I took a research methods class because it was required. I saw it as a hurdle I had to jump to get my BA [Bachelor of Arts] in criminal justice. When I first stepped into the class, I was pretty intimidated, but I’m really glad I stuck it out. I have been a detective for several years and I know that what I learned in research methods is going to open up some career advancements in the future.

Detective W. Wentz

Media coverage of rape and sexual assault on college campuses has been widespread in the past few years, along with increased calls for changes in the way these crimes are handled by universities. While society appears to have given up the stereotype that people are more likely to be raped by strangers lurking in the bushes than by people they know, measuring the prevalence of rape remains a difficult task. In fact, despite over three decades of research, the magnitude of rape, stalking, and intimate partner violence (IPV) against men and women is still frequently disputed. For many reasons, including the historical stigma attached to these crimes, fear of retaliation from perpetrators, and other safety concerns, estimating incidence rates of this violence has always been a difficult task. As we noted in Chapter 1, the most enduring source of statistical information about violent crime in the United States is the Uniform Crime Reporting (UCR) program compiled by the Federal Bureau of Investigation (FBI), but this data source relies on victimizations reported to the police. This is problematic, since we know that less than 50% of these offenses are ever reported to police. Due to this weakness in estimating rates of this violence, random sample surveys of the population are now being used as the social science tool of choice for uncovering incidents of violence. However, as can be expected, surveys employing diverse methodologies and different definitions of violence result in tremendously diverse estimates.

Importantly, valid statistical data on the prevalence of these victimizations, including defining the characteristics of those most affected (e.g., subgroups by race/ethnicity and age), is the first step in preventing them. Two federal agencies have attempted to measure both rape and IPV, the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Justice’s Bureau of Justice Statistics (BJS). The CDC-sponsored survey is called the National Intimate Partner and Sexual Violence Survey (NISVS), and the BJS-sponsored survey, which measures most other forms of crime victimization, is called the National Crime Victimization Survey (NCVS). As we will see in this chapter, the survey questions used by the two agencies are quite different, despite the fact that they are attempting to measure the same things.
After an initial review of the reasons for using survey methods, we explain the major steps in questionnaire design and then consider the features of four types of surveys, highlighting the unique problems of each and suggesting possible solutions. Important ethical issues are discussed in the final section. By the chapter's end, you should be well on your way to becoming an informed consumer of survey reports and a knowledgeable developer of survey designs. In addition, you will become a more informed student of the methodological issues surrounding the measurement of violent victimization in the United States.

SURVEY RESEARCH IN THE SOCIAL SCIENCES

Survey research involves the collection of information from a sample of individuals through their responses to questions. Not only is survey research one of the most popular methods for science research, many newspaper editors, political pundits, and marketing gurus have turned to survey research because it is an efficient method for systematically collecting data from a broad spectrum of individuals and social settings. In fact, surveys have become such a vital part of our nation's social fabric that we cannot assess much of what we read in the newspaper or see on TV without having some understanding of this method of data collection (Converse 1984).

Attractive Features of Survey Research

Regardless of its scope, survey research owes its continuing popularity to three features: versatility, efficiency, and generalizability.

Versatility

The first and foremost reason for the popularity of survey methods is their versatility. Researchers can ask respondents questions about almost any topic you can imagine. Although a survey is not the ideal method for testing all hypotheses or learning about every social process, a well-designed survey can enhance our understanding of about any social issue. In fact, there is hardly any topic of interest to social scientists that has not been studied at some time with survey methods.

Computer technology has made surveys even more versatile. Computers can be programmed so that different types of respondents are asked different questions. Short videos or pictures can be presented to respondents on a computer screen. An interviewer may give respondents a laptop on which to record their answers to sensitive personal questions, such as about illegal activities, so that not even the interviewer will know what they said (Tourangeau 2004).

Efficiency

Surveys also are popular because data can be collected from many people at relatively low cost and, depending on the survey design, relatively quickly. For example, the NISVS relies on a random digit dialing (RDD0 telephone survey of both landlines and cell phones. These one-shot telephone interviews can cost as little as $30 per respondent (Ross 1990). Large mailed surveys are less expensive, at $10 to $15 per potential respondent, but the cost can
increase greatly when intensive follow-up efforts are made. Surveys of the general population using personal interviews are much more expensive and can be extremely costly per survey respondent when lengthy travel or repeat visits are needed to connect with respondents (Groves and Cork 2008). As you would expect, phone surveys are the quickest survey method, which accounts for their popularity.

Surveys are efficient research methods because many variables can be measured without substantially increasing the time or cost of data collection. Mailed questionnaires can include up to 10 pages of questions before respondents lose interest (and before more postage must be added). The maximum time limit for phone surveys seems to be about 45 minutes. In-person interviews can last much longer, taking more than an hour. For example, the NISVS asks approximately 60 questions to assess IPV, sexual violence, and stalking over the lifetime and during the 12 months prior to the interview.

Of course, the efficiency of the surveys can be attained only in a place with a reliable communications infrastructure (Labaw 1980). A reliable postal service, required for mail surveys, has generally been available in the United States, and phone surveys can be effective in the United States because 95% of its households have phones (Czaja and Blair 1996). Also important to efficiency are the services of the many survey organizations that provide the trained staff and the proper equipment for conducting high-quality surveys. Crime surveys in nonwestern countries still must rely on personal interviews (World Health Organization [WHO] 2010).

Modern information technology has been a mixed blessing for survey efficiency. The Internet makes it easier to survey some populations, but it leaves out important segments. Caller ID and answering machines make it easy to screen out unwanted calls, but these tools also make it harder to reach people in phone surveys. In addition, as discussed in Chapter 5, a growing number of people use only cell phones. As a result, after a long decline to below 5% in 2001, the percentage of U.S. households without landline telephones climbed to 29% by 2011 and then to 40% by 2013 (Christian, Keeter, Purcell, and Smith 2010; McGeeney and Keeter 2014; U.S. Census Bureau 2013) (see Exhibit 8.1). As a result of these changes, survey researchers must spend more time and money to reach potential respondents (Tourangeau 2004).

**Generalizability**

Survey methods lend themselves to probability sampling from large populations. Thus, survey research is very appealing when sample generalizability is a central research goal. In fact, survey research is often the only means available for developing a representative picture of the attitudes and characteristics of a large population.

Surveys also are the research method of choice when cross-population generalizability is a primary concern. They allow a range of social contexts and subgroups to be sampled, and the consistency of relationships can be examined across the various subgroups.

Still, challenges remain. For example, although only 14% of U.S. households had no Internet access at home or work in 2013, the persons in these households tended to be older, poorer, and less educated than those who had Internet access (Pew Research Center 2014). Another challenge in survey research is the growing foreign-born population in the United States (13% in 2012), which requires foreign-language versions of survey forms. If surveys cannot be provided in a variety of languages, results may not be generalized to the entire population (Grieco et al. 2012).

**The Omnibus Survey**

Most surveys are directed at a specific research question. In contrast, an omnibus survey covers a range of topics of interest to different social scientists. It has multiple sponsors or is
designed to generate data useful to a broad segment of the social science community rather than answer one particular research question.

One of the most successful omnibus surveys is the General Social Survey (GSS) of the National Opinion Research Center at the University of Chicago. Today, the GSS is administered every two years as a 90-minute interview to a probability sample of almost 3,000 Americans. It includes more than 500 questions about background characteristics and opinions, with an emphasis on social stratification, race relations, family issues, law and social control, and morale. It explores political views, work experiences, social ties, news sources, and views on law, health, and religion. Questions and topic areas are chosen by a board of overseers drawn from the best survey researchers.

The core of the GSS is the set of questions asked in every survey. Other questions are repeated only in alternating surveys, and some questions are added in single or multiyear supplements paid for by special grants. Since 1988, most of the questions have been asked in each survey, but many of them have been asked of only a randomly selected subset of respondents. This split-ballot design allows the inclusion of more questions without increasing the survey's cost. The split-ballot design also allows for experiments on the effect of question wording; different phrasings of the same question are included in the split-ballot subsets.

Although the NCVS is not exactly an omnibus survey, it was developed to obtain detailed information on a number of phenomena related to victimization. It does cover related information, including injuries and medical care received for victimization; the cost of victimization, including costs incurred for medical care and property lost; and whether the victimization was reported to police or other victim service agencies.
The deficiency of the omnibus approach is the limited depth that can be achieved in any one substantive area. In some years, the GSS avoids this problem by going into greater depth in one particular area. But the best way to get survey data about one particular topic is still the survey developed around the topic alone. The surveys we are going to highlight in this chapter were all developed to measure one topic: victimization.

**DESIGNING QUESTIONNAIRES**

The questionnaire (or interview schedule, as it is often called in interview-based studies) is the central feature of the survey process. Without a well-designed questionnaire tailored to the study’s purposes, survey researchers have little hope of achieving their research goals.

The correct design of a questionnaire varies with the specific survey method used and the other particulars of a survey project. There is no precise formula for a well-designed questionnaire. Nonetheless, some key principles should guide the design of any questionnaire, and some systematic procedures should be considered for refining it.

**Maintain Focus**

A survey (with the exception of an omnibus survey) should be guided by a well-defined inquiry and a definitively targeted population. Does the study seek to describe some phenomenon in detail, explain some behavior, or explore some type of social relationship? And is your aim to explain that behavior for everyone, or only as it pertains to a select group? Until the research objective is clearly formulated, survey design cannot begin. Throughout the process of questionnaire design, this objective should be the primary basis for making decisions about what to include and exclude and what to emphasize or treat with less importance. Moreover, the questionnaire should be viewed as an integrated whole, in which each section and every question serves a clear purpose related to the study’s objective and is a complement to other sections or questions.

Surveys often include too many irrelevant questions and fail to include questions that the researchers later realize are crucial. One way to ensure that all possibly relevant questions are asked is to use questions suggested by prior research, theory, or experience or by experts (including participants) who are knowledgeable about the setting under investigation. Of course, even the best researcher cannot anticipate every question that could be worthwhile, nor can one anticipate those that are worthless.

**Build on Existing Instruments**

When another researcher already has designed a set of questions to measure a key concept in your study, that existing set of questions can be called a survey instrument. If evidence from previous surveys indicates that these already-formulated questions provide a good measure of the concept or behaviors you are interested in, then use them! Measurement tools have already been established for many concepts, especially those of interest to criminological research, including delinquency, self-control, depression, and so on. In the case study that follows, you will see how researchers rarely have to reinvent the wheel.

**Research in a Diverse Society: Consider Translation**

Should the survey be translated into one or more languages in addition to English? In the 21st century, no survey plan in the United States or many other countries can be considered complete until this issue has been considered. In the United States in 2008, 15.3% of persons...
aged 18 years and older were foreign born (Pew Hispanic Center 2008), and more than half of these adults said that they did not speak English very well. In some areas of the United States, these proportions can be much higher. Many first-generation immigrants are not fluent in English (Hakimzadeh and Cohn 2007). As a result, they can be included in a survey only if it is translated into their native language.

This does not simply mean picking up a bilingual dictionary, clicking “translate” in a web browser, or even hiring a translator to translate the questions. You must ensure that the concepts you are measuring have equivalence in different cultures, which is often a time-consuming task and typically involves teams of experts both in the language and the culture for which the questionnaire is intended. Many government-sponsored surveys are currently translated into Spanish, including both the NISVS and the NCVS.

Compare the questions from the NCVS in Exhibit 8.2 with the screening questions for sexual violence from the CDC-sponsored NISVS that are displayed in Exhibit 8.3. Both surveys estimate prevalence rates of sexual violence, but as you can see, the questions from which their estimates are based are very different indeed. These questions are intended to measure both rape and other forms of sexual violence as well as unwanted sexual contact. In the next section, we will provide you with some specific guidelines for writing questions, and you will see that the answer to this question is not so clear-cut.

**CASE STUDY**

**Measuring Violent Victimization**

To assess whether respondents have experienced a victimization, the U.S. Department of Justice–sponsored NCVS asks a number of questions about experiences within the past six months. The primary screening questions about violent victimizations are displayed in Exhibit 8.2. As you can see, these questions are fairly specific and help respondents think about many different contexts, including those instances that may not be considered victimizations, such as those committed by family and friends.

<table>
<thead>
<tr>
<th>Exhibit 8.2 Screening Questions Used by the National Crime Victimization Survey to Measure Violent Victimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has anyone attacked or threatened you in any of these ways:</td>
</tr>
<tr>
<td>a. With any weapon—for instance, a gun or knife</td>
</tr>
<tr>
<td>b. With anything like a baseball bat, frying pan, scissors, or stick</td>
</tr>
<tr>
<td>c. By something thrown, such as a rock or bottle</td>
</tr>
<tr>
<td>d. Any grabbing, punching, or choking.</td>
</tr>
<tr>
<td>e. Any rape, attempted rape, or other type of sexual assault</td>
</tr>
<tr>
<td>f. Any face-to-face threats</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>g. Any attack or threat or use of force by anyone at all? Please mention it even if you were not certain it was a crime.</td>
</tr>
</tbody>
</table>

(Continued)
<table>
<thead>
<tr>
<th>2.</th>
<th>Incidents involving forced or unwanted sexual acts are often difficult to talk about. Have you been forced or coerced to engage in unwanted sexual activity by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. someone you didn’t know before</td>
</tr>
<tr>
<td></td>
<td>b. a casual acquaintance or</td>
</tr>
<tr>
<td></td>
<td>c. someone you know well.</td>
</tr>
<tr>
<td>3.</td>
<td>Were you attacked or threatened or did you have something stolen from you</td>
</tr>
<tr>
<td></td>
<td>a. at home, including the porch or yard</td>
</tr>
<tr>
<td></td>
<td>b. at or near a friend’s, relative’s, or neighbor’s home</td>
</tr>
<tr>
<td></td>
<td>c. at work or school</td>
</tr>
<tr>
<td></td>
<td>d. in a place such as a storage shed or laundry room, a shopping mall, a restaurant, a bank, or an airport</td>
</tr>
<tr>
<td></td>
<td>e. while riding in any vehicle</td>
</tr>
<tr>
<td></td>
<td>f. on the street or in a parking lot</td>
</tr>
<tr>
<td></td>
<td>g. at such places as a party, theater, gym, picnic area, bowling lane, or while fishing or hunting.</td>
</tr>
<tr>
<td></td>
<td>h. Did anyone attempt to attack or attempt to steal anything belonging to you from any of these places?</td>
</tr>
<tr>
<td>4.</td>
<td>People often don’t think of incidents committed by someone they know. Did you have something stolen from you or were you attacked or threatened by</td>
</tr>
<tr>
<td></td>
<td>a. someone at work or school</td>
</tr>
<tr>
<td></td>
<td>b. a neighbor or friend</td>
</tr>
<tr>
<td></td>
<td>c. a relative or family member</td>
</tr>
<tr>
<td></td>
<td>d. any other person you’ve met or known?</td>
</tr>
<tr>
<td>5.</td>
<td>Did you call the police to report something that happened to you which you thought was a crime?</td>
</tr>
<tr>
<td>6.</td>
<td>Did anything happen to you which you thought was a crime but did not report to the police?</td>
</tr>
</tbody>
</table>

**WRITING SURVEY QUESTIONS**

Questions are the centerpiece of survey research. Because the way they are worded can have a great effect on the way they are answered, selecting good questions is the single most important concern for survey researchers. All hope for achieving measurement validity is lost unless the questions in a survey are clear and convey the intended meaning to respondents. In principle, survey questions can be a straightforward and efficient means of measuring individual characteristics, facts about events, levels of knowledge, and opinions of any sort. In practice, survey questions, if misleading or unclear, can result in inappropriate and unintended answers.
### Exhibit 8.3 Screening Questions for Sexual Violence From the CDC-Sponsored National Intimate Partner and Sexual Violence Survey

#### How many people have ever . . .

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. exposed their sexual body parts to you, flashed you, or masturbated in front of you?</td>
</tr>
<tr>
<td>b. made you show your sexual body parts to them? Remember, we are only asking about things that you didn’t want to happen.</td>
</tr>
<tr>
<td>c. made you look at or participate in sexual photos or movies?</td>
</tr>
<tr>
<td>d. harassed you while you were in a public place in a way that made you feel unsafe?</td>
</tr>
<tr>
<td>e. kissed you in sexual way? Remember, we are only asking about things that you didn’t want to happen.</td>
</tr>
<tr>
<td>f. fondled or grabbed your sexual body parts?</td>
</tr>
</tbody>
</table>

#### When you were drunk, high, drugged, or passed out and unable to consent, how many people ever . . .

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. had vaginal sex with you? By vaginal sex, we mean that {if female: a man or boy put his penis in your vagina} {if male: a women or girl made you put your penis in her vagina}</td>
</tr>
<tr>
<td>b. [if male] made you perform sexual sex, meaning that they made you put your penis into their anus?</td>
</tr>
<tr>
<td>c. made you receive anal sex, meaning they put their penis into your anus?</td>
</tr>
<tr>
<td>d. made you perform oral sex, meaning that they put their penis in your mouth or made you penetrate their vagina or anus with your mouth?</td>
</tr>
<tr>
<td>e. made you receive oral sex, meaning that they put their mouth on your {if male: penis} {if female: vagina} or anus?</td>
</tr>
</tbody>
</table>

#### How many people have ever used physical force or threats to physically harm you to make you . . .

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. have vaginal sex?</td>
</tr>
<tr>
<td>b. [if male] perform anal sex?</td>
</tr>
<tr>
<td>c. receive anal sex?</td>
</tr>
<tr>
<td>d. make you perform oral sex?</td>
</tr>
<tr>
<td>e. make you receive oral sex?</td>
</tr>
<tr>
<td>f. put their fingers or an object in your {if female: vagina or} anus?</td>
</tr>
</tbody>
</table>

#### How many people have ever used physical force or threats of physical harm to . . .

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. [if male] try to make you have vaginal sex with them, but sex did not happen?</td>
</tr>
<tr>
<td>b. try to have [if female: vaginal] oral, or anal sex with you, but sex did not happen?</td>
</tr>
</tbody>
</table>

#### How many people have you had vaginal, oral, or anal sex with after they pressured you by . . .

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. doing things like telling you lies, making promises about the future they knew were untrue, threatening to end your relationship, or threatening to spread rumors about you?</td>
</tr>
<tr>
<td>b. wearing you down by repeatedly asking for sex, or showing they were unhappy?</td>
</tr>
<tr>
<td>c. using their authority over you, for example, your boss or your teacher?</td>
</tr>
</tbody>
</table>
All questions proposed for a survey must adhere to basic guidelines and then be tested and revised until the researcher feels confident they will be clear to the intended respondents (Fowler 1995). Structurally, questions on surveys generally fall into two categories: those with and those without explicit response choices. Recall from Chapter 4 that open-ended questions are those without explicit response choices. This type of question is usually used only for explorative purposes, when there is little known about a particular topic and you want to uncover as much about it as possible without restricting responses. For example, if you are investigating the perceptions of residents regarding a new community policing program instituted in the neighborhood, open-ended questions such as the following one could be very informative:

“In your opinion, what have been the benefits of the community policing program in your neighborhood?”

The information obtained from open-ended questions such as this could then be used as the basis for questions with fixed responses in future studies that evaluate the efficacy of community policing.

Open-ended questions are also excellent tools for obtaining respondents’ interpretations in greater detail and can often illuminate flaws in other questions. A survey researcher can also try to understand what respondents mean by their responses after the fact by including additional open-ended questions in the survey. Adding such interpretive questions after key survey questions is always a good idea, but it is of utmost importance when the questions in a survey have not been pretested. An example from a study of people with driving violations illustrates the importance of interpretive questions:

When asked whether their emotional state affected their driving at all, respondents would reply that their emotions had very little effect on their driving habits. Then, when asked to describe the circumstances surrounding their last traffic violation, respondents typically replied, “I was mad at my girlfriend,” or “I had a quarrel with my wife,” or “We had a family quarrel,” or “I was angry with my boss.” (Labaw 1980, 71)

Were these respondents lying in response to the first question? Probably not. More likely, they simply did not interpret their own behavior in terms of a general concept such as emotional state. But their responses to the first question were likely to tell a different story without the further detail provided by answers to the second.

In summary, one strength of open-ended questions is the wealth of information they provide. This wealth of information, however, is exactly why many researchers do not use them. The verbatim text narratives obtained from open-ended questions take a great deal of time and energy to organize and summarize. In addition, many respondents may feel overwhelmed about writing a lengthy essay. If you want to ask a large number of open-ended questions, it is perhaps best to consider an in-person interview or a phone interview instead of a questionnaire (both of which are discussed later in this chapter).

When respondents are offered explicit responses to choose from, this type of question is referred to as a closed-ended question or a fixed-choice question. Most surveys of a large number of people primarily contain fixed-choice questions, which are easy to process and analyze with the use of computers and statistical software. With fixed-choice questions, respondents are also more likely to answer the question that researchers want them to answer. By including the response choices, the survey reduces ambiguity. However, fixed-choice questions can also obscure what people really think, unless the choices are carefully designed to match the range of all possible responses to the question.
Regardless of the format used for questions, there are several rules to follow and pitfalls to avoid that will maximize the validity of your survey instrument. We will highlight these in the next section.

**Constructing Clear and Meaningful Questions**

All hope for achieving measurement validity is lost unless survey questions are clear and convey the intended meaning to respondents. The fact that you pose questions all the time and have no trouble understanding the responses you receive does not mean writing clear and meaningful survey questions presents no challenge. Consider a few of the differences between everyday conversations and standardized surveys.

- Survey questions must be asked of many people, not only one person.
- The same survey questions must be used with each person, not tailored to the specifics of a given conversation.
- Survey questions must be understood in the same way by people who differ in many ways.
- You will not be able to rephrase a survey question if someone does not understand it, because that would alter the question, and it would not be the same as the one posed to other participants.
- Survey respondents do not know you, and so cannot be expected to share the nuances of expression that you and those close to you use to communicate.

These features make a survey very different from natural conversation and make question writing a challenging and important task for survey researchers.

Questions must be very clear and specific about what is being asked of respondents. Note the differences in specificity between the rape-screening questions used by the NISVS and the NCVS displayed in Exhibits 8.2 and 8.3. It is logical that the multiple behaviorally specific questions from the NISVS will be associated with greater disclosure by survey respondents compared to the one question about sexual intercourse posed by the NCVS. Research has shown that questions that are written with more behavior-specific language, such as those used by the NISVS, result in much better recall by respondents of these types of victimizations compared to the questions used by the NCVS (Bachman et al. 2013; Fisher 2009).

In addition to writing clear and meaningful questions, there are several other rules to follow and pitfalls to avoid that we will highlight in the next section.

**Avoid Confusing Phrasing and Vagueness**

Good grammar is a basic requirement for clear questions. Clearly and simply phrased questions are most likely to have the same meaning for different respondents. So, be brief and to the point. The wordier and longer the question, the more likely you are to lose the respondent's attention and focus.

Virtually all questions about behavior and feelings will be more reliable if they refer to specific times or events (Turner and Martin 1984). Without a **reference period**, or time frame around which a question is being asked, a researcher will not know how to interpret an answer. For example, the question “How often do you carry a method of self-protection such as pepper spray?” will produce answers that have no common reference period and can therefore not be reliably compared to answers from other respondents. A more specific way to ask...
the question is “In the last month, how many days did you carry a method of self-protection such as pepper spray?”

In general, research shows that the longer the reference period, the greater the under-reporting of a given behavior (Cantor 1984, 1985; Kobilarcik, Alexander, Singh, and Shapiro 1983). As a general rule, when respondents are being asked about mundane or day-to-day activities, reference periods should be no longer than “in the past month.” However, when rare events are being measured, such as experiences with victimizations, “in the last 6 months,” as utilized by the NCVS Survey, or “in the past 12 months,” as used by the National Violence Against Men and Women Survey (NVAMW, a precursor to the NISVS), are both more appropriate. By using longer reference periods such as this, we will more likely capture these rarer events.

Avoid Negative Words and Double Negatives

Picture yourself answering the following question: “Do you disagree that juveniles should not be tried as adults if they commit murder?” It probably took a long time for you to figure out if you would actually agree or disagree with this statement, because it is written as a double-negative question. For example, if you think juveniles who commit murder should be tried as adults, you would actually agree with this statement. Even questions that are written with a single negative are usually difficult to answer. For example, suppose you were asked to respond to “I can’t stop thinking about a terrorist attack happening” using a five-point response set of very rarely to very often. A person who marks very rarely is actually saying, “I very rarely can’t stop thinking about the terrorist attacks on 9/11.” Confusing, isn’t it? Even the most experienced survey researchers can unintentionally make this mistake.

Avoid Double-Barreled Questions

When a question is really asking more than one question, it is called a double-barreled question. For example, the statement “I believe we should stop spending so much money building prisons and put it into building more schools” is really asking respondents two different questions. Some respondents may believe we should stop building so many prisons but may not want the revenue to go into building more schools. Double-barreled questions can also show up in the response categories. For example, the item below is really asking two questions:

Do you know anyone who has ever used cocaine?

Yes ____ No ____ I have used cocaine

Avoid Making Either Disagreement or Agreement Disagreeable

People often tend to agree with a statement merely to avoid seeming disagreeable. You can see the impact of this human tendency in a Michigan Survey Research Center survey that asked who was to blame for crime and lawlessness in the United States (Schuman and Presser 1981). When one question stated that individuals were more to blame than social conditions, 60% of the respondents agreed. But when the question was rephrased so respondents were asked, in a balanced fashion, whether individuals or social conditions were more to blame, only 46% chose individuals.

You can take several steps to reduce the likelihood of agreement bias. As a general rule, you should impartially present both sides of attitude scales in the question itself: “In general, do you believe that individuals or social conditions are more to blame for crime and lawlessness in the United States?” (Dillman 2000, 61–62). The response choices themselves should be
phrased to make each one seem as socially approved—as agreeable—as the others. You should
also consider replacing the word agree with a range of response alternatives. For example, the
question “To what extent do you support or oppose mandatory background checks for all peo-
ple who want to buy a firearm?” (response choices range from strongly support to strongly oppose)
is probably a better approach than the question, “To what extent do you agree or disagree with
the statement ‘Mandatory background checks for all people who want to buy a firearm are
worthy of support?’” (response choices range from strongly agree to strongly disagree).

When an illegal or socially disapproved behavior or attitude is the focus, we have to
be concerned that some respondents will be reluctant to agree that they have ever done or
thought such a thing. In this situation, the goal is to write a question and response choices that
make agreement seem acceptable, or at the very least, not stigmatizing. For example, Dillman
(2000) suggests that we ask, “Have you ever taken anything from a store without paying for
it?” rather than “Have you ever shoplifted something from a store?” (75). Asking about a
variety of behaviors or attitudes that range from socially acceptable to socially unacceptable
will also soften the impact of agreeing with those that are socially unacceptable.

Additional Guidelines for Fixed-Response Questions

Creating questions that are clear and meaningful is only half of the formula to creating a
good survey instrument. The choices you provide respondents in fixed-choice questions are
also important. In this section, we provide you with several rules that will help ensure that
the response choices you provide to your questions will also be clear, concise, and exhaustive.

Response Choices Should Be Mutually Exclusive

When you want respondents to make only one choice, the fixed-choice categories must not
overlap. For example, if you were interested in the ways foot patrol officers spent their time
while working, you might ask the following question:

On average, how much time do you spend on the job each week taking care of traffic
violations?

- Less than 1 hour
- 1–3 hours
- 3–6 hours
- 6–10 hours
- 10 hours or more

The choices provided for respondents in this question are not mutually exclusive
responses, because they overlap. Which choice would an officer select if he or she spent three
hours a week on traffic violations? Choices that are mutually exclusive would look like this:

- 1 hour or less
- 2–3 hours
- 4–6 hours
- 7–10 hours
- 11 hours or more
Make the Response Categories Exhaustive

In addition to mutual exclusivity, fixed-response categories must also allow all respondents to select an option. Consider the same research question about foot patrol officers. Suppose we asked a question such as this:

In what activity do you spend the most time in an average week on the job?

- Traffic violations
- Disturbance-related issues
- Felony arrests
- Misdemeanor arrests

Regardless of how exhaustive we think the response categories are, there must always be an option for respondents who require another choice. Response categories can easily be made exhaustive if respondents are provided with a choice labeled as follows:

- Other, please specify: __

Note, however, that other should be used only after you have included all options that you believe to be relevant. Otherwise, a large percentage of respondents will select the other category and you will have to spend time coding their responses.

Utilize Likert-Type Response Categories

Likert-type responses generally ask respondents to indicate the extent to which they agree or disagree with statements. Why the name? Well, this format is generally believed to have been developed by Rensis Likert in the 1930s. Likert-type response categories list choices for respondents to select their level of agreement with a statement and may look similar to this:

“Three-strikes” laws that increase penalties for individuals convicted of three or more felonies will help decrease the crime rate.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

Minimize Fence Sitting and Floating

Two related problems in question writing stem from some respondents’ desires to choose an acceptable or socially desirable answer and from other respondents who want to get through the survey as quickly as possible. There is no uniformly correct solution to these problems, so you must carefully select an alternative. Fence sitters are people who see themselves as neutral in their attitudes toward a particular issue. If you are truly interested in those who do not have strong feelings on an issue, one alternative is to provide a neutral or undecided response option. The disadvantage to these options is that they may encourage some respondents to take the easy way out rather than really thinking about their feelings. This alternative may also provide an out for respondents who do not want to reveal how they truly feel about an issue. On the other hand, not providing respondents who really have no opinion on an issue with an option such as undecided can be very frustrating and may encourage them to leave the item blank altogether. Whatever you decide, it is generally a good idea to provide respondents with instructions that ask them
to select the choice in each item that most closely reflects their opinion. This should help make all respondents feel more comfortable about their answers, particularly those who only slightly feel one way or the other.

**Floaters** are respondents who choose a substantive answer even when they do not know anything about a particular question. For example, research has shown that a third of the public will provide an opinion on a proposed law they know nothing about if they are not provided with a *don’t know* response option (Schuman and Presser 1981). Of course, providing a *don’t know* option has the same disadvantage as providing a neutral response option; its inclusion leads some people to take the easy way out.

If you are really interested in informed opinions about an issue, it is best to provide detailed information about that issue when asking a question. For example, let us say we were interested in attitudes about the treatment of juvenile offenders by the criminal justice system. Suppose we asked respondents to provide their opinion on the following statement: “The Juvenile Justice Bill before Congress will help reduce crime committed by juveniles.” Do you know what the Juvenile Justice Bill is? If we did not provide a *don’t know* option, respondents who knew nothing about the Juvenile Justice Bill would be forced to select a response that would not be meaningful and may bias the results of the entire survey. Instead of a *don’t know* option, another way to handle the problem is to provide details of the issue you are interested in. For example, you could tell respondents that one component of the bill encourages states to adjudicate all juvenile homicide offenders 13 years of age or older as adults and then ask respondents their opinion about this particular issue. If you are truly interested in the extent to which respondents have knowledge about a particular issue and you want to include a *don’t know* response, it should be set apart from the other choices so that respondents do not mistake it as a neutral or undecided choice. Of course, as with all questions, there should be clear instructions about what the response options actually mean. For example, if you wanted to examine citizens’ knowledge and opinion about the independent counsel statute, you could ask this question:

**Instructions:** For each statement, check the box that best indicates the extent to which you agree with the statement. If you do not have enough information about a statement to determine your level of agreement, leave the boxes blank and put an X next to “don’t know.”

I think the independent counsel law should remain as it is.

- strongly agree
- agree
- disagree
- strongly disagree
- don’t know

**Utilize Filter Questions**

The use of filter questions is important to ensure that questions are asked only of relevant respondents. For example, if you are interested in the utilization of police services by robbery victims, you would first need to establish victimization with a filter question. These filter questions create skip patterns. For example, respondents who answer *no* to one question are directed to skip ahead to another question, but respondents who answer *yes* go on to the contingent question(s). Skip patterns should be indicated clearly with arrows or other directions in the questionnaire, as demonstrated in Exhibit 8.4.
### Exhibit 8.4 Filter Questions and Skip Patterns

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
</table>
| 14. In the past six months, has anyone taken something from you by force or the threat of force? | ________ Yes (if yes, please answer questions 15 through 16)  
________ No (if no, please skip to question 17) |
| 15. What was the approximate monetary value of the items taken? | ________ Under $50  
________ $51 to $99  
________ $100 to $299  
________ $300 to $500  
________ Over $500 |
| 16. Was the incident reported to the police? | ________ Yes  
________ No |
| 17. How fearful are you of walking alone at night in your neighborhood? | ________ Extremely afraid  
________ Afraid  
________ Unafraid  
________ Extremely unafraid |

### Combining Questions Into Indexes

Measuring variables with single questions is very popular. Public opinion polls based on answers to single questions are reported frequently in newspaper articles and TV newscasts: “Do you favor or oppose the policy for . . . ?” “If you had to vote today, for which candidate would you vote?” The primary problem with using a single question is that if respondents misunderstand the question or have some other problem with the phrasing, there is no way to tell. Single questions are prone to this **idiosyncratic variation**, which occurs when individuals’ responses vary because of their reactions to particular words or ideas in the question. Differences in respondents’ backgrounds, knowledge, and beliefs almost guarantee that they will understand the same question differently. If some respondents do not know some of the words in a question, we may misinterpret their answers—if they answer at all. If a question is too complex, respondents may focus on different parts of the question. If prior experiences or culturally biased orientations lead different groups in the sample to interpret questions differently, answers will not have a consistent meaning, because the question meant something different to each respondent.

If only one question is used to measure a variable, the researcher may not realize respondents had trouble with a particular word or phrase in the questions. Although writing carefully worded questions will help reduce idiosyncratic variation, when measuring concepts, the best option is to devise an index of multiple rather than single questions.

---

*Idiosyncratic variation:* Variation in responses to questions that is caused by individuals’ reactions to particular words or ideas in the question instead of by variation in the concept that the question is intended to measure.
When several questions are used to measure one concept, the responses may be combined by taking the sum or average of the responses. A composite measure based on this type of sum or average is called an **index** or a **scale**. The idea is that idiosyncratic variation in response to single questions will average out, so the main influence on the combined measure will be the concept focused on by the questions. In addition, the index can be considered a more complete measure of the concept than can any one of the component questions.

Creating an index, however, is not merely a matter of writing a few questions that seem to focus on one concept. Questions that seem to measure a common concept to you might seem to concern several different issues to respondents. The only way to know that a given set of questions does effectively form an index is to administer the questions in a pretest to people similar to the sample you plan to study. If a common concept is being measured, people’s responses to the different questions should display some consistency. Special statistics called **reliability measures** help researchers decide whether responses are consistent. Most respondent attitudes are complex and consist of many elements.

Be aware of response sets when constructing an index measuring attitudes. For example, some people tend to agree with almost everything asked of them, whereas others tend to disagree. Still others are prone to answer neutrally to everything, if given the option. To decrease the likelihood of this happening, it is a good idea to make some statements both favorable and unfavorable to a particular attitude to vary the response choices and still reach an understanding of individuals’ opinions. In this way, respondents are forced to be more careful in their responses to individual items. Exhibit 8.5 displays a hypothetical set of questions designed to solicit respondents’ attitudes toward police in their community.

When scoring an index or scale made up of both favorable and unfavorable statements, you must remember to reverse code the unfavorable items. For example, marking *strongly agree* to the first item in Exhibit 8.5 should not be scored the same as a *strongly agree* response to the second item.

**Exhibit 8.5  Items in an “Attitude Toward Police” Index**

| 1. Police officers are generally fair to all people, regardless of their race or ethnicity. |
| Strongly Agree | Agree | Disagree | Strongly Disagree |
| 2. Police officers are given too much freedom to stop and frisk community residents. |
| Strongly Agree | Agree | Disagree | Strongly Disagree |
| 3. If someone resisted arrest, even a little, most police officers would become assaultive if they thought they could get away with it. |
| Strongly Agree | Agree | Disagree | Strongly Disagree |
| 4. Police officers put their lives on the line every day trying to make it safe for residents of this community. |
| Strongly Agree | Agree | Disagree | Strongly Disagree |
| 5. The majority of police officers have lied under oath at least once. |
| Strongly Agree | Agree | Disagree | Strongly Disagree |
| 6. The majority of police officers are honest and fair. |
| Strongly Agree | Agree | Disagree | Strongly Disagree |
Due to the popularity of survey research, indexes already have been developed to measure many concepts, and some of these indexes have proved to be reliable in a range of studies. It usually is much better to use these indexes to measure concepts than to try to devise new questions to form a new index. As noted earlier in this chapter, the use of a preexisting measure both simplifies the work involved in designing a study and facilitates a comparison of findings to those obtained in previous studies.

One index available in the NCVS is designed to measure what is referred to in criminological literature as routine activities. To explain crime victimization, the routine activities theory focuses on the circumstances in which crimes are committed rather than on the circumstances of the offender. According to Cohen and Felson (1979), each criminal act requires the convergence of three elements: likely and motivated offenders, suitable targets, and an absence of capable guardians to prevent the would-be offenders from committing the crime. Thus, the routine patterns of work, play, and leisure time affect the convergence in time and place of the motivated offenders, the suitable targets, and the absence of guardians. To measure the extent to which respondents engage in routine activities away from the home, the NCVS asks three questions that are displayed in Exhibit 8.6. These questions measure different types of activities people routinely engage in when away from the home. When combined, these three questions create a better measure of an individual’s activities away from the home than would a single question.

<table>
<thead>
<tr>
<th>Exhibit 8.6</th>
<th>Example of an Index: NCVS Questions Used to Make Up an Index of Routine Activities Away From the Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before we get to the crime questions, I’d like to ask you about some of your usual activities. We have found that people with different lifestyles may be more or less likely to become victims of crime.</td>
<td></td>
</tr>
<tr>
<td>30. On average, during the past six months (that is, since __________, 20 __________), how often have you gone shopping? (For example, at drug, clothing, grocery, hardware, and convenience stores) (Read answer categories until respondent answers yes.)</td>
<td></td>
</tr>
<tr>
<td>31. On average, during the past six months, how often have you spent the evening away from home for work, school, or entertainment? (Read answer categories until respondent answers yes.)</td>
<td></td>
</tr>
</tbody>
</table>

Before we get to the crime questions, I’d like to ask you about some of your usual activities. We have found that people with different lifestyles may be more or less likely to become victims of crime.

30. On average, during the past six months (that is, since __________, 20 __________), how often have you gone shopping? (For example, at drug, clothing, grocery, hardware, and convenience stores) (Read answer categories until respondent answers yes.)

31. On average, during the past six months, how often have you spent the evening away from home for work, school, or entertainment? (Read answer categories until respondent answers yes.)
Another example of an index is the one used to measure student perceptions of tolerance for substance abuse on college campuses (Core Institute 2015). An excerpt from this is shown in Exhibit 8.7. Alone, no single question would be sufficient to capture the overall tolerance of substance abuse on campus. A person’s total response to these questions is likely to provide a more accurate indication of tolerance for substance abuse than would a single, general question such as, “Do students on this campus feel that drinking or using drugs is okay?”

The advantages of using indexes rather than single questions to measure important concepts are very clear, and for this reason, surveys often include multiple questions to measure one concept. The following are three cautions to consider when using indexes:

Our Presupposition That Each Component Question Is Measuring the Same Concept May Be Mistaken. Although we may include multiple questions in a survey to measure one concept, we may find that answers to the questions are not related to one another, and so the index cannot be created. Alternatively, we may find that answers to a few of the questions are not related to the answers given to most of the other questions. We may therefore decide to discard these particular questions before computing the average score.

The Questions in an Index May Cluster Together in Subsets. All the questions may measure the intended concept, but we may conclude that the concept actually has several different aspects. A multidimensional index has then been obtained. This conclusion can in turn help us refine our understanding of the original concept. For example, over two decades of work have culminated in the development of a multidimensional index of stress at the state level. Research has found that this index, the State Stress Index (SSI), is related to a number of aggressive behaviors also measured at the state level, such as state rates of homicide and rape (Linsky, Bachman, and Straus 1995). The SSI is based on the life-events theory of stress, which holds that the more events—such as divorce or movement to a new community—to which individuals must adapt, the greater risk they have of not being able to cope. The administration and scoring of life-event measures of stressors experienced by an individual are straightforward. Respondents are asked to indicate events on the list they experienced in the recent past. The number of life events is then added to provide a score that indicates the extent to which the respondent has experienced these stressful events. The SSI is a translation of the life-events approach from the original individual level to the macro or societal level. The basic strategy was to measure the rate at which these events occurred in each state to
# Exhibit 8.7 Example of an Index: Excerpt From the Index of Student Tolerance of Substance Abuse

37. During the past 30 days, to what extent have you engaged in any of the following behaviors?

<table>
<thead>
<tr>
<th>(Mark one for each line)</th>
<th>0 Times</th>
<th>1 Time</th>
<th>2 Times</th>
<th>3–5 Times</th>
<th>6–9 Times</th>
<th>10 or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refused an offer of alcohol or other drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bragged about your alcohol or other drug use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heard someone else brag about his or her alcohol or other drug use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carried a weapon such as a gun, knife, and so on (do not count hunting situations or weapons used as part of your job)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced peer pressure to drink or use drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held a drink to have people stop bothering you about why you weren’t drinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thought a sexual partner was not attractive because he or she was drunk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Told a sexual partner that he or she was not attractive because he or she was drunk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Core Institute 2015.

evaluate the stressfulness of living in each state. What developed was a multidimensional index composed of 15 indicators that statistically fell into three categories: economic stressors, family stressors, and community stressors. The specific variables used to make up the SSI are presented in Exhibit 8.8.
Sometimes Particular Questions Are Counted, or Weighted, More Than Others in the Calculation of the Index. Some questions may be more central to the concept being measured than others and so may be given greater weight in the index score. It is difficult to justify this approach without extensive testing, but some well-established indexes do involve differential weighting. Another approach to creating an index score is to give different weights to the responses to different questions before summing or averaging the responses. Such a weighted index is also termed a scale. The scaling procedure might be as simple as arbitrarily counting responses to one question as worth two or three times as much as responses to another question, but most often, the weight applied to each question is determined through empirical testing. For example, based on Mooney and Lee’s (1995) research on abortion law reform, the scoring procedure for a scale of support for abortion might give a 1 to agreement that abortion should be allowed “when a pregnancy results from rape or incest” and a 4 to agreement with the statement that abortion should be allowed “whenever a woman decides she wants one.” In other words, agreeing that abortion is allowable in any circumstances is much stronger support for abortion rights than agreeing that abortion should be allowed only in the case of rape or incest.

### Exhibit 8.8 Life-Events Indicators in the State Stress Index (SSI)

<table>
<thead>
<tr>
<th>Economic Stressors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business failures per 1 million population</td>
</tr>
<tr>
<td>Unemployment claims per 100 thousand adults age 18 and over</td>
</tr>
<tr>
<td>Striking workers per 100 thousand adults age 18 and over</td>
</tr>
<tr>
<td>Bankruptcy cases per 100 thousand population</td>
</tr>
<tr>
<td>Mortgage foreclosures per 100 thousand population</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family Stressors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divorces per 1 thousand population</td>
</tr>
<tr>
<td>Abortions per 100 thousand population</td>
</tr>
<tr>
<td>Illegitimate births per 100 thousand population age 14 and over</td>
</tr>
<tr>
<td>Infant deaths per 1 thousand live births</td>
</tr>
<tr>
<td>Fetal deaths per 1 thousand pregnancies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Stressors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaster assistance per 100 thousand population</td>
</tr>
<tr>
<td>Percentage residing in state less than five years</td>
</tr>
<tr>
<td>New housing units per 1 thousand population</td>
</tr>
<tr>
<td>New welfare recipients per 100 thousand population</td>
</tr>
<tr>
<td>High school dropouts per 100 thousand population</td>
</tr>
</tbody>
</table>

*Source: Linsky, Bachman, and Straus 1995.*
Demographic Questions

Almost all questionnaires include a section on demographic information such as sex, age, race or ethnicity, income, and religion. For many research studies, these questions are important independent variables. For example, research has shown that all five of these factors are related to the probability of victimization. Many researchers, however, include demographic questions that are not necessary for purposes of their research. Try to avoid this, particularly for questions on income, because it makes the questionnaire more intrusive than necessary. In fact, many respondents feel that questions about their income invade their privacy. If you believe income is an essential variable for your study, providing fixed responses that include a range of values to select from is less intrusive than asking respondents for specific annual incomes. This format is utilized by the NCVS, as shown in Exhibit 8.9.

Care should also be taken when writing questions about race and ethnicity. Many people are justifiably sensitive to these questions. Even the U.S. Bureau of the Census has been struggling with appropriate categories to offer respondents. In fact, the Bureau still utilizes two questions, one for race and one for respondent ethnicity (Hispanic or non-Hispanic), which is obviously problematic. Most surveys now include the option of marking categories that apply, so those with mixed race/ethnic backgrounds can be identified. The NCVS asks a question about Hispanic origin and then asks the following question about race:

Which of the following best describes your racial background? Please mark all that apply.

1. ____ White
2. ____ Black/African American
3. ____ American Indian/Alaska Native
4. ____ Asian
5. ____ Native Hawaiian/Other Pacific Islander
6. ____ Other (Specify) ______________

Exhibit 8.9 Question on Income From the NCVS

Including income from all sources, such as work, child support, and AFDC [Aid to Families with Dependent Children], how much income did you personally receive before taxes? Stop me when I get to the category that applies. Was it

<table>
<thead>
<tr>
<th>12a</th>
<th>Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less than $4,999</td>
</tr>
<tr>
<td>2</td>
<td>$5,000–$7,499</td>
</tr>
<tr>
<td>3</td>
<td>$7,500–$9,999</td>
</tr>
<tr>
<td>4</td>
<td>$10,000–$12,499</td>
</tr>
<tr>
<td>5</td>
<td>$12,500–$14,999</td>
</tr>
<tr>
<td>6</td>
<td>$15,000–$17,499</td>
</tr>
<tr>
<td>7</td>
<td>$17,500–$19,999</td>
</tr>
<tr>
<td>8</td>
<td>$20,000–$24,999</td>
</tr>
</tbody>
</table>
Allowing respondents to select all that apply is necessary when many respondents are from a mixed racial background. Questions on marital status can also be tricky to compose. The traditional categories of married, single, divorced, and widowed, still used by unsavvy researchers, can be interpreted very differently by different respondents. Why? Well, isn’t someone who is currently divorced also single? And what about someone not officially divorced but separated? To avoid confusing respondents, the U.S. Bureau of the Census adopted the following response categories: married, separated, widowed, divorced, and never married.

Because demographic questions are usually perceived as private by respondents, some researchers place them in a section at the end of the questionnaire with an introduction reassuring respondents that the information will remain confidential. However, when the information being gathered in the rest of the questionnaire is even more sensitive, such as information about violence that respondents may have experienced at the hands of a family member or an intimate partner, some researchers opt to keep demographic questions near the beginning of the questionnaire.

Don’t Forget to Pretest!

Adhering to the preceding question-writing guidelines will go a long way toward producing a useful questionnaire. However, simply asking what appear to be clear questions does not ensure that people have a consistent understanding of what you are asking. You need some external feedback, and the more of it, the better.

No questionnaire should be considered ready for use until it has been pretested. Try answering the questionnaire yourself, and then revise it. Try it out on some colleagues or other friends, and then revise it. Then select a small sample of individuals from the population you are studying or one very similar to it, and try out the questionnaire on them. Audiotape the test interviews for later review or, for a written questionnaire, include some space for individuals to add comments on each key question in the pretest version.

The NVAMW Survey was pretested in four different trials on a total of 107 respondents. Yes, four! The pretests were used to assess the effectiveness of the interview introduction, identify confusion and awkwardness in question wording and response categories, and evaluate the flow and length of the interview. Once the fourth pretest established that the instrument was workable, it was then fielded to replicate samples of 500, 1,000, or 2,000 completed interviews. This additional pretesting allowed Tjaden and Thoennes (2000) to determine whether they should retain, drop, or revise particular questions.

Another important form of feedback results from simply discussing the questionnaire content with others. Persons to consult should include other researchers, key figures in the locale or organization to be surveyed (such as elected representatives, company presidents,
and community leaders), and some individuals from the population to be sampled. If you find you have to explain a particular question in detail, you probably need to rewrite it. Run your list of variables and specific questions by such figures whenever you have a chance. Reviewing the relevant literature to find results obtained with similar surveys and comparable questions is also an important step to take. Of course, you should have already conducted such a review before writing your questions!

Another increasingly popular form of feedback comes from guided discussions among potential respondents, called focus groups, to check for consistent understanding of terms and to identify the range of events or experiences about which people will be asked to report. By listening to and observing the focus group discussions, researchers can validate their assumptions about what level of vocabulary is appropriate and what people are going to be reporting (Fowler 1995).

Professional survey researchers have also developed a technique for evaluating questions called the cognitive interview (Fowler 1995). Although the specifics vary, the basic approach is to ask people test questions and then probe with follow-up questions to learn how they understood the questions and what their answers mean.

Review the distribution of responses to each question, listen to the audiotapes, or read all the comments, and then code what you heard or read to identify problems in question wording or delivery. Revise any questions that respondents do not seem to interpret as you had intended or that are not working well for other reasons.

To create a good questionnaire takes several drafts. By the time you have gone through a couple of drafts, you may not be scanning the instrument as clearly as you think. A very honest illustration of this is provided by Don Dillman, the director of the Social and Economic Sciences Research Center at Washington State University. His research team was about ready to mail a questionnaire with the following response categories:

What is your opinion?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Oppose</td>
<td>Oppose</td>
<td>Neither Oppose nor Favor</td>
<td>Favor</td>
<td>Strongly Oppose</td>
</tr>
</tbody>
</table>

This Likert-type response format slipped not only by Dillman but by his typist, a research assistant, and another person working on the project. He explains,

> By the time a would-be surveyor has reached the final draft, he or she is often scanning the questionnaire for errors but not absorbing the detail. . . . All of us were looking for other things, such as spacing, punctuation, and content. The uniform appearance of the response categories looked right to all of us. (Seltzer 1996, 98)

A careful scrutiny of your questionnaire using the procedures outlined in this section will help you detect these and other problems.

**ORGANIZATION OF THE QUESTIONNAIRE**

Once the basic topics and specific variables for a questionnaire have been identified, they can be sorted into categories (which may become separate sections), listed in tentative order, and later adjusted to develop the questionnaire’s polish and coherence. Throughout the question-writing process, the grouping of variables into sections and the ordering...
of questions within sections can be adjusted. These adjustments will in turn require changes in the specific questions in an iterative process that leads to a polished, coherent questionnaire.

The first thing needed is a descriptive title for the questionnaire that indicates the overall topic. The title is essential because it sets the context for the entire survey. For example, both the NCVS and the NISVS are interested in measuring the magnitude of crime victimization in the United States. The NISVS, however, was presented as a survey interested in a number of personal safety-related issues, including tactics used in conflict resolution. The NCVS has the word crime right in the title, and this conveys to respondents that it is a survey interested in obtaining information only about crimes respondents have experienced. Unfortunately, some survey participants still may not view assaults they have experienced by intimates and other family members as criminal acts, which will decrease the chance that they will be counted as victims.

Even though many of the behaviors conveyed in the screening instruments (e.g., kicking and punching) are the same for both surveys, the context in which these questions are asked must inevitably play a role in the candor respondents are willing to provide. The contextual message of crime may take precedence over the questions and may discourage respondents from reporting incidents they do not perceive as crimes. Lynch (1996) illuminates the importance of context by citing a study undertaken by the BJS in 1975, when a fear-of-crime supplement was asked of a subsample of the respondents to the NCVS prior to the screening interview. Reports of victimization in the subsample that received the fear-of-crime supplement increased significantly; this finding was attributed to a warm-up effect of the fear supplement, such that the additional questions about fear of crime stimulated recall of crime events.

Floyd J. (“Jack”) Fowler Jr., PhD, Founder and Director of the Center for Survey Research

Jack Fowler “wrote the book” on survey research—two books, actually, with SAGE: Improving Survey Questions (1995) and Survey Research Methods (1988). This career focus crept up on Fowler while he was in school. As an undergraduate major in English at Wesleyan University, Fowler found himself fascinated by social science and went on to earn his PhD in social psychology at the University of Michigan. In graduate school, he got hooked on survey research.

Fowler was asked to serve as a research assistant in a series of studies designed to identify the sources of error in the National Health Interview Survey, a major source of health data in the United States. This was an opportunity to relate research methodology to real-life problems and improve the way the world works, and

Fowler seized it. He went on to found the Center for Survey Research at the University of Massachusetts Boston and to serve as its director for more than two decades. Fowler describes his professional life as “essentially a series of projects” that have made a difference by helping address important problems in areas ranging from health care, crime, and housing to medical decision making and views of local government.

His advice for students interested in a similar career is this:

Methods, methods, methods. Make sure you are firmly grounded in the methods of collecting and analyzing data. The research priorities will change, society and the nature of the problems change so fast. However, if you know how to collect and analyze data, you will always be relevant. . . . To enjoy work most days and to feel confident [that] it is making a positive difference is about as good as one can ask for.
Question Order Matters!

In addition to the title, question order and the use of multiple questions to uncover attitudes about emotionally charged topics are important, because these factors also can influence responses. Consider the issue of capital punishment. For example, a 2013 Gallup poll revealed that 64% of those surveyed approved of the death penalty for murder. However, when respondents were given the alternative punishment of life imprisonment without the possibility of parole, the support declined to 50%. This suggests that public opinion questions that simply ask whether the person approves of capital punishment for convicted murderers are a misleading indicator of the strength of support for the death penalty. As Paternoster (1991) explains,

What Americans may be expressing, however, is a desire for protection against dangerous criminals, not a desire for capital punishment. More sophisticated polling questions indicate that the public does not necessarily want to repay one life with another, but wants the murderer to be unable to offend again, and to ease the hardship and loss for those left behind. (30)

Question order can lead to context effects when one or more questions influence how subsequent questions are interpreted (Schober 1999). For example, when a sample of the general public was asked, “Do you think it should be possible for a pregnant woman to obtain a legal abortion if she is married and does not want any more children?” Fifty-eight percent said yes. However, when this question was preceded by a less permissive question that asked whether the respondent would allow abortion of a defective fetus, only 40% said yes. Asking the question about a defective fetus altered respondents’ frame of reference, perhaps by making abortion simply to avoid having more children seem frivolous by comparison (Turner and Martin 1984, 135). The point to take away from these cases is that question order is extremely important. As Schuman and Presser (1981) acknowledge,

Both examples illustrate the potential impact of question order on the respondents’ answers. This potential is greatest when two or more questions concern the same issue or closely related issues so that asking one question affects reactions to the next question. The impact of question order also tends to be greatest for general summary-type questions. (23)

There is no real cure for this potential problem, although the split-ballot technique may help identify the problem when the question order is reversed on a subset of the questionnaires. What is most important is to be aware of the potential for problems due to question order and to carefully evaluate the likelihood of their occurrence in any particular questionnaire. Survey results should mention, at least in a footnote, the order in which key questions were asked when more than one such question was used (Labaw 1980).

Organizational Guidelines

Questionnaires should conform to several other organizational guidelines as well:

- Major topic divisions within the questionnaire should be organized in separate sections, and each section should be introduced with a brief statement. This helps respondents understand the organization of the questionnaire.

- Instructions should be used liberally to minimize respondent confusion. Instructions should explain how each type of question is to be answered (such as circling a number
### Exhibit 8.10 Section of the NVAMW Survey on Stalking Victimization

**SECTION H: STALKING VICTIMIZATION**

**H1.** Now I'd like to ask you some questions about following or harassment you may have experienced on more than one occasion by strangers, friends, relatives, or even husbands and partners. Not including all bill collectors, telephone solicitors, or other sales people, has anyone—male or female—ever . . . [MARK ALL THAT APPLY]

01 Followed you or spied on you?
02 Sent you unsolicited letters or written correspondence?
03 Made unsolicited phone calls to you?
04 Stood outside your home, school, or workplace?
05 Showed up at places you were at, even though he or she had no business being there?
06 Left unwanted items for you to find?
07 Tried to communicate with you in ways against your will?
08 Vandalized your property or destroyed something you loved?
09 (Volunteered) Don't Know [GOTO SECTION I]
10 (Volunteered) Refused [GOTO SECTION I]
11 (Volunteered) None [GOTO SECTION I]

**H2.** If H1 = ANY OF 1–8 (RESPONDENT HAS BEEN STALKED) GO TO H3, OTHERWISE GO TO SECTION I.

**H3.** Has anyone ever done any of these things to you on more than one occasion?

1 Yes
2 No [GOTO SECTION I]
3 (Volunteered) Don't Know [GOTO SECTION I]
4 (Volunteered) Refused [GOTO SECTION I]

**H4.** How many different people have ever done this to you on more than one occasion?

__________ Number of people [RANGE IS 1–97]

98 (Volunteered) Don't Know [GOTO SECTION I]
99 (Volunteered) Refused [GOTO SECTION I]

**H5.** Was this person or these persons . . . [MARK ALL THAT APPLY]

01 Your current spouse?
02 An ex-spouse?
03 A male live-in partner?
04 A female live-in partner?

(Continued)
Exhibit 8.10  (Continued)

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<table>
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<tr>
<td>05</td>
<td>A relative?</td>
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<td>06</td>
<td>Someone else you know?</td>
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<tr>
<td>07</td>
<td>A stranger?</td>
</tr>
<tr>
<td>08</td>
<td>(Volunteered) Don’t Know</td>
</tr>
<tr>
<td>09</td>
<td>(Volunteered) Refused</td>
</tr>
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or writing a response) in a neutral way that is not likely to influence responses.
Instructions are particularly important with groups of questions that have standard answers laid out in a matrix format. The same set of response choices appears next to each question, and many respondents do not realize that they should circle one response on each line. Instructions also should guide respondents through skip patterns.

- Instructions may also be used to clarify for respondents why some information is included in the questionnaire (such as the implicit instruction to skip a set-off box of lines that are labeled as “for coding purposes only”).

- The questionnaire should look attractive, be easy to complete, and have substantial open space. Resist the temptation to cram as many questions as possible onto one page. Response choices should be printed in a font or format and location different from the questions.

- Response choices should be designated by numbers to facilitate coding and data entry after the questionnaire is completed.

There were several sections in the NVAMW Survey, including sections on fear of violence and accommodation behavior, previous relationships, current partner (spouse, boyfriend or girlfriend) characteristics, sexual victimization, physical victimization, stalking victimization, violence in current relationships, and threat victimization. Exhibit 8.10 presents the introduction and a portion of the section on stalking victimization. Even though this questionnaire was given over the phone by professional interviewers, notice the specific instructions provided throughout.

THE COVER LETTER

The cover letter for a mailed questionnaire and the introductory statement read by interviewers in telephone or in-person interviews are also critical to the survey’s success. Similar to the context set by the title of the survey, the initial statement of the cover letter sets the tone for the entire questionnaire. For example, the first thing interviewers said to respondents of the NVAMW Survey was, “Hello, I’m ________ from SRBI, the national research organization. We are conducting a national survey on personal safety for the Center for Policy Research, under a grant from the federal government.” Notice that even though the survey’s primary purpose was to uncover incidents of victimization, it was presented to respondents as a survey interested in issues of personal safety. This was done to increase the probability of respondents disclosing incidents of victimization even if they did not perceive them as
crimes. Also note that the introductory statement disclosed the researcher's affiliation and the project sponsor. In addition, the purposes of the survey should also be briefly described, and a contact telephone number should be included for those who wish to ask questions or register complaints.

A carefully prepared cover letter or initial statement should increase the response rate and result in more honest and complete answers to the survey questions; a poorly prepared cover letter or initial statement can have the reverse effects. There is no opportunity to clarify misunderstandings.

The cover letter or introductory statement must have the following characteristics:

**Credible.** The letter should establish that the research is conducted by a researcher or organization the respondent is likely to accept as a credible, unbiased authority. Research conducted by government agencies, university personnel, and recognized research organizations (such as Gallup or RAND) is usually considered credible. On the other hand, a questionnaire from an animal rights group on the topic of animal rights will probably be viewed as biased.

**Personalized.** The cover letter should include a personalized salutation (not “Dear Student”), refer to the respondent in the second person (“Your participation . . .”), and close with the researcher's signature.

**Interesting.** The statement should interest the respondent in the contents of the questionnaire. Never make the mistake of assuming that what interests you will also interest your respondents. Try to put yourself in their shoes before composing the statement and then test your appeal with a variety of potential respondents.

**Responsible.** Reassure the respondent that the information you obtain will be treated confidentially, and include a phone number the respondent can use if he or she has questions or would like a summary of the final report. Point out that the respondent's participation is completely voluntary (Dillman 1978). For example, in the NVAMW Survey, respondents were told,

> I will be asking you about your personal experiences and opinions. You don't have to answer any questions you don't want to. All your answers will be treated as strictly confidential. Your participation is completely voluntary but very important to the study. You can confirm the authenticity of the survey by calling our 800 number and asking for the Women's Safety Survey Coordinator.

**SURVEY DESIGNS**

The five basic survey designs are the mailed survey, group-administered survey, phone survey, in-person survey, and electronic or web-based survey. Exhibit 8.11 summarizes the typical features of the five different survey designs. Each survey design varies in its arrangement and application.

**Manner of Administration.** The five survey designs differ in the manner in which the questionnaire is administered. Mailed, group, and electronic surveys are completed by the respondents themselves. During phone and in-person interviews, however, the researcher or a staff person asks the questions and records the respondent’s answers.
Questionnaire Structure. Survey designs also differ in the extent to which the content and order of questions are structured in advance by the researcher. Most mailed, group, phone, and electronic surveys are highly structured, fixing in advance the content and order of questions and response choices. Some of these types of surveys, particularly mailed surveys, may include some open-ended questions (where respondents write in their answers rather than checking off one of several response choices). In-person interviews are often highly structured, but they may include many questions without fixed-response choices. Moreover, some interviews may proceed from an interview guide rather than a fixed set of questions. In these relatively unstructured interviews, the interviewer covers the same topics with respondents but varies questions according to the respondent's answers to previous questions. Extra questions are added as needed to clarify or explore answers to the most important questions.

Setting. Most mail and electronic questionnaires and phone interviews are intended for completion by only one respondent. The same is usually true of in-person interviews, although sometimes researchers interview several family members at once. On the other hand, a variant of the standard survey is a questionnaire distributed simultaneously to a group of respondents, who complete the survey while the researcher (or assistant) waits. Students in classrooms are typically the group involved, although this type of group distribution also occurs in surveys administered to employees and members of voluntary groups.

Cost. As mentioned earlier, in-person interviews are the most expensive type of survey. Phone interviews are much less expensive, but surveying by mail is cheaper yet. Electronic surveys are now the least expensive method because there are no interviewer costs, no mailing costs, and, for many designs, almost no costs for data entry. Of course, extra staff time and expertise is required to prepare an electronic questionnaire.

Because of their different features, the five designs vary in the types of errors to which they are most prone and the situations in which they are most appropriate. The rest of this section focuses on the unique advantages and disadvantages of each design.

Mailed, Self-Administered Surveys

A mailed (self-administered) survey is conducted by mailing a questionnaire to respondents, who then administer the survey themselves. The principal drawback in using this method of survey administration is the difficulty maximizing the response rate—we have to rely on people to voluntarily return the surveys! The final response rate is unlikely to be much
above 80% and almost surely will be below 70% unless procedures to maximize the response rate are precisely followed. A response rate below 60% is a disaster, and even a 70% response rate is not much more than minimally acceptable. It is hard to justify the representativeness of the sample if more than a third of those surveyed fail to respond.

Some ways to maximize the response rate (Fowler 1988; Mangione 1995; Miller 1991) include the following:

- Make the questionnaire attractive, with plenty of white space.
- Use contingent questions and skip patterns infrequently. When they are necessary, guide respondents visually through the pattern.
- Make individual questions clear and understandable to all the respondents. No interviewers will be on hand to clarify the meaning of the questions or probe for additional details.
- Use no more than a few open-ended questions. Respondents are likely to be put off by the idea of having to write out answers.
- Include a personalized and professional cover letter. Using an altruistic appeal (informing respondents that their response will do some good) seems to produce a response rate 7% higher than indicating that respondents will receive something for their participation.
- Have a credible research sponsor. According to one investigation, a sponsor known to respondents may increase the rate of response by as much as 17%. The next most credible sponsors are the state headquarters of an organization and then other people in a similar field. Publishing firms, college professors or students, and private associations elicit the lowest response rates.
- Write an identifying number on the questionnaire so you can determine who the nonrespondents are.
- A small incentive can help. Even a coupon or ticket worth $2 can be enough to increase the response rate.
- Include a stamped, self-addressed return envelope with the questionnaire.

Most important, use follow-up mailings to encourage initial nonrespondents to return a completed questionnaire. Dillman (2000) recommends a standard procedure for follow-up mailings:

1. Send a reminder postcard, thanking respondents and reminding nonrespondents, to all sample members two weeks after the initial mailing.
2. Send a replacement questionnaire with a new cover letter only to nonrespondents about three or four weeks after the initial mailing.
3. Send another replacement questionnaire with a new cover letter eight weeks after the initial mailing by certified mail if possible. (It’s pretty expensive.) If enough time and resources are available for telephone contacts or in-person visits for interviews, they will also help.

Related to the threat of nonresponse in mailed surveys is the hazard of incomplete response. Some respondents may skip some questions or stop answering questions at some point in the questionnaire. Fortunately, this problem does not often occur with well-designed questionnaires. Potential respondents who decide to participate in the survey will usually complete it.
But there are many exceptions to this observation, since questions that are poorly written, too complex, or about sensitive personal issues simply turn off some respondents. Revising or eliminating such questions during the design phase should minimize the problem.

Many researchers continue to rely on mailed surveys because they are relatively inexpensive, and respondents are free to answer questions at their leisure, without the scrutiny of a survey administrator.

**Group-Administered Surveys**

A **group-administered survey** is completed by individual respondents assembled in a group. The response rate is not usually a concern in surveys that are distributed and collected in a group setting, because most group members will participate. The difficulty with this method is that assembling a group is seldom feasible because it requires a captive audience. Individuals going about their daily activities are usually not amenable to group-administered surveys. With the exception of students, employees, members of the armed forces, and some institutionalized populations, most populations cannot be sampled in such a setting.

One issue of special concern with group-administered surveys is the possibility that respondents will feel coerced to participate and as a result will be less likely to answer questions honestly.

Also, because administering a survey to a group probably requires the approval of the group’s supervisor, and because such surveys are often conducted on the organization’s premises, respondents may infer that the researcher is not at all independent of the sponsor. Even those who volunteer may still feel uncomfortable answering all questions, which may bias their responses. No complete solution to this problem exists, but it helps to make an introductory statement that emphasizes the researcher’s independence, assures respondents that their surveys will be completely anonymous, and gives participants a chance to ask questions about the survey.

**Surveys by Telephone**

In a **phone survey**, interviewers question respondents over the phone and then record their answers. Phone interviewing has become a very popular method of conducting surveys in the United States because almost all families have phones. But two matters may undermine the validity of a phone survey: not reaching the proper sampling units and not getting enough complete responses to make the results generalizable.

**Reaching Sampling Units**

Today, drawing a random sample is easier than ever due to RDD (Lavrakas 1987). A machine calls random phone numbers within designated exchanges, regardless of whether the numbers are published. When the machine reaches an inappropriate household (such as a business in a survey directed to the general population), the phone number is simply replaced with another. Also, several recent surveys have used both landline and cell phone databases to capture individuals who no longer have landlines.

To ensure cell phone–only households were also included in the sample, NISVS interviews were conducted both by landline and cell phone. The NISVS used RDD in all 50 states and the District of Columbia, so estimates of victimization could be aggregated up to the state level of analysis. This allowed both individual- and state-level prevalence rates to be calculated. Regardless of how individuals are contacted, the interviewers must also ask a series of questions at the start of the survey to ensure that they are speaking to the appropriate member of the household.
Maximizing Response to Phone Surveys

Three issues require special attention in phone surveys. First, because people often are not home, multiple callbacks will be necessary for many sample members. In addition, interviewers must be prepared for distractions if the respondent is interrupted by other household members. Sprinkling interesting questions throughout the questionnaire may help maintain respondent interest. In general, rapport between the interviewer and the respondent is likely to be lower with phone surveys than in-person interviews, as respondents may tire and refuse to answer all the questions (Miller 1991).

The number of callbacks needed to reach respondents by telephone has increased greatly in the past 20 years, with increasing numbers of single-person households, dual-earner families, and out-of-home activities. The growth of telemarketing has also created another problem for telephone survey researchers: Individuals are more accustomed to saying no to calls from strangers or simply use their answering machines or caller ID mechanism to screen unwanted calls (Dillman 2000). The response rates for most phone surveys, even those sponsored by the U.S. government, have been decreasing over the past two decades. For example, the individual response rate for the NCVS was 91% in 1996, but by 2007, it had fallen to 85% (Groves and Cork 2008). Cell phone users are also harder (and more costly) to contact in phone surveys. Households with a cell phone but no landline tend to be younger, so the rate of phone survey participation is declining even more among those 18 to 34 years of age (Keeter 2008).

Response rates by age of respondent from the NCVS indicate that age is a factor. As you can see in Exhibit 8.12, persons 24 years of age or younger were much less likely to volunteer for the telephone interview compared to older persons. In fact, it can be seen that as age of respondents increased, so did response rates.

Phone surveyors also must cope with difficulties due to the impersonal nature of phone contact. Visual aids cannot be used, so the interviewer must be able to verbally convey all information about response choices and skip patterns. With phone surveys, instructions for the interviewer must clarify how to ask each question, and the response choices must be short.

Careful interviewer training is essential for phone surveys. Below is a brief description of how SRBI interviewers were trained before conducting the NVAMW Survey:

Because of the complexity of the survey, only the most experienced SRBI interviewers worked on the survey. Before fielding the survey, interviewers received specialized training on the general principles of survey research and the requirements of the study at hand. Interviewers were also trained to recognize and respond appropriately to cues that the respondent may have been concerned about being overheard. Telephone numbers of local support services (e.g., domestic violence shelters, rape crisis hotlines, child protective services) were offered to respondents who disclosed current abuse or appeared in distress. (Tjaden and Thoennes 1998)

Procedures can be standardized more effectively, quality control maintained, and processing speed maximized when phone interviewers are assisted by computers. This computer-assisted telephone interview has become known as CATI, and most large surveys are now performed in this way. There are several advantages to using CATI, but perhaps the foremost advantage is that data collection and data entry can occur concurrently. Second, the CATI system has several machine edit features that help minimize data entry error. For example, by automatically assigning single-punch fields of appropriate width for each data item in the questionnaire, the CATI system eliminates the possibility of over-punching and the possibility of including blanks as legitimate values. Third, by programming the skip patterns into its data entry program, the CATI system ensures that the aggregated database is comprehensive and accurate.

One method that avoids the interviewer altogether is computerized interactive voice response (IVR) survey technology. In an IVR survey, respondents receive automated calls and...
answer questions by pressing numbers on their touch-tone phones or speaking numbers that are interpreted by computerized voice recognition software. These surveys can also record verbal responses to open-ended questions for later transcription. Although they present some difficulties when many answer choices must be used or skip patterns must be followed, IVR surveys have been used successfully with short questionnaires and when respondents are highly motivated to participate (Dillman 2000). When these conditions are not met, potential respondents may be put off by the impersonality of this computer-driven approach.

In summary, phone surveying is the best method to use for relatively short surveys of the general population. Response rates in phone surveys tend to be very high, often above 80%, because few individuals will hang up on a polite caller or refuse to answer questions (at least within the first 30 minutes or so).

**In-Person Interviews**

What is unique to the in-person interview, compared to the other survey designs, is the face-to-face social interaction between interviewer and respondent. If financial resources are available for hiring interviewers to go out and personally conduct the surveys with respondents, in-person interviewing is often the best way to conduct a survey.

Although time-consuming and costly, in-person interviewing has several advantages. Response rates are higher for this survey design than for any other when potential respondents are approached by a courteous interviewer. For example, respondents for the NCVS actually stay in the sample for three years. The first of their surveys is performed in person. This is one reason the NCVS obtains a very high response rate—approximately 95%. In addition, in-person interviews can be much longer than mailed or phone surveys, and the questionnaire can be complex, with both open-ended and closed-ended questions and
frequent branching patterns. The order in which questions are read and answered can be controlled by the interviewer, and the physical and social circumstances of the interview can be monitored. Last, respondents’ interpretations of questions can be probed and clarified.

However, researchers must be alert to some special hazards due to the presence of an interviewer. Respondents should experience the interview process as a personalized interaction with an interviewer who is very interested in their experiences and opinions. At the same time, every respondent should have the same interview experience and be asked the same questions in the same way by the same type of person, who reacts similarly to the answers. Therein lies the researcher’s challenge: to plan an interview process that will be personal, engaging, consistent, and nonreactive and to hire interviewers who can carry out the plan. Without a personalized approach, the rate of response will be lower, and answers will be less thoughtful and potentially less valid. Without a consistent approach, information obtained from different respondents will not be comparable, because it is less reliable and less valid.

**Balancing Rapport and Control**

Adherence to some basic guidelines for interacting with respondents can help interviewers maintain an appropriate balance between personalization and standardization:

- Project a professional image in the interview, that of someone who is sympathetic to the respondent but nonetheless has a job to do.
- Establish rapport at the outset by explaining what the interview is about and how it will work and by reading the consent form. Ask the respondent if he or she has any questions or concerns, and respond to these honestly and fully. Emphasize that everything the respondent says is confidential.
- During the interview, ask questions at a close but not intimate distance. Stay focused on the respondent, and be certain your posture conveys interest. Maintain eye contact, respond with appropriate facial expressions, and speak in a conversational tone of voice.
- Be sure to maintain a consistent approach; deliver each question as written and in the same tone of voice. Listen empathically, but avoid self-expression or loaded reactions.
- Repeat questions if the respondent is confused. Use nondirective probes such as, “Can you tell me more about that?” for open-ended questions.

As with phone interviewing, computers can be used to increase control of the in-person interview. In a **computer-assisted personal interviewing (CAPI)** project, interviewers carry a laptop computer programmed to display the interview questions and process the responses that the interviewer types in, as well as to check that these responses fall within the allowed ranges. Interviewers seem to like CAPI, and the data obtained are at least as good in quality as those obtained in a noncomputerized interview (Shepherd, Hill, Bristor, and Montalyan 1996). **Computer-assisted self-interviewing (CASI)** is also an alternative. With audio-CASI, respondents interact with a computer-administered questionnaire by using a mouse and following audio instructions delivered via headphones. Audio-CASI is considered the most reliable way to administer questionnaires that probe sensitive or potentially stigmatizing information, such as offending or victimization information (Tourangeau and Smith 1996; Turner et al. 1998). Wolff, Blitz, Shi, Bachman, and Siegel (2006) used this technology to obtain information about the physical and sexual victimization experiences of male and female state prison inmates. They explain,

> The survey was administered using audio-CASI (computed assisted self-interviewing) and was available in English and Spanish. There were 30 computer stations set up at
each facility and members of the research team were available to answer any questions and assist with the technology as needed. (1350)

The presence of an interviewer may make it more difficult for respondents to give honest answers to questions about sensitive personal matters. If you are not using a CASI, interviewers may hand respondents a separate, self-administered questionnaire containing the more sensitive questions. After answering these questions, the respondent can then seal the separate questionnaire in an envelope so that the interviewer does not know the answers.

Although in-person interview procedures are typically designed with the expectation that the interview will involve only the interviewer and the respondent, one or more other household members are often within earshot. This is particularly problematic if you are asking respondents about issues related to other family members, such as victimizations by family members. Although the NVAMW Survey interviewed only one member of each household, the NCVS interviews all members of a selected household. Thus, all family members are asked the same set of screening questions regarding their victimization experiences with both known and unknown offenders. Even though respondents are instructed to reschedule a telephone or personal interview for a more convenient time (e.g., when others are not present), this situation may nevertheless prevent some respondents from disclosing incidents of violence to interviewers, particularly those incidents perpetrated by intimate partners within the household.

HOW MEN BEHAVE AT WORK

The New York Times reported on a survey they did in conjunction with Morning Consult with 615 men. They claimed that this was a nationally representative sample of men who had a full-time job. About 25% of the men said they had engaged in at least one form of gender harassment in the past year, such as telling crude jokes or stories or sharing inappropriate videos. About 1 in 10 of the men said they had engaged in unwanted sexual attention such as unwanted touching or making comments about someone's body. Not surprisingly, few men (about 2%) said they had actually engaged in sexual coercion, pressuring people into sexual acts by offering rewards or threatening retaliation.

For Further Thought:

1. What would you have to know about how the sample was selected to be confident that these results were representative of the general population of working men?

2. If you were going to conduct such a study, what questions would you ask on the questionnaire?

Maximizing Response to Interviews

Even if the right balance is struck between maintaining control over interviews and achieving good rapport with respondents, in-person interviews can still have a problem. Due to the difficulty of catching all the members of a sample, response rates may suffer. As we noted in Chapter 5, many households are screening their calls and have little tolerance for unwanted solicitations.

Several factors affect the response rate in interview studies. Households with young children or elderly adults tend to be easier to contact, whereas single-person households are more difficult to reach (Groves and Couper 1998). Refusal rates vary with some respondent characteristics. People with less education participate somewhat less in surveys of political issues (perhaps because they are less aware of current political issues). Less education is also associated with higher rates of don’t know responses (Groves 1989). High-income persons tend to participate less in surveys about income and economic behavior (perhaps because they are suspicious about why others want to know about their situation). Unusual strains and disillusionment in a society can also undermine the general credibility of research efforts and the ability of interviewers to achieve an acceptable response rate. These problems can be lessened with an advance letter introducing the survey project and by multiple contact attempts throughout the day and evening, but they cannot entirely be avoided (Fowler 1988; Groves and Couper 1998).

Electronic Surveys

Electronic surveys (also known as web-based surveys) have become increasingly useful for two reasons: growth in the fraction of the population using the Internet and technological advances that make the design of electronic surveys, often done using the web or e-mail, relatively easy.

However, it is still not possible to obtain a true representative sample of the U.S. population on the web, since not everyone is connected or has access to the Internet. While many specific populations have very high rates of Internet use, such as professional groups, middle-class communities, members of organizations, and, of course, college students, coverage still remains a major problem with many populations (Tourangeau, Conrad, and Couper 2012). About one quarter of U.S. households are not connected to the Internet (File 2013), so it is not yet possible to survey directly a representative sample of the U.S. population on the web. Rates of Internet usage also are much lower in other parts of the world, with a worldwide average of 34.3% and rates as low as 15.6% in Africa and 27.5% averaged across all of Asia. Households without Internet access also tend to be older, poorer, and less educated than are those that are connected, so web surveys of the general population can result in seriously biased estimates (File 2013; Pew Research Center 2014). Coverage problems can be compounded in web surveys because of much lower rates of survey completion: It is too easy to stop working on a web survey—much easier than it is to break off interaction with an interviewer (Tourangeau et al. 2012).

The extent to which the population of interest is connected to the web is the most important consideration when deciding whether to conduct a survey through the web. Other considerations that may increase the attractiveness of a web survey include a need for a large sample, desire for a rapid turnaround, a need to collect sensitive information that might be embarrassing to acknowledge in person, the availability of an e-mail list of the population, and the extent to which the interactive and multimedia features will enhance interest in the survey (Sue and Ritter 2012). Connor, Gray, and Kypri (2010) achieved a 63% response rate with a web survey about substance use that began with an initial e-mail invitation to a representative sample of undergraduate students at six New Zealand campuses.
There are several different approaches to conducting web-based surveys, each with unique advantages and somewhat different effects on the coverage problem. Many web-based surveys begin with an e-mail message to potential respondents that contains a direct link to the survey website. If a defined population with known e-mail addresses is to be surveyed, a researcher can send e-mail invitations to a representative sample without difficulty. To ensure that the appropriate people respond to a web-based survey, researchers may require that respondents enter a PIN (personal identification number) to gain access to the survey (Dillman 2000). However, lists of unique e-mail addresses for the members of defined populations generally do not exist outside of organizational settings. Many people have more than one e-mail address, and often, there is no apparent link between an e-mail address and the name or location of the person it is assigned to. As a result, there is no available method for drawing a random sample of e-mail addresses for people from any general population, even if the focus is only on those with Internet access (Dillman 2007).

Some web surveys are instead linked to a website that is used by the intended population, and everyone who visits that site is invited to complete the survey. Although this approach can generate a very large number of respondents, the resulting sample will necessarily reflect the type of people who visit that website (middle-class, young North Americans) and thus be a biased representation of the larger population (Dillman 2000). Some control over the resulting sample can be maintained by requiring participants to meet certain inclusion criteria (Selm and Jankowski 2006).

Coverage bias can also be a problem with web surveys that are designed for a population with high levels of Internet use. If the topic of the survey leads some people to be more likely to respond on the web, the resulting sample can be very unrepresentative. Wells, Cavanaugh, Bouffard, and Nobles (2012) identified this problem in a comparison of attitudes of students responding to a web survey about gun violence with students at the same university who responded to the same survey administered in classes. Here is their e-mail introducing their survey to potential respondents:

Recently, in response to shootings on university campuses like Virginia Tech and Northern Illinois University, several state legislatures (South Dakota, Texas, Washington) have begun debating whether to change rules banning students and employees from carrying concealed weapons on campus. This is an important public safety issue and the faculty in [name of student’s university] are interested in knowing how people on this campus feel about it.

Students who responded to the web survey were much more likely to support the right to carry concealed weapons on campus than were those who responded in the classroom survey. In general, having a more extreme attitude motivated people to participate.

Some web surveys are designed to reduce coverage bias by providing computers and Internet connections to those who do not have them. This design-based recruitment method begins by contacting people by phone and providing those who agree to participate with whatever equipment they lack. This approach considerably increases the cost of the survey, so it is normally used as part of creating the panel of respondents who agree to be contacted for multiple surveys over time. The start-up costs can then be spread across many surveys. Of course, coverage bias is not as important when a convenience sample will suffice for an exploratory survey about some topic. Freshman (2012) used a web survey of a convenience sample to study symptoms of post-traumatic stress disorder (PTSD) among victims of the convicted white-collar criminal Bernie Madoff.

This convenience, nonprobability sample was solicited via direct link to the study placed in online Madoff survivor support groups and comment sections of newspapers and blogs dealing with the event. The study announcement encouraged victims to
forward the link to other former investors who might be interested in responding to
the survey, thereby creating a snowball effect. The link led directly to a study descrip-
tion and enabled respondents to give informed consent prior to study participation.
Participants were assured of anonymity of their responses and were instructed how
to proceed in the event of increased feelings of distress as a result of study material.
The survey was presumed to take approximately five to 10 minutes to complete. (41)

Although a majority of respondents met clinical criteria for a diagnosis of PTSD, there is
no way to know if this sample represents the larger population of Madoff’s victims.
In contrast to problems of coverage, web surveys have some unique advantages for
increasing measurement validity (Selm and Jankowski 2006; Tourangeau et al. 2012).
Questionnaires completed on the web can elicit more honest reports of illicit behavior
and of victimization as compared with phone interviews (Parks, Pardi, and Bradizza 2006).
They are relatively easy to complete, as respondents simply click on response boxes, and
the survey can be programmed to move each respondent easily through sets of ques-
tions, not presenting questions that do not apply to the respondent. Pictures, sounds, and
animation can be used as a focus of particular questions, and graphic and typographic
variation can be used to enhance visual survey appeal. Definitions of terms can pop up
when respondents scroll over them (Dillman 2007). Using these features, a skilled web
programmer can generate a survey layout with many attractive features that make it more
likely that respondents will give their answers—and have a clear understanding of the
question (Smyth, Dillman, Christian, and Stern 2004). Responses can quickly be checked
to make sure they fall within the allowable range. Because answers are recorded directly
in the researcher’s database, data entry errors are almost eliminated, and results can be
reported quickly.

There are many free online services to aid you in developing a web survey, such as
SurveyMonkey. However, many universities have also subscribed to more sophisticated
survey engines such as Qualtrics. For example, the Center for Drug and Health Studies
at the University of Delaware conducted a college risk behavior survey using Qualtrics.
Exhibit 8.13 displays one screen of the survey, which was devoted to ascertaining the extent
to which students engaged in all types of risky behavior, including drinking and driving,
using drugs, cheating, victimization, stealing, fighting, gambling, and illegally downloading
material. Notice that the top of the screen told respondents how much of the survey they
had left before they were finished. To enhance their response rate, the researchers offered
students who completed the survey a $5 voucher that could be used at any university eating
establishment.

**Mixed-Mode Surveys**

Survey researchers increasingly are combining different survey designs. **Mixed-mode
surveys** allow the strengths of one survey design to compensate for the weaknesses of
another and can maximize the likelihood of securing data from different types of respon-
dents. For example, a survey may be sent electronically to sample members who have
e-mail addresses and be mailed to those who do not. Alternatively, nonrespondents in a
mailed survey may be interviewed in person or over the phone. As noted previously, an
interviewer may use a self-administered questionnaire and a CASI to present sensitive
questions to a respondent.

Mixing survey designs like this makes it possible that respondents will give different
answers to different questions because of the mode in which they are asked, rather than
because they actually have different opinions. However, use of what Dillman (2000) calls
“unimode design” reduces this possibility substantially. A **unimode design** uses questions and
response choices that are least likely to yield different answers according to the survey mode.
that is used. Unimode design principles include use of the same question structures, response choices, and skip instructions across modes as well as using a small number of response choices for each question.

**A Comparison of Survey Designs**

Which survey design should be used when? Group-administered surveys are similar in most respects to mailed surveys, except they require the unusual circumstance of having access to the sample in a group setting. We therefore do not need to consider this survey design by itself; what applies to mailed survey designs applies to group-administered survey designs, with the exception of sampling issues. Thus, we can focus our comparison on the four survey designs that involve the use of a questionnaire with individuals sampled from a larger population: mailed surveys, phone surveys, in-person surveys, and electronic surveys. Exhibit 8.14 summarizes their strong and weak points.

The most important consideration in comparing the advantages and disadvantages of the four survey designs is the likely response rate they will generate. Because of the great weakness of mailed surveys in this respect, they must be considered the least preferred survey design from a sampling standpoint. However, researchers may still prefer a mailed survey when they have to reach a widely dispersed population and do not have enough financial resources to hire and train an interview staff or to contract with a survey organization that already has an interview staff available in many locations.

Contracting with an established survey research organization for a phone survey is often the best alternative to a mailed survey. The persistent follow-up attempts necessary to secure
### Exhibit 8.14  Advantages and Disadvantages of Four Survey Designs

<table>
<thead>
<tr>
<th>Characteristics of Design</th>
<th>Mail Survey</th>
<th>Phone Survey</th>
<th>In-Person Survey</th>
<th>Electronic Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Representative sample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity for inclusion is known</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For completely listed populations</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>For incompletely listed populations</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Selection within sampling units is controlled (e.g., specific family members must respond)</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Respondents are likely to be located</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If samples are heterogeneous</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>If samples are homogeneous and specialized</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Questionnaire construction and question design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowable length of questionnaire</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Ability to include</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complex questions</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Open questions</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Screening questions</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Tediouos, boring questions</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Ability to control question sequence</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Ability to ensure questionnaire completion</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Distortion of answers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odds of avoiding social desirability bias</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Odds of avoiding interviewer distortion</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Odds of avoiding contamination by others</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Administrative goals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odds of meeting personnel requirements</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Odds of implementing results quickly</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Odds of keeping costs low</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

*Source: Adapted from Mail and Internet Surveys: The Tailored Design Method. 2nd ed., by Dillman, Don. A. Copyright © 2000 by John Wiley & Sons, Inc.*
an adequate response rate are much easier over the phone than in person or via mail. But the process is not simple:

Initial telephone contact with households was attempted during hours of the day and days of the week which had the greatest probability of respondent contact (between 5:30 P.M. and 10:00 P.M. on weekdays, between 9:00 A.M. and 10:00 P.M. on Saturdays, and between 10:00 A.M. and 10:00 P.M. on Sundays). Interviewers made five attempts to ringing unanswered telephones on different days and at different times over a period of at least three weeks in order to obtain the highest possible response rate. If the interview could not be conducted or completed at the time of the initial contact, the interviewer rescheduled the interview at a time convenient to the respondent. (Patricia Tjaden, personal communication)

In-person surveys are clearly preferable in terms of the possible length and complexity of the questionnaire itself as well as in the researcher’s ability to monitor conditions while the questionnaire is being completed. Mailed surveys often are preferable for asking sensitive questions, although this problem can be lessened in an interview by giving respondents a separate sheet to fill out on their own or including a CASI component. Although interviewers may themselves distort results, either by changing the wording of questions or failing to record answers properly, this problem can be lessened by careful training and monitoring of interviewers and by tape-recording interviews.

A phone survey limits the length and complexity of the questionnaire but offers the possibility of very carefully monitoring interviewers (Dillman 1978; Fowler 1988). For the NVAMW Survey, SRBI ensures quality control over its interviewers in the following manner:

Throughout the project, interviewers were silently monitored by a supervisor at least twice during each of their interviewing shifts to evaluate the manner in which interviewers were conducting the interview and the accuracy with which they were entering responses. (Tjaden and Thoennes 1998, 14)

The advantages and disadvantages of electronic surveys must be weighed in light of the target community’s Internet access at the time that the survey is to be conducted. As this seventh edition goes to press, too many people lack Internet connections for general use of Internet surveying, and too many people who have computers lack adequate computer capacity for displaying complex webpages.

These various points about the different survey designs lead to two general conclusions. First, in-person interviews are the strongest design and are generally preferable when sufficient resources and a trained interview staff are available; telephone surveys have many of the advantages of in-person interviews at a much lower cost. Second, the best survey design for any particular study will be determined by the study’s unique features and goals rather than by any absolute standard of what the best survey is.

**ERRORS IN SURVEY RESEARCH**

It might be said that surveys are too easy to conduct. Organizations and individuals often decide that a survey will help solve some important problem because it seems so easy to write up some questions and distribute them. But without careful attention to sampling, measurement, and overall survey design, the effort is likely to be a flop. Such flops are too common for comfort, so the responsible survey researcher must take the time to design surveys...
properly and to convince sponsoring organizations that this time is worth the effort (Turner and Martin 1984).

For a survey to succeed, it must minimize four types of error (Groves 1989): (1) poor measurement, (2) nonresponse, (3) inadequate coverage of the population, and (4) sampling error, which was covered in Chapter 5.

**Poor Measurement.** Measurement error was a key concern in Chapter 4, but there is much more to be learned about how to minimize these errors of observation in the survey process. It takes effort to answer survey questions carefully: Respondents have to figure out what each question means, recall relevant information, and decide which answer is most appropriate. Survey respondents sometimes reduce the effort required to answer a question by interpreting questions superficially and giving what they think will be an acceptable answer (Krosnick 1999). A tendency to choose responses appearing earlier in a list of responses—a “primacy effect”—is a similar problem (Toepoel 2016). Errors in measurement also arise when respondents are unwilling to disclose their feelings and behaviors, unable to remember past events, and misunderstand survey questions. What people report that they have done is not necessarily what they have actually done (Brenner 2012). A natural desire to say what the interviewer wants to hear can generate an “acquiescent response bias” among some respondents, while others may answer questions about sensitive issues in a way they believe is more socially desirable (Toepoel 2016). Presenting clear and interesting questions in a well-organized questionnaire will help reduce measurement error by encouraging respondents to answer questions carefully and to take seriously the request to participate in the survey. Careful assessment of survey question quality is thus an essential step in survey design. The next section focuses on how to write good survey questions.

**Nonresponse.** Nonresponse is a major and growing problem in survey research, although it is a problem that varies between particular survey designs. Social exchange theory can help us understand why nonresponse rates have been growing in the United States and Western Europe since the early 1950s (Dillman 2000; Tourangeau 2004). According to social exchange theory, a well-designed survey effort will maximize the social rewards for survey participation and minimize its costs as well as establish trust that the rewards will outweigh the costs (Blau 1964). The perceived benefits of survey participation have declined with decreasing levels of civic engagement and with longer work hours (Groves, Singer, and Corning 2000; Krosnick 1999). Perceived costs have increased with the widespread use of telemarketing and the ability of many people to screen out calls from unknown parties with answering machines and caller ID. In addition, recipients pay for time on cell phone calls, so the ratio of costs to benefits worsens for surveys attempting to reach persons using cell phones (Nagourney 2002).

**Inadequate Coverage of the Population.** A poor sampling frame can invalidate the results of an otherwise well-designed survey. Recall that we considered the importance of a good sampling frame in Chapter 5.

It is most important to maintain a realistic perspective on the nature of surveys to avoid making unrealistic assumptions about the validity of survey results. Although surveys provide an efficient means for investigating a wide range of issues in large and diverse populations, the data they provide is necessarily influenced by these four sources of error. Survey researchers must make every effort to minimize each one. Only by learning more about different survey features and survey research alternatives can we prepare to weigh the advantages and disadvantages of survey research in particular circumstances and thus assess the value of a survey design in relation to a specific research question.
ETHICAL ISSUES IN SURVEY RESEARCH

Survey research usually poses fewer ethical dilemmas than do experimental or field research designs. Potential respondents to a survey can easily decline to participate, and a cover letter or an introductory statement that identifies the sponsors of and motivations for the survey gives them the information required to make this decision. The methods of data collection are quite obvious in a survey, so little is concealed from the respondents. The primary ethical issue in survey research involves protecting respondents.

Protection of Respondents

If the survey could possibly have any harmful effects for the respondents, these should be disclosed fully in the cover letter or introductory statement (recall the informed consent form outlined in Chapter 3). The procedures used to reduce such effects should also be delineated, including how the researcher will keep interviews confidential and anonymous. In addition, surveys such as the NISVS and NCVS, which attempt to measure sensitive subject matter such as rape and intimate-perpetrated assault, should also have other protections in place. When asking about victimizations, particularly those that are perpetrated by known offenders and family members, WHO has been at the forefront of establishing policies to protect respondents. As WHO notes, “The primary ethical concern related to researching VAW [violence against women] is the potential for inflicting harm to respondents through their participation in the study” (Ellsberg and Heise 2005, 38). Because many perpetrators of IPV use control as a form of abuse, a respondent may suffer physical harm if an abuser finds out that he or she disclosed information about their relationship to an interviewer. Guidelines to prevent this from happening include interviewing only one person in the household (Ellsberg and Heise 2005). In addition, a graduated informed consent process is also recommended. For example, when first contacting a potential respondent, the initial person who answered the telephone should be provided only general information about the survey topic (e.g., on health-related issues). Only after a respondent is selected from a household should he or she be told about the specific topics that will be covered (e.g., violent victimizations). Interviewers should also remind respondents that they can stop the interview at any time, and the interviewer should establish a safety plan with each respondent.

Minimizing the distress of reliving victimization events and providing information on services and resources that can help relieve the respondent’s situation are also necessary. For example, the NISVS provided telephone numbers for the National Domestic Violence Hotline and the Rape, Abuse, and Incest National Network at the end of interviews. The college risk behavior survey discussed earlier in this chapter also gave respondents information about a number of avenues for seeking help, including the phone numbers to the University of Delaware Center for Counseling and Student Development, the Delaware Council on Gambling Problems, and the Delaware 24-Hour Rape Crisis Hotline. As you can see in Exhibit 8.15, the last screen of the survey provided this information to respondents.

Respondent protection is even more complicated when asking about victimizations against minor children, as the NCVS does (e.g., it interviews individuals aged 12 or older). Currently, researchers do not fall under the purview of mandatory reporters, according to most state statutes, and the WHO claims there is no consensus internationally about how to handle cases of child abuse (Bachman et al. 2013). This is true for cases of elder abuse that are reported by respondents as well. Even though statutes do not explicitly list researchers as mandatory reporters, however, interviewers should certainly be required to develop protocols to act in the best interests of a child or an elder when cases of these forms of abuse are revealed.
Confidentiality

Do any of the questions have the potential to embarrass respondents or otherwise subject them to adverse consequences (such as legal sanctions)? If the answer to this question is no, and it often is in surveys about general social issues, other ethical problems are unlikely. But if the questionnaire includes questions about attitudes or behaviors that are socially stigmatized or generally considered to be private or questions about actions that are illegal, the researcher must proceed carefully and ensure that respondents’ rights are protected.

The first step to take with potentially troublesome questions is to consider omitting or modifying them. Researchers often include some questions in surveys out of curiosity or out of a suspicion that the questions might prove to be important. If sensitive questions fall into this category, they probably should be omitted. There is no point in asking, “Have you ever
been convicted of a felony?” if the answers are unlikely to be used in the analysis of survey results.

Many surveys do include some essential questions that might prove damaging to the subjects if their answers were disclosed, particularly surveys interested in delinquent or criminal offending behavior. To prevent any possibility of harm to subjects due to disclosure of such information, it is critical to preserve subject confidentiality. When identifying information is needed, the only way to protect **confidentiality** is by ensuring that no one other than research personnel have access to information that could be used to link respondents to their responses, and even that access should be limited to what is necessary for specific research purposes. Only numbers should be used to identify respondents on their questionnaires, and the researcher should keep the names that correspond to these numbers in a separate, safe, and private location, unavailable to others who might otherwise come across them. Follow-up mailings or contact attempts that require linking the ID numbers with names and addresses should be carried out by trustworthy assistants under close supervision.

Only if no identifying information about respondents is obtained can surveys provide true **anonymity** to respondents. In this way, no identifying information is ever recorded to link respondents with their responses. However, the main problem with anonymous surveys is that they preclude follow-up attempts to encourage participation by initial nonrespondents, and they prevent panel designs, which measure change through repeated surveys of the same individuals. In-person surveys rarely can be anonymous, because an interviewer must in almost all cases know the name and address of the interviewee. However, phone surveys that are meant only to sample opinions at one point in time, as in political polls, can safely be completely anonymous. When no follow-up is desired, group-administered surveys also can be anonymous. To provide anonymity in a mail survey, the researcher should omit identifying codes from the questionnaire but could include a self-addressed, stamped postcard so the respondent can notify the researcher that the questionnaire has been returned, without being linked to the questionnaire itself (Mangione 1995).

Any survey can allow anonymous responses to a subset of particularly sensitive questions. A tear-off sheet containing these questions and a separate return envelope, without identifying information, can be included with a mailed survey. In an in-person interview, this special section can be left with the respondent to be completed later and returned by mail. Of course, a response obtained in this way cannot be linked with the response of the same subject to the same question in some later follow-up survey. But if it increases the response rate, this method can provide more valid results for the initial survey.

**CONCLUSION**

Survey research is an exceptionally efficient and productive method for investigating a wide array of social research questions. In addition to the potential benefits for social science, considerations of time and expense frequently make a survey the preferred data-collection method. One or more of the four survey designs reviewed in this chapter can be applied to almost any research question. It is no wonder that surveys have become the most popular research method in sociology and that they frequently influence discussion and planning about important social and political questions.

The relative ease of conducting at least some types of survey research leads many people to imagine that no particular training or systematic procedures are required. Nothing could be further from the truth. As a result of this widespread misconception, you will encounter a great many worthless survey results. You must be prepared to carefully examine the procedures used in any survey before accepting its findings as credible. And if you decide to conduct a survey, you must be prepared to invest the time and effort required to follow proper procedures.

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**Confidentiality:**
A provision of research in which identifying information that could be used to link respondents to their responses is available only to designated research personnel for specific research needs.

**Anonymity:**
Provided by research in which no identifying information is recorded that could be used to link respondents to their responses.
In Electronic surveys may be e-searched.

Mixed

* The cover letter for a mailed questionnaire and the
  introductory statement for an interview should be
credible, personalized, interesting, and responsible.

- Survey research is the most popular form of social
  research because of its versatility, efficiency, and
generalizability. Many survey datasets, including those
  of the NCVS and the NISVS, are available for social
  scientists to use in teaching and research.

- Surveys can fail to produce useful results due to
  problems in sampling, measurement, and overall
  survey design.

- A survey questionnaire or interview schedule should
  be designed as an integrated whole, with each
  question and section serving some clear purpose and
  complementing the others.

- Questions must be worded carefully to avoid confusing
  the respondents or encouraging a less-than-honest
  response. Inclusion of “don’t know” choices and neutral
  responses may help, but the presence of such options also
  affects the distribution of answers. Open-ended questions
  can be used to determine the meaning that respondents
  attach to their answers. Answers to any survey questions
  may be affected by the questions that precede them in a
  questionnaire or an interview schedule.

- Every questionnaire and interview schedule should
  be pretested on a small sample that is similar to the
  sample to be surveyed.

- The cover letter for a mailed questionnaire and the
  introductory statement for an interview should be
credible, personalized, interesting, and responsible.

- Response rates in mailed surveys are typically well
  below 70%, unless multiple mailings are made to
  nonrespondents and the questionnaire and cover letter
  are attractive, interesting, and fully planned. Response
  rates for group-administered surveys are usually much
  higher.

- Phone interviews using RDD allow for fast turnaround
  and efficient sampling. Multiple callbacks may be
  required, but once the people are contacted, most can
  be interviewed by phone for 30 to 45 minutes.

- In-person interviews have several advantages over
  other types of surveys: They allow longer and more
  complex interview schedules, monitoring of the
  conditions when the questions are answered, probing
  for respondents’ understanding of the questions, and
  high response rates.

- Electronic surveys may be e-mailed or posted on the
  web. IVR systems using the telephone are another
  option. At this time, use of the Internet is not sufficiently
  widespread to allow web surveys of the general
  population, but these approaches can be fast and efficient
  for populations with high rates of computer use.

- Mixed-mode surveys allow the strengths of one survey
  design to compensate for the weaknesses of another.
  However, questions and procedures must be designed
  carefully, using unimode design principles to reduce
  the possibility that responses to the same question will
  vary as a result of the mode of delivery.
Most survey research poses few ethical problems because respondents are able to decline to participate. This option should be stated clearly in the cover letter or introductory statement. Special care must be taken when questionnaires are administered in group settings (to captive audiences) and when sensitive personal questions are to be asked; subject confidentiality should always be preserved.

**EXERCISES**

1. Read the original article for one of the surveys described in this book. (Check the texts of the chapters for ideas.) Critique the article using the questions presented in Appendix B as your guide. Focus particular attention on sampling, measurement, and survey design.

2. Write 8 to 10 questions for a one-page questionnaire on fear of crime among students. Include some questions to measure characteristics (such as income or year in school) that might help explain their attitudes. Make all but one of your questions closed ended.

3. After writing the questionnaire for Exercise 2, write at least two research hypotheses for what you intend to find and explain your reasoning. For example, do you expect female students to experience a greater fear of crime than male students? If so, why?

4. By interviewing two students, conduct a preliminary pretest of the questionnaire you wrote for Exercise 2.

5. Make any necessary revisions to the questionnaire you wrote in Exercise 2. Write a cover letter that presumes the survey will be administered to students in a class at your school. Submit the questionnaire and cover letter to your instructor for comment and evaluation.

6. Test your understanding of survey research terminology by completing one set of interactive exercises on survey design from the Student Study Site (http://edge.sagepub.com/bachmanprccj7e). Be sure to review the text on the pages indicated in relation to any answers you get wrong!

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**DEVELOPING A RESEARCH PROPOSAL**

1. Write 10 questions for a one-page questionnaire that concerns your proposed research question. Your questions should operationalize at least three of the variables on which you have focused, including at least one independent and one dependent variable (you may have multiple questions to measure some variables). Make all but one of your questions closed-ended. If you completed the research proposal exercises in Chapter 4, you can select your questions from the ones you developed for those exercises.

2. Conduct a preliminary pretest of the questionnaire by conducting cognitive interviews with two students or other persons similar to those to whom the survey is directed. Follow up the closed-ended questions with open-ended probes that ask the students what they meant by each response or what came to mind when they were asked each question. Take into account the feedback you receive when you revise your questions.

3. Polish up the organization and layout of the questionnaire, following the guidelines in this chapter. Prepare a rationale for the order of questions in your questionnaire. Write a cover letter directed to the appropriate population that contains appropriate statements about research ethics (human subjects issues).
WEB EXERCISES

1. Go to the Social Science Information Gateway (SOSIG) website (http://www.ariadne.ac.uk/issue2/sosig). Search SOSIG for electronic journal articles that use surveys to collect information on crime, criminal behavior, or criminal victimization. Find at least five articles and briefly describe each.

2. Go to the Finnish Social Science Data Archive website (https://services.fsd.uta.fi/catalogue/index?lang=en&study_language=en). From here, you can browse the catalog by topic, keyword, or type of data (quantitative or qualitative). Browse the publications list or conduct a search at the site for at least three countries for studies that use surveys to collect information on crime, criminal behavior, or criminal victimization. What type of information did you find? If possible, do a cross-national comparison between the studies reviewed in Web Exercise 1 and the studies found in this exercise.

3. Who does survey research, and how do they do it? These questions can be answered through careful inspection of ongoing surveys and the organizations that administer them (https://ciser.cornell.edu/about-us/partners/). Spend some time reading about the different survey research organizations, and write a brief summary of the types of research they conduct, the projects in which they are involved, and the resources they offer on their websites. What are the distinctive features of different survey research organizations?

4. Go to the Research Triangle Institute site (http://www.rti.org). Click on “Services and Capabilities” and then click on “Surveys and Data Collection.” Read about the institute’s methods for survey design and instrument development. Continue to explore this section of the website. Explore the innovative techniques used by RTI. What does reviewing this website add to your understanding of these topics from reading this chapter?

5. Go to The Pew Research Center (http://www.pewsocialtrends.org). Browse a few of their recent surveys and review 10 questions. Critique them in terms of the principles for question writing that you have learned.

ETHICS EXERCISES

1. In this chapter, we posed the following questions: “How can researchers ameliorate the negative consequences that may arise from responding to these surveys?” and “What responsibility do researchers have in providing safety to respondents, should they need it?” Write a short statement in response to each question.

2. The NISVS interviews people 18 years or older, but the NCVS selects into their sample all people in the household who are 12 years of age or older. We already asked you about the ethical dilemmas of reporting victimizations, but what about respondents who are minors and under the age of 18? What about children under the age of 12? Teachers and medical personnel are required by law to report cases they believe to represent incidents of child abuse. Should researchers have the same obligation? How would this affect large-scale surveys using RDD, in which you want to preserve the anonymity of respondents?

3. Group-administered surveys are easier to conduct than other types of surveys, but they always raise an ethical dilemma. If a teacher allows a researcher to survey a class or if an employer allows employees to complete a survey on company time, are the surveys really voluntary? Is it sufficient to read a statement to the group stating that their participation is entirely up to them? What general guidelines should be followed in such situations?
1. Let’s take a look at the structure of the GSS survey first.
   a. First, run frequencies for the variables `race`, `educcat`, and `polhitok`.
   b. Look carefully at the number of cases for each of these measures. Why do you think the figure is so much smaller for one measure than for the other two? Recall the discussion of the GSS in this chapter.

2. Look critically at how the question for the variable `grass` is written and measured. The exact question was “Do you think the use of marijuana should be made legal or not?” Look back at your frequency and notice the response categories offered.
   a. Can this question's phrasing be interpreted to mean multiple things? Be specific in your answer.
   b. Are response categories mutually exclusive? If not, be clear where the overlap is.
   c. Does this question minimize fence sitting?
   d. How well does this question capture nuances of opinion?
   e. Are there any other issues or strengths for this question?

f. Rewrite this question so that it corrects the limitations you have identified.

3. Let’s answer a substantive question: Who is most likely to be pro-marijuana legalization in terms of race and education?
   a. Write a hypothesis for each group.
   b. Then, use a cross-tabulation with the variable `grass` as the dependent variable and `educcat` and `race` as independent variables.
   c. What do you find? Are your hypotheses supported?
   d. Consider who is most likely to be arrested and/or imprisoned for marijuana use—poor black men. Are these results surprising or unintuitive in light of that information?
   e. Do you think the question you wrote for Exercise 2f would have given comparable results? Why or why not?

4. The GSS is administered face to face. It’s important to check whether the person asking questions has any influence on how people respond. For this case, let’s look at whether an interviewer’s race changes responses to hot button race-related questions.
a. Let’s look at how the interviewer’s race (variable raceint) affects attitudes about police violence. To do this, cross-tabulate raceint with the variable polhitok, which asked if respondents thought it would ever be acceptable for police to hit a citizen.

b. Is there evidence of social desirability bias in this variable? Can we fully trust the results for these questions? What might be causing this bias, if there is any?

c. If there is evidence of bias, what could be done about the way these questions (or the survey) are administered to reduce this desirability bias?

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