12. University of Southern Mississippi	\$22,590,000
13. West Virginia University	\$21,920,000
14. University of Louisville	\$20,150,000
15. University of Kentucky	\$19,709,000

Source: "The Academic Pork Barrel, 2010" from *Inside Higher Ed*, April 29, 2010; http://www.insidehighered.com/news/2010/04/29/earmark (accessed May 16, 2010).

that the drugs are effective. This number is far lower when the drug companies are not the funding source. Some people believe that negative findings about new products are suppressed when millions of dollars for a company are involved. Researchers may receive stock or financial incentives to show positive findings or to delay the release of negative findings. More than half of university researchers who received money from drug or biotechnology companies stated that private donors exerted influence on how they did their work.

Research on medicine or biotechnology is not the only area where profits and disseminating research findings conflict. In 1997, a Cornell University professor testified for 10 minutes at a town meeting about the labor practices of the largest nursing home corporation in the United States, Beverly Enterprises, which operates 700 nursing homes. The professor's testimony was backed up by years of research and documented by congressional reports, newspaper reports, court records, interviews, and other scholars. In 1998, the company sued the professor for \$225,000 for defaming it and demanded years of research documents and notes. This is called a **Strategic Lawsuits against Public Participation** (SLAPP) suit; its purpose is to stop public testimony.

The practice began in the 1970s when companies issued "strategic lawsuits" to silence the opposition on controversial issues.

The threat of a lawsuit by managers interviewed in a study on corporate crime delayed publication and forced the researcher to change the results. A threatened lawsuit by school officials stopped publication of a study of a boarding school. School officials wanted to change what they had said in interviews and make other changes because they disagreed with the researcher's conclusions. In another example, a questionable researcher who had been charged with conflicts of interest threatened a lawsuit to force changes in an article conducted by a team of fellow researchers.⁴⁰

SLAPP suit Type of lawsuit that wealthy, powerful organizations use to intimidate researchers and stop them from publicly expressing ideas or revealing information.

Serious charges were made between 2002 and 2004 that the federal government of the United States restricted the release of scientific information that contradicted or failed to support the administration's policy positions. These changes included censoring data on the efficacy of condoms, blocking evidence that showed abstinence is not as effective as sex education, and directing the National Cancer Institute to post a claim on its Web site stating that abortion promotes breast cancer although a major study showed no connection. In addition, government officials had removed reports on global warming from distribution based on the objections from political advisers, not scientists. The Environmental Protection Agency said it would not analyze pollution studies that contradicted official administration policy. A U.S. Department of Agriculture researcher who studied

how to decrease the odor of swine farms through diet developed related applications that also detected air contaminants. Unintentionally, the study also showed that large-scale hog confinements regularly violated federal pollution limits and produced antibiotic-resistant bacteria. A member of the hog industry learned of the research and contacted the researcher's supervisor, who in turn forbade him from presenting the findings at a research conference or submitting his study to scientific journals.⁴¹ Such actions were not as drastic as Iran's government jailing survey researchers because their results showed that a large majority of the Iranian people wanted to improve relations with the United States, contrary to the Iranian government's policy (see Summary Review Box 1, A Summary of Political Issues).

SUMMARY REVIEW BOX 1

A Summary of Political Issues

DIRECT LIMITS ON RESEARCH

- The government (or vigilante groups) bans, fires, jails, or threatens professors and researchers who study unpopular topics, openly discuss "forbidden" ideas, or make statements that the government opposes.
- Officials in government agencies or large organizations block access to official documents or statistical information or try to restrict how official data are gathered or made publicly available.
- Politicians and those in high office criticize, attack, or put public pressure to block legitimate social research that they disagree with on personal, religious, or ideological grounds.
- Officials try to block or censor research because they believe it might hinder national security or they clandestinely try to control social research for their own military or secret intelligence gathering purposes.

INDIRECT LIMITS ON RESEARCH THROUGH FUNDING

- Limits or cuts in funding for research prevent the production of new knowledge that might challenge cherished ideological beliefs or political views.
- Controls over the topics or issues receiving research funding redirect new knowledge so that it will provide support for certain policy positions.

- Pork barrel spending by politicians circumvents the peer-review processes and allocates research funds based on political favoritism or on rewarding friends in one's home district instead of being based on competition by scientific merit.
- 4. Limits are placed on the techniques, tools, or services that researchers can use to fulfill political objectives and are unrelated to the scientific research process yet add costs, time, or complications to conducting research.

LIMITS ON OR BIAS IN THE DISSEMINATION OF RESEARCH RESULTS

- Researchers are threatened with legal action or penalties if they speak freely in a public forum or openly publish the findings of their research.
- 2. Prior review or screening is required by nonscientists (i.e., corporate or political officials) before a researcher is allowed to share research findings with the scientific community or public.
- Officials and other influential people promote research findings that the scientific community considers to be seriously defective, weak, or inadequate but that advance their political agenda.

EXPANSION BOX 6 Models of Relevance

- No net effects. Social science findings produce no greater social good. Several famous social scientists who argue this are William Graham Sumner, Vilfredo Pareto, Herbert Spencer, Edward Banfield, and James Q. Wilson. These conservative social scientists see the products of research as capable of being used for anyone's self-interest and believe that, in the long run, as much harm as good has come from the greater knowledge that social science yields.
- 2. Direct and positive effects. Social science knowledge results in an improvement for all. Liberal social scientists, such as Robert Merton, who adopt this stance see knowledge about social relations leading to a more rational world. Research results on social problems help us understand the social world much better, enabling us to know how we can modify it toward some greater good. For example, Lindblom and Cohen (1979) urged a redirection of social science toward what they see as social problem solving.
- 3. Special constituency, the proletariat. Social science should be used to advance the interests and position of the working class. This is the Marxist model of the appropriate use of social research. According to it, all social science falls into three categories: the trivial, that which helps the bourgeoisie, and that which aids the proletariat. Consistent with a critical science approach, research findings should be used to advocate and defend the interests of the working class and assist workers by exposing and combatting exploitation, oppression, injustice, and repression.
- 4. Special constituency, the uncoopted. Social science should be used to aid any disadvantaged or under-

privileged group in society. This model, associated with Karl Mannheim and C. Wright Mills, is more general than the Marxian position. It sees many social groups as lacking power in society (women, consumers, racial minorities, gays, the poor, etc.) and argues that these groups are oppressed by the powerful in society who have access to education, wealth, and knowledge. The social researcher should defend those who lack a voice in society and who are manipulated by those in power. The powerful can use or purchase social science research for their own ends. Because they have a unique role in society and are in a position to learn about all areas of society, social researchers have an obligation to help the weak and share knowledge with them.

5. Special constituency, the government. Social science's proper role is to aid the decision makers of society, especially public officials. This model has been expressed by Senator Daniel Patrick Moynihan and in official National Science Foundation policy reports and is common in nondemocratic societies. It is similar to the second model (direct and positive effects), but adds the assumption that government is in the best position to use social research findings and is fully committed to eradicating social problems. It is also similar to the first (no net effects) model but implies "selling" or providing findings to the highest bidder within the limits of national loyalty. It assumes that the government operates in the best interests of everyone and that researchers have a patriotic duty to give what they learn to officials holding political power.

The Dissemination of Findings

Positivist researchers recognize two areas in which values legitimately come into play. First, researchers can select a topic area or research question. Although there are "scientific frontier" areas of inquiry in topic areas, researchers can choose a research question based on personal preference.⁴² Second, after a study is completed, researchers' values shape where they disseminate findings. The scientific community expects researchers to report findings, and funding agencies require a report, but beyond these requirements, the dissemination is up to the individual researcher.

Models of Relevance. After the research is completed an ethical-political concern may arise that Rule (1978a, 1978b) has called **models of relevance**. Rule reviewed the positions that social researchers took toward their research and its use and argued that the positions can be collapsed into five basic types (see Expansion Box 6, Models of Relevance).

The models of relevance are ideal types of the positions that social scientists take. Is the researcher

Models of relevance A set of ideal types of ways that social researchers understand the purposes of conducting research and the use of research results.

a technician who produces valid, reliable information about how society works that is be used by others? Or does the researcher belong to an independent community of professionals who have a say in what research questions are asked and how results are used? On a continuum, one extreme is the amoral researcher who lacks any concern or control over research or its use. He or she supplies the knowledge that others request and nothing more. This was the stance that many scientists in Nazi Germany took to justify collaborating with Nazi practices, which were later classified as "crimes against humanity." He or she "just follows orders" and "just does the job" but asks "no questions." At the other extreme are researchers who have total control over research and its use.

The approaches to social science are associated with different models of relevance as are different political views.⁴³ Positivists tend to follow the "direct and positive effects" or "special constituency, the government" model. The interpretive researcher follows the "no net effects" or the "uncoopted" model. Critical social scientists follow the "special constituency, the proletariat" or "special constituency, the uncoopted" models.

Specific researchers or research projects cross between models. For example, Whyte (1986) described research on employee ownership as crossing between three constituencies (the proletariat, the uncoopted, and the government) and as having direct and positive effects.

Since Rule developed models of relevance, a new model has appeared with a large increase in the number and size of nongovernmental private **think tanks** in the United States. This sixth model is *special constituency, wealthy individuals, and corporations.* It states that social research can reflect a researcher's political values and advance the political goals of wealthy groups who seek to maintain or expand their power. The think tanks are research and public organizations funded by wealthy indi-

Think tank An organization (usually nonprofit, nongovernmental) in which one or more researchers, writers, journalists, and others develop, refine, elaborate on, and publicize ideas about policy issues. viduals, corporations, and political groups. For example, the Manhattan Institute, Cato Institute, Heritage Foundation, and American Enterprise Institute grew dramatically from the early 1980s to the 1990s. They have a particular politicalideological viewpoint and use social research or pseudoscience to advance their agenda. Think tanks pay researchers, sponsor research reports, and draw public attention to results supporting their views (see Example Box 4, Ethics, Politics, and the Misuse of Survey Research).

Think tank studies vary in quality. Their studies often lack peer review and are short on solid

EXAMPLE BOX **4** Ethics, Politics, and the Misuse of Survey Research

In a highly unusual move, the leading professional public opinion organization, the American Association for Public Opinion Research (AAPOR), sharply criticized two organizations that engaged in blatantly unethical behavior with survey research to advance narrow political goals. In 1997, the Association found that Frank Luntz of Luntz Research Corporation "repeatedly refused to make public essential factors about his research." His surveys showed strong public support for a Republican Party proposal called "Contract with America" in November 1994 that other researchers did not find. Luntz widely publicized his findings but refused to disclose basic methodological information as is required in ethical surveys.

Three years later, the AAPOR criticized Campaign Tel, Ltd. for a gross violation of confidentiality. Campaign Tel used a list with names and telephone numbers of registered Wisconsin voters and claimed to be conducting a survey. In fact, the company turned over detailed information on survey responses and phone numbers to the Wisconsin Republican Party. The AAPOR stated that it "strongly condemns any practice that poses as a survey and elicits information from a respondent for any purpose other than legitimate survey research." Campaign Tel misrepresented its true nature. By the time the AAPOR had detected and documented the unethical behavior, Campaign Tel had ceased to exist.

Source: See AAPOR website, www.aapor.org/main1.html.

evidence but long on recommendations. Their audience is not the scientific community but politicians, journalists, and the public. Their primary goal is not to advance knowledge. They promote an ideological viewpoint to shape public thinking or influence political debate. They receive significant media publicity, fame, and fortune. At the same time, traditional social scientists who operate with meager funds and lack connections to the mass media find that the public and journalists overlook their more rigorous, careful studies of the same public issues because the publicity given to think tank results overwhelms the public and journalists.

After Findings Are Published. The communalism norm of the scientific community says to make findings public. Once findings are part of the public domain, the researcher loses control over them. This means that others can use the findings for their own purposes. Although the researcher may have chosen a topic based on his or her values, once the findings are published, others can use findings to advance opposing values.

Consider, for example, that you want to increase the political rights of a Native American tribe. You study the tribe's social practices including practices that become barriers to their achieving greater power in the community. Once you publish the findings, members of the tribe can use the results to break down barriers, yet opponents can use the same findings to restrict the power of the tribe and to reinforce the barriers.

Findings That Influence Future Behavior. Did you ever do something differently than you had before because of research findings that you read? If so, you are not alone. Sometimes the dissemination of findings affects social behavior. One example is the effect of political poll results. Public opinion polls affect the political preferences of voters; that is, parts of the population change their views to correspond to what opinion polls say they have found.⁴⁴

Other social research findings can affect behavior. In fact, the dissemination of research findings may affect behavior in a way that negates or alters the original findings. For example, a study finds that professionals are likely to put a great deal of stress on the academic achievement of their children. This creates highly anxious, unhappy children. If professionals read the findings, they may alter their child-rearing behavior. Then another study, years later, might find that professionals are not likely to rear their children to achieve in academic areas any more than other groups do.

Researchers have several responses to research findings that affect social behavior:

- **1.** They ruin the predictability and regularity of human social behavior, undermining replication.
- 2. They change only trivial behaviors, so this is an issue only to researchers working in very narrow applied areas.
- **3.** They change human behavior because there are few unalterable laws of human behavior, and people will use knowledge in the public domain to change their lives.

In any case, social research has not uncovered the full complexity of human relations and behavior. Even if it had and such knowledge were fully and accurately disseminated to the entire population, social researchers would still have to study which human behaviors change and how.

Academic Freedom. Most students have heard about academic freedom but few understand it. **Academic freedom** is the existence of an open and largely unrestricted atmosphere for the free exchange of ideas and information. In open democratic societies, many people value intellectual freedom and believe in providing scholars freedom from interference. This idea is based on the belief that fundamental democratic institutions, the advance of unbiased knowledge, and freedom of expression require a free flow of ideas and information. Academic freedom is related to the autonomy of research. New ideas for research topics, the interpretation of

Academic freedom The concept that researchers and/or teachers are free to examine all topics and discuss all ideas without any restrictions, threats, or interference from people or authorities outside the community of teachers, scholars, and scientists. findings, the development of theories or hypotheses, and the open discussion of ideas require academic freedom.

Academic freedom in colleges, universities, and research institutes provides a context for the free discussion and open exchange of ideas that scientific research requires. For knowledge to advance, researchers, professors, and students need a setting in which they feel free to advance or debate diverse, and sometimes unpopular, opinions or positions a setting in which people are not afraid to explore a full range of ideas in open discussion, in classrooms, in public talks, or in publications.

You can see the importance of academic freedom by the paucity of social research in places where it is nonexistent. Social-political advocacy groups and government officials that want to restrict discussion or impose a point of view can threaten academic freedom. Restrictions on academic freedom limit the growth of knowledge about society and undermine the integrity of the research process.

Academic freedom appeared as a significant issue in the late nineteenth century as the social sciences were being institutionalized in universities. In the early years, professors lost their jobs because political officials or economic elites disliked the views expressed in classrooms or publications. University officials forced famous scholars in the early U.S. social science, like Thorsten Veblen, out of jobs because of what they said in the classroom or ideas they wrote about. The development of tenure, the idea that faculty could not be fired after a long probationary period (typically six years) without a very good reason, advanced academic freedom but does not guarantee it totally. Tenure has greatly reduced the firing of professors and researchers by university officials merely for advocating unpopular ideas.⁴⁵

Political attacks on social science are not new. They illustrate the conflict between the independent pursuit of knowledge and the views of political groups who want to impose their beliefs. These attacks raise the question: How autonomous should social science be from the values in the larger culture? The findings of social research frequently conflict with social beliefs based on nonscientific knowledge systems such as religion or political ideology. Galileo faced this issue about 400 years ago, before natural science was accepted. His astronomical findings, based on free-thinking science, contradicted official Church doctrine. Galileo was forced to recant his findings publicly under threat of torture. Silencing him slowed the advance of knowledge for a generation. The challenges of evolutionary theory also illustrate how scientific knowledge and popular beliefs conflict with one another.

Academic freedom is integral to good research. Scientific research involves more than knowing technical information (e.g., how to draw a random sample); it requires a spirit of free and open discussion, criticism based on scientific merit regardless of values, and inquiry into all areas of social life. When academic freedom is restricted, these values are threatened.

OBJECTIVITY AND VALUE FREEDOM

Some argue that social science must be as objective and unbiased as the natural sciences; others maintain that value-free, objective social science is impossible. Part of the confusion is because each term has at least two alternative definitions. Sometimes, two different terms share the same definition (see Chart 2).

The positivist approach holds that science is value free, unbiased, and objective. It collapses the definitions together. Logical-deductive, formal theory, and the separation of facts from value-based concepts guarantee value neutrality. The scientific community is free of prejudice and governed by free and open discussion. With complete value freedom and objectivity, science reveals the one and only, unified, unambiguous truth.

Max Weber, Alvin Gouldner, and Karl Mannheim are three major nonpositivist social thinkers who discussed the role of the social scientist in society. Weber (1949) argued that the fact/value separation is not clear in the social sciences. He suggested that value-laden theories define social facts or socially meaningful action. Thus, social theories necessarily contain value-based concepts because members of specific cultures create all concepts about the social world. We cannot purge the cultural content of social concepts, and socially

CHART 2 Objective, Value Free, and Unbiased

1. Objective:

- a. Opposite of *subjective;* external, observable, factual, precise, quantitative
- Logical; created by an explicit rational procedure; absence of personal or arbitrary decisions; follows specific preestablished rules
- 2. Value free:
 - Absence of any metaphysical values or assumptions; devoid of *a priori* philosophical elements; amoral
 - Lack of influence from personal prejudice or cultural values; devoid of personal opinion; no room for unsupported views; neutral
- 3. Unbiased:
 - a. Nonrandom error eliminated; absence of systematic error; technically correct
 - Lack of influence from personal prejudice or cultural values; devoid of personal opinion; no room for unsupported views; neutral

meaningful action makes sense only in a cultural context. For example, when we study racial groups, the groups are not interested in the biological differences between races. Race is a social concept; we study it because the members of a culture have attached social meaning to racial appearance. Race would be meaningless if people did not attach significance to observable racial differences.

Other social researchers have built on Weber's ideas. For example, Moore (1973) asked whether majority-group (e.g., Anglo, White) researchers can accurately study racial minorities as "outsiders," because their questions, assumptions, and interests originate in a dominant, nonminority perspective. Are the culture, values, and belief system of the dominant White culture appropriate for asking important questions and really understanding the subculture of racial minorities? Similar concerns have been raised regarding gender.⁴⁶ Being from a different culture may not preclude researching a group, but it calls for extra care and sensitivity from a researcher.

Weber (1949) also argued that social scientists cannot avoid taking stands on the social issues they

study. Researchers *must* be unbiased (i.e., neutral and devoid of personal opinion and unsupported views) when applying accepted research techniques and focus on the means or mechanisms of how the social world works, not on ends, values, or normative goals. A researcher's values must be separate from the findings, and he or she should advocate positions on specific issues only when speaking as a private citizen.

Gouldner (1976) attacked the notion of valuefree, objective social science. He argued that value freedom was used in the past to disguise specific value positions. In fact, value freedom is itself a value—one in favor of "value free." Gouldner said that complete value freedom was impossible and that scientists and other professionals use the term to hide their own values. He recommended making values explicit. A researcher can be motivated to do research by a desire to do more than study the world dispassionately. The researcher who is motivated by a strong moral desire to effect change need not invalidate good research practice.

Mannheim (1936) also questioned the ideas of value neutrality and objectivity. He saw the intellectuals of a society, especially those involved in social research, as occupying a unique social role. A person's social location in society shapes his or her ideas and viewpoints, yet social researchers are separate from most other people. Their social position influences them less because they make special efforts to learn the viewpoints of other people and empathize with all parts of society. Compared to most other people, they are less beholden to powerful elites and less subject to shifts in popular opinion, fads, and crazes. They can and should adopt a relational position—a position apart from any other specific social group yet in touch with all groups. They should be detached or marginal in society yet have connections with all parts of society, even those that are often overlooked or hidden.

Relational position Karl Mannheim's idea that professional academic researchers and intellectuals occupy a unique social position and are detached from the major groups in society, which puts them in the best position to develop unbiased knowledge.

CONCLUSION

Communicating results is a central part of the larger scientific enterprise as are the ethics and politics of social research. "Solutions" to the political issues that you may face are threefold. First, you need to be aware of such issues, be aware of potential dangers, and adopt a realistic view of the sociopolitical environment instead of a naïve view of social research. Second, you should work with others to advocate for the independence of research from outside pressures. Third, you need to educate the public and leaders of major institutions about the value and importance of independent social research. I want to end this chapter by urging you, as a consumer of social research or a new social researcher, to be self-aware. Be conscious of the place of the research in society and of the societal context of social research itself. Social researchers bring a unique perspective to the larger society. We have a responsibility to ourselves, the scientific community, and society, and we need to have an awareness of how the social sciences acquired our current place in society.

KEY TERMS

academic freedom editing error of segregation executive summary freewriting grantsmanship models of relevance paraphrasing plagiarism prewriting principal investigator (PI) Project Camelot relational position request for proposals (RFP) revising SLAPP suit think tank zoom lens

REVIEW QUESTIONS

- **1.** Discuss the relationship among prewriting, freewriting, rewriting, editing, and composing in the process of writing a research report.
- **2.** What are the primary differences in the organization of a quantitative versus a qualitative research report?
- **3.** How is a proposal to conduct research similar to and different from a final research report?
- 4. What types of limitations on social research come from the actions of politicians?
- **5.** In what ways can control over funding influence the types of issues being researched?
- **6.** How might the criteria used by government or private donors that provide funds for research differ from criteria used by peers in the scientific community?
- 7. What have been the trends in U.S. government funding for research over the past 20 years, and how might they be influencing the research that is being conducted now?
- 8. What is the source of Rule's models of relevance, and what is their usefulness?
- 9. How does academic freedom support or contradict a relational position?
- 10. What are the meanings of doing objective and value-free research?

NOTES

1. See "Plagiarism Case Documented," American Sociological Association *Footnotes*, 17(2), p. 2 or "Noted Harvard Psychiatrist Resigns Post after Faculty Group Finds He Plagiarized," *Chronicle of Higher Education*, 35(15), p. 1.

2. From Sociology Writing Group (1991).

3. For suggestions on writing, see Donald et al. (1983) and Leggett et al. (1965).

4. From Sociology Writing Group (1991:40).

5. See Fine (1988) for this and other suggestions on writing.

6. See Mullins (1977:11–30) for a discussion of outlines and the organization of quantitative research reports. Also see Williams and Wolfe (1979:85–116) for good hints on how to organize ideas in a paper.

7. Grosof and Sardy (1985:386–389) have provided suggestions on how to explain quantitative findings.

8. Lofland (1974) inductively discovered what he identifies as five major writing styles for reporting field research (generic, novel, elaborated, eventful, and interpenetrated) and discusses how they are evaluated.

9. The error of segregation is discussed in Lofland and Lofland (1984:146).

10. See Becker and Geer (1982:244) and Schatzman and Strauss (1973:130) for a discussion of this and related issues.

11. See Hammersley and Atkinson (1983) and Van Maanen (1988).

12. Discussed in Spradley (1970:162–167).

13. See Van Maanen (1988:13).

14. See Dabbs (1982) and Jackson (1978).

15. For a discussion of ethical concerns in writing field research reports, see Becker (1969), Punch (1986), and Wax (1971).

16. See Barzun and Graff (1970) and Shafer (1980) for excellent suggestions on writing about historical research.

17. For more on writing proposals to fund research projects, see Bauer (1988), Locke et al. (1987), and Quarles (1986). A somewhat dated but useful short introduction to proposal writing is found in Krathwohl (1965). 18. For Russian social science research, see Keller (1988, 1989) and Swafford (1987). Also see "Soviet Sociologist Calls Attention for Her Science," American Sociological Association *Footnotes* (April 1987), p. 2.

19. See Greenberg (1967:71).

20. For more on the decade of the 1950s and its effect on social reseachers, see Caute (1978:403–430), Goldstein (1978:360–369), and Schrecker (1986).

21. See Block and Burns (1986) and Starr (1987).

22. See Bermant (1982:138). Nelkin (1982a) provided a general discussion of "forbidden" topics in social science research.

23. "Sex Survey Is Dealt a Setback," *New York Times* (July 26, 1989), p. 7.

24. See Stephen Burd, "Scientists Fear Rise of Intrusion in Work Supported by NIH," *Chronicle of Higher Education* (October 2, 1991), p. Alff.

25. See Cumings (1997), Sanders (1979), and Simpson (1993) on U.S. government influence on area studies and internationally related academic research during the Cold War era.

26. Project Camelot is described in Horowitz (1965).

27. See Dickson (1984), Nelkin (1982b), and Shattuck and Spence (1988:2).

28. See Shattuck and Spence (1988) and Josephson (1988). Also see "Librarians Charge Plan Would Cut Flow of Data," *New York Times* (February 21, 1989).

29. For more on the CIA and social researchers, see Shattuck and Spence (1988:39–40) and Stephenson (1978).

30. For sensitive situations involving cross-national research, see Fuller (1988) and Van den Berge (1967).

31. For discussion, see Bannister (1987), Blumer (1991b), D'Antonio (1992), Hyman (1991), Ross (1991), and Seybold (1987).

32. See Dynes (1984) on COSSA.

33. The SSRC spent \$20 million for the social sciences from 1924 to 1928 (Gieger, 1986:152) compared to \$136 million allocated in 1989 by the NSF for the social sciences (D'Antonio, 1992). In the late 1920s, the number of academic social scientists was about one-tenth what it is today and a dollar had six times more purchasing power. The number of social science doctoratesincluding psychology, teaching, or conducting basic research-in 1986 was about 129,000 (Science and Engineering Personnel: A National Overview, Document NSF 90-310). The number of higher education faculty in all academic fields in 1930 was less than 83,000 (Historical Statistics of the United States, 1970, Table H696). The \$20 million over 4 years in the 1920s, or \$5 million per year, would be equivalent to roughly \$300 million in 1990. The median family income before taxes in 1929 was \$2,335 (Historical Statistics, Table G308).

34. For more on the effects of politics and funding cuts on social research in the 1980s, see Cummings (1984), Himmelstein and Zald (1984), and Zuiches (1984). For more general discussion of the effect of funding on research, see Galliher and McCartney (1973) and Dickson (1984).

35. See "NIH FY 1991 Budget Rescinded by \$3.1 Million, Congress Objects to 31 Research Projects Funded by NSF," *The Blue Sheet* (F-D-C Reports, Inc.) (May 27, 1992), p. 3.

36. Nature Neuroscience Editorial (2005).

37. See Brainard and Borrego (2003), Brainard and Southwick (2001), Cordes (1998), Payne (2003a, 2003b), and Savage (2001) on rapidly increasing pork barrel academic spending.

38. See Golder (1996).

39. Lawrence Altman, "Experts See Bias in Drug Data," *New York Times* (April 29, 1997).

40. See Punch (1986:18–19; 49–69) and Sheryl Gay Stolberg, "Gifts to Science Researchers Have Strings, Study Finds," *New York Times* (April 1, 1998). On the nursing home "SLAPP suit," see Greenhouse, "Cornell Professor Fights a Slander Suit," *New York Times*

(April 1, 1998), and news report of Morning Edition, National Public Radio (April 27, 1998).

41. See Block (2003), Clymer (2002), Krider (2004), Lee (2003), and Union of Concerned Scientists (2004).

42. For more discussion on how researchers select research questions or problems, see Gieryn (1978) and Zuckerman (1978).

43. See Brym (1980) on role of intellectuals in society.
44. Marsh (1984), Noelle-Neumann (1974, 1984), and Price (1989) discussed the effects of research results on subsequent public behavior and opinion.

45. Bartiz (1960), Schrecker (1986), Schwendinger and Schwendinger (1974), and Silva and Slaughter (1980) discuss the history of social researchers in society.

46. Committees on the Status of Women in Sociology (1986).