

Survey Research

CHAPTER OVERVIEW

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Introduction

Surveys are a very old research technique. In the Old Testament, for example, we find the following:

After the plague the Lord said to Moses and to Eleazar the son of Aaron, the priest, “Take a census of all the congregation of the people of Israel, from twenty old and upward.”

(Numbers 26: 1–2)

Ancient Egyptian rulers conducted censuses to help them administer their domains. Jesus was born away from home because Joseph and Mary were journeying to Joseph’s ancestral home for a Roman census.

A little-known survey was attempted among French workers in 1880. A German political sociologist mailed some 25,000 questionnaires to workers to determine the extent of their exploitation by employers. The rather lengthy questionnaire included items such as these:

Does your employer or his representative resort to trickery in order to defraud you of a part of your earnings?

If you are paid piece rates, is the quality of the article made a pretext for fraudulent deductions from your wages?

The survey researcher in this case was not George Gallup but Karl Marx ([1880] 1956: 208). Though 25,000 questionnaires were mailed out, there is no record of any being returned.

Today, survey research is a frequently used mode of observation in the social sciences. In a typical survey, the researcher selects a sample of respondents and administers a standardized questionnaire to them. Chapter 7 discussed sampling techniques in detail. This chapter discusses how to prepare a questionnaire and describes the various

respondent A person who provides data for analysis by responding to a survey questionnaire.

options for administering it so that respondents answer your questions adequately.

The chapter concludes with a short discussion of *secondary analysis*, the analysis of survey data collected by someone else. This use of survey results has become an important aspect of survey research in recent years, and it’s especially useful for students and others with scarce research funds.

Let’s begin by looking at the kinds of topics that researchers can appropriately study by using survey research.

Topics Appropriate for Survey Research

Surveys may be used for descriptive, explanatory, and exploratory purposes. They are chiefly used in studies that have individual people as the units of analysis. Although this method can be used for other units of analysis, such as groups or interactions, some individual persons must serve as **respondents** or informants. Thus, we could undertake a survey in which divorces were the unit of analysis, but we would need to administer the survey questionnaire to the participants in the divorces (or to some other informants).

Survey research is probably the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly. Careful probability sampling provides a group of respondents whose characteristics may be taken to reflect those of the larger population, and carefully constructed standardized questionnaires provide data in the same form from all respondents.

Surveys are also excellent vehicles for measuring attitudes and orientations in a large population. Public opinion polls—for example, Gallup, Harris, Roper, and Yankelovich—are well-known examples of this use. Indeed, polls have become so prevalent that at times the public seems unsure what to think of them. Pollsters are criticized by those who don’t think (or want to believe) that polls are

accurate (candidates who are “losing” in polls often tell voters not to trust the polls). But polls are also criticized for being *too* accurate—for example, when exit polls on election day are used to predict a winner before the actual voting is complete.

The general attitude toward public opinion research is further complicated by scientifically unsound “surveys” that nonetheless capture people’s attention because of the topics they cover and/or their “findings.” A good example is the “Hite Reports” on human sexuality. While enjoying considerable attention in the popular press, Shere Hite was roundly criticized by the research community for her data-collection methods. For example, a 1987 Hite report was based on questionnaires completed by women around the country—but which women? Hite reported that she distributed some 100,000 questionnaires through various organizations, and around 4,500 were returned.

Now 4,500 and 100,000 are large numbers in the context of survey sampling. However, given Hite’s research methods, her 4,500 respondents didn’t necessarily represent U.S. women any more than the *Literary Digest’s* enormous 1936 sample represented the U.S. electorate when their 2 million sample ballots indicated that Alf Landon would bury FDR in a landslide.

Sometimes, people use the pretense of survey research for quite different purposes. For example, you may have received a telephone call indicating you’ve been selected for a survey, only to find that the first question was “How would you like to make thousands of dollars a week right there in your own home?” Or you may have been told you could win a prize if you could name the president whose picture is on the penny. (Tell them it’s Elvis.) Unfortunately, a few unscrupulous telemarketers try to prey on the general cooperation people have given to survey researchers.

By the same token, political parties and charitable organizations have begun conducting phony “surveys.” Often under the guise of collecting public opinion about some issue, callers ultimately ask respondents for a monetary contribution.

Recent political campaigns have produced another form of bogus survey, the “push poll.” Here’s what the American Association for Public

Opinion Polling had to say in condemning this practice:

A “push poll” is a telemarketing technique in which telephone calls are used to canvass potential voters, feeding them false or misleading “information” about a candidate under the pretense of taking a poll to see how this “information” affects voter preferences. In fact, the intent is not to measure public opinion but to manipulate it—to “push” voters away from one candidate and toward the opposing candidate. Such polls defame selected candidates by spreading false or misleading information about them. The intent is to disseminate campaign propaganda under the guise of conducting a legitimate public opinion poll.

(Bednarz 1996)

In short, the labels “survey” and “poll” are sometimes misused. Done properly, however, survey research can be a useful tool of social inquiry. Designing useful (and trustworthy) survey research begins with formulating good questions. Let’s turn to that topic now.

Guidelines for Asking Questions

In social research, variables are often operationalized when researchers ask people questions as a way of getting data for analysis and interpretation. Sometimes the questions are asked by an interviewer; sometimes they are written down and given to respondents for completion. In other cases, several general guidelines can help researchers frame and ask questions that serve as excellent operationalizations of variables while avoiding pitfalls that can result in useless or even misleading information.

Surveys include the use of a **questionnaire**—an instrument specifically designed to elicit information that will be useful for analysis. Although some of the specific points to follow are more appropriate to structured questionnaires than to the

more open-ended questionnaires used in qualitative, in-depth interviewing, the underlying logic is valuable whenever we ask people questions in order to gather data.

Choose Appropriate Question Forms

Let's begin with some of the options available to you in creating questionnaires. These options include using questions or statements and choosing open-ended or closed-ended questions.

Questions and Statements

Although the term *questionnaire* suggests a collection of questions, an examination of a typical questionnaire will probably reveal as many statements as questions. This is not without reason. Often, the researcher is interested in determining the extent to which respondents hold a particular attitude or perspective. If you can summarize the attitude in a fairly brief statement, you can present that statement and ask respondents whether they agree or disagree with it. As you may remember, Rensis Likert greatly formalized this procedure through the creation of the Likert scale, a format in which respondents are asked to strongly agree, agree, disagree, or strongly disagree, or perhaps strongly approve, approve, and so forth.

questionnaire A document containing questions and other types of items designed to solicit information appropriate for analysis. Questionnaires are used primarily in survey research but also in experiments, field research, and other modes of observation.

open-ended questions Questions for which the respondent is asked to provide his or her own answers. In-depth, qualitative interviewing relies almost exclusively on open-ended questions.

closed-ended questions Survey questions in which the respondent is asked to select an answer from among a list provided by the researcher. Popular in survey research because they provide a greater uniformity of responses and are more easily processed than open-ended questions.

Both questions and statements can be used profitably. Using both in a given questionnaire gives you more flexibility in the design of items and can make the questionnaire more interesting as well.

Open-Ended and Closed-Ended Questions

In asking questions, researchers have two options. They can ask **open-ended questions**, in which case the respondent is asked to provide his or her own answer to the question. For example, the respondent may be asked, "What do you feel is the most important issue facing the United States today?" and be provided with a space to write in the answer (or be asked to report it verbally to an interviewer). As we'll see in Chapter 10, in-depth, qualitative interviewing relies almost exclusively on open-ended questions. However, they are also used in survey research.

In the case of **closed-ended questions**, the respondent is asked to select an answer from among a list provided by the researcher. Closed-ended questions are very popular in survey research because they provide a greater uniformity of responses and are more easily processed than open-ended ones.

Open-ended responses must be coded before they can be processed for computer analysis, as we'll see in Chapter 14. This coding process often requires the researcher to interpret the meaning of responses, opening the possibility of misunderstanding and researcher bias. There is also a danger that some respondents will give answers that are essentially irrelevant to the researcher's intent. Closed-ended responses, on the other hand, can often be transferred directly into a computer format.

The chief shortcoming of closed-ended questions lies in the researcher's structuring of responses. When the relevant answers to a given question are relatively clear, there should be no problem. In other cases, however, the researcher's structuring of responses may overlook some important responses. In asking about "the most important issue facing the United States," for example, his or

her checklist of issues might omit certain issues that respondents would have said were important.

The construction of closed-ended questions should be guided by two structural requirements. First, the response categories provided should be exhaustive: They should include all the possible responses that might be expected. Often, researchers ensure this by adding a category such as “Other (Please specify: _____).” Second, the answer categories must be mutually exclusive: The respondent should not feel compelled to select more than one. (In some cases, you may wish to solicit multiple answers, but these may create difficulties in data processing and analysis later on.) To ensure that your categories are mutually exclusive, carefully consider each combination of categories, asking yourself whether a person could reasonably choose more than one answer. In addition, it’s useful to add an instruction to the question asking the respondent to select the one best answer, but this technique is not a satisfactory substitute for a carefully constructed set of responses.

Make Items Clear

It should go without saying that questionnaire items need to be clear and unambiguous, but the broad proliferation of unclear and ambiguous questions in surveys makes the point worth emphasizing. We can become so deeply involved in the topic under examination that opinions and perspectives are clear to us but not to our respondents—many of whom have paid little or no attention to the topic. Or, if we have only a superficial understanding of the topic, we may fail to specify the intent of a question sufficiently. The question “What do you think about the proposed peace plan?” may evoke in the respondent a counterquestion: “Which proposed peace plan?” Questionnaire items should be precise so that the respondent knows exactly what the researcher is asking.

The possibilities for misunderstanding are endless, and no researcher is immune (Polivka and Rothgeb 1993). One of the most established research projects in the United States is the Census Bureau’s ongoing “Current Population Survey” or

CPS, which measures, among other critical data, the nation’s unemployment rate. A part of the measurement of employment patterns focuses on a respondent’s activities during “last week,” by which the Census Bureau means Sunday through Saturday. Studies undertaken to determine the accuracy of the survey found that more than half the respondents took “last week” to include only Monday through Friday. By the same token, whereas the Census Bureau defines “working full-time” as 35 or more hours a week, the same evaluation studies showed that some respondents used the more traditional definition of 40 hours per week. As a consequence, the wording of these questions in the CPS was modified in 1994 to specify the Census Bureau’s definitions.

Similarly, the use of the term *Native American* to mean *American Indian* often produces an overrepresentation of that ethnic group in surveys. Clearly, many respondents understand the term to mean “born in the United States.”

Avoid Double-Barreled Questions

Frequently, researchers ask respondents for a single answer to a question that actually has multiple parts. That seems to happen most often when the researcher has personally identified with a complex question. For example, you might ask respondents to agree or disagree with the statement “The United States should abandon its space program and spend the money on domestic programs.” Although many people would unequivocally agree with the statement and others would unequivocally disagree, still others would be unable to answer. Some would want to abandon the space program and give the money back to the taxpayers. Others would want to continue the space program but also put more money into domestic programs. These latter respondents could neither agree nor disagree without misleading you.

As a general rule, whenever the word *and* appears in a question or questionnaire statement, check whether you’re asking a double-barreled question. See “Double-Barreled and Beyond” for some imaginative variations on this theme.

Double-Barreled and Beyond

Even established, professional researchers have sometimes created double-barreled questions and worse. Consider this question, asked of U.S. citizens in April 1986, at a time when the country's relationship with Libya was at an especially low point. Some observers suggested that the United States might end up in a shooting war with the small North African nation. The Harris Poll sought to find out what U.S. public opinion was.

If Libya now increases its terrorist acts against the U.S. and we keep inflicting more damage on Libya, then inevitably it will all end in the U.S. going to war and finally invading that country which would be wrong.

Respondents were given the opportunity of answering "Agree," "Disagree," or "Not sure." Notice the elements contained in the complex statement:

1. Will Libya increase its terrorist acts against the U.S.?
2. Will the U.S. inflict more damage on Libya?
3. Will the U.S. inevitably or otherwise go to war against Libya?
4. Would the U.S. invade Libya?
5. Would that be right or wrong?

These several elements offer the possibility of numerous points of view—far more than the three alternatives offered to the survey respondents. Even if we were to assume hypothetically that Libya would "increase its terrorist attacks" and the United States would "keep inflicting more damage" in return, you might have any one of at least seven distinct expectations about the outcome:

	<i>U.S. will not go to war</i>	<i>War is probable but not inevitable</i>	<i>War is inevitable</i>
U.S. will not invade Libya	1	2	3
U.S. will invade Libya but it would be wrong		4	5
U.S. will invade Libya and it would be right		6	7

The examination of prognoses about the Libyan situation is not the only example of double-barreled questions sneaking into public opinion research. Here are some questions the Harris Poll asked in an attempt to gauge U.S. public opinion about then Soviet General Secretary Gorbachev:

He looks like the kind of Russian leader who will recognize that both the Soviets and the Americans can destroy each other with nuclear missiles so it is better to come to verifiable arms control agreements.

He seems to be more modern, enlightened, and attractive, which is a good sign for the peace of the world.

Even though he looks much more modern and attractive, it would be a mistake to think he will be much different from other Russian leaders.

How many elements can you identify in each of the questions? How many possible opinions could people have in each case? What does a simple "agree" or "disagree" really mean in such cases?

Source: Reported in *World Opinion Update*, October 1985 and May 1986, respectively.

Respondents Must Be Competent to Answer

In asking respondents to provide information, you should continually ask yourself whether they can do so reliably. In a study of child rearing, you might ask respondents to report the age at which they first talked back to their parents. Quite aside from the problem of defining *talking back to parents*, it's doubtful that most respondents would remember with any degree of accuracy.

As another example, student government leaders occasionally ask their constituents to indicate

how students' fees ought to be spent. Typically, respondents are asked to indicate the percentage of available funds that should be devoted to a long list of activities. Without a fairly good knowledge of the nature of those activities and the costs involved in them, the respondents cannot provide meaningful answers. Administrative costs, for example, will receive little support although they may be essential to the program as a whole.

One group of researchers examining the driving experience of teenagers insisted on asking an open-ended question concerning the number of miles driven since receiving a license. Although

consultants argued that few drivers would be able to estimate such information with any accuracy, the question was asked nonetheless. In response, some teenagers reported driving hundreds of thousands of miles.

Respondents Must Be Willing to Answer

Often, we would like to learn things from people that they are unwilling to share with us. For example, Yanjie Bian indicates that it has often been difficult to get candid answers from people in China.

[Here] people are generally careful about what they say on nonprivate occasions in order to survive under authoritarianism. During the Cultural Revolution between 1966 and 1976, for example, because of the radical political agenda and political intensity throughout the country, it was almost impossible to use survey techniques to collect valid and reliable data inside China about the Chinese people's life experiences, characteristics, and attitudes towards the Communist regime.

(1994: 19–20)

Sometimes, U.S. respondents say they're undecided when, in fact, they have an opinion but think they're in a minority. Under that condition, they may be reluctant to tell a stranger (the interviewer) what that opinion is. Given this problem, the Gallup Organization, for example, has used a "secret ballot" format, which simulates actual election conditions, in that the "voter" enjoys complete anonymity. In an analysis of the Gallup Poll election data from 1944 to 1988, Andrew Smith and G. F. Bishop (1992) have found that this technique substantially reduced the percentage of respondents who said they were undecided about how they would vote.

This problem is not limited to survey research, however. Richard Mitchell (1991: 100) faced a similar problem in his field research among U.S. survivalists:

Survivalists, for example, are ambivalent about concealing their identities and inclinations. They realize that secrecy protects them from

the ridicule of a disbelieving majority, but enforced separatism diminishes opportunities for recruitment and information exchange. . . .

"Secretive" survivalists eschew telephones, launder their mail through letter exchanges, use nicknames and aliases, and carefully conceal their addresses from strangers. Yet once I was invited to group meetings, I found them cooperative respondents.

Questions Should Be Relevant

Similarly, questions asked in a questionnaire should be relevant to most respondents. When attitudes are requested on a topic that few respondents have thought about or really care about, the results are not likely to be useful. Of course, because the respondents may express attitudes even though they've never given any thought to the issue, you run the risk of being misled.

This point is illustrated occasionally when researchers ask for responses relating to fictitious people and issues. In one political poll I conducted, I asked respondents whether they were familiar with each of 15 political figures in the community. As a methodological exercise, I made up a name: Tom Sakumoto. In response, 9 percent of the respondents said they were familiar with him. Of those respondents familiar with him, about half reported seeing him on television and reading about him in the newspapers.

When you obtain responses to fictitious issues, you can disregard those responses. But when the issue is real, you may have no way of telling which responses genuinely reflect attitudes and which reflect meaningless answers to an irrelevant question.

Ideally, we would like respondents to simply report that they don't know, have no opinion, or are undecided in those instances where that is the case. Unfortunately, however, they often make up answers.

Short Items Are Best

In the interests of being unambiguous and precise and of pointing to the relevance of an issue, researchers tend to create long and complicated

items. That should be avoided. Respondents are often unwilling to study an item in order to understand it. The respondent should be able to read an item quickly, understand its intent, and select or provide an answer without difficulty. In general, assume that respondents will read items quickly and give quick answers. Accordingly, provide clear, short items that will not be misinterpreted under those conditions.

Avoid Negative Items

The appearance of a negation in a questionnaire item paves the way for easy misinterpretation. Asked to agree or disagree with the statement “The United States should not recognize Cuba,” a sizable portion of the respondents will read over the word *not* and answer on that basis. Thus, some will agree with the statement when they’re in favor of recognition, and others will agree when they oppose it. And you may never know which are which.

Similar considerations apply to other “negative” words. In a study of support for civil liberties, for example, respondents were asked whether they felt “the following kinds of people should be *prohibited* from teaching in public schools” and were presented with a list including such items as a Communist, a Ku Klux Klansman, and so forth. The response categories “yes” and “no” were given beside each entry. A comparison of the responses to this item with other items reflecting support for civil liberties strongly suggested that many respondents gave the answer “yes” to indicate willingness for such a person to teach, rather than to indicate that such a person should be prohibited from teaching. (A later study in the series using the answer categories “permit” and “prohibit” produced much clearer results.)

bias That quality of a measurement device that tends to result in a misrepresentation of what is being measured in a particular direction. For example, the questionnaire item “Don’t you agree that the president is doing a good job?” would be biased in that it would generally encourage more favorable responses.

In 1993 a national survey commissioned by the American Jewish Committee produced shocking results: One American in five believed that the Nazi Holocaust—in which six million Jews were reportedly killed—never happened; further, one in three Americans expressed some doubt that it had occurred. This research finding suggested that the Holocaust Revisionist movement in America was powerfully influencing public opinion (“1 in 5 Polled Voices Doubt on Holocaust” 1993).

In the aftermath of this shocking news, researchers reexamined the actual question that had been asked: “Does it seem possible or does it seem impossible to you that the Nazi extermination of the Jews never happened?” On reflection, it seemed clear that the complex, double-negative question could have confused some respondents.

A new survey was commissioned and asked, “Does it seem possible to you that the Nazi extermination of the Jews never happened, or do you feel certain that it happened?” In the follow-up survey, only 1 percent of the respondents believed the Holocaust never happened, and another 8 percent said they weren’t sure (“Poll on Doubt of Holocaust Is Corrected” 1994).

Avoid Biased Items and Terms

Recall from our discussion of conceptualization and operationalization in Chapter 5 that there are no ultimately true meanings for any of the concepts we typically study in social science. *Prejudice* has no ultimately correct definition; whether a given person is prejudiced depends on our definition of that term. The same general principle applies to the responses we get from people completing a questionnaire.

The meaning of someone’s response to a question depends in large part on its wording. This is true of every question and answer. Some questions seem to encourage particular responses more than other questions do. In the context of questionnaires, **bias** refers to any property of questions that encourages respondents to answer in a particular way.

Most researchers recognize the likely effect of a question that begins, “Don’t you agree with the President of the United States that . . .” No reputable

researcher would use such an item. Unhappily, the biasing effect of items and terms is far subtler than this example suggests.

The mere identification of an attitude or position with a prestigious person or agency can bias responses. The item “Do you agree or disagree with the recent Supreme Court decision that . . .” would have a similar effect. Such wording may not produce consensus or even a majority in support of the position identified with the prestigious person or agency, but it will likely increase the level of support over what would have been obtained without such identification.

Sometimes the impact of different forms of question wording is relatively subtle. For example, when Kenneth Rasinski (1989) analyzed the results of several General Social Survey studies of attitudes toward government spending, he found that the way programs were identified had an impact on the amount of public support they received. Here are some comparisons:

<i>More Support</i>	<i>Less Support</i>
“Assistance to the poor”	“Welfare”
“Halting rising crime rate”	“Law enforcement”
“Dealing with drug addiction”	“Drug rehabilitation”
“Solving problems of big cities”	“Assistance to big cities”
“Improving conditions of blacks”	“Assistance to blacks”
“Protecting social security”	“Social security”

In 1986, for example, 62.8 percent of the respondents said too little money was being spent on “assistance to the poor,” whereas in a matched survey that year, only 23.1 percent said we were spending too little on “welfare.”

In this context, be wary of what researchers call the *social desirability* of questions and answers. Whenever we ask people for information, they answer through a filter of what will make them look good. This is especially true if they’re interviewed face-to-face. Thus, for example, a particular man may feel that things would be a lot better if women were kept in the kitchen, not allowed to vote, forced to be quiet in public, and so forth. Asked whether he supports equal rights for women,

however, he may want to avoid looking like a chauvinist. Recognizing that his views are out of step with current thinking, he may choose to say “yes.”

The best way to guard against this problem is to imagine how you would feel giving each of the answers you intend to offer to respondents. If you would feel embarrassed, perverted, inhumane, stupid, irresponsible, or otherwise socially disadvantaged by any particular response, give serious thought to how willing others will be to give those answers.

The biasing effect of particular wording is often difficult to anticipate. For example, in both surveys and experiments, researchers sometimes ask respondents to consider hypothetical situations and say how they think they would behave. Those situations often involve other people, however, and the names used can affect responses. For instance, researchers have long known that male names for the hypothetical people can produce different responses than female names do. Research by Joseph Kasof (1993) points to the importance of what the specific names are: whether they generally evoke positive or negative images in terms of attractiveness, age, intelligence, and so forth. Kasof’s review of past research suggests there has been a tendency to use more positively valued names for men than for women.

As in all other research, carefully examine the purpose of your inquiry and construct items that will be most useful to it. You should never be misled into thinking there are ultimately “right” and “wrong” ways of asking the questions. When in doubt about the best question to ask, moreover, remember that you should ask more than one.

These, then, are some general guidelines for writing questions to elicit data for analysis and interpretation. Next we look at how to construct questionnaires.

Questionnaire Construction

Questionnaires are used in connection with many modes of observation in social research. Although structured questionnaires are essential to and most

directly associated with survey research, they are also widely used in experiments, field research, and other data-collection activities. For this reason, questionnaire construction can be an important practical skill for researchers. As we discuss the established techniques for constructing questionnaires, let's begin with some issues of questionnaire format.

General Questionnaire Format

The format of a questionnaire is just as important as the nature and wording of the questions asked. An improperly laid out questionnaire can lead respondents to miss questions, confuse them about the nature of the data desired, and even lead them to throw the questionnaire away.

As a general rule, a questionnaire should be spread out and uncluttered. If a self-administered questionnaire is being designed, inexperienced researchers tend to fear that their questionnaire will look too long; as a result, they squeeze several questions onto a single line, abbreviate questions, and try to use as few pages as possible. These efforts are ill-advised and even dangerous. Putting more than one question on a line will cause some respondents to miss the second question altogether. Some respondents will misinterpret abbreviated questions. More generally, respondents who find they have spent considerable time on the first page of what seemed like a short questionnaire will be more demoralized than respondents who quickly complete the first several pages of what initially seemed like a rather long form. Moreover, the latter will have made fewer errors and will not have been forced to reread confusing, abbreviated questions. Nor will they have been forced to write a long answer in a tiny space.

Similar problems can arise for interviewers in a face-to-face or telephone interview. Like respondents to a self-administered questionnaire, interviewers may miss questions, lose their place, and generally become frustrated and flustered. Interview questionnaires need to be laid out in a way that supports the interviewer's work, including special instructions and guidelines that go beyond

what respondents to a self-administered questionnaire would need.

The desirability of spreading out questions in the questionnaire cannot be overemphasized. Squeezed-together questionnaires are disastrous, whether completed by the respondents themselves or administered by trained interviewers. The processing of such questionnaires is another nightmare; I'll have more to say about that in Chapter 14.

Formats for Respondents

In one of the most common types of questionnaire items, the respondent is expected to check one response from a series. For this purpose my experience has been that boxes adequately spaced apart are the best format. Modern word processing makes the use of boxes a practical technique these days; setting boxes in type can also be accomplished easily and neatly. You can approximate boxes by using brackets: [], but if you're creating a questionnaire on a computer, you should take the few extra minutes to use genuine boxes that will give your questionnaire a more professional look. Here are some easy examples:

Rather than providing boxes to be checked, you might print a code number beside each response and ask the respondent to circle the appropriate number (see Figure 9-1). This method has the added advantage of specifying the code number to be entered later in the processing stage (see Chapter 14). If numbers are to be circled, however, you should provide clear and prominent instructions to the respondent, because many will be tempted to cross out the appropriate number, which makes data processing more difficult. (Note that the technique can be used more safely when interviewers administer the questionnaires, because the interviewers themselves record the responses.)

Contingency Questions

Quite often in questionnaires, certain questions will be relevant to some of the respondents and irrelevant to others. In a study of birth control

Did you happen to vote in the last presidential election?

1. Yes
2. No
3. Don't know

Have you ever felt you were the victim of sexual discrimination?

1. Yes
2. No
3. Don't know

FIGURE 9-1

Circling the Answer

methods, for instance, you would probably not want to ask men if they take birth control pills.

This sort of situation often arises when researchers wish to ask a series of questions about a certain topic. You may want to ask whether your respondents belong to a particular organization and, if so, how often they attend meetings, whether they have held office in the organization, and so forth. Or, you might want to ask whether respondents have heard anything about a certain political issue and then learn the attitudes of those who have heard of it.

Each subsequent question in series such as these is called a **contingency question**: Whether it is to be asked and answered is contingent on responses to the first question in the series. The proper use of contingency questions can facilitate the respondents' task in completing the questionnaire, because they are not faced with trying to answer questions irrelevant to them.

There are several formats for contingency questions. The one shown in Figure 9-2 is probably the clearest and most effective. Note two key elements in this format. First, the contingency question is isolated from the other questions by being set off to the side and enclosed in a box. Second, an arrow connects the contingency question to the answer on which it is contingent. In the illustration, only those respondents answering yes are expected to answer the contingency question. The rest of the respondents should simply skip it.

23. Have you ever smoked marijuana?

Yes

No

If yes: About how many times have you smoked marijuana?

Once

2 to 5 times

6 to 10 times

11 to 20 times

More than 20 times

FIGURE 9-2

Contingency Question Format. Contingency questions offer a structure for exploring subject areas logically in some depth.

Note that the questions shown in Figure 9-2 could have been dealt with in a single question. The question might have read, "How many times, if any, have you smoked marijuana?" The response categories, then, might have read: "Never," "Once," "2 to 5 times," and so forth. This single question would apply to all respondents, and each would find an appropriate answer category. Such a question, however, might put some pressure on respondents to report having smoked marijuana, because the main question asks how many times they have smoked it, even though it allows for those *exceptional cases who have never smoked marijuana even once*. (The emphases used in the previous sentence give a fair indication of how respondents might read the question.) The contingency question format illustrated in Figure 9-2 should reduce the subtle pressure on respondents to report having smoked marijuana.

contingency question A survey question intended for only some respondents, determined by their responses to some other question. For example, all respondents might be asked whether they belong to the Cosa Nostra, and only those who said yes would be asked how often they go to company meetings and picnics. The latter would be a contingency question.

24. Have you ever been abducted by aliens?

Yes

No

If yes: Did they let you steer the ship?

Yes

No

If yes: How fast did you go?

Warp speed

Weenie speed

FIGURE 9-3

Contingency Table. Sometimes it will be appropriate for certain kinds of respondents to skip over inapplicable questions. To avoid confusion, you should be sure to provide clear instructions to that end.

Used properly, even rather complex sets of contingency questions can be constructed without confusing the respondent. Figure 9-3 illustrates a more complicated example.

Sometimes a set of contingency questions is long enough to extend over several pages. Suppose you're studying political activities of college students, and you wish to ask a large number of questions of those students who have voted in a national, state, or local election. You could separate out the relevant respondents with an initial question such as "Have you ever voted in a national, state, or local election?" but it would be confusing to place the contingency questions in a box stretching over several pages. It would make more sense to enter instructions, in parentheses after each answer, telling respondents to answer or skip the contingency questions. Figure 9-4 provides an illustration of this method.

In addition to these instructions, it's worthwhile to place an instruction at the top of each page containing only the contingency questions. For example, you might say, "This page is only for respondents who have voted in a national, state, or local election." Clear instructions such as these spare respondents the frustration of reading and puzzling over questions irrelevant to them and

13. Have you ever voted in a national, state, or local election?

- Yes (Please answer questions 14–25.)
- No (Please skip questions 14–25. Go directly to question 26 on page 8.)

FIGURE 9-4

Instructions to Skip

increase the likelihood of responses from those for whom the questions are relevant.

Matrix Questions

Quite often, you'll want to ask several questions that have the same set of answer categories. This is typically the case whenever the Likert response categories are used. In such cases, it is often possible to construct a matrix of items and answers as illustrated in Figure 9-5.

This format offers several advantages over other formats. First, it uses space efficiently. Second, respondents will probably find it faster to complete a set of questions presented in this fashion than in other ways. In addition, this format may increase the comparability of responses given to different questions for the respondent as well as for the researcher. Because respondents can quickly review their answers to earlier items in the set, they might choose between, say, "strongly agree" and "agree" on a given statement by comparing the strength of their agreement with their earlier responses in the set.

There are some dangers inherent in using this format, however. Its advantages may encourage you to structure an item so that the responses fit into the matrix format when a different, more idiosyncratic set of responses might be more appropriate. Also, the matrix question format can foster a response-set among some respondents: They may develop a pattern of, say, agreeing with all the statements. This would be especially likely if the set of statements began with several that indicated a particular orientation (for example, a liberal political perspective) with only a few later ones representing

17. Beside each of the statements presented below, please indicate whether you Strongly Agree (**SA**), Agree (**A**), Disagree (**D**), Strongly Disagree (**SD**), or are Undecided (**U**).

	SA	A	D	SD	U
a. What this country needs is more law and order.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The police should be disarmed in America.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. During riots, looters should be shot on sight.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
etc.					

FIGURE 9-5

Matrix Question Format. Matrix questions offer an efficient format for presenting a set of closed-ended questionnaire items that have the same response categories.

the opposite orientation. Respondents might assume that all the statements represented the same orientation and, reading quickly, misread some of them, thereby giving the wrong answers. This problem can be reduced somewhat by alternating statements representing different orientations and by making all statements short and clear.

Ordering Items in a Questionnaire

The order in which questionnaire items are presented can also affect responses. First, the appearance of one question can affect the answers given to later ones. For example, if several questions have been asked about the dangers of terrorism to the United States and then a question asks respondents to volunteer (open-ended) what they believe to represent dangers to the United States, terrorism will receive more citations than would otherwise be the case. In this situation, it's preferable to ask the open-ended question first.

Similarly, if respondents are asked to assess their overall religiosity ("How important is your religion to you in general?"), their responses to later questions concerning specific aspects of religiosity will be aimed at consistency with the prior assessment. The converse is true as well. If respondents are first asked specific questions about different aspects of their religiosity, their subsequent overall assessment will reflect the earlier answers. The order

of responses within a question can also make a difference (Bishop and Smith 2001).

The impact of item order is not uniform. When J. Edwin Benton and John Daly (1991) conducted a local government survey, they found that the less-educated respondents were more influenced by the order of questionnaire items than those with more education were.

Some researchers attempt to overcome this effect by randomizing the order of items. This effort is usually futile. In the first place, a randomized set of items will probably strike respondents as chaotic and worthless. The random order also makes it more difficult for respondents to answer, because they must continually switch their attention from one topic to another. Finally, even a randomized ordering of items will have the effect discussed previously—except that you'll have no control over the effect.

The safest solution is sensitivity to the problem. Although you cannot avoid the effect of item order, try to estimate what that effect will be so that you can interpret results meaningfully. If the order of items seems especially important in a given study, you might construct more than one version of the questionnaire with different orderings of the items. You will then be able to determine the effects by comparing responses to the various versions. At the very least, you should pretest your questionnaire in the different forms. (We'll discuss pretesting in a moment.)

The desired ordering of items differs between interviews and self-administered questionnaires. In the latter, it's usually best to begin the questionnaire with the most interesting set of items. The potential respondents who glance casually over the first few items should want to answer them. Perhaps the items will ask for attitudes they're aching to express. At the same time, however, the initial items should not be threatening. (It might be a bad idea to begin with items about sexual behavior or drug use.) Requests for duller, demographic data (age, gender, and the like) should generally be placed at the end of a self-administered questionnaire. Placing these items at the beginning, as many inexperienced researchers are tempted to do, gives the questionnaire the initial appearance of a routine form, and the person receiving it may not be motivated to complete it.

Just the opposite is generally true for interview surveys. When the potential respondent's door first opens, the interviewer must gain rapport quickly. After a short introduction to the study, the interviewer can best begin by enumerating the members of the household, getting demographic data about each. Such items are easily answered and generally nonthreatening. Once the initial rapport has been established, the interviewer can then move into the area of attitudes and more sensitive matters. An interview that began with the question "Do you believe in witchcraft?" would probably end rather quickly.

Questionnaire Instructions

Every questionnaire, whether it is to be completed by respondents or administered by interviewers, should contain clear instructions and introductory comments where appropriate.

It's useful to begin every self-administered questionnaire with basic instructions for completing it. Although many people these days have experience with forms and questionnaires, begin by telling them exactly what you want: that they are to indicate their answers to certain questions by placing a check mark or an *X* in the box beside the appropriate answer or by writing in their answer when asked to do so. If many open-ended questions are

used, respondents should be given some guidelines about whether brief or lengthy answers are expected. If you wish to encourage your respondents to elaborate on their responses to closed-ended questions, that should be noted.

If a questionnaire has subsections—political attitudes, religious attitudes, background data—introduce each with a short statement concerning its content and purpose. For example, "In this section, we would like to know what people consider the most important community problems." Demographic items at the end of a self-administered questionnaire might be introduced thus: "Finally, we would like to know just a little about you so we can see how different types of people feel about the issues we have been examining."

Short introductions such as these help the respondent make sense of the questionnaire. They make the questionnaire seem less chaotic, especially when it taps a variety of data. And they help put the respondent in the proper frame of mind for answering the questions.

Some questions may require special instructions to facilitate proper answering. This is especially true if a given question varies from the general instructions pertaining to the whole questionnaire. Some specific examples will illustrate this situation.

Despite attempts to provide mutually exclusive answers in closed-ended questions, often more than one answer will apply for respondents. If you want a single answer, you should make this perfectly clear in the question. An example would be "From the list below, please check the primary reason for your decision to attend college." Often the main question can be followed by a parenthetical note: "Please check the one best answer." If, on the other hand, you want the respondent to check as many answers as apply, you should make this clear.

When a set of answer categories are to be ranked by the respondent, the instructions should indicate this, and a different type of answer format should be used (for example, blanks instead of boxes). These instructions should indicate how many answers are to be ranked (for example: all; only the first and second; only the first and last; the most important and least important). These

instructions should also spell out the order of ranking (for example: “Place a 1 beside the most important item, a 2 beside the next most important, and so forth”). Rank-ordering of responses is often difficult for respondents, however, because they may have to read and reread the list several times, so this technique should be used only in those situations where no other method will produce the desired result.

In multiple-part matrix questions, giving special instructions is useful unless the same format is used throughout the questionnaire. Sometimes respondents will be expected to check one answer in each column of the matrix; in other questionnaires they’ll be expected to check one answer in each row. Whenever the questionnaire contains both formats, it’s useful to add an instruction clarifying which is expected in each case.

Pretesting the Questionnaire

No matter how carefully researchers design a data-collection instrument such as a questionnaire, there is always the possibility—indeed the certainty—of error. They will always make some mistake: an ambiguous question, one that people cannot answer, or some other violation of the rules just discussed.

The surest protection against such errors is to pretest the questionnaire in full or in part. Give the questionnaire to the ten people in your bowling league, for example. It’s not usually essential that the pretest subjects comprise a representative sample, although you should use people for whom the questionnaire is at least relevant.

By and large, it’s better to ask people to complete the questionnaire than to read through it looking for errors. All too often, a question seems to make sense on a first reading, but it proves to be impossible to answer.

Stanley Presser and Johnny Blair (1994) describe several different pretesting strategies and report on the effectiveness of each. They also provide data on the cost of the various methods.

There are many more tips and guidelines for questionnaire construction, but covering them all would take a book in itself. For now I’ll complete

this discussion with an illustration of a real questionnaire, showing how some of these comments find substance in practice.

Before turning to the illustration, however, I want to mention a critical aspect of questionnaire design: precoding. Because the information collected by questionnaires is typically transformed into some type of computer format, it’s usually appropriate to include data-processing instructions on the questionnaire itself. These instructions indicate where specific pieces of information will be stored in the machine-readable data files. Notice that the following illustration has been precoded with the mysterious numbers that appear near questions and answer categories.

A Composite Illustration

Figure 9-6 is part of a questionnaire used by the University of Chicago’s National Opinion Research Center in its General Social Survey. The questionnaire deals with people’s attitudes toward the government and is designed to be self-administered, though most of the GSS is conducted in face-to-face interviews.

Self-Administered Questionnaires

So far we’ve discussed how to formulate questions and how to design effective questionnaires. As important as these tasks are, the labor will be wasted unless the questionnaire produces useful data—which means that respondents actually complete the questionnaire. We turn now to the major methods for getting responses to questionnaires.

I’ve referred several times in this chapter to interviews and self-administered questionnaires. Actually, there are three main methods of administering survey questionnaires to a sample of respondents: self-administered questionnaires, in which respondents are asked to complete the questionnaire themselves; surveys administered by interviewers in face-to-face encounters; and surveys

10. Here are some things the government might do for the economy. Circle one number for each action to show whether you are in favor of it or against it.

- 1. Strongly in favor of
- 2. In favor of
- 3. Neither in favor of nor against
- 4. Against
- 5. Strongly against

PLEASE CIRCLE A NUMBER

a. Control of wages by legislation	1	2	3	4	5	28/
b. Control of prices by legislation	1	2	3	4	5	29/
c. Cuts in government spending	1	2	3	4	5	30/
d. Government financing of projects to create new jobs	1	2	3	4	5	31/
e. Less government regulation of business	1	2	3	4	5	32/
f. Support for industry to develop new products and technology	1	2	3	4	5	33/
g. Supporting declining industries to protect jobs	1	2	3	4	5	34/
h. Reducing the work week to create more jobs	1	2	3	4	5	35/

11. Listed below are various areas of government spending. Please indicate whether you would like to see more or less government spending in each area. Remember that if you say "much more," it might require a tax increase to pay for it.

- 1. Spend much more
- 2. Spend more
- 3. Spend the same as now
- 4. Spend less
- 5. Spend much less
- 8. Can't choose

PLEASE CIRCLE A NUMBER

a. The environment	1	2	3	4	5	8	36/
b. Health	1	2	3	4	5	8	37/
c. The police and law enforcement	1	2	3	4	5	8	38/
d. Education	1	2	3	4	5	8	39/
e. The military and defense	1	2	3	4	5	8	40/
f. Retirement benefits	1	2	3	4	5	8	41/
g. Unemployment benefits	1	2	3	4	5	8	42/
h. Culture and the arts	1	2	3	4	5	8	43/

12. If the government *had* to choose between keeping down inflation or keeping down unemployment, to which do you think it should give highest priority?

Keeping down inflation	1	44/
Keeping down unemployment	2	
Can't choose	8	

13. Do you think that labor unions in this country have too much power or too little power?

Far too much power	1	45/
Too much power	2	
About the right amount of power	3	
Too little power	4	
Far too little power	5	
Can't choose	8	

FIGURE 9-6

A Sample Questionnaire. This questionnaire excerpt is from the General Social Survey, a major source of data for analysis by social researchers around the world.

14. How about business and industry, do they have too much power or too little power?		
Far too much power	1	46/
Too much power	2	
About the right amount of power	3	
Too little power	4	
Far too little power	5	
Can't choose	8	
15. And what about the federal government, does it have too much power or too little power?		
Far too much power	1	47/
Too much power	2	
About the right amount of power	3	
Too little power	4	
Far too little power	5	
Can't choose	8	
16. In general, how good would you say labor unions are for the country as a whole?		
Excellent	1	48/
Very good	2	
Fairly good	3	
Not very good	4	
Not good at all	5	
Can't choose	8	
17. What do you think the government's role in each of these industries should be?		

- 1. Own it
- 2. Control prices and profits but not own it
- 3. Neither own it nor control its prices and profits
- 8. Can't choose

PLEASE CIRCLE A NUMBER

a. Electric power	1	2	3	8	49/
b. The steel industry	1	2	3	8	50/
c. Banking and insurance	1	2	3	8	51/

18. On the whole, do you think it should or should not be the government's responsibility to . . .

- 1. Definitely should be
- 2. Probably should be
- 3. Probably should not be
- 4. Definitely should not be
- 8. Can't choose

PLEASE CIRCLE A NUMBER

a. Provide a job for everyone who wants one	1	2	3	4	8	52/
b. Keep prices under control	1	2	3	4	8	53/
c. Provide health care for the sick	1	2	3	4	8	54/
d. Provide a decent standard of living for the old	1	2	3	4	8	55/

FIGURE 9-6

(Continued)

conducted by telephone. This section and the next two discuss each of these methods in turn.

The most common form of self-administered questionnaire is the mail survey. However, there are several other techniques that are often used as well. At times, it may be appropriate to administer a questionnaire to a group of respondents gathered at the same place at the same time. A survey of students taking introductory psychology might be conducted in this manner during class. High school students might be surveyed during homeroom period.

Some recent experimentation has been conducted with regard to the home delivery of questionnaires. A research worker delivers the questionnaire to the home of sample respondents and explains the study. Then the questionnaire is left for the respondent to complete, and the researcher picks it up later.

Home delivery and the mail can also be used in combination. Questionnaires are mailed to families, and then research workers visit homes to pick up the questionnaires and check them for completeness. Just the opposite technique is to have questionnaires hand delivered by research workers with a request that the respondents mail the completed questionnaires to the research office.

On the whole, when a research worker either delivers the questionnaire, picks it up, or both, the completion rate seems higher than it is for straight-forward mail surveys. Additional experimentation with this technique is likely to point to other ways to improve completion rates while reducing costs. The remainder of this section, however, is devoted specifically to the mail survey, which is still the typical form of self-administered questionnaire.

Mail Distribution and Return

The basic method for collecting data through the mail has been to send a questionnaire accompanied by a letter of explanation and a self-addressed, stamped envelope for returning the questionnaire. The respondent is expected to complete the questionnaire, put it in the envelope, and return it. If, by any chance, you've received such a questionnaire and failed to return it, it would be valuable to recall the reasons you had for not returning it and

keep them in mind any time you plan to send questionnaires to others.

A common reason for not returning questionnaires is that it's too much trouble. To overcome this problem, researchers have developed several ways to make returning them easier. For instance, a self-mailing questionnaire requires no return envelope: When the questionnaire is folded a particular way, the return address appears on the outside. The respondent therefore doesn't have to worry about losing the envelope.

More-elaborate designs are available also. The university student questionnaire to be described later in this chapter was bound in a booklet with a special, two-panel back cover. Once the questionnaire was completed, the respondent needed only to fold out the extra panel, wrap it around the booklet, and seal the whole thing with the adhesive strip running along the edge of the panel. The foldout panel contained my return address and postage. When I repeated the study a couple of years later, I improved on the design. Both the front and back covers had foldout panels: one for sending the questionnaire out and the other for getting it back—thus avoiding the use of envelopes altogether.

The point here is that anything you can do to make the job of completing and returning the questionnaire easier will improve your study. Imagine receiving a questionnaire that made no provisions for its return to the researcher. Suppose you had to (1) find an envelope, (2) write the address on it, (3) figure out how much postage it required, and (4) put the stamps on it. How likely is it that you would return the questionnaire?

A few brief comments on postal options are in order. You have options for mailing questionnaires out and for getting them returned. On outgoing mail, your choices are essentially between first-class postage and bulk rate. First class is more certain, but bulk rate is far cheaper. (Check your local post office for rates and procedures.) On return mail, your choice is between postage stamps and business-reply permits. Here, the cost differential is more complicated. If you use stamps, you pay for them whether people return their questionnaires or not. With the business-reply permit, you pay for

only those that are used, but you pay an additional surcharge of about a nickel. This means that stamps are cheaper if a lot of questionnaires are returned, but business-reply permits are cheaper if fewer are returned (and you won't know in advance how many will be returned).

There are many other considerations involved in choosing among the several postal options. Some researchers, for example, feel that using postage stamps communicates more "humanness" and sincerity than using bulk rate and business-reply permits does. Others worry that respondents will steam off the stamps and use them for some purpose other than returning the questionnaires. Because both bulk rate and business-reply permits require establishing accounts at the post office, you'll probably find stamps much easier for small surveys.

Monitoring Returns

The mailing of questionnaires sets up a new research question that may prove valuable to a study. Researchers shouldn't sit back idly as questionnaires are returned; instead, they should undertake a careful recording of the varying rates of return among respondents.

An invaluable tool in this activity is a return rate graph. The day on which questionnaires were mailed is labeled Day 1 on the graph, and every day thereafter the number of returned questionnaires is logged on the graph. It's usually best to compile two graphs. One shows the number returned each day—rising, then dropping. The second reports the cumulative number or percentage. In part, this activity provides the researchers with gratification, as they get to draw a picture of their successful data collection. More important, however, it serves as their guide to how the data collection is going. If follow-up mailings are planned, the graph provides a clue about when such mailings should be launched. (The dates of subsequent mailings should be noted on the graph.)

As completed questionnaires are returned, each should be opened, scanned, and assigned an identification (ID) number. These numbers should be assigned serially as the questionnaires are returned, even if other identification numbers have

already been assigned. Two examples should illustrate the important advantages of this procedure.

Let's assume you're studying attitudes toward a political figure. In the middle of the data collection, the media break the story that the politician is having extramarital affairs. By knowing the date of that public disclosure and the dates when questionnaires were received, you'll be in a position to determine the effects of the disclosure. (Recall the discussion in Chapter 8 of history in connection with experiments.)

In a less sensational way, serialized ID numbers can be valuable in estimating nonresponse biases in the survey. Barring more direct tests of bias, you may wish to assume that those who failed to answer the questionnaire will be more like respondents who delayed answering than like those who answered right away. An analysis of questionnaires received at different points in the data collection might then be used for estimates of sampling bias. For example, if the grade point averages (GPAs) reported by student respondents decrease steadily through the data collection, with those replying right away having higher GPAs and those replying later having lower GPAs, you might tentatively conclude that those who failed to answer at all have lower GPAs yet. Although it would not be advisable to make statistical estimates of bias in this fashion, you could take advantage of approximate estimates based on the patterns you've observed.

If respondents have been identified for purposes of follow-up mailing, then preparations for those mailings should be made as the questionnaires are returned. The case study later in this section discusses this process in greater detail.

Follow-up Mailings

Follow-up mailings may be administered in several ways. In the simplest, nonrespondents are simply sent a letter of additional encouragement to participate. A better method, however, is to send a new copy of the survey questionnaire with the follow-up letter. If potential respondents have not returned their questionnaires after two or three weeks, the questionnaires have probably been lost or misplaced. Receiving a follow-up letter might

encourage them to look for the original questionnaire, but if they can't find it easily, the letter may go for naught.

The methodological literature strongly suggests that follow-up mailings provide an effective method for increasing return rates in mail surveys. In general, the longer a potential respondent delays replying, the less likely he or she is to do so at all. Properly timed follow-up mailings, then, provide additional stimuli to respond.

The effects of follow-up mailings will be seen in the response rate curves recorded during data collection. The initial mailings will be followed by a rise and subsequent subsiding of returns; the follow-up mailings will spur a resurgence of returns; and more follow-ups will do the same. In practice, three mailings (an original and two follow-ups) seem the most efficient.

The timing of follow-up mailings is also important. Here the methodological literature offers less-precise guides, but I have found that two or three weeks is a reasonable space between mailings. (This period might be increased by a few days if the mailing time—out and in—is more than two or three days.)

If the individuals in the survey sample are not identified on the questionnaires, it may not be possible to re-mail only to nonrespondents. In such a case, send your follow-up mailing to all members of the sample, thanking those who may have already participated and encouraging those who have not to do so. (The case study reported later describes another method you can use in an anonymous mail survey.)

Acceptable Response Rates

A question that new survey researchers frequently ask concerns the percentage return rate, or the **response rate**, that should be achieved in a mail

response rate The number of people participating in a survey divided by the number selected in the sample, in the form of a percentage. This is also called the *completion rate* or, in self-administered surveys, the *return rate*: the percentage of questionnaires sent out that are returned.

survey. The body of inferential statistics used in connection with survey analysis assumes that all members of the initial sample complete and return their questionnaires. Because this almost never happens, response bias becomes a concern, with the researcher testing (and hoping) for the possibility that the respondents look essentially like a random sample of the initial sample, and thus a somewhat smaller random sample of the total population.

Nevertheless, overall response rate is one guide to the representativeness of the sample respondents. If a high response rate is achieved, there is less chance of significant response bias than with a low rate. Conversely, a low response rate is a danger signal, because the nonrespondents are likely to differ from the respondents in ways other than just their willingness to participate in your survey. Richard Bolstein (1991), for example, found that those who did not respond to a preelection political poll were less likely to vote than those who did participate. Estimating the turnout rate from just the survey respondents, then, would have overestimated the number who would show up at the polls.

But what is a high or low response rate? A quick review of the survey literature will uncover a wide range of response rates. Each of these may be accompanied by a statement like “This is regarded as a relatively high response rate for a survey of this type.” (A U.S. senator made this statement regarding a poll of constituents that achieved a 4 percent return rate.) Even so, it's possible to state some general guidelines about return rates. A review of published social research literature suggests that a response rate of 50 percent is considered adequate for analysis and reporting. A response of 60 percent is good; a response rate of 70 percent is very good. Bear in mind, however, that these are only rough guides; they have no statistical basis, and a demonstrated lack of response bias is far more important than a high response rate. If you want to pursue this matter further, Delbert Miller (1991: 145–55) has reviewed several specific surveys to offer a better sense of the variability of response rates.

As you can imagine, one of the more persistent discussions among survey researchers concerns

ways of increasing response rates. You'll recall that this was a chief concern in the earlier discussion of options for mailing out and receiving questionnaires. Survey researchers have developed many ingenious techniques addressing this problem. Some have experimented with novel formats. Others have tried paying respondents to participate. The problem with paying, of course, is that it's expensive to make meaningfully high payment to hundreds or thousands of respondents, but some imaginative alternatives have been used. Some researchers have said, "We want to get your two-cents' worth on some issues, and we're willing to pay"—enclosing two pennies. Another enclosed a quarter, suggesting that the respondent make some little child happy. Still others have enclosed paper money. Similarly, Michael Davern and his colleagues (2003) found that financial incentives also increased completion rates in face-to-face interview surveys (discussed in the next section).

Don Dillman (1978) provides an excellent review of the various techniques that survey researchers have used to increase return rates on mail surveys, and he evaluates the impact of each. More important, Dillman stresses the necessity of paying attention to all aspects of the study—what he calls the "Total Design Method"—rather than one or two special gimmicks.

More recently, Francis Yammarino, Steven Skinner, and Terry Childers (1991) have undertaken an in-depth analysis of the response rates achieved in many studies using different techniques. Their findings are too complex to summarize easily, but you might find some guidance there for effective survey design.

A Case Study

The steps involved in the administration of a mail survey are many and can best be appreciated in a walk-through of an actual study. Accordingly, this section concludes with a detailed description of how the student survey we discussed in Chapter 7 as an illustration of systematic sampling was administered. This study did not represent the theoretical ideal for such studies, but in that regard it

serves present purposes all the better. The study was conducted by the students in my graduate seminar in survey research methods.

As you may recall, 1,100 students were selected from the university registration tape through a stratified, systematic sampling procedure. For each student selected, six self-adhesive mailing labels were printed by the computer.

By the time we were ready to distribute the questionnaires, it became apparent that our meager research funds wouldn't cover several mailings to the entire sample of 1,100 students (questionnaire printing costs were higher than anticipated). As a result, we chose a systematic two-thirds sample of the mailing labels, yielding a subsample of 733 students.

Earlier, we had decided to keep the survey anonymous in the hope of encouraging more candid responses to some sensitive questions. (Later surveys of the same issues among the same population indicated this anonymity was unnecessary.) Thus, the questionnaires would carry no identification of students on them. At the same time, we hoped to reduce the follow-up mailing costs by mailing only to nonrespondents.

To achieve both of these aims, a special postcard method was devised. Each student was mailed a questionnaire that carried no identifying marks, plus a postcard addressed to the research office—with one of the student's mailing labels affixed to the reverse side of the card. The introductory letter asked the student to complete and return the questionnaire—assuring anonymity—and to return the postcard simultaneously. Receiving the postcard would tell us—without indicating which questionnaire it was—that the student had returned his or her questionnaire. This procedure would then facilitate follow-up mailings.

The 32-page questionnaire was printed in booklet form. The three-panel cover described earlier in this chapter permitted the questionnaire to be returned without an additional envelope.

A letter introducing the study and its purposes was printed on the front cover of the booklet. It explained why the study was being conducted (to learn how students feel about a variety of issues), how students had been selected for the study, the

importance of each student's responding, and the mechanics of returning the questionnaire.

Students were assured that their responses to the survey were anonymous, and the postcard method was explained. A statement followed about the auspices under which the study was being conducted, and a telephone number was provided for those who might want more information about the study. (Five students called for information.)

By printing the introductory letter on the questionnaire, we avoided the necessity of enclosing a separate letter in the outgoing envelope, thereby simplifying the task of assembling mailing pieces.

The materials for the initial mailing were assembled as follows. (1) One mailing label for each student was stuck on a postcard. (2) Another label was stuck on an outgoing manila envelope. (3) One postcard and one questionnaire were placed in each envelope—with a glance to ensure that the name on the postcard and on the envelope were the same in each case.

The distribution of the survey questionnaires had been set up for a bulk rate mailing. Once the questionnaires had been stuffed into envelopes, they were grouped by zip code, tied in bundles, and delivered to the post office.

Shortly after the initial mailing, questionnaires and postcards began arriving at the research office. Questionnaires were opened, scanned, and assigned identification numbers as described earlier in this chapter. For every postcard received, a search was made for that student's remaining labels, and they were destroyed.

After two or three weeks, the remaining mailing labels were used to organize a follow-up mailing. This time a special, separate letter of appeal was included in the mailing piece. The new letter indicated that many students had returned their questionnaires already, and it was very important for all others to do so as well.

The follow-up mailing stimulated a resurgence of returns, as expected, and the same logging procedures continued. The returned postcards told us which additional mailing labels to destroy. Unfortunately, time and financial pressures made a third mailing impossible, despite initial plans to do so, but the two mailings resulted in an overall return rate of 62 percent.

This illustration should give you a fairly good sense of what's involved in the execution of mailed self-administered questionnaires. Let's turn now to the second principal method of conducting surveys, in-person interviews.

Interview Surveys

The **interview** is an alternative method of collecting survey data. Rather than asking respondents to read questionnaires and enter their own answers, researchers send interviewers to ask the questions orally and record respondents' answers. Interviewing is typically done in a face-to-face encounter, but telephone interviewing, discussed in the next section, follows most of the same guidelines.

Most interview surveys require more than one interviewer, although you might undertake a small-scale interview survey yourself. Portions of this section will discuss methods for training and supervising a staff of interviewers assisting you with a survey.

This section deals specifically with survey interviewing. Chapter 10 discusses the less structured, in-depth interviews often conducted in qualitative field research.

The Role of the Survey Interviewer

There are several advantages to having a questionnaire administered by an interviewer rather than a respondent. To begin with, interview surveys typically attain higher response rates than mail surveys do. A properly designed and executed interview survey ought to achieve a completion rate of at least 80 to 85 percent. (Federally funded surveys often require one of these response rates.)

Interview A data-collection encounter in which one person (an interviewer) asks questions of another (a respondent). Interviews may be conducted face-to-face or by telephone.

Respondents seem more reluctant to turn down an interviewer standing on their doorstep than to throw away a mailed questionnaire.

The presence of an interviewer also generally decreases the number of “don’t knows” and “no answers.” If minimizing such responses is important to the study, the interviewer can be instructed to probe for answers (“If you had to pick one of the answers, which do you think would come closest to your feelings?”).

Further, if a respondent clearly misunderstands the intent of a question or indicates that he or she does not understand, the interviewer can clarify matters, thereby obtaining relevant responses. (As we’ll discuss shortly, such clarifications must be strictly controlled through formal specifications.)

Finally, the interviewer can observe respondents as well as ask questions. For example, the interviewer can note the respondent’s race if this is considered too delicate a question to ask. Similar observations can be made regarding the quality of the dwelling, the presence of various possessions, the respondent’s ability to speak English, the respondent’s general reactions to the study, and so forth. In one survey of students, respondents were given a short, self-administered questionnaire to complete—concerning sexual attitudes and behavior—during the course of the interview. While respondents completed the questionnaire, the interviewer made detailed notes regarding their dress and grooming.

This procedure raises an ethical issue. Some researchers have objected that such practices violate the spirit of the agreement by which the respondent has allowed the interview. Although ethical issues seldom are clear-cut in social research, it’s important to be sensitive to them, as we saw in Chapter 3.

Survey research is of necessity based on an unrealistic stimulus-response theory of cognition and behavior. Researchers must assume that a questionnaire item will mean the same thing to every respondent, and every given response must mean the same when given by different respondents. Although this is an impossible goal, survey questions are drafted to approximate the ideal as closely as possible.

The interviewer must also fit into this ideal situation. The interviewer’s presence should not affect a respondent’s perception of a question or the answer given. In other words, the interviewer should be a neutral medium through which questions and answers are transmitted.

As such, different interviewers should obtain exactly the same responses from a given respondent. (Recall our earlier discussions of reliability.) This neutrality has a special importance in area samples. To save time and money, a given interviewer is typically assigned to complete all the interviews in a particular geographic area—a city block or a group of nearby blocks. If the interviewer does anything to affect the responses obtained, the bias thus interjected might be interpreted as a characteristic of that area.

Let’s suppose that a survey is being done to determine attitudes toward low-cost housing in order to help in the selection of a site for a new government-sponsored development. An interviewer assigned to a given neighborhood might—through word or gesture—communicate his or her own distaste for low-cost housing developments. Respondents might therefore tend to give responses in general agreement with the interviewer’s own position. The results of the survey would indicate that the neighborhood in question strongly resists construction of the development in its area when in fact their apparent resistance simply reflects the interviewer’s attitudes.

General Guidelines for Survey Interviewing

The manner in which interviews ought to be conducted will vary somewhat by survey population and survey content. Nevertheless, some general guidelines apply to most interviewing situations.

Appearance and Demeanor

As a rule, interviewers should dress in a fashion similar to that of the people they’ll be interviewing. A richly dressed interviewer will probably have difficulty getting good cooperation and responses from poorer respondents; a poorly dressed