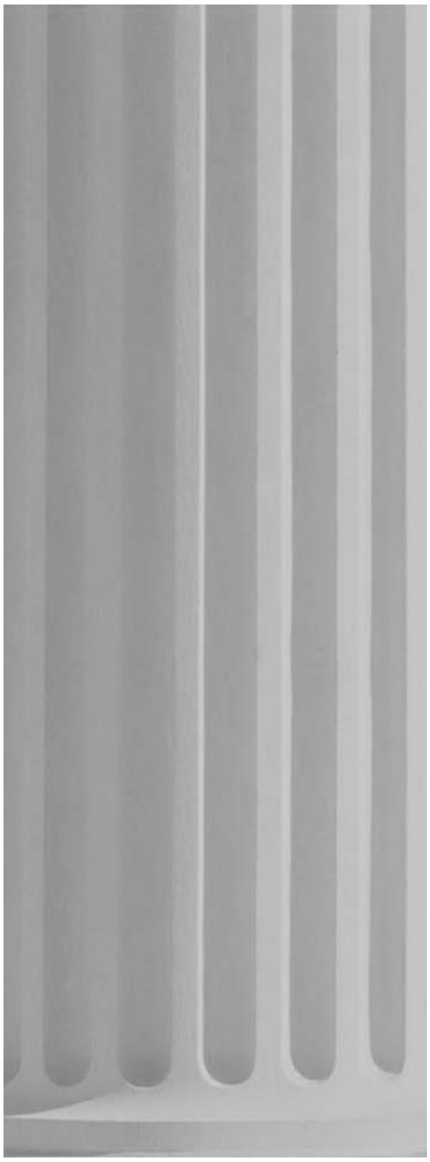
CHAPTER 4

Survey Research



KEY TERMS

dichotomous question
filter or contingency question
focus group
group-administered questionnaire
interval-level response format
Likert response format
mail survey
multioption variable
nominal response format
ordinal response format
response brackets
response format
response scale
sample
sampling
sampling frame
semantic differential
single-option variable
structured response formats
telephone interview
unstructured response formats

OUTLINE

Survey research (Fowler, 2001) is one of the most important areas of measurement in applied social research. In this chapter, I'll begin at the most specific level: how to construct the questions for a survey. I'll discuss a number of issues, including the different types of questions, decisions about question content, decisions about question wording, decisions about response format, and question placement and sequence in your instrument. I'll turn next to some of the special issues involved when there is an interviewer collecting the responses. I'll then move to a broader view and examine the different types of surveys that are possible. These are roughly divided into two general categories: questionnaires and interviews. Next, I'll explain how you select the survey method that's best for your situation. Finally, I'll consider some of the advantages and disadvantages of each type of survey method.

4-1 Constructing the Survey

Constructing a survey instrument is an art in itself. You must make numerous small decisions—about content, wording, format, and placement—that can have important consequences for your entire study. Although there's no one perfect way to accomplish this job, I do have advice to offer that might increase your chances of developing a better final product.

Three primary issues are involved in writing a question:

- Determining the question content, scope, and purpose
- Choosing the response format that you use for collecting information from the respondent
- Figuring out how to word the question to get at the issue of interest

After you have your questions written, there is also the issue of how best to place them in your survey.

You'll see that although many aspects of survey construction are just common sense, if you are not careful, you can make critical errors that have dramatic effects on your results. It cannot be emphasized enough that pilot testing of questions and surveys will always pay off in identification of problems with wording, omissions, typos, and various surprising responses to items that you had been thinking were just right.

4-1a Types of Questions

Survey questions can be divided into two broad types: *structured* and *unstructured.* From an instrument design point of view, the structured questions pose the greater

FIGURE 4–1 **Dichotomous response formats for a survey question**

Do you believe that the death penalty is ever justified?

___Yes

___No

Please enter your gender:

☐ Male ☐ Female

difficulties (see Section 4-1c, Response Format). From a content perspective, it may actually be more difficult to write good unstructured questions. Here, I'll discuss the variety of structured questions you can consider for your survey. (I discuss unstructured questioning more in Section 4-2, Interviews.)

Dichotomous Response Formats When a question has two possible responses, it has a dichotomous response format. Surveys often use **dichotomous questions** that ask for a Yes/No, True/False, or Agree/Disagree response (Figure 4–1). There are a variety of ways to lay these questions out on a questionnaire.

dichotomous question
A question with two possible responses.

Questions Based on Level of Measurement We can also classify questions in terms of the level of measurement used in the question's **response format**. (The idea of level of measurement is covered in Chapter 3.) For instance, you might measure occupation using a **nominal response format** as in Figure 4–2. In a nominal response format, the number next to each response has no meaning except as a placeholder for that response; the choices in the example are a 2 for a lawyer and a 1 for a truck driver. From the numbering system used, you can't infer that a lawyer is twice something that a truck driver is. The primary reason you might number responses in this manner is to speed data entry. The person entering the data from this survey would need to enter only a short number rather than a longer category name like "truck driver."

response format
A response format that has a number beside each choice where the number has no meaning except as a placeholder for that response.

nominal response format
A response format that has a number beside each choice where the number has no meaning except as a placeholder for that response.

When you ask respondents to rank order their preferences, you are using an **ordinal response format**. For example, in Figure 4–3, the respondent is asked to rate candidate preferences.

ordinal response format
A response format in which respondents are asked to rank the possible answers in order of preference.

In this example, you want the respondent to put a 1, 2, 3, or 4 next to the candidate, where 1 is the respondent's first choice. Note that this could get confusing. The respondents might check their candidate instead of entering a number, or assign higher numbers to candidates they prefer more instead of understanding that you want rank ordering where a higher number means a lower rank. Notice in

FIGURE 4–2 **A nominal-level response format for a survey question**

Occupational Class:
1 = truck driver
2 = lawyer
3 = etc.

FIGURE 4–3 An ordinal-level response format for a survey question

Rank the candidates in order of preference from best to worst...

___Bob Dole

___Bill Clinton

___Newt Gingrich

___Al Gore

the example that I stated the prompt (question) explicitly, so the respondent knows I want a number from 1 to 4.

interval-level response format
A response measured on an interval level, where the size of the interval between potential response values is meaningful. Most 1 to 5 rating responses can be considered interval level.

Likert response format
An interval-level response format that uses a 5-point integer scale. For instance, a 1 to 5 rating would be considered a Likert response format.

You can also construct survey questions using an **interval-level response format**. One of the most common of these types is the traditional 1 to 5 rating (or 1 to 7, or 1 to 9, and so on). This is sometimes referred to as a *Likert scale*. However, as you will see in Chapter 5, a Likert scale is much more than this response format alone, so it's probably better to call the 1 to 5 rating a **Likert response format**. In Figure 4–4, you see how you might ask an opinion question using a 1 to 5 bipolar scale. (It's called *bipolar* because there is a neutral point, and the two ends of the scale are at opposite positions of the opinion.)

semantic differential
A scaling method in which an object is assessed by the respondent on a set of bipolar adjective pairs.

response scale
A sequential numerical response format, such as a 1-to-5 rating format.

An interval response format is used with an approach called the **semantic differential**, as shown in Figure 4–5. Here, an item is assessed by the respondent on a set of bipolar adjective pairs (in this example, a 5-point rating **response scale** is used).

Finally, another type of interval response format occurs when you use a cumulative or Guttman scale to collect responses. Here, the respondents check each item with which they agree. The items themselves are constructed so that they are cumulative; if you agree with one item, you probably agree with all of the ones above it in the list (Figure 4–6). Each item also has a scale score that is not shown with the item. A respondent's score is the highest scale score of an item with which he or she agreed.

filter or contingency question
A question you ask the respondents to determine whether they are qualified or experienced enough to answer a subsequent one.

Filter or Contingency Questions Sometimes, you have to ask the respondents one question to determine whether they are qualified or experienced enough to answer a subsequent one. This requires using a **filter or contingency question**. For instance, you may want to ask one question if the respondent has ever smoked marijuana and a different question if he or she has not. In this case, you would have to construct a filter question to determine first whether the respondent has ever smoked marijuana (Figure 4–7).

FIGURE 4–4 An interval-level response format for a survey question

The death penalty is justifiable under some circumstances.

1	2	3	4	5
strongly disagree	disagree	neutral	agree	strongly agree

FIGURE 4–5 A semantic differential response format for a survey question

Please state your opinions on national health insurance on the scale below

	very much	some-what	neither	some-what	very much	
interesting	☐	☐	☐	☐	☐	boring
simple	☐	☐	☐	☐	☐	complex
uncaring	☐	☐	☐	☐	☐	caring
useful	☐	☐	☐	☐	☐	useless

FIGURE 4–6 A cumulative response format for a survey question

Please check each statement that you agree with:
__Are you willing to permit immigrants to live in your country?
__Are you willing to permit immigrants to live in your community?
__Are you willing to permit immigrants to live in your neighborhood?
__Would you be willing to have an immigrant live next door to you?
__Would you let your child marry an immigrant?

FIGURE 4–7 A filter or contingency question

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

Filter questions can be complex. Sometimes, you have to have multiple filter questions to direct your respondents to the correct subsequent questions. You should keep the following conventions in mind when using filters:

- *Try to avoid having more than three levels (two jumps) for any question.* Too many jumps will confuse respondents and may discourage them from continuing with the survey.
- *If there are only two levels, use graphics to jump (for example an arrow and box).* The example in Figure 4–7 shows how you can make effective use of an arrow and box to help direct the respondent to the correct subsequent question.
- *If possible, jump to a new page.* If you can't fit the response to a filter on a single page, it's probably best to be able to say something like, *If YES, please turn to page 4*, rather than *If YES, please go to Question 38*, because the respondent will generally have an easier time finding a page than a specific question. One of the advantages of Web-based or other electronically formatted surveys is that branching questions can be programmed to make the transition from one item to another very simple for the respondent because the branched item automatically appears where and when it should.

4-1b Question Content

For each question in your survey, you should ask yourself how well it addresses the content you are trying to get at. The following sections cover some content-related questions you can ask about your survey questions.

Is the Question Necessary and Useful? Examine each question to determine whether you need to ask it at all and whether you need to ask it at the level of detail you currently have, as in the following examples:

- Do you need the age of each child or just the number of children younger than 16?
- Do you need to ask income or can you estimate?

Are Several Questions Needed? Sometimes, we develop a question in which we try to ask about too many things at once, as in the following examples:

- What are your feelings toward African-Americans and Hispanic-Americans?
- What do you think of proposed changes in benefits and hours?

It's hard—often impossible—for respondents to answer such questions because they have conflicting opinions. They may feel very differently about African-Americans and Hispanic-Americans, or about changes in benefits versus changes in hours. You can often spot these kinds of problem questions by looking for the conjunction *and* in your question. We refer to this classic question-writing problem as the *double-barreled question*. You should think about splitting each of the questions into two separate ones.

Another reason you might need more than one question is that the question you ask does not cover all possibilities. For instance, if you ask about earnings, the respondent might not mention all income (such as dividends or gifts). If you ask respondents if they're in favor of public TV, they might not understand that you're asking about their general opinion. They may not be in favor of public TV for themselves (they never watch it), but might favor it for their children (who watch *Sesame Street* regularly). You might be better off asking two questions: one about their own viewing and one about the viewing habits of other members of their households.

Sometimes, you need to ask additional questions because your question does not provide you with enough context to interpret the answer. For instance, if you ask about attitudes toward Catholics, can you interpret this without finding out about your respondents' attitudes toward religion in general or other religious groups?

At times, you need to ask additional questions because your question does not determine the intensity of the respondent's attitude or belief. For example, if respondents say they support public TV, you probably should also ask whether they ever watch it or if they would be willing to have their tax dollars spent on it. It's one thing for respondents to tell you they support something, but the intensity of that response is greater if they are willing to back their sentiment of support with their behavior.

Do Respondents Have the Needed Information? Look at each question in your survey to see whether the respondent is likely to have the necessary information to be able to answer the question. For example, let's say you want to ask the following question:

Do you think Dean Rusk acted correctly during the Bay of Pigs crisis?

The respondents won't be able to answer this question if they have no idea who Dean Rusk was or what the Bay of Pigs crisis was. In surveys of television viewing, you cannot expect the respondent to answer questions about shows they have never watched. You should ask a filter question first (such as, Have you ever watched the show *ER*?) before asking for opinions about it.

Does the Question Need to Be More Specific? Sometimes, researchers ask their questions too generally and the information they obtain is difficult to interpret. For example, let's say you want to find out the respondent's opinions about a specific book. You could ask the following question:

How well did you like the book?

and offer some scale ranging from "Not at All" to "Extremely Well," but what would the response mean? What does it mean to say you liked a book extremely well? Instead, you might ask questions designed to be more specific:

Did you recommend the book to others?

or

Did you look for other books by that author?

Is the Question Sufficiently General? You can err in the other direction as well by being too specific. For instance, if you ask people to list the television programs they liked best in the past week, you could get a different answer than if you asked them which show they've enjoyed most over the past year. Perhaps a show they don't usually like had a great episode in the past week, or their favorite show was preempted by another program.

Is the Question Biased or Loaded? One danger in question writing is that your own biases and blind spots may affect the wording (see Section 4-1d, Question Wording). For instance, you might generally be in favor of tax cuts. If you ask the question,

What do you see as the benefits of a tax cut?

you're asking about only one side of the issue. You might get a different picture of the respondents' positions if you also asked about the disadvantages of tax cuts. The same thing could occur if you are in favor of public welfare and you ask

What do you see as the disadvantages of eliminating welfare?

without also asking about the potential benefits.

response brackets
A question response type that includes groups of answers, such as between 30 and 40 years old, or between $50,000 and $100,000 annual income.

Will the Respondent Answer Truthfully? For each question on your survey, ask yourself whether respondents will have any difficulty answering the question truthfully. If there is some reason why they may not, consider rewording the question. For instance, some people are sensitive about answering questions about their exact age or income. In this case, you might give them **response brackets** to choose from (such as between 30 and 40 years old, or between $50,000 and $100,000 annual income). Sometimes, even bracketed responses won't be enough. Some people do not like to share how much money they give to charitable causes. (They may be afraid of opening themselves up to even more solicitations.) No matter how you word the question, they would not be likely to tell you their contribution rate. Sometimes, you can work around such problems by posing the question in terms of a *hypothetical projective respondent* (a little bit like a projective test). For example, they might respond if you ask how much money "people you know" typically give in a year to charitable causes. Finally, you can sometimes dispense with asking a question at all if you can obtain the answer unobtrusively. (This is covered in Chapter 6.) If you are interested in finding out which magazines the respondents read, you might instead tell them you are collecting magazines for a recycling drive and ask if they have any old ones to donate. Of course, you have to consider the ethical implications of such deception!

4-1c Response Format

structured response formats
A response format that is determined prior to administration.

unstructured response formats
A response format that is not predetermined and where the response is determined by the respondent. An open-ended question is a type of unstructured response format.

The response format is how you collect the answer from the respondent. Some people use the term *response scale,* but you will see in Chapter 5 that the term *scales* has a very specific meaning that we shouldn't confuse with the way you collect the data. Let's start with a simple distinction between what I call **structured response formats** and **unstructured response formats**.

Structured Response Formats Structured response formats help the respondent respond more easily and help the researcher accumulate and summarize responses more efficiently, but they can also constrain the respondent and limit the researcher's ability to understand what the respondent really means. There are many different structured response formats, each with their own strengths and weaknesses. We'll review the major ones here.

Fill-in-the-Blank. One of the simplest response formats is a blank line that can be used to collect data for a number of different response types. For instance, asking your gender as shown in Figure 4–8 is one of the simplest fill-in-the-blank formats.

Blanks are also used for checking responses in dichotomous questions, as illustrated in Figure 4–9.

Here, the respondent would probably put a checkmark or an *X* next to the response. This is also an example of a *dichotomous* response because it has only two possible values. Other common dichotomous responses are True/False and Yes/No. Another common use of a fill-in-the-blank response format is in a preference ranking, as described earlier in Figure 4–3, where respondents entered their rank

FIGURE 4–8 **A common fill-in-the-blank question**

Please enter your gender:

_____ Male

_____ Female

FIGURE 4–9 **Using blanks for checking a response**

Please enter your preference for the following candidates where '1' = your first choice, '2' = your second choice, and so on.

_____ **Robert Dole**

_____ **Colin Powell**

_____ **Bill Clinton**

_____ **Al Gore**

preferences for four candidates into the blank line in front of each category. Notice that, in this case, you expect the respondent to place a number on every blank, whereas in the previous example, you expect the respondent to choose only one.

And there's always the classic fill-in-the-blank test item (Figure 4–10).

Check the Answer. The respondent places a check next to the response(s). The simplest form would be the example given previously in Figure 4–9, which asks the respondents to indicate their gender. Sometimes, you supply a box that the person can fill in with an *X*, which is sort of a variation on the checkmark. Figure 4–11 shows a check-box format.

Notice that in this example, it is possible to check more than one response. By convention, you usually use the check-mark format when you want to allow the respondent to select multiple items.

This type of question is sometimes referred to as a **multioption variable**. You have to be careful when you analyze data from a multioption variable. Because the respondent can select any of the options, you have to treat this type of variable in your analysis as though each option is a separate variable. For instance, for each option you would normally enter into a computer either a 0 if the respondent did not check it or a 1 if the respondent did check it. For the previous example, if the respondent had only a printer and CD-ROM drive, you would enter the sequence 1, 1, 0, 0, 0 in five separate variables. There is an important reason why you should code this variable as either 0 or 1 when you enter the data. If you do, and you want to determine what percentage of your **sample** has a printer, all you have to do is compute the average of the 0's and l's for the printer variable. For instance, if you have 10 respondents and only 3 have a printer, the average would be 3/10 =.30, or 30%, which is the percentage who checked that item.

multioption variable
A question format in which the respondent can pick multiple variables from a list.

sample
The actual units you select to participate in your study.

The previous example is also a good example of a checklist item. When you use a checklist, you want to be sure that you ask the following questions:

- Are all of the alternatives covered?
- Is the list of reasonable length (not too long)?

FIGURE 4–10 **A fill-in-the-blank test item**

Name: _________________________

FIGURE 4–11 **The check-box format**

Please check if you have the following item on the computer you use most:

- ❑ modem
- ❑ printer
- ❑ CD-ROM drive
- ❑ joystick
- ❑ scanner

- Is the wording impartial?
- Is the form of the response easy, uniform?

Sometimes, you may not be sure that you have covered all of the possible responses in a checklist. If that is the case, you should probably allow the respondent to write in any other options that apply.

Circle the Answer. Sometimes, respondents are asked to circle an item to indicate their response. Usually, you are asking them to circle a number. For instance, you might have the example shown in Figure 4–12.

If respondents are answering questions on a computer, it's not feasible to have them circle a response. In this case, you would most likely use an option button, as shown in Figure 4–13. With an option button, only one option at a time can be checked. The rule of thumb is that you ask people to circle an item or click a button when you want them to be able to select only one of the options. In contrast to the multioption variable, this type of item is referred to as a **single-option variable;** even though the respondents have multiple choices, they can select only one of them. You would analyze this as a single variable that can take the integer values from 1 to 5.

single-option variable
A question response list from which the respondent can check only one response.

FIGURE 4–12 **A circle-the-answer response format**

Capital punishment is the best way to deal with convicted murderers.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

FIGURE 4–13 **An option button response format on the Web.**

Capital punishment is the best way to deal with convicted murderers.

○	○	○	○	○
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

FIGURE 4–14 **The unstructured response format**

Please add any other comments:

____

____

____

Unstructured Response Formats A wide variety of structured response formats exist; however, there are relatively few unstructured ones. What is an unstructured response format? Generally, it is written text. If the respondent (or interviewer) writes down text as the response, you have an unstructured response format. These can vary from short comment boxes to the transcript of an interview.

In almost every short questionnaire, there's usually one or more short text field questions. One of the most frequent is shown in Figure 4–14.

Actually, there's really not much more to text-based response formats of this type than writing the prompt and allowing enough space for a reasonable response.

Transcripts are an entirely different matter. In those cases, the transcriber has to decide whether to transcribe every word or record only major ideas, thoughts, quotes, and so on. In detailed transcriptions, you may also need to distinguish different speakers (such as the interviewer and respondent) and have a standard convention for indicating comments about what's going on in the interview, including nonconversational events that take place and thoughts of the interviewer.

4-1d Question Wording

One of the major difficulties in writing good survey questions is getting the wording right. Even slight wording differences can confuse the respondent or lead to incorrect interpretations of the question. Here, I outline some questions you can ask about how you worded each of your survey questions.

Can the Question be Misunderstood? The survey author always has to be on the lookout for questions that could be misunderstood or confusing. For instance, if you ask a person for his or her nationality, it might not be clear what you want. (Do you want someone from Indonesia to say *Indonesian, Asian,* or *Pacific Islander*?) Or, if you ask for marital status, do you want people to say simply that they are either married or not married? Or do you want more detail (like divorced, widow/widower, and so on)?

Some terms are too vague to be useful. For instance, if you ask a question about the mass media, what do you mean? The newspapers? Radio? Television?

Here's one of my favorites. Let's say you want to know the following:

> What kind of headache remedy do you use?

Do you want to know what brand name medicine respondents take? Do you want to know about home remedies? Are you asking whether they prefer a pill, capsule, or caplet?

What Assumptions Does the Question Make? Sometimes, you don't stop to consider how a question will appear from the respondent's point of view. You don't think about the assumptions behind the questions. For instance, if you ask what social class someone's in, you assume that they know what social class is and that they think of themselves as being in one. In this case, you may need to use a filter question first to determine whether either of these assumptions is true.

Is the Time Frame Specified? Whenever you use the words *will, could, might,* or *may* in a question, you might suspect that the question asks a time-related question. Be sure that, if it does, you have specified the time frame precisely. For instance, you might ask:

> Do you think Congress will cut taxes?

or something like

> Do you think Congress could successfully resist tax cuts?

Neither of these questions specifies a time frame. You can specify a time frame for the first question, such as:

> Do you think Congress will cut taxes during its current session?

How Personal is the Wording? By changing just a few words, a question can go from being relatively impersonal to probing into private perspectives. Consider the following three questions, each of which asks about the respondent's satisfaction with working conditions:

- Are working conditions satisfactory or not satisfactory in the plant where you work?
- Do you feel that working conditions are satisfactory or not satisfactory in the plant where you work?
- Are you personally satisfied with working conditions in the plant where you work?

The first question is stated from a fairly detached, objective viewpoint. The second asks how you feel. The last asks whether you are personally satisfied. Be sure the questions in your survey are at an appropriate level for your context, and be sure that level is consistent across questions in your survey.

Is the Wording Too Direct? At times, asking a question too directly may be threatening or disturbing for respondents. For instance, consider a study in which you want to discuss battlefield experiences with former soldiers who experienced trauma. Examine the following three question options:

- How did you feel about being in the war?
- How well did the equipment hold up in the field?
- How well were new recruits trained?

The first question may be too direct. For this population, it may elicit powerful negative emotions based on individual recollections. The second question is a less direct one. It asks about equipment in the field, but for this population, it may also lead the discussion toward more difficult issues to discuss directly. The last question is probably the least direct and least threatening. Bashing the new recruits is standard protocol in almost any social context. The question is likely to get the respondent talking and recounting anecdotes, without eliciting much stress. Of course, all of this may simply be begging the question. If you are doing a study where the respondents might experience high levels of stress because of the questions you ask, you should reconsider the ethics of doing the study.

Other Wording Issues The nuances of language guarantee that the task of the question writer is endlessly complex. Without trying to generate an exhaustive list, here are a few other guidelines to keep in mind:

- Questions should not contain difficult or unclear terminology.
- Questions should make each alternative clear.
- Question wording should not be objectionable.

- Question wording should not be loaded or slanted. That is, they should not steer the respondent to a particular response (Otherwise, why ask them the question?).

4-1e Question Placement

One of the most difficult tasks facing the survey designer involves the ordering of questions. Which topics should be introduced early in the survey, and which later? If you leave your most important questions until the end, you may find that your respondents are too tired to give them the kind of attention you would like. If you introduce them too early, they may not yet be ready to address the topic, especially if it is a difficult or disturbing one. There are no easy answers to these problems; you have to use your judgment. When you think about question placement, consider the following potential issues:

- The answer may be influenced by prior questions.
- The question may come too early or too late to arouse interest.
- The question may not receive sufficient attention because of the questions around it.

The Opening Questions Just as in other aspects of life, first impressions are important in survey work. The first few questions you ask will determine the tone for the survey and can help put your respondent at ease. With that in mind, the opening few questions should, in general, be easy to answer. You might start with some simple descriptive questions that will get the respondent rolling. You should never begin your survey with sensitive or threatening questions.

Sensitive Questions In much of your social research, you will have to ask respondents about difficult or uncomfortable subjects. Before asking such questions, you should attempt to develop some trust or rapport with the respondent. Often, preceding the sensitive questions with some easier warm-up ones will help, but you have to make sure that the sensitive material does not come up abruptly or appear unconnected to the rest of the survey. It is often helpful to have a transition sentence between sections of your instrument to give the respondent some idea of the kinds of questions that are coming. For instance, you might lead into a section on personal material with the following transition: "In this next section of the survey, we'd like to ask you about your personal relationships. Remember, we do not want you to answer any questions if you are uncomfortable doing so."

If you are interested in a topic that will require sensitive questions, you must also consider the ethical aspects of such a study. Most institutional review boards (IRBs) will look closely at sensitive questions and ask you to assess the likelihood of a respondent becoming upset or being "at risk" in other ways. You will also be required to specify the procedures you will use in such instances to assist a participant who becomes distressed during your study. The procedures will have to be described in the protocol you submit to your IRB as well as in the informed consent procedure you use in your study. Local norms may vary in terms of what is considered sensitive, but some examples might include grief, sexuality, abuse, substance use, and illegal activity, among others.

Guidelines for Question Sequencing The survey-design business has lots of conventions or rules of thumb. You can use the following suggestions when reviewing your instrument:

- Start with easy, nonthreatening questions.
- Put more difficult, threatening questions near the end.
- Never start a mail survey with an open-ended question.

- For historical demographics, follow chronological order.
- Ask about one topic at a time.
- When switching topics, use a transition.
- Reduce response set (the tendency of the respondent to just keep checking the same response).
- For filter or contingency questions, make a flowchart.

4-1f The Golden Rule

You are imposing in the life of your respondents. You are asking for their time, their attention, their trust, and often, for their personal information. Therefore, you should always keep in mind the golden rule of survey research (and, I hope, for the rest of your life as well!):

> Do unto your respondents as you would have them do unto you!

To put this in more practical terms, you should keep the following in mind:

- Thank the respondent at the beginning for allowing you to conduct your study.
- Keep your survey as short as possible—include only what is absolutely necessary.
- Be sensitive to the needs of the respondent.
- Be alert for any sign that the respondent is uncomfortable.
- Thank the respondent at the end for participating.
- Assure the respondent that you will send a copy of the final results—and make sure you do.

4-2 Interviews

Interviews (McCracken, 1988) are among the most challenging and rewarding forms of measurement. They require a personal sensitivity and adaptability as well as the ability to stay within the bounds of the designed protocol. Here, I describe the preparation you typically need to do for an interview study and the process of conducting the interview itself. Keep in mind that the distinction between an interview and a questionnaire is not always clear-cut. Interviewers typically use a type of questionnaire instrument as the script for conducting the interview. It often has both structured and unstructured questions on it. This type of interview questionnaire would also have instructions for the interviewer that are not seen by the respondent and may include space for the interviewer to record any observations about the progress and process of the interview. These features would not be present in a mailed questionnaire.

4-2a The Role of the Interviewer

The interviewer is really the jack-of-all-trades in survey research. The interviewer's role is complex and multifaceted. It includes the following tasks:

- *Locate and enlist cooperation of respondents.* The interviewer has to find the respondent. In door-to-door surveys, this means being able to locate specific addresses. Often, the interviewer has to work at the least desirable times (like immediately after dinner or on weekends) because that's when respondents are most readily available.
- *Motivate respondents to do a good job.* If the interviewer does not take the work seriously, why would the respondent? The interviewer has to be motivated and has to be able to communicate that motivation to the respondent. Often, this means that the interviewer has to be convinced of the importance of the research.

- *Clarify any confusion/concerns.* Interviewers have to be able to think on their feet. Respondents may raise objections or concerns that were not anticipated. The interviewer has to be able to respond candidly and informatively.
- *Observe quality of responses.* Whether the interview is personal or over the phone, the interviewer is in the best position to judge the quality of the information that is being recorded. Even a verbatim transcript will not adequately convey how seriously the respondent took the task, or any gestures or body language that was observed.
- *Conduct a good interview.* Last, and certainly not least, the interviewer has to conduct a good interview! Every interview has a life of its own. Some respondents are motivated and attentive; others are distracted or disinterested. The interviewer also has good or bad days. Assuring a consistently high-quality interview is a challenge that requires constant effort.

4-2b Training the Interviewers

One of the most important aspects of any interview study is the training of the interviewers themselves. In many ways, the interviewers are your measures, and the quality of the results is totally in their hands. Even in small studies involving only a single researcher-interviewer, it is important to organize in detail and rehearse the interviewing process before beginning the formal study.

Here are some of the major topics that you should consider during interviewer training:

- *Describe the entire study.* Interviewers need to know more than simply how to conduct the interview itself. They should learn about the background for the study, previous work that has been done, ethical safeguards and procedures, and why the study is important.
- *State who is the sponsor of research.* Interviewers need to know whom they are working for. They—and their respondents—have a right to know not only what agency or company is conducting the research but also who is paying for the research.
- *Teach enough about survey research.* Although you seldom have the time to teach a full course on survey-research methods, the interviewers need to know enough that they respect the survey method and are motivated. Sometimes, it may not be apparent why a question or set of questions was asked in a particular way. The interviewers will need to understand the rationale behind the way you constructed the instrument.
- *Explain the sampling logic and process.* Naive interviewers may not understand why sampling is so important. They may wonder why you go through the difficulty of selecting the sample so carefully. You will have to explain that sampling is the basis for the conclusions that will be reached and for the degree to which your study will be useful.
- *Explain interviewer bias.* Interviewers need to know the many ways they can inadvertently bias the results. They also need to understand why it is important that they not bias the study. This is especially a problem when you are investigating political or moral issues on which people have strongly held convictions. Although the interviewers may think they are doing good for society by slanting results in favor of what they believe, they need to recognize that doing so could jeopardize the entire study in the eyes of others.
- *Walk through the interview.* When you first introduce the interview, it's a good idea to walk through the entire protocol so that the interviewers can get an idea of the various parts or phases and how they interrelate.
- *Explain respondent selection procedures, including the following:*
  - *Reading maps:* It's astonishing how many adults don't know how to follow directions on a map. In personal interviews, interviewers may need to locate respondents spread over a wide geographic area. They often have to

navigate by night (respondents tend to be most available in evening hours) in neighborhoods they're not familiar with. Teaching basic map-reading skills and confirming that the interviewers can follow maps is essential.

- *Identifying households:* In many studies, it is impossible in advance to say whether every sample household meets the sampling requirements for the study. In your study, you may want to interview only people who live in single-family homes. It may be impossible to distinguish townhouses and apartment buildings in your *sampling frame*. The interviewer must know how to identify the appropriate target household.
- *Identifying respondents:* Just as with households, many studies require respondents who meet specific criteria. For instance, your study may require that you speak with a male head-of-household between the ages of 30 and 40 who has children younger than 18 living in the same household. It may be impossible to obtain statistics in advance to target such respondents. The interviewer may have to ask a series of filtering questions before determining whether the respondent meets the sampling needs.

- *Rehearse the interview.* You should probably have several rehearsal sessions with the interview team. You might even videotape rehearsal interviews to discuss how the trainees responded in difficult situations. The interviewers should be familiar with the entire interview before ever facing a respondent.
- *Explain supervision.* In most interview studies, the interviewers will work under the direction of a supervisor. In some contexts, such as university research, the supervisors may be faculty advisors; in others, such as a business context, they may be the boss. To ensure the quality of the responses, the supervisor may have to observe a subsample of interviews, listen in on phone interviews, or conduct follow-up assessments of interviews with the respondents. This practice can be threatening to the interviewers. You need to develop an atmosphere in which everyone on the research team—interviewers and supervisors—feels like they're working together toward a common end.
- *Explain scheduling.* The interviewers have to understand the demands being made on their schedules and why these are important to the study. In some studies, it will be imperative to conduct the entire set of interviews within a certain time period. In most studies, it's important to have the interviewers available when it's convenient for the respondents, not necessarily the interviewer.

4-2c The Interviewer's Kit

It's important that interviewers have all of the materials they need to do a professional job. Usually, you will want to assemble an interviewer kit that can be easily carried and that includes all of the important materials, such as following:

- A professional-looking three-ring notebook (this might even have the logo of the company or organization conducting the interviews)
- Maps
- Sufficient copies of the survey instrument
- Official identification (preferably a picture ID)
- A cover letter from the principal investigator or sponsor
- A telephone number the respondent can call to verify the interviewer's authenticity

4-2d Conducting the Interview

Once all the preparation is complete, the interviewers, with their kits in hand, are ready to proceed. It's finally time to do an actual interview. Each interview is unique, like a small work of art (and sometimes the art may not be very good). Each interview has its own ebb and flow—its own pace. To the outsider, an interview looks like a fairly standard, simple, ordinary event, but to the interviewer, it can be filled with special nuances and interpretations that aren't often immediately apparent. Every interview includes some common components. There's the opening, where the interviewer gains entry and establishes the rapport and tone for what follows. There's the middle game, the heart of the process, which consists of the protocol of questions and the improvisations of the probe. Finally, there's the end-game, the wrap-up, during which the interviewer and respondent establish a sense of closure. Whether it's a 2-minute phone interview or a personal interview that spans hours, the interview is a bit of theater, a mini-drama that involves real lives in real time.

Opening Remarks In many ways, the interviewer has the same initial problem that a salesperson has. The interviewers have to get the respondents' attention initially for a long enough period that they can sell them on the idea of participating in the study. Many of the remarks here assume an interview that is being conducted at a respondent's residence, but the similarities to other interview contexts should be straightforward.

- *Gaining entry.* The first thing the interviewer must do is gain entry. Several factors can enhance the prospects. Probably the most important factor is initial appearance. The interviewer needs to dress professionally and in a manner that will be comfortable to the respondent. In some contexts, a business suit and briefcase may be appropriate; in others, it may intimidate. The way the interviewers appear initially to the respondent has to communicate some simple messages—that they're trustworthy, honest, and nonthreatening. Cultivating a manner of professional confidence, the sense that the respondent has nothing to worry about because the interviewers know what they're doing, is a difficult skill to teach interviewers and an indispensable skill for achieving initial entry.
- *Doorstep technique.* If the interviewer is standing on the doorstep and someone has opened the door, even if only halfway, the interviewer needs to smile and briefly state why he or she is there. Have your interviewers suggest what they would like the respondent to do. Not ask. Suggest. Instead of saying, "May I come in to do an interview?" have them try a more imperative approach like, "I'd like to take a few minutes of your time to interview you for a very important study."
- *Introduction.* If interviewers get this far without having doors slammed in their faces, chances are they will be able to get an interview. Without waiting for the respondent to ask questions, they should introduce themselves. Be sure your interviewers have this part of the process memorized so they can deliver the essential information in 20 to 30 seconds at most. They should state their name and the name of the organization they represent, as well as show their identification badge and the letter that introduces them. You want them to have as legitimate an appearance as possible. If they have a three-ring binder or clipboard with the logo of your organization, they should have it out and visible. They should assume that the respondent will be interested in participating in an important study.
- *Explaining the study.* At this point, the interviewers have been invited to come in. (After all, they're standing there in the cold, holding an assortment of materials, clearly displaying their credentials, and offering the respondent the chance to participate in an interview; to many respondents, it's a rare and exciting event. They are seldom asked their views about anything, and yet they know that important decisions are made all the time based on input from others.) When the respondent has continued to listen long enough, the interviewer needs to explain the study. There are three rules to this critical

explanation: (1) Keep it short, (2) Keep it short, and (3) Keep it short! The respondent doesn't have to or want to know all of the nuances of this study, how it came about, how you convinced your thesis committee to buy into it, and so on. Provide the interviewers with a one- or two-sentence description of the study and have them memorize it. No big words. No jargon. No detail. There will be more than enough time for that later. (Interviewers should bring some written materials to leave at the end for that purpose.) Provide a twenty-five-words-or-less description. What the interviewers *should* spend some time on is disclosing fully the purpose of the study and assuring respondents that they are interviewing them confidentially and that their participation is voluntary.

Asking the Questions The interviewer has gotten in and established an initial rapport with the respondent. It may be that the respondent was in the middle of doing something when the interviewer arrived and needs a few minutes to finish the phone call or send the kids off to do homework. Then it's time to begin the interview itself. Here are some hints you can give your interviewers:

- *Use the questionnaire carefully, but informally.* The interview questionnaire is the interviewer's friend. It was developed with a lot of care and thoughtfulness. Although interviewers have to be ready to adapt to the needs of the setting, their first instinct should always be to trust the instrument that was designed. However, they also need to establish a rapport with the respondent. If they bury their faces in the instrument and read the questions, they'll appear unprofessional and disinterested. Reassure them that even though they may be nervous, the respondent is probably even more nervous. Encourage interviewers to memorize the first few questions, so they need refer to the instrument only occasionally, using eye contact and a confident manner to set the tone for the interview and help the respondent get comfortable.
- *Ask questions exactly as written.* Sometimes, interviewers will think that they could improve on the tone of a question by altering a few words to make it simpler or friendlier. Urge them not to. They should ask the questions as they appear on the instrument. During the training and rehearsals, allow the interviewers to raise any issues they have with the questions. It is important that the interview be as standardized as possible across respondents. (This is true except in certain types of exploratory or interpretivist research, where the explicit goal is to avoid any standardizing.)
- *Follow the order given.* When interviewers know an interview well, they may see a respondent bring up a topic that they know will come up later in the interview. They may be tempted to jump to that section. Urge them not to. This can cause them to lose their place or omit questions that build a foundation for later questions.
- *Ask every question.* Sometimes, interviewers will be tempted to omit a question because they thought they have already heard what the respondent will say. Urge them not to assume. For example, let's say you were conducting an interview with college-age women about the topic of date rape. In an earlier question, the respondent mentioned that she knew of a woman on her dormitory floor who had been raped on a date within the past year. A few questions later, the interviewer is supposed to ask, "Do you know of anyone personally who was raped on a date?" Interviewers might figure they already know that the answer is yes and decide to skip the question. Encourage them to say something like, "I know you may have already mentioned this, but do you know of anyone personally who was raped on a date?" At this point, the respondent may say, "Well, in addition to the woman who lived down the hall in my dorm, I know of a friend from high school who experienced date rape." If the interviewer hadn't asked the question, this detail would have remained undiscovered.

- *Don't finish sentences.* Silence is one of the most effective devices for encouraging respondents to talk. If interviewers finish respondents' sentences for them, they imply that what respondents had to say is transparent or obvious, or that they don't want to give respondents the time to express themselves in their own language.

Obtaining Adequate Responses—The Probe When the respondent gives a brief, cursory answer, the interviewer needs to probe the respondent to elicit a more thoughtful, thorough response. Teach the following probing techniques:

- *The silent probe.* The most effective way to encourage someone to elaborate is to do nothing at all—just pause and wait. This is referred to as the *silent probe.* It works (at least in certain cultures) because respondents are uncomfortable with pauses or silence. It suggests to respondents that the interviewer is waiting, listening for what they will say next.
- *Overt encouragement.* At times, interviewers can encourage the respondent directly. They should try to do so in a way that does not imply approval or disapproval of what the respondent said (that could bias their subsequent results). Overt encouragement could be as simple as saying "uh-huh" or "okay" after the respondent completes a thought.
- *Elaboration.* Interviewers can encourage more information by asking for elaboration. For instance, it is appropriate to ask questions like "Would you like to elaborate on that?" or "Is there anything else you would like to add?"
- *Asking for clarification.* Sometimes, interviewers can elicit greater detail by asking the respondent to clarify something that was said earlier by saying something like, "A minute ago you were talking about the experience you had in high school. Could you tell me more about that?"
- *Reflection.* This is the old psychotherapist trick. You say something without really saying anything new. For instance, the respondent just described a traumatic childhood experience. The interviewer might say, "What I'm hearing you say is that you found that experience very traumatic," and then pause. The respondent is likely to say something like, "Well, yes, and it affected the rest of my family as well. In fact, my younger sister. . ."

Recording the Response Although we have the capability to record a respondent in audio and/or video, most interview methodologists don't think it's a good idea. Respondents are often uncomfortable when they know their remarks will be recorded word for word. They may strain to say things only in a socially acceptable way. Although you would get a more detailed and accurate record, it is likely to be distorted by the process of obtaining it. This may be more of a problem in some situations than in others. It is increasingly common to be told that your conversation may be recorded during a phone interview, and most focus-group methodologies use unobtrusive recording equipment to capture what's being said. However, in general, personal interviews are still best when recorded by the interviewer using pen and paper. Here, I assume the paper-and-pen approach.

- *Record responses immediately.* The interviewers should record responses as they are being stated. This appropriately conveys the idea that they are interested enough in what the respondent is saying to write it down. The interviewers don't have to write down every single word, but you may want them to record certain key phrases or quotes verbatim. Implement a system for distinguishing what the respondent says verbatim from what interviewers are characterizing (how about quotations, for instance).
- *Include all probes.* The interviewers should indicate every single probe that you use. Develop shorthand for different standard probes. Use a clear form for writing them in (for example, place probes in the left margin). Use

abbreviations where possible; abbreviations will help interviewers capture more of the discussion. Develop a standardized system (R = respondent, DK = don't know). If interviewers create an abbreviation on the fly, have them indicate its origin. For instance, if your interviewer decides to abbreviate *Spouse* with an *S*, have them make a notation in the right margin saying S = Spouse.

Concluding the Interview To bring the interview to closure, interviewers should remember the following:

- *Thank the respondents.* Don't forget to do this. Even if the respondents were troublesome or uninformative, it is important to be polite and thank them for their time.
- *Tell them when you expect to send results.* You owe it to your respondents to show them what they contributed to and what you learned. Now, they may not want your entire 300-page dissertation. It's common practice to prepare a short, readable, jargon-free summary of interviews to send to the respondents.
- *Don't be brusque or hasty.* Interviewers need to allow for a few minutes of winding-down conversation. The respondent may be interested in how the results will be used. While the interviewers are putting away their materials and packing up to go, they should engage the respondent. Some respondents may want to keep on talking long after the interview is over. Provide interviewers with a way to cut off the conversation politely and make their exit. For instance, you might have your interviewers say, "I would love to stay to discuss this more with you, but unfortunately, I have another interview appointment I must keep."
- *Immediately after leaving, the interviewer should write down any notes about how the interview went.* Sometimes, interviewers will have observations about the interview that they didn't want to write down while they were with the respondent. (Perhaps they noticed the respondent becoming upset by a question or detected hostility in a response.) Immediately after the interview, interviewers should go over their notes and make any other comments and observations, but they should be sure to distinguish these from the notes made during the interview (by using a different color pen, for instance).

4-3 Surveys

4-3a Types of Surveys

Surveys can be divided into two broad categories: the questionnaire and the interview. Questionnaires are typically instruments that the respondent completes. Interviews are typically completed by the interviewer, based on what the respondent says. Sometimes, it's hard to tell the difference between a questionnaire and an interview. Most interviews follow a set script of questions that looks very much like a questionnaire (except that it usually also has instructions for the interviewer and space for the interviewer to record observations about how the interview progressed). Some people think that questionnaires always ask short, closed-ended questions and that interviews always ask broad, open-ended ones, but you will see questionnaires with open-ended questions (although they do tend to be shorter than interview questions), and there will often be a series of closed-ended questions asked in an interview.

Survey research has changed dramatically in the last 10 years. Automated telephone surveys use random dialing methods and may even use completely automated interviewing in which a computer program "asks" the questions and the respondent supplies answers by speaking into the telephone or using the numeric keys on the telephone to respond. The proliferation of cellular phones has benefited individuals with regard to some aspects of privacy from surveyors and marketers, but it has also made it very difficult to reach some segments of the population. It is also very difficult to identify a sampling frame for cellular phone users.

Web-based surveys enable people to respond anytime and from anywhere in the world. A new variation of group interview has evolved as focus group methodology. Increasingly, survey research is tightly integrated with the delivery of service—often, so much so that the survey becomes a type of service provision. Your hotel room has a survey on the desk. Your waiter presents a short customer satisfaction survey with your check. You get a call for an interview several days after your last call to a computer company for technical assistance and are asked to complete a short survey when you visit a Web site. Here, I'll describe the major types of questionnaires and interviews, keeping in mind that technology is leading to rapid evolution of methods. I'll discuss the relative advantages and disadvantages of these different survey types in Section 4-3c, Advantages and Disadvantages of Survey Methods.

Questionnaires When most people think of questionnaires, they think of the **mail survey** (Dillman, 1999). All of us have, at some time, probably received a questionnaire in the mail. Mail surveys have many advantages. They are relatively inexpensive to administer. You can send the exact same instrument to a wide number of people. The respondent can fill it out at his or her own convenience. However, there are some disadvantages as well. Response rates from mail surveys are often low, and mail questionnaires are not the best vehicles for asking for detailed written responses.

mail survey
A paper-and-pencil survey that is sent to respondents through the mail.

A second type is the **group-administered questionnaire**. A sample of respondents is brought together and asked to respond to a structured sequence of questions. Traditionally, questionnaires have been administered in group settings for convenience. The researcher can give the questionnaire to those who are present and be fairly sure that there will be a high response rate. If the respondents don't understand the meaning of a question, they can ask for clarification. In addition, in many organizational settings, it is relatively easy to assemble the group (in a company or business, for instance).

group-administered questionnaire
A survey that is administered to respondents in a group setting. For instance, if a survey is administered to all students in a classroom, we would describe that as a group-administered questionnaire.

What's the difference between a group-administered questionnaire and a group interview or focus group? In the group-administered questionnaire, each respondent is handed an instrument and asked to complete it while in the room. Each respondent completes an instrument. In the group interview or focus group (see Section 4-2, Interviews), the interviewer facilitates the session. People work as a group, listening to each other's comments and answering the questions. Someone takes notes for the entire group; people don't complete the interview individually.

A less familiar type of questionnaire is the household drop-off survey. In this approach, a researcher goes to the respondent's home or business and hands the respondent the instrument. In some cases, the respondent is asked to mail it back; in others, the interviewer returns to pick it up. This approach attempts to blend the advantages of the mail survey and the group-administered questionnaire. Like the mail survey, the respondent can work on the instrument in private, when it's convenient. Like the group-administered questionnaire, the interviewers make personal contact with the respondent; they don't just send an impersonal survey instrument. In addition, respondents can ask questions about the study and get clarification on what they are being asked to do. Generally, this increases the percentage of people willing to respond.

Perhaps the most important change in survey research over the past few decades has been the rise of the electronic survey or e-survey (Dillman, 1999). There are a wide and increasing variety of technologies for electronic surveys, but most of them fall into one of two categories: email surveys or Web surveys. Although these two are similar in the technology used for delivery of the survey (email versus Web, of course), perhaps the more important difference is that email surveys are "pushed" directly to the respondent's computer, whereas with Web surveys, you have to "pull" the respondent to a Web site. This distinction has important implications for how the respondent perceives the survey and for response rates.

Electronic surveys also raise important questions about who can be reached. Although computer access is becoming more ubiquitous, there are still many people who have limited access or none at all. These issues have been labeled "non-observation errors" (Groves, 1989) due to the fact that many households do not have computer access and that access is much less likely among the disabled, poor, and minority populations. Internet users tend to be younger and better educated (Fricker, Galesic, Tourangeau, & Yan, 2005). If you do not know how many people have received a survey via a listserv, how do you calculate your response rate? And how do you know whether the kind of person you were targeting actually completed the survey? Given these complications, you may consider the possibility of conducting dual-media surveys, where you make the survey available through multiple channels (for example, e-survey and mail survey) and allow respondents to select their preferred method of response.

Interviews Interviews are a far more personal form of research than questionnaires. In the personal interview, the interviewer works directly with the respondent. In contrast to mail surveys, the interviewer has the opportunity to probe or ask follow-up questions, and interviews are generally easier for the respondent, especially if you are seeking opinions or impressions. Interviews can be time-consuming, and they are resource intensive. The interviewer is considered a part of the measurement instrument, and interviewers have to be well trained to respond to any possible situation.

focus group
A qualitative measurement method where input on one or more focus topics is collected from participants in a small-group setting where the discussion is structured and guided by a facilitator.

An increasingly important type of interview is the group interview or focus group. In a **focus group**, the interviewer is essentially a facilitator of the group discussion. Small groups of five to ten people are asked to discuss one or more focus questions. The facilitator strives to ensure that each person has an opportunity to give an opinion. Focus groups enable deeper consideration of complex issues than many other survey methods. When people hear the points others make, it often will trigger ideas or responses they wouldn't have thought of by themselves (much like in brainstorming). But you always have to be concerned about how respondents in a group might be constrained from saying what they believe because others are present.

telephone interview
A personal interview that is conducted over the telephone.

Almost everyone is familiar with the **telephone interview**. Telephone interviews enable a researcher to gather information rapidly. Most of the major public opinion polls that are reported are based on telephone interviews. Like personal interviews, they allow for some personal contact between the interviewer and the respondent. They also allow the interviewer to ask follow-up questions. But they have some major disadvantages: many people don't have publicly listed telephone numbers, some don't have telephones, people often don't like the intrusion of a call to their homes, and telephone interviews have to be relatively short or people will feel imposed upon.

4-3b Selecting the Survey Method

Selecting the type of survey you are going to use is one of the most critical decisions in many social research contexts. A few simple rules will help you make the decision; you have to use your judgment to balance the advantages and disadvantages of different survey types. Here, all I want to do is give you a number of questions you might ask to guide your decision.

Population Issues The first set of considerations has to do with the population and its accessibility.

- *Can the population units be identified?* For some populations, you have a complete listing of the units to be sampled. For others, such a list is difficult or impossible to compile. For instance, there are complete listings of registered voters or persons with active drivers' licenses, but no one keeps a complete list of homeless people. If you are doing a study that requires input from homeless persons, it's likely that you'll need to go and find the respondents personally.

In such contexts, you can pretty much rule out the idea of mail surveys or telephone interviews.

- *Is the population literate?* Questionnaires require that your respondents read. Although this might seem initially like a reasonable assumption for most adult populations, recent research suggests that the instance of adult illiteracy is alarmingly high. Even if your respondents can read to some degree, your questionnaire might contain difficult or technical vocabulary. Clearly, you would expect some populations to be illiterate. Young children would not be good targets for questionnaires.
- *Are there language issues?* We live in a multilingual world. Virtually every society has members who speak a language other than the predominant language. Some countries (like Canada) are officially multilingual, and our increasingly global economy requires us to do research that spans countries and language groups. Can you produce multiple versions of your questionnaire? For mail instruments, can you know in advance which language your respondent speaks, or do you need to send multiple translations of your instrument? Can you be confident that important connotations in your instrument are not culturally specific? Could some of the important nuances get lost in the process of translating your questions?
- *Will the population cooperate?* People who do research on illegal immigration have a difficult methodological problem. They often need to speak with illegal immigrants or people who may be able to identify others who are. Why would those respondents cooperate? Although the researcher may mean no harm, the respondents are at considerable risk legally if information they divulge should get into the hands of the authorities. The same can be said for any target group that is engaging in illegal or unpopular activities.
- *What are the geographic restrictions?* Is your population of interest dispersed over too broad a geographic range for you to study feasibly with a personal interview? It may be possible for you to send a mail instrument to a nationwide sample. You may be able to conduct phone interviews with them, but it will almost certainly be less feasible to do research that requires interviewers to visit directly with respondents if they are widely dispersed.

Sampling Issues The *sample* is the actual group you will have to contact in some way. When doing survey research, you need to consider several important sampling issues.

- *What data is available?* What information do you have about your sample? Do you have current addresses? Current phone numbers? Are your contact lists up to date?
- *Can respondents be found?* Can your respondents be located? Some people are very busy. Some travel a lot. Some work the night shift. Even if you have an accurate phone, address, or email address, you may not be able to locate or make contact with your sample.
- *Who is the respondent?* Who is the respondent in your study? Let's say you draw a sample of households in a small city. A household is not a respondent. Do you want to interview a specific individual? Do you want to talk only to the head of household (how is that person defined)? Are you willing to talk to any member of the household? Do you decide that you will speak to the first adult member of the household who opens the door? What if that person is unwilling to be interviewed but someone else in the house is willing? How do you deal with multifamily households? Similar problems arise when you sample groups, agencies, or companies. Can you survey any member of the organization? Or do you want to speak only to the director of human resources? What if the person you would like to interview is unwilling or unable to participate? Do you use another member of the organization?
- *Can all members of the population be sampled?* If you have an incomplete list of the population (sampling frame), you may not be able to sample every member of

the population. Lists of various groups are extremely hard to keep up to date. People move or change their names. Even though they are on your sampling frame listing, you may not be able to get to them. It's also possible they are not even on the list.

- *Are response rates likely to be a problem?* Even if you are able to solve all of the other population and sampling problems, you still have to deal with the issue of response rates. Some members of your sample will simply refuse to respond. Others have the best of intentions but can't seem to find the time to send in your questionnaire by the due date. Still others misplace the instrument or forget about the appointment for an interview. Low response rates are among the most difficult of problems in survey research. They can ruin an otherwise well-designed survey effort.

Question Issues Sometimes, the nature of what you want to ask respondents determines the type of survey you select.

- *What types of questions can you ask?* Are you going to be asking personal questions? Are you going to need to get lots of detail in the responses? Can you anticipate the most frequent or important types of responses and develop reasonable closed-ended questions?
- *How complex will the questions be?* Sometimes, you are dealing with a complex subject or topic. The questions you want to ask are going to have multiple parts. You may need to branch to subquestions.
- *Will filter questions be needed?* A filter question may be needed to determine whether the respondent is qualified to answer your question(s) of interest. For instance, you wouldn't want to ask for respondents' opinions about a specific computer program without first screening to find out whether they have any experience with the program. Sometimes, you have to filter on several variables (for example, age, gender, and experience). The more complicated the filtering, the less likely it is that you can rely on paper-and-pencil instruments without confusing the respondent.
- *Can question sequence be controlled?* Is your survey one in which you can construct a reasonable sequence of questions in advance? Or are you doing an initial exploratory study in which you may need to ask follow-up questions that you can't easily anticipate?
- *Will lengthy questions be asked?* If your subject matter is complicated, you may need to give the respondent some detailed background for a question. Can you reasonably expect your respondent to sit still long enough in a phone interview to listen to your question?
- *Will long response scales be used?* If you are asking people about the different computer equipment they use, you may have to have a lengthy response list (CD-ROM drive, floppy drive, mouse, touch pad, modem, network connection, external speakers, and so on). Clearly, it may be difficult to ask about each of these in a short phone interview.

Content Issues The content of your study can also pose challenges for the different survey types you might use.

- *Can the respondents be expected to know about the issue?* If respondents do not keep up with the news (for example, by reading the newspaper, watching television news, or talking with others), they may not even know of the news issue you want to ask them about. Or, if you want to do a study of family finances and you are talking to the spouse who doesn't pay the bills on a regular basis, he or she may not have the information to answer your questions.
- *Will the respondent need to consult records?* Even if the respondents understand what you're asking about, you may need to allow them to consult their records to get an accurate answer. For instance, if you ask them how much money they

spent on food in the past month, they may need to look up their personal check and credit card records. In this case, you don't want to be involved in an interview where they would have to go look things up while they keep you waiting (and they wouldn't be comfortable with that).

Bias Issues People come to the research endeavor with their own sets of biases and prejudices. Sometimes, these biases will be less of a problem with certain types of survey approaches.

- *Can social desirability be avoided?* Respondents generally want to look good in the eyes of others. None of us likes to look as if we don't know an answer. We don't want to say anything that would be embarrassing. If you ask people about information that may put them in this kind of position, they may not tell you the truth, or they may spin the response so that it makes them look better. This may be more of a problem in a face-to face interview situation or a phone interview.
- *Can interviewer distortion and subversion be controlled?* Interviewers may distort an interview as well. They may not ask difficult questions or ones that make them uncomfortable. They may not listen carefully to respondents on topics for which they have strong opinions. They may make the judgment that they already know what the respondent would say to a question based on their prior responses, even though that may not be true.
- *Can false respondents be avoided?* With mail surveys, it may be difficult to know who actually responded. Did the head of household complete the survey or someone else? Did the chief executive officer actually give the responses or instead pass the task off to a subordinate? Are the people you're speaking with on the phone actually who they say they are? At least with personal interviews, you have a reasonable chance of knowing to whom you are speaking. In mail surveys or phone interviews, this may not be the case.

Administrative Issues Last, but certainly not least, you have to consider the feasibility of the survey method for your study.

- *Costs.* Cost is often the major determining factor in selecting survey type. You might prefer to do personal interviews but can't justify the high cost of training and paying for the interviewers. You may prefer to send out an extensive mailing but can't afford the postage to do so.
- *Facilities.* Do you have the facilities (or access to them) to process and manage your study? In telephone interviews, do you have well-equipped phone surveying facilities? For focus groups, do you have a comfortable and accessible room to host the group? Do you have the equipment needed to record and transcribe responses?
- *Time.* Some types of surveys take longer than others. Do you need responses immediately (as in an overnight public opinion poll)? Have you budgeted enough time for your study to send out mail surveys and follow-up reminders and to get the responses back by mail? Have you allowed for enough time to get enough personal interviews to justify that approach?
- *Personnel.* Different types of surveys make different demands of personnel. Interviews require well-trained and motivated interviewers. Group-administered surveys require people who are trained in group facilitation. Some studies may be in a technical area that requires some degree of expertise in the interviewer.

Clearly, there are lots of issues to consider when you are selecting which type of survey to use in your study, and there is no clear and easy way to make this decision in many contexts because it might be that no single approach is clearly the best. You may have to make trade-offs and weigh the advantages and disadvantages discussed in the next section. There is judgment involved. Two expert researchers

TABLE 4–1 **Advantages and Disadvantages of Different Survey Methods**

	Questionnaire				Interview		
Issue	Group	Mail	Email/ Web	Drop-Off	Personal	Phone	Focus Group
Are visual presentations possible?	Yes	Yes	Yes	Yes	Yes	No	Yes
Are long response categories possible?	Yes	Yes	???	Yes	???	No	???
Is privacy a feature?	No	Yes	Yes	No	Yes	???	No
Is the method adaptable on the spot?	No	No	No	No	Yes	Yes	Yes
Are longer open-ended questions feasible?	No	No	No	No	Yes	Yes	Yes
Are reading and writing needed?	???	Yes	Yes	Yes	No	No	No
Can you judge quality of response?	Yes	No	No	???	Yes	???	Yes
Are high response rates likely?	Yes	No	No	Yes	Yes	No	Yes
Can you explain study in person?	Yes	No	No	Yes	Yes	???	Yes
Is it low cost?	Yes	Yes	Yes	No	No	No	No
Are staff and facilities needs low?	Yes	Yes	Yes	No	No	No	No
Does it give access to dispersed samples?	No	Yes	Yes	No	No	No	No
Does respondent have time to formulate answers?	No	Yes	Yes	Yes	No	No	No
Is there personal contact?	Yes	No	No	Yes	Yes	No	Yes
Is a long survey feasible?	No	No	No	No	Yes	No	No
Is there quick turnaround?	No	Yes	Yes	No	No	Yes	???

might, for the same problem or issue, select entirely different survey methods, but if you select a method that isn't appropriate or doesn't fit the context, you can doom a study before you even begin designing the instruments or questions themselves.

4-3c Advantages and Disadvantages of Survey Methods

It's hard to compare the advantages and disadvantages of the major different survey types. Even though each type has some general advantages and disadvantages, there are exceptions to almost every rule. Table 4–1 shows my general assessment.

Summary

A lot of territory was covered in this chapter. You've learned about the different types of surveys—questionnaires and interviews—and how to choose between them. You learned how to construct a questionnaire and address issues of question content, response formats, and question wording and placement. You learned how to train interviewers and the basic steps involved in conducting an interview. Based on this chapter, you should feel pretty confident taking a crack at developing your own survey. The next chapter introduces you to several types of quantitative measurements—scales and indexes—where you attempt to represent a construct with a specific score or value.

Login to the Online Edition of your text at www.atomicdog.com to find additional resources located in the Study Guide at the end of each chapter.