

# 1

## CONDUCTING SURVEYS

Everyone Is Doing It

### CHAPTER OBJECTIVES

After reading and studying this chapter's contents, you will be able to:

- Define a survey.
- Compare and contrast the advantages, limitations, and costs of self-administered, in-person, and web- or mobile-based surveys.
- Describe and justify the use of specific surveys administered in a variety of settings such as education, health, and business.
- Assess the ethical implications of using surveys in real-life settings.
- Appraise the adequacy of a survey organization's privacy policy and discuss the criteria you used in making your evaluation.

### OVERVIEW

Surveys are everywhere. You will find them in doctors' offices, schools, airplanes, and hotel rooms. When you buy a product or order a service online, you can expect to receive a survey asking you to rate it. Surveys are used to collect information from or about people to describe, compare, or explain their knowledge, feelings, values, and behavior. Surveys typically take the form of self-administered questionnaires and interviews. Self-administered questionnaires can be completed by hand, and online interviews can take place in person ("face-to-face," on the phone), in online forums, and by videoconference).

Survey data is used by program planners, evaluators, administrators, managers, researchers, marketers, and policy leaders in diverse fields including business, health, education, social welfare, and politics.

Usable surveys result from clearly stated and valid questions. Surveyors must know in advance who and how many people will be contacted (sampling) and when and how often the survey will take place (design). Surveyors must also be able to efficiently process, analyze, and interpret data.

Choosing among survey types (self-administered questionnaires or interviews) and administration methods (mail, phone, or internet) requires (1) identifying the combination most likely to produce credible and accurate results and (2) balancing the desired survey types and administration methods against available resources.

Survey purposes and methods fall on a continuum. Some surveys can have far-reaching, generalizable effects, and their methods must be scientific. Surveys of the population's health conducted by the U.S. government are examples of scientific surveys. Other surveys are conducted to meet specific needs; their methods may not always achieve the highest standards of scientific rigor, but they must still produce accurate results and so must use reliable and valid techniques. Polling students in a particular school to identify their summer reading choices, to be sure the library is well stocked, is an illustration of a survey designed to meet a specific need.

Surveyors must be concerned with protecting respondents' privacy and assuring confidentiality of responses. Most institutions have rules for protecting human subjects and ensuring that their consent to respond is an informed consent. Online surveys have special rules for guarding confidentiality. These surveys may be vulnerable to outsiders and need protection across three communication arms: surveyor to respondent, respondent to web server, and web server to surveyor.

## WHAT IS A SURVEY?

Surveys are information collection methods used to describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behavior. A survey can be a self-administered questionnaire that someone fills out alone or with assistance, or a survey can be an interview done in person or on the phone. Some surveys are on paper or online, and the respondent can complete them privately at home or in a central location—say, at a health center. The respondent can either return the completed survey by snail mail or fill it out online. Surveys can be interactive and guide the respondent through the questions. Interactive surveys also may provide audiovisual cues to help.

Here are at least three good reasons for conducting surveys:

*Reason 1: A policy needs to be set or a program must be planned.*

### EXAMPLE: SURVEYS TO MEET POLICY OR PROGRAM NEEDS

- The YMC Corporation wants to determine which hours to be open each day. The corporation surveys employees to find out which 8-hour shifts they are willing to work.
- The national office of the Health Voluntary Agency is considering providing daycare for its staff's children. How many have very young children? How many would use the agency's facility?
- Ten years ago, the Bartley School District changed its language arts curriculum. Since then, some people have argued that the curriculum has become out of date. What do the language teachers think? If revisions are needed, what should they look like?

*Reason 2: You want to evaluate the effectiveness of programs to change people's knowledge, attitudes, health, or welfare.*

## EXAMPLE: SURVEYS IN EVALUATIONS OF PROGRAMS

- The YMC Corporation has created two programs to educate people about the advantages and disadvantages of working at unusual hours. One program takes the form of individual counseling and a specially prepared, self-monitored online course. The second program is conducted in large groups. A survey is conducted 6 months after each program is completed to find out whether the employees think they got the information they needed. The survey also aims to find out whether they would recommend that others participate in a similar program and how satisfied they are with their work schedules.
- The Health Voluntary Agency is trying two approaches to childcare. One is primarily child centered, and the children usually decide from a list of activities which ones they would like to do during the hours they are in the program. The other is academic and artistic. Children are taught to read, play musical instruments, and dance at set times during the day. Which program is most satisfactory in that the parents, children, and staff are active participants and pleased with the curriculum's content? The agency surveys parents, children, and staff to get answers.
- The Bartley School District changed its language arts curriculum. A survey is conducted to find out whether and how the change has affected parents' and students' opinions of the high school program.

*Reason 3: You are a researcher who uses a survey to get information about how to guide studies and programs.*

## EXAMPLE: SURVEYS FOR RESEARCH

- Because the YMC Corporation has so many educational programs, it wants to research how adults learn best. Do they prefer self-learning or formal classes? Are reading materials appropriate, or are videos better? How do they feel about online learning? As part of its research, and to make sure all the possibilities are covered, the corporation conducts a survey of a sample of employees to learn their preferences.
- The Health Voluntary Agency is considering joining with a local university in a study of preschool education. The agency conducts a survey of the parents participating in the new daycare programs. The survey asks about the participants' education and income. Researchers need data such as this so they can test one of their major assumptions—namely, that parents with higher education and incomes are more likely to choose the more academic of the two preschool programs.
- The Bartley School District is part of a U.S. government-funded national study of the teaching of the English language. The study's researchers hypothesized that classroom teaching depends more on the teachers' educational backgrounds and reading preferences than on the formal curriculum. A survey is conducted to find out teachers' educational backgrounds and reading habits so that that data is available for testing the researchers' hypothesis.

## WHEN IS A SURVEY BEST?

Many methods exist for obtaining information about and from people. A survey is only one. Consider a youth center that has as its major aim to provide a variety of services to the community. It offers medical, financial, legal, and educational assistance to residents of the city who are between 12 and 21 years of age, regardless of background. The program is particularly proud of its coordinated approach, arguing that the center's effectiveness comes from making available many services in one location to all participants. Now that the center is 10 years old, a survey is to be conducted to find out how successful it is. Are participants and staff satisfied? Which services do young people use? Is the center a multiservice one? Are people better off with their health and other needs because of their participation in the center? A self-administered questionnaire survey is decided on to help answer these and other questions. Figure 1.1 shows some excerpts from the questionnaire.

**FIGURE 1.1** ■ Excerpt From an Overly Ambitious Self-Administered Questionnaire

5. Is your blood pressure now normal?

- Yes 1
- No 2

7. Which of the following social services have you used in the last 12 months? (Please indicate yes or no for each service.)

Services	1. Yes	2. No
Medical.....	1	2
Legal.....	1	2
Financial.....	1	2
Educational.....	1	2

10. How satisfied are you with each of the following services? Please indicate your satisfaction with each service.

Services	5. Definitely Satisfied	4. Satisfied	3. Neither Satisfied Nor Dissatisfied	2. Not Satisfied	1. Definitely Not Satisfied
Daily counseling session	5	4	3	2	1
Legal aid facility	5	4	3	2	1
Library	5	4	3	2	1

11. How much time in a 5-minute period does the doctor spend listening (rather than, say, talking) to you? (Please check one.)

- Less than 1 minute
- About 1 or 2 minutes
- More than 2 minutes

The questionnaire was shown to a reviewer whose advice was to eliminate Questions 5, 7, and 11, and keep only Question 10. The reviewer stated that surveys are not best for certain types of information. Here is the reasoning:

Question 5 asks for a report of a person's blood pressure. Is it normal? In general, information of this kind is most accurate if it is obtained from other sources—say, a medical record. Many people might have difficulty recalling their blood pressure with precision and would be at a loss to define normal blood pressure.

Question 7 may be all right if you feel confident that the person's recall will be accurate. Otherwise, the youth center's records are probably a better source of information about which services are used.

Question 11 asks the patient to tell how much time the doctor spends listening rather than talking. If you are interested in the patient's perceptions, then the question is fine. If, however, you want data on the actual time the doctor listened rather than talked to the patient, observation by an impartial observer is probably best.

Question 10 is appropriate. Only participants can tell you how satisfied they are. No other source will do so as well.

Surveys are by no means the only source of information for making decisions, nor are they necessarily the most relevant. Some other sources of information are the following:

- Observations or eyewitness reports; filmed, videotaped, and audiotaped accounts
- Performance tests that require a person to do a task (such as teaching a lesson to a class); observer assessment of the effectiveness of the performance
- Written tests of ability or knowledge
- Reviews that rely on existing documentation, such as examination of medical and school attendance records; analysis of the content of published and unpublished articles and diaries; interpretation of the activities of online chat and support groups

Surveys can be used in deciding policy or in planning and evaluating programs and conducting research when the information you need should come directly from people. The data they provide is descriptions of feelings and perceptions, values, habits, and personal background or demographic characteristics such as age, health, education, and income.

Sometimes surveys are combined with other sources of information. This is particularly true for evaluations and research.

## EXAMPLE: SURVEYS COMBINED WITH OTHER INFORMATION SOURCES

- As part of its evaluation of childcare programs, the Health Voluntary Agency surveys parents, children, and staff about their degree of participation and satisfaction. Also, the agency reviews financial records to evaluate the costs of

each program, and standardized tests are given to appraise how ready children were for school.

- The YMC Corporation is researching how adults learn. Achievement and performance tests are given at regular intervals. In addition, a survey provides supplemental data on how adults like to learn.

## SELF-ADMINISTERED QUESTIONNAIRES AND INTERVIEWS: THE HEART OF THE MATTER

All surveys consist of (1) questions and responses. To get accurate data, you must account for a survey's (2) sampling and design, (3) data processing or "management" and analysis, (4) pilot testing, and (5) response rate. Survey results are presented as written (printed on paper or reproduced electronically) and oral reports.

### Questions and Responses

Information from surveys is obtained by asking questions. Questions are sometimes referred to as *items*. The questions may have forced-response choices.

#### EXAMPLE: FORCED-CHOICE QUESTION

What is the main advantage of multiple-choice over essay questions?

- Can be scored objectively
- Are best at measuring complex behaviors
- Can have more than one answer
- Are the least threatening of the question types

Questions on surveys may be open-ended.

#### EXAMPLE: OPEN-ENDED QUESTION

What is the main advantage of multiple-choice over essay questions?

Answer here:

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The selection, wording, and ordering of questions and answers require careful thought and a reasonable command of language.

## Survey Sample and Design

Surveys are data collection methods used to obtain information from and about people: From and about which people, how often, and when? As soon as you raise questions such as these, you must become concerned with the *sample* and *design* of the survey. The sample is the number and characteristics of people in the survey. The design refers to how often the survey takes place (only once, or *cross-sectional*; over time, or *longitudinal*), whether the participants are selected at random or are chosen some other way, and how many separate groups are included.

Consider these three surveys:

Survey 1: What do graduates from the class of 2025 know about physical fitness?

*Survey method:* Online questionnaire

*Sample:* All 1,000 graduates from State College's class of 2025

*How often survey takes place:* Only once—at graduation

*How participants are selected:* All graduates are eligible

*How many groups:* Only one—the class of 2025

*Design:* Cross-sectional

Survey 2: Does knowledge about physical fitness change over a 12-month period among graduates of the class of 2025?

*Survey method:* Online questionnaire

*Sample:* All 1,000 graduates from State College's class of 2025

*How often survey takes place:* Twice—at graduation and 12 months later

*How participants are selected:* All graduates are eligible

*How many groups:* Only one—the class of 2025

*Design:* Longitudinal cohort

Survey 3: Over time, do differences exist among graduating classes in their knowledge of physical fitness?

*Survey method:* Online questionnaire

*Sample:* A 75% randomly selected sample of graduates from the classes of 2025, 2027, and 2029 to equal 2,250 graduates

*How often survey takes place:* Three times—at graduation and 12 and 24 months later

*How participants are selected:* Randomly

*How many groups:* Three—the classes of 2025, 2027, and 2029

*Design:* Longitudinal and comparative

Survey 1 asks for a portrait of the class of 2025's knowledge of physical fitness, and a mailed questionnaire is to be used. This portrait is called a cross-sectional survey design. Survey 2

wants to know about changes in knowledge of physical fitness over a 1-year period: from graduation forward 12 months. The design is longitudinal. The entire class is a cohort of people.

Survey 3 is longitudinal because survey data is collected from each of the three graduating classes over three points in time: at the time of graduation and 1 and 2 years later. The design also is comparative because knowledge can be compared between any two and among all three classes at graduation, 1 year later, 2 years later, or across all three times. An illustration of the design for Survey 3 can take the form of Table 1.1.

Survey 3 differs from Surveys 1 and 2 in how the graduates are selected for participation. In Survey 3, a 75% sample of graduates will be randomly selected to participate. In the other two surveys, all graduates, not only a sample, are eligible. *Random selection* means that each graduate has an equal chance of being included.

All three surveys are online, but their samples and designs vary.

### Planning for Data Analysis

Regardless of your survey's design or size, you must think ahead to how you plan to analyze the survey's data.

Will you compute percentages so that your results look like this?

Of the total sample, 50% reported that they were Republicans, 42% were Democrats, 5% were Independent, 1% belonged to the Green Party, and 3% had no party affiliation.

Will you produce averages to appear this way?

The average age of the respondents is 56.4 years. The median educational level is 13 years.

Will you compare groups and report something like this?

A total of 60% of the men, but only 20% of the women, were Republicans.

Respondents do not differ significantly in satisfaction with the present government.

Will you look for relationships such as this?

The survey found no association between how liberal or conservative people were and their educational attainments.

**TABLE 1.1** ■ A Longitudinal Survey Design Comparing Class Knowledge Over Time

Class	When Survey Is Given		
	Time of Graduation	1 Year After Graduation	2 Years After Graduation
2025			
2027			
2029			



High school graduates who were 30 years of age or older were significantly more likely to vote in the last election than were older, less educated respondents.

Will you look for changes over time?

Since 2020, statistically significant differences have been found in the number of men participating in 2 or more hours of childcare per day.

## Pilot Testing

A pilot test is a tryout, and its purpose is to help produce a survey form that is usable and will provide you with the information you need. All surveys *must* be pilot tested before being put into practice. Self-administered questionnaires depend heavily on the clarity of their language (it does not matter if it is a written or online questionnaire), and pilot testing quickly reveals whether people understand the directions you have provided and if they can answer the survey questions. A pilot test of a face-to-face interview will also tell you about interviewers. Can they follow the interview form easily? Are the spaces on printed surveys large enough for recording responses? Do interviewers know what to do if the computer “freezes” while they are during a computer-assisted interview? Does the respondent understand how to move back and forward through an online survey? Pilot tests also can tell you how much time it takes to complete the survey.

Testing helps make the survey run smoothly. Whenever possible, you should try to duplicate the environment in which the survey is to take place. That might mean obtaining permission from people to be only in the pilot test but not in the survey, although they are eligible for full participation.

## Response Rate

The surveyor wants everyone who is eligible to respond to all questions. Pilot testing helps improve the response rate because it can eliminate severe potential sources of difficulty, such as poorly worded questions and no place to record answers on printed questionnaires. Furthermore, if the entire set of survey procedures is carefully tested, then this, too, can help the response rate. Before you do a telephone interview, ask these questions: Do you have available a current list of telephone numbers? Are you willing to make phone calls at the time the survey respondents are available? Do you have a plan for reaching respondents who do not return calls left on voicemail? For online surveys ask the following: Do you have available a current list of email addresses? Do you know how to ensure privacy of responses? Other ways of ensuring good response rates exist, regardless of survey type, such as keeping surveys short and simple and providing incentives for participating.

How high should the response rate be? If you are conducting a large, complex survey, you will want to use statistical procedures to answer this question. If your survey is relatively simple (say, a pool of teachers in a school or nurses in three hospitals), then you have to decide how many people you will need for the results to be believable. If 20 people are eligible to complete a mailed, self-administered questionnaire and only 10 respond, you may feel different from the way you will feel if, at another time, 200 of 400 respond. Both surveys have a 50% response rate, but reporting on the views of 10 of 20 people may appear to be less convincing than telling about 200 of 400. Except when done statistically, the desired response rate tends to be entirely subjective, and the general rule is “higher is better.”

## Reporting Results

Survey results are reported daily on the web through newsfeeds and social media. To many, a survey is usually a poll of some, but not all, people about an issue of immediate political, social, or economic concern. Survey results typically look like those in Figures 1.2 and 1.3.

To get results such as these requires many steps, and all surveys follow them:

- Deciding on the type of survey (mailed or online questionnaire; phone or face-to-face interviews)
- Selecting the survey's content, writing questions, and pilot testing the form
- Deciding who should participate (Everyone? A sample of people?) and how often (Just once? Each year for 5 years?)
- Administering the survey (Who should conduct the interview? By when must the online questionnaire be submitted?)
- Processing the data (How will data be entered: manually or electronically from survey to database?)

**FIGURE 1.2 ■ The Look of Survey Results (1)**

Question: If the election were held today, would you vote for Candidate X?

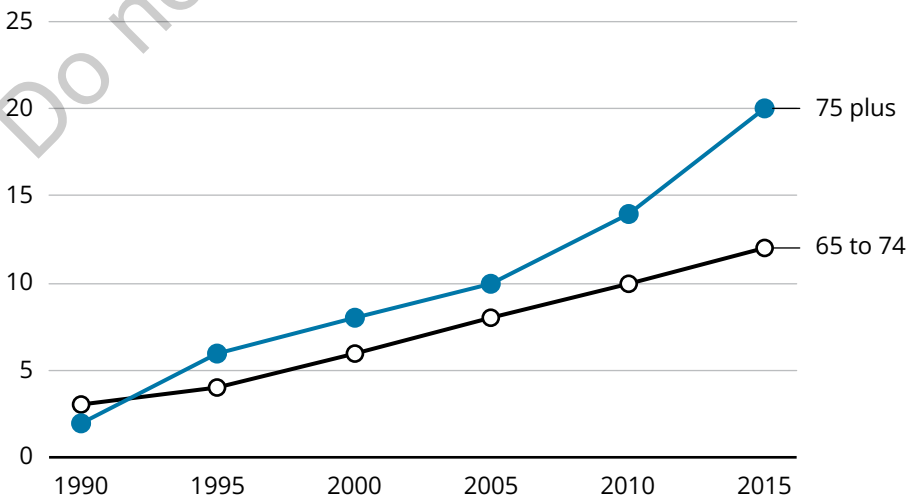
	Yes	No
Men	50%	50%
Women	20%	80%

**FIGURE 1.3 ■ The Look of Survey Results (2)**

Question: Did the number of older applicants differ in age between 2000 and 2025?

### Number of Applicants 65 Years and Older: 1990–2015

Millions



- Analyzing and interpreting the results (Was the response rate good enough? What do the numbers or differences between people mean? How do people feel about Candidate X? Have opinions changed over time?)
- Reporting the results orally or in writing using text, charts, tables, and graphs (Who is the audience? How long should the report be? Which data should be presented?)

No credible survey can omit any single step, although depending on its purposes and resources, some steps will receive more emphasis in any given survey than in another.

## THE FRIENDLY COMPETITION

How do you choose between self-administered questionnaires and interviews? Is a mailed or an online survey better? When is an interview the best choice? Here are some criteria for selecting among the different survey types.

### Reliability and Validity

A reliable survey results in consistent information. A valid survey produces accurate information. Reliable and valid surveys are obtained by making sure the definitions and models you use to select questions are grounded in theory or experience. No single survey type starts out with better reliability and validity than another. Choose the survey method that is most precise and accurate for your specific purposes. For example, if you are worried that the people you are surveying cannot read well, an oral (face-to-face or phone) interview is likely to produce far better results than a written one.

Focus groups and pilot tests help you decide which type to use and whether you have done a good job of designing the survey and making it user-friendly. Respondents or survey administrators (the people who do the interviewing or hand out the questionnaires) who have trouble with the survey will use it incorrectly, introducing bias, and that in turn reduces the accuracy of the results. A well-designed, easy-to-use survey always contributes to reliability and validity.

### Usefulness or Credibility of Results

The results will be useful if they are valid and if the survey method is one that users accept as correct. Find out before you start which method is the one people want. Sometimes the people who will use the results have strong preferences.

### Costs

This refers to the financial burden of developing and administering each type of survey. The costs of face-to-face and phone interviews include phone charges or, in large surveys, the costs of purchasing a phone system and paying for miscalled and out-of-date telephone numbers as well as hang-ups. You also need to pay for writing a script for the interviewer, training the interviewers, monitoring the quality of the interviews, and providing incentives to respondents.

Online surveys require extensive development and testing. One way to save on development is to purchase user-friendly online commercial survey programs. You will have

to learn how to use the developers' software, however, and this can be time-consuming and costly. And even the best software cannot make up for a sloppy survey.

## Online Surveys

Online or web-based surveys are self-administered questionnaires. Respondents complete online surveys on laptops, desktops, notebooks, tablets, and cell or mobile phones. Surveyors like online surveys because they can easily reach large numbers of people across the world and online survey software is accessible and relatively inexpensive.

Online surveys sometimes run into trouble because surveyors do not plan adequately. Survey notices are sent out to unsuspecting respondents who then delete them as spam. Or the survey is sent to everyone on a list of email addresses, and many of the addresses are incorrect. Other problems include failure to provide incentives to overloaded respondents who are overwhelmed with survey requests or too many or hard-to-understand questions. As with any other survey type, the surveyor has many careful decisions to make about the content and format of the questions and responses, the sample size, who will be included in the survey and who will be excluded, and how to guarantee that the results are accurate and secure. Online software cannot make up for a poorly designed and implemented survey that is not used appropriately.

Here is a checklist to use in deciding when to use online surveys.

### CHECKLIST FOR DECIDING THE BEST USES FOR ONLINE SURVEYS

- The survey needs wide geographic coverage.
- You are hoping to reach a large number of people.
- You have access to valid phone numbers or email addresses and permission to use them. Unsolicited surveys may go directly to spam or junk mail.
- You or your agency or institution conducts surveys relatively frequently so that any investment in technological and software infrastructure is worthwhile. Developing software to create survey questions can be costly. Commercial companies abound that can help design and implement surveys and analyze data. That's the easy part. There is always a learning curve, however, and learning new software takes time, and time uses financial resources.
- You have designed some survey questions to be answered by all respondents, but other questions will be answered by only some respondents. For instance, if you want to explore people's exercise habits, but not all people report that they exercise, you want to ask only the exercisers about their activities. Online surveys can be programmed to distinguish between who is to answer questions and who is to skip them. This saves the surveyor the need to resort to complex instructions.
- You plan to use multimedia such as video clips and voice-over in describing a new idea, product, or service.
- You need results in a hurry. Online surveys can produce real-time data as each person completes the questionnaire. It is important to remember that the statistical results produced by most survey software packages are relatively simple: numbers, averages, and so on. The graphics produced are also simple and include pie charts and line graphics. More complex analyses and reports take more time and expertise.

- You want to compare survey data over time. Online survey data can easily be stored in a database for future use. New survey data can be added to the database from time to time from the same or from different groups of people, and you can compare data over time for one or more groups of respondents.
- You plan to study survey behavior. With online surveys, the date and time of survey completion and the time spent on each question are known. This information can be used to see if there are differences among people in how much time they need to complete each question and the entire survey. The data can be used to help you improve the survey questions.

At least four potential concerns accompany most web surveys. They are the following:

1. *Multiple addresses.* Many people have many email addresses or points of contact through social media. Although some potential respondents may consolidate their addresses so that they can view messages from all sources whenever they check, others do not. Some people only check one or two sites frequently, and others check their email or multiple social media feeds infrequently. Be certain that the addresses you have are accurate and commonly used.
2. *Privacy and confidentiality.* Many people are suspicious of sending information over the internet. Surveyors must learn how to guard respondents' privacy and convincingly communicate the strength of their efforts to respondents. It is important to note that not everyone knows if their computer, phone, or tablet is secure or how to maximize security, nor are they aware of who has access to their browsing history. The surveyor, of course, does not have control over privacy lapses that may occur because of a poorly secured device.
3. *Identity of the respondents.* The surveyor has no real way of knowing who is completing the questionnaire.
4. *Technological differences.* Respondents vary in their Wi-Fi connections and browsers and may set their own text size and color settings. Some surveys do not permit use of the back function on the browser and rely instead on a special back arrow. Any deviation from expectation may be confusing to respondents, and they may give up. The survey should be tested on all commonly used browsers. If necessary, respondents should be instructed on how to go back and forward in the survey. Computers (desktops, laptops, tablets) lose their connections, and it is a good idea to set up a system so that, in case of loss of power or a connection, the respondents will be able to return to the survey without losing their place.

Many web-based surveys are done through online merchants who sell software and survey processing services. Many firms do practically everything for the surveyor. They will send out the survey, track respondents, analyze data, and produce reports. They don't usually create surveys, but they may provide referrals to consultants who do.

If you decide to purchase online survey software, be prepared to spend up to a week learning how to use it. Most vendors provide excellent tutorials in how to select question types, number pages and questions, and decide on features such as background colors

and logos. It is important that you read the fine print regarding how much assistance you will have from the survey vendor.

Surveyors are tempted to rely on their vendors to update and maintain the survey and the survey data. But service contracts tend to be limited, and so these guidelines should be followed.

## GUIDELINES FOR SURVEYORS WHO WORK WITH COMMERCIAL SURVEY COMPANIES

- Download your data frequently, and store your files safely. Your access to your data may disappear when you discontinue your service.
- Create off-line copies of every online survey, and use it with another online service. Make sure that you can save the survey in the cloud or on your computer.
- Be wary of the company's list of suggested survey questions. Are they appropriate for your respondents? What evidence has been provided that they have ever been used with anyone? By whom have they been used?
- Make certain that you know who owns the survey data. Do you own the data, or does the vendor? Can the vendor sell the data or use it for purposes unrelated to your survey? What happens to the respondents' email addresses, if you use them, as is common to invite people to take the survey? Are the responses collected over secured, encrypted connections? Where is the information system's infrastructure (servers, networking equipment) located? Who owns and manages the equipment in the data centers? Are the data centers staffed and monitored all day, every day? Who has access to the data centers? The answers to these questions should be readily available on the vendor's website. Look for the vendor's privacy policy and read it.

You can go online for information on how to evaluate merchants. Go to any search engine, and use these key words: "compare online survey services."

### Cell or Mobile and Smartphones

Many people throughout the world have cell (mobile) phones. A major source of phone communication is through text messaging, or texting, which means sending electronic messages between two or more users of mobile devices. Text messages may be sent over a cellular network and via satellite or internet connections. The messages may contain words, numbers, digital images, videos, sound content, and ideograms known as emojis (happy faces, sad faces). Text message surveys can be administered in two ways. The first is to text questions and answers back and forth. This method is relatively simple because anyone with a cell phone can answer, but it has significant limitations. Question and response lengths are often limited in the number of characters that can be used. If the number is exceeded, the message is broken into segments by the device before sending, and the recipient's device rebuilds the message. Although some devices rebuild the messages so that they keep their original form, others scramble them, making them difficult to read. The number of questions must also be kept to a minimum, and this may result in loss of information. Finally, questions and responses are sent one at a time, and respondents tend to lose interest after about 10 minutes.

The second texting option is to send respondents a link to a web survey which they can complete from the browser on their phone. The link often takes the respondent directly to the survey, but sometimes, the respondent is required to use a QR Code (quick response code). Although these options give surveyors greater flexibility in the number and types of questions and responses they can include, not everyone has an internet-enabled smartphone. In fact, some people still rely on landlines. They tend to be older and less wealthy than smartphone users. Reaching them means relying on other survey methods such as in-person interviews.

Cell phone surveys also may have cost and legal or ethics concerns. Many users pay for receiving or sending texts. Some surveyors provide incentives, including cash, to offset the costs to the respondents. This, of course, raises the costs of the survey.

It is also important to note that in many countries, such as the United States, regulations make it illegal for companies to send text messages without explicit consent from respondents before sending them a text message survey. Simply having permission to contact the respondent via cell phone is not enough. Individuals must give explicit consent to be contacted via text message, which is a major obstacle for most survey projects.

### Making the Decision

To help you decide among the different types of surveys that may be relevant to your needs, Table 1.2 compares the advantages and disadvantages of the major survey types and reminds you of their special needs and costs.

## A SURVEY CONTINUUM: FROM SPECIFIC TO GENERAL USE

Surveys have become a major means of collecting data to answer questions about health and social, economic, and political life. How extensive and scientific must a survey be?

Compare these two surveys.

### EXAMPLE: SURVEY WITH A SPECIFIC USE

The directors of the Neighborhood Halfway Houses want to provide services that are appropriate for residents. At present, many complaints have arisen over the lack of adequate fitness facilities. A survey will be conducted to poll the five health care providers, 100 residents, and 10 full- and part-time staff to find out what facilities are desirable and affordable.

### EXAMPLE: SURVEY WITH A GENERAL USE

The County Health Department is concerned with the effectiveness of its 10 halfway houses. Together, the 10 houses have 20,000 residents and 220 full- and part-time staff. The County Health Department has negotiated arrangements for health care services from several providers in the public and private sectors. As part of its effectiveness study, the County Health Department is surveying a random sample of residents, staff, and providers at all houses. NextDoor County is interested in adopting the County Health Department's halfway house model and is anxiously waiting for the results of the survey and evaluation.

TABLE 1.2 ■ Comparing Survey Types

	Self-Administered		Interview	
	Mailed	Web-Based or Cellular	Phone	In Person (Including Videoconferencing)
Characteristics	The respondent completes a written or paper-and-pencil survey.	The survey is accessed and completed online using any internet-enabled device including computers (desktops, laptops) or cell (mobile) phones and tablets.	An interviewer uses a landline or mobile phone to speak to the respondent.	The interviewer and respondent are in the same place during the interview.
Advantages	The survey can reach large geographic areas. Many people are used to completing paper-and-pencil surveys. People can complete the survey anywhere.	Worldwide information is obtained immediately (in real time). The survey can provide the respondent with explanations of unfamiliar words and help with difficult questions on an as-needed basis; it can provide audio and videos to clarify ideas. It's easy to send automatic reminders to many respondents. It's easy to process data because the responses can automatically be downloaded to a spreadsheet, data analysis package, or database.	You can explore answers with respondents. You can assist the respondent with unfamiliar words. Some people enjoy phone contact.	You can explore answers with respondents. Some people prefer direct contact with interviewers.
		You can tailor questions to the needs of the respondent and surveyor without having to add complicated instructions.		



TABLE 1.2 ■ Comparing Survey Types (Continued)

	Self-Administered		Interview	
	Mailed	Web-Based or Cellular	Phone	In Person (Including Videoconferencing)
Disadvantages	You need a motivated sample to return a completed survey. Many people think they have too much to do without also having to complete surveys. Respondents must be able to read, see, and write.	The surveyor needs reliable email addresses and mobile phone numbers. The respondent must have reliable Wi-Fi or cellular access. Questionnaires do not always look the same in different browsers and screens. Questionnaire layout will need to be modified for smaller screen phones. Wi-fi and cellular systems can go down or be unreliable.	More people are replacing landlines with cell or mobile phones. You need to train interviewers. You need to make sure the respondent is available and have plans to follow up with messages left on voice mail. You need to make sure that mobile phone respondents are in a place (e.g., not driving) where they can concentrate on the survey.	You need trained interviewers. You must find a suitable place to conduct the interview, which may not be easy given respondents' schedules.
Special needs	Access to a current mailing address list is essential. Follow-up mailings are almost always essential.	Current email addresses and phone numbers are essential. People change email addresses frequently. Some people don't check email and rely on social media. Spam programs on any device can send surveys to junk mail. Most phones have settings enabling users to automatically send messages from unknown numbers to spam.	You need current phone numbers (landline or cell). You need to understand how to use sophisticated sampling methods for people who have landlines and cell phone or only landlines or only cell phones because respondents may differ in age and other important personal characteristics.	If on site, you need space and privacy. It may be difficult to travel to a person's home.

(Continued)

TABLE 1.2 ■ Comparing Survey Types (Continued)

	Self-Administered		Interview	
	Mailed	Web-Based or Cellular	Phone	In Person (Including Videoconferencing)
	Incentives may increase the number of responses. Data entry is not automatic. Data must be entered by hand.	You need to propose a convincing method of ensuring privacy and confidentiality. Incentives are often needed to encourage or even pay for responses		Incentives are almost always required for motivation.
Costs	You need paper, envelopes, stamps for repeated mailings, and incentives for respondents. Data entry, programming, and analysis is done by hand, a time-consuming process.	If you decide to design your own survey, a great deal of programming time is needed. If you use an online service, you must pay a license fee and learn how to use the company's software. Incentives for respondents are almost always a must, especially in phone surveys if respondents have to pay for calls and texts.	You need to consider the costs and time involved in training and supervision, telephones and telephone charges, computers and technical expertise, and incentives for respondents.	You need to consider training, space, and travel.

The justification for the first survey is one halfway house's concern with its own needs. The reason for the second is the County Health Department's interest in the effectiveness of all its halfway houses. Also, NextDoor County is interested in the survey's results. Survey 1, with its limited impact, can be relatively informal in its methods. Survey 2, in contrast, must be rigorous in its sampling plan, questionnaire construction, and data analysis and interpretation.

Survey 1 is concerned primarily with usefulness. Survey 2 is also concerned with validity and generalizability: If adapted in another place (NextDoor County), will the County Health Department's halfway house model be equally effective?

Each time you do a survey, you must evaluate where its purposes fall on a continuum that goes from specific to general use. You have some leeway with a survey designed to meet specific needs. All surveys that aim to be generalizable in their findings must be conducted with rigor.

## ETHICS, PRIVACY, AND CONFIDENTIALITY

Some people have become suspicious of surveys. They fear that the information they provide will be used inappropriately. Many techniques exist for protecting each person's privacy and ensuring that information will be used only with the person's knowledge and for clearly stated purposes. The surveyor needs to reassure potential respondents that these techniques have been incorporated into each survey. It is the ethical—right thing—to do.

All completed printed or written surveys should be kept in locked files, and only a limited number of staff should have access to them on a need-to-know basis. At the conclusion of data analysis, the surveys should be shredded. Furthermore, you can separate identifying information (e.g., names, birthdates, Social Security numbers, or other government-issued identification numbers) from survey responses by assigning codes to individuals and using the codes to link them to their responses. Online survey takers can be permitted to assign their own usernames and passwords when logging in to take a survey.

The use of surveys and concern for ethical issues are completely interwoven. Surveys are conducted because of the need to know; ethical considerations protect the individual's right to privacy or even anonymity.

If your survey is for a public or private agency that is receiving U.S. government funds, you should know that the federal government has specified the legal dimensions of informed consent, privacy, and confidentiality. These dimensions include the following:

- A fair explanation of the procedures to be followed and their purposes
- A description of any risks and benefits
- An offer to answer any inquiries
- An instruction that the person is free to withdraw consent and discontinue participation without prejudice

Confidentiality is protected by the Protection of Human Subjects guidelines of the Code of Federal Regulations, sometimes called the Common Rules. *Confidentiality* refers to the safeguarding of any information about one person that is known by another. A surveyor who has the names and addresses of people, even in code or without

identification, or “deidentified,” may not use this information to reveal identities. In many surveys, confidentiality is a real concern because complete anonymity is practically impossible. A code number, an email address, an Internet Service Provider address, or even sometimes a ZIP or postal code may lead to the survey respondent’s identity.

If you work for a private agency, organization, or business, you should check the rules of informed consent and confidentiality. Is there a human subjects’ protection committee or institutional review board (IRB) whose approval you must get? If you are a student, check whether you can ask the questions you are planning. Also, you may be part of a larger project that has already received approval for its activities if it conforms to certain standards—among them, the informed consent of respondents.

## Informed Consent

The consent form gives potential respondents sufficient written information to decide whether to complete a survey. Here is a list of contents to include in an informed consent form:

### CONTENTS OF AN INFORMED CONSENT FORM

- A title such as “Consent to Participate in Survey”
- The name of the survey
- The purpose of the survey
- Procedures to be followed, including where the survey will take place and its duration
- Potential risks and discomforts, including answering questions that are personal or being in a closed room for 2 hours
- Potential benefits to respondents and society, including new knowledge or better information to develop programs or policies (sometimes the benefits are not yet known)
- Payment for participation (say how much participants will be paid; if no payment is provided, say so)
- Confidentiality—if the respondent’s name is to be kept confidential, describe coding procedures, who will have access to the surveys, and where the completed surveys will be kept; if information is to be shared with anyone, state with whom (you may be required by law to reveal survey results)
- Participation and withdrawal—can the participants withdraw at any time; what happens to them if they do? (For example, do they still retain any incentives? Will they still receive the same education, social benefits, or health care they came for?)
- Identification of surveyors—who should be called if questions arise about the survey?

## The Internet and Ethical Surveys

An online survey involves a web of computers that interact with one another. Communications take place between the surveyor and the respondent, the respondent and the web server, and the web server and the surveyor. Security breaches are possible anywhere within the web unless you put protections in place.

## Communication Between the Surveyor and the Respondent

It is not uncommon for a surveyor to contact a respondent by email. The email will discuss the survey and invite the participant to click on a URL or paste it into a browser such as Google's Chrome, Apple's Safari, or Microsoft's Edge. Unfortunately, email is not always secure or private. Many people are unaware of whether their computers are secure or even how to secure them. Email programs maintained by employers often are not private. If people do not log off or are careless about passwords, the respondents' privacy can be compromised easily. Also, inadequate passwords are easy to crack. If you conduct a survey that requires people to use a password, you must ensure that the password setup is secure.

## Communication Between the Respondent and the Website

When a respondent enters sensitive data in the blank spaces of a web-based questionnaire, it is like a shopper providing a credit card number when shopping online. Online merchants use a Secure Sockets Layer (SSL) protocol that allows secure communications across the internet. An SSL protocol encrypts (converts into code) the user's survey input, and it decrypts it when it arrives at the website. Many potential survey respondents are becoming aware of how easily their responses can be intercepted unless they are secured, and without guarantees that responses are encrypted, some of them may refuse to take the survey. You must decide in advance whether to use SSL and how to explain your security choices to respondents.

## Communication Between the Website and the Researcher

Sensitive identifiable data needs to be protected in transit by using either an SSL protocol or a secure file transfer protocol.

## Data Protection

Some people are reluctant to complete online surveys or even connect to survey sites for fear that their privacy will be compromised. All databases storing sensitive and identifiable information must be protected, regardless of whether they are created and maintained by commercial firms or by individuals. Encrypting the databases probably provides the most security.

All reputable organizations develop or adapt rules for reassuring respondents that privacy will be respected. Here is a minimum set of rules for a privacy policy:

### MINIMUM CRITERIA FOR A SURVEY ORGANIZATION'S PRIVACY POLICY

1. Describes exactly which survey data will be stored in the survey's database
2. Explains why any data is being stored
3. Explains whether the organization gives, sells, or transfers information and, if it does, to whom and under which circumstances
4. Tells how the site monitors unauthorized attempts to change the site's contents
5. Discusses who maintains the site

6. If relevant, explains how cookies are used—cookies are small amounts of information your browser stores that allow web-based applications to store information about selected items, user preferences, registration information, and other information that can be retrieved later (Are the cookies session specific? If not, can users opt out of the web page feature that stores the cookies beyond the session?)

The following is an excerpt from the U.S. Centers for Disease Control and Prevention's (CDC's) privacy policy (<https://www.cdc.gov/other/privacy.html>). Although the CDC's site is used for many purposes (not only for surveys and survey reports), its privacy policy is easy to read and illustrates how to comply with the minimum set of criteria for a privacy policy.

## CDC'S PRIVACY POLICY NOTICE

The CDC is committed to maintaining your privacy and protecting your personal information when you visit CDC websites, use CDC's mobile applications, or receive public health information from the CDC. With respect to the collection, use, and disclosure of personally identifiable information (PII), CDC complies with all applicable federal laws.

The CDC's privacy policy is clear:

- The CDC does not collect any PII when you visit any of CDC's digital medial channels unless you choose to provide that information.
- Any PII provided is fully protected.
- Non-PII information related to a visit to CDC websites may be automatically collected and temporarily stored.

The CDC describes how the organization handles information about your visit to the website and users who receive CDC information through CDC or other digital media channels, especially regarding the use of "cookies."

When you visit a page on CDC.gov, the internet browser on your computer or mobile device may store a small piece of data that is exchanged with CDC.gov web servers (commonly called "cookies"). Cookies allow your browser to "remember" specific information about your visit while you are using the site and are sent by the browser to CDC.gov servers in all web requests to the CDC. Cookies make it easier for you to use the dynamic features of web pages because they can save certain settings and preferences. Cookies from CDC web pages collect information about only your visit and interaction with the site; they do not collect personal information about you. To learn how to manage or refuse cookies from CDC.gov or any other site see the section that follows—"How Can I Control Cookies?"—or visit USA.gov.

### CDC.gov Cookies

CDC.gov uses the following cookies (defined and organized per the Office of Management and Budget's "Guidance for Online Use of Web Measurement and Customization Technologies" (OMB M-10-22):

*Single-session cookies* are used for technical purposes, such as enabling better navigation through the site, facilitating the use of user accounts, and generating aggregated statistics about how the website is used. Single-session cookies may use a unique identifier but do not publicly expose personal information.

*Multi-session or persistent cookies* are used to recognize a browser session that was used in a previous visit to a CDC.gov website and can improve a user's experience, for example, by continuing preference settings from previous visits. These persistent cookies also provide the ability for the CDC to gather information on unique visitors to CDC.gov websites.

The CDC uses a third-party analytics provider to analyze the collected data. This provider does not receive personally identifiable information through these cookies.

### Third-Party Cookies

Some pages on CDC.gov websites may include content or functionality from third parties. These third parties may use web measurement and customization technologies (such as cookies). Consult the privacy policies of these third parties for further information.

### How Can I Control Cookies?

The CDC uses a privacy manager that provides you with a choice to accept or reject different categories of cookies used by CDC.gov. The privacy manager prevents cookies, web beacons, and local storage objects from being placed on your device. The privacy manager also prevents third-party tools from loading regardless of your cookie settings, which provides you with an additional layer of privacy that prevents the tool from loading at all. Because the privacy manager creates a cookie in your browser, the opt-in and opt-out choices you make through the privacy manager will be effective only on the device and browser you used to make your choices, and your choices will expire when the cookie expires. Once the cookie is created, the privacy manager will retain your settings for 3 years from the date of your most recent visit. You may revisit the privacy manager to change or renew your choices at any time.

Look at the following excerpt from a privacy statement. The statement comes from a large corporation that conducts surveys. As you can see, the company is truthful about the potential for other companies to track customers' activities. However, consumers are left with the obligation to (1) be aware that unwanted cookies may be placed on their hard drive and (2) if they prefer to do something about it by contacting the privacy officer.

### EXCERPT FROM A LARGE COMPANY'S PRIVACY STATEMENT

Some of our business partners may use cookies on our sites (for example, links to business partners). We do not want our business partners to use cookies to track our customers' activities once they leave our sites. However, *we may not have total control* [italics are mine] over how our business partners may use cookies on our Web sites. If you become aware that [name of company] our business partner is placing an unwanted cookie on your hard drive, please contact our Privacy Officer to assist us in resolving the problem.

This excerpt raises several questions: Will the respondents know if cookies are on their hard drive? How does the respondent get in touch with the privacy officer? Information is available in the “Contact Us” portion of the site, but the respondent must look for it. It makes sense that the public is increasingly suspicious of online surveys and how their data is used.

You can help avoid some of these problems by being certain you have considered all the pitfalls of sending surveys and survey information into cyberspace.

If you plan to use the internet (including email) to (1) communicate with study participants or (2) send participant information to a collaborator or contractor, you should be able to complete the following questionnaire for maintaining an ethically sound online survey.

## EXAMPLE QUESTIONNAIRE: MAINTAINING AN ETHICALLY SOUND ONLINE SURVEY

1. Describe the measures that will be taken to ensure that the web server hosting the internet site is protected. In the description, provide information on physical security, firewalls, software patches and updates, and penetration drills.
2. If a password or other secure authorization method is to be used to allow access to the website, ask these two questions:
  - How will user passwords be distributed?
  - How will passwords and web access be terminated?
3. If the user session is encrypted, describe the method of encryption that will be used.
4. Explain who will have administrative access to data on the web server. Give names, study roles, and organizational affiliations.
5. Explain in detail the administrative safeguards put in place to restrict unauthorized and unnecessary access.
6. Describe how the information will be used. Will you give, sell, or transfer information to anyone?
7. Give the name and address of the application owner, that is, the individual or people who maintain the application.
8. If email is used to contact respondents, describe the measures taken to assure respondents that the communication is from an authorized person.
9. If respondents are asked to contact the surveyors using email, describe how the respondents will be authenticated to adequately ensure the source of the email communication.
10. Explain how the study consent form describes the potential risks to privacy associated with the use of email.
11. If email is to be used to send study data to investigators, vendors, or others, explain if and how the email will be encrypted.
12. If respondents are to send you attachments by email, tell them if the attachments will be encrypted or password protected.
13. If automated email routing systems are used, describe the security controls that will be in place. Specifically, describe the testing and disaster recovery procedures.
14. If contractors or vendors have access to survey respondents' personal identifiable or confidential information,



- describe the language that is included in the contract to protect respondent privacy, and
  - describe the security requirements that will be provided to contractors or vendors who are designing or hosting web-based services for the project.
15. Give the names of the people on the survey project responsible for ensuring that the survey organization's policies and procedures for confidentiality and security are followed. Provide their professional position and affiliation.
  16. Give the names of the people responsible for the general security administration for the information technology associated with this survey. Provide their professional position and affiliation.

Each survey has different limits on what it needs to collect and from whom. Some survey samples are more vulnerable than others and need different safeguards. The following is a typical informed consent form that could be used in an online survey of teachers in a large school district. The survey's purpose is to identify needs for improvement in the workplace.

## EXAMPLE: INFORMED CONSENT FORM FOR AN ONLINE SURVEY

Your individual responses to survey questions will be kept confidential by The Survey Project and its survey contractor, Online Systems, Inc. Confidential data is information, such as an individual's or school's identification, that may not be released outside of The Survey Project, except with permission from the respondent. Individuals may grant The Survey Project permission to release confidential data that describes themselves. An authorized representative of The Survey Project member schools may grant The Survey Project permission to release confidential data that describes their school. **[Comment: This defines and describes the limits of confidentiality.]**

Online Systems, Inc. will generate aggregate reports that contain school-wide and departmental information to help your school identify, prioritize, and implement improvements in the school workplace that will increase student engagement. Information will not be reported in instances where respondent groups contain less than five individuals. **[Comment: It may be possible to identify individual views in small groups. This would violate privacy.]** Data from open-ended questions will be provided to your school in deidentified, redacted form. Only de-identified record-level data will be retained by The Survey Project, and only de-identified aggregate analyses will be shared in publications and research presentations with the academic community. **[Comment: This is how the data will be used.]** The Survey Project may release de-identified responses to individuals who agree to protect the data and who agree to The Survey Project's confidentiality policies. Online Systems, Inc. will store data on secure servers and destroy all identified data within 2 years of survey administration. **[Comment: Servers will be secured. The vendor must destroy identifiable data within 2 years.]** By participating, you will be contributing valuable information to your school. The Survey Project and Online Systems, Inc. have taken numerous steps to protect participants in The Survey Project. Ethics board requirements require that you are informed that if the information collected were to become public with individual identification, it could prove personally uncomfortable. **[Comment: This is a risk of participation.]**

This survey has been reviewed and approved according to The Survey Project's policies and procedures. By continuing, you acknowledge that you have read and

understood the above information and agree to participate in this survey. **[Comment: This is an online survey, and the respondent is not asked to “sign” to indicate willingness to participate. Signing software is available, but most surveys accept survey completion as informed consent.]** If you have any questions about the survey, contact . . . If you have any questions about your rights as a research participant, contact . . . **[Comment: This is where to include whom to contact with questions.]**

Some large institutions and companies have ethics boards and privacy officers who can help you ensure an ethical survey. Many surveyors and survey companies, however, are not technically sophisticated regarding privacy, nor are they trained in online survey ethics. You can learn more about ethical survey research by going online to websites including the American Association for Public Opinion Research (AAPOR).

## CHILDREN AND SURVEY ETHICS

Who is a child? The definition of a child differs across research jurisdictions such as countries and individual states. In the United States, a child usually becomes an adult by 18 years of age. That means that a 17-year-old in the United States may still be considered a child. In the United States, the Children’s Online Privacy Protection Act requires verifiable consent from a parent or legal guardian for interviewing children below the age of 13 years. The rules for ethical surveys are often stricter for children than for adults.

When doing surveys with adults, the first step is to make sure they know what they are getting into and how to get out of it if they want to. That means with adults, the first step for participation is to provide them with the means of providing informed consent.

The informed consent model with children requires parents or legal guardians to provide permission for (1) their children to take the survey and (2) the surveyor to contact the children. Once permission is obtained, the children are asked for their assent to become participants.

In the United States, federal regulations specify what must be included in an adult consent process, and these requirements also apply to the parental permission process. There are no regulations that require specific elements or define the content or format of the child assent process. This means that surveyors are left on their own to prepare the adult and the child documents.

Research about children’s decision-making skills supports the common practice of using different assent processes for children and for adolescents, with the level of disclosure increasing as children grow older. Surveyors should probably offer mature adolescents information about the survey that is comparable to information that they provide to adults.

Don’t forget to consider the nationality, ethnicity, and socioeconomic status of your potential respondents when putting together parental permission and child assent processes and documents. Also, remember that cultural assumptions about the rights of children vary widely. In some countries or subgroups, it may be inappropriate and perhaps offensive to ask children to complete questionnaires on- or off-line.

When going through the assent process, make sure children know the following:

- That they are being asked to participate in a research study or in a local effort to understand more about a problem (how to improve our school, how to make the internet safer)
- The purpose of the survey (to find out how children like to learn, to understand how much time children spend on social networks)
- How much time is involved in participating (no more than 5 minutes)
- What will happen to them if they agree to participate (you will answer questions online)
- The foreseeable risks and/or discomforts (you may find some questions hard to answer) and any benefits they may experience (you may help other children your age)
- That they can ask their parents or surveyor any questions they have about participating
- That their participation is voluntary (entirely up to them) and that they may stop at any time
- That their parent or guardian knows they have been asked to be a part of the study

Here is a sample assent form, one that is most appropriate for children between 10 and 15.

### EXAMPLE: CHILD ASSENT FORM

Hello,

We are doing a study to learn about people who are honest and people who are not honest. We are asking you to help because we don't know much about whether kids your age come across mostly honest people or mostly dishonest people. We will use this information to educate parents and teachers to become more understanding of the world their children live in.

If you agree to be in our study, we are going to ask you some questions about people. We want to know if you think they are usually honest or not. For example, we will ask you if your friends, people you know, your teachers, and family members are usually honest or usually not honest. We will not tell your answers to anyone.

You can ask questions about this study any time. If you don't want to answer a question, you do not have to. If you want to stop answering questions, you can leave the study. Absolutely nothing will happen to you if you decide to leave the study. No one will be upset, and we will not tell anyone.

If you don't want to be in this study, do not sign this paper. Being in this study is up to you.

*Your signature:*

*Signature of person obtaining assent:*

## INTERNATIONAL SURVEYS

If you are involved in an international survey, keep in mind that the content of a questionnaire reflects not only the language of the originating country but also the standards, expectations, values, and preoccupations of the surveyors and any laypeople involved in helping develop and test the questions. Linguists and anthropologists often point out that language and culture are not the same. For example, both England and the United States are primarily English-speaking countries, but their citizens do not necessarily share the same values with respect to education, health, and social well-being.

Think about the word *family* in English. Many Americans, for example, interpret family to include only relatives like mother or sister or maybe aunt and uncle. But in other cultures, family includes a much wider group. A question such as “Has anyone in your family had heart disease?” requires the international surveyor to make certain that the response choices are inclusive and meaningful to the respondents. Another option is to be specific and ask: Have any of these people in your family had heart disease (mother, father, grandmother, grandfather)?

English-speaking surveyors may find that sometimes it is impossible to find equivalent translations in languages such as Arabic, Cantonese, Punjabi, or Swahili. These languages have different roots from English. The terms “checkup” and “Pap smear,” for example, have no conceptual equivalent in any Chinese language.

Ethical research in international settings means that culturally appropriate procedures must be followed to protect survey participants. Many IRBs and ethics boards require surveyors to submit proof that the customs and language of the participating countries have been respected.

Consider this if you are doing an international survey:

1. Be sure the survey is available in the original language (English) and in translation. Be sure you can provide a detailed explanation of the translation process to justify its appropriateness for the country in which it is to be used.
2. If the survey includes children, you need to be able to verify the age at which participants can consent or assent to participation in surveys.
3. If local customs and regulations are such that active parental permission would be culturally inappropriate, the surveyor should compile proof that such permission is not culturally appropriate. Examples of such proof would be documents with specific regulations (in English and certified to be accurate) that indicate that such permission is not required or an official letter from a ranking official in the country of interest indicating that such permission is not culturally appropriate.
4. If surveyors are eligible for a waiver of active parental permission, they should be prepared to provide parents with a letter describing the study. The letter should be written in the parent’s language and at an appropriate literacy level.
5. The surveyor also needs to get letters of agreement from the appropriate officials (government officials, school officials, community officials) that state that the survey itself has been reviewed and is acceptable. Be sure that the letter is on letterhead and has an original signature.

## FORMAL STANDARDS FOR SURVEY ETHICS

Two major survey research organizations can provide you with standards for conducting survey research to cover all situations. The AAPOR has developed a code to describe the obligations that all professionals have to uphold the credibility of survey and public opinion research. To read the code and to get many other resources including how to work with an IRB, go to <https://aapor.org/standards-and-ethics/>.

AAPOR also provides a list of survey practices that it condemns. This includes requiring a monetary payment or soliciting monetary contributions from members of the public as part of a research process, offering products or services for sale, using participant contacts as a means of generating sales leads, and revealing the identity of individual respondents.

### SUMMING UP

- Surveys are information collection methods used to describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behavior.
- Surveys are best when you need information directly from people about what they believe, know, and think.
- A survey can be a self-administered questionnaire that someone fills out alone or with assistance. Self-administered questionnaires can take the form of written or online surveys. Written surveys may be completed by mail or on location.
- A survey can be an interview done in person or on the phone.
- All surveys consist of questions that include the opportunity to respond. That is why the term *questionnaire* is often used interchangeably with the term *survey*.
- To get accurate survey data, you must consider the survey's questions, response choices, sampling methods, response rate, design, and data analysis.
- Survey results are presented as written (printed on paper or reproduced electronically) and oral reports.
- A reliable survey produces consistent information, whereas a valid one results in accurate information.
- Mail surveys are often used because people are familiar with them; however, the response rate is often dismal without a great deal of follow-up and incentives.
- Interviewers need training, which may be time-consuming and costly.
- The internet is an efficient method of reaching a wide audience, but technical expertise is needed whether you do it on your own or use a commercial firm to assist. Online surveys, like all surveys, require careful advance planning.
- Cell phone surveys can be costly, and it is difficult to sample among people who have only landlines, those with landlines and cell phones, and those with only cell phones.

- Surveys may be done for specific or general purposes. Survey findings that are needed for many people and places will require special attention to how they are designed.
- All complete written surveys should be kept in locked files, and only a limited number of staff should have access to them on a need-to-know basis. At the conclusion of data analysis, the surveys should be shredded.
- Separate identifying information (e.g., names, birthdates, Social Security numbers) from survey responses by assigning codes to individuals and using the codes to link them to their responses.
- Online survey takers may be given the option of choosing their own identification names and passwords when logging into a survey.
- If email addresses are used to inform participants about and provide a link to the survey, these should be made available to a select group of surveyors.
- If a survey is for a public or private agency that is receiving U.S. government funds, there are stringent legal dimensions of informed consent, privacy, and confidentiality. These dimensions include the following:
  - A fair explanation of the procedures to be followed and their purposes
  - A description of any risks and benefits
  - An offer to answer any inquiries
  - An instruction that the person is free to withdraw consent and to discontinue participation without prejudice
- Informed consent to participate in a survey implies a willingness to complete it because respondents understand the survey's purpose and procedures, the potential risks and benefits of responding, whether there is payment for participation, how confidentiality will be handled, and whether withdrawal without penalty is possible.
- A survey's privacy policy should do the following:
  - Describe the data that will be stored in the survey's database.
  - Explain why the data is being stored.
  - Explain whether the organization gives, sells, or transfers information and, if it does, to whom and under which circumstances.
  - Inform how unauthorized attempts to change the site's contents are monitored.
  - Discuss who maintains the site, and if relevant, explain how cookies are used—Are they session specific? If not, can users opt out of the webpage feature that stores the cookies beyond the session?
  - Have rules for ethical research and surveys that are often stricter for children than for adults.
- The informed consent model with children requires parents (or legal guardians) to provide permission for their children to take the survey and allow the surveyor to contact the children. Children then provide their assent to become participants.
  - If you conduct surveys internationally, culturally appropriate procedures must be followed to protect survey participants.

- If you are not sure what is and what is not ethical, go to the American Association for Public Opinion Research or The U.S. Department of Health and Human Services' Office for Human Research Protections.

### THINK ABOUT THIS

Define a survey. Compare the uses of surveys to other information collection methods such as scientific literature reviews and school attendance records.

Read the description of each survey and then answer these questions:

1. Name the survey method that is being used. Justify the method's use.
2. Is this the method you would have chosen to achieve the survey's objectives? Explain.
3. List three ethical concerns that must be addressed in each of the surveys.

## SURVEY DESCRIPTIONS

### Predicting Heart Problems From the Stress of the September 11, 2001, Terrorist Attacks on the United States

Health researchers wanted to examine the degree to which stress resulting from the September 11, 2001, terrorist attacks on the United States forecasted heart problems in the nation 3 years after. They enlisted a national sample of adults in a web-based survey of their stress. The people who participated had completed a health survey before the attacks, so the investigators had baseline information on them. Within 2 weeks of the attacks, the participants completed web surveys, and they continued to do so 1, 2, and 3 years after. The researchers contacted the survey participants' physicians to find out whether they had diagnosed cardiovascular (heart) ailments over the 3-year period. The researchers found that acute stress responses to the September 11 attacks were associated with a 53% increased incidence of cardiovascular ailments over the 3 subsequent years.

### School Furniture and Lower-Back Pain

This survey was designed to find out whether some types of school furniture prevent or cause lower-back pain in children. Five hundred forty-six schoolchildren aged 14–17 years answered a written questionnaire about sitting positions during school hours and the presence and severity of lower-back pain. The dimensions and the weight of the children's school bags were measured, as were the types and dimensions of the school furniture. The findings were that more than half of the adolescents experienced lower-back pain during the preceding 3 months, and about one-quarter reported reduced daily function or care seeking because of lower-back pain. Lower-back pain occurrence was not found to be associated with the types or dimensions of the school furniture or body dimensions but was positively associated with carrying the school bag on one shoulder.

### Male and Female Participation in Jazz Improvisation

Three hundred thirty-two surveys were given to students enrolled in middle school, junior high school, high school, college, and community jazz programs within 60 miles of a major Midwestern university in the United States. The survey was administered during jazz band rehearsals and took approximately 10 minutes to complete. Jazz

band directors and/or student teachers administered the survey to middle school and high school participants, who were instructed to take the survey home for a parent's signature indicating approval for the child's participation in the study. The findings indicated that females are significantly less confident, are more anxious, and have less self-efficacy (attitude) toward learning jazz improvisation.

### **Satisfaction With Paid Personal-Assistance Services**

Traditional public home care programs in the United States rely on public or private agencies to hire and fire home care workers, schedule and direct services, monitor quality of care, discipline workers if necessary, and pay workers and applicable payroll taxes. In the agency-directed model, clients can express preferences for services or workers but have no formal control over them. This survey was concerned with comparing consumer-directed versus agency-directed home care on satisfaction with paid personal assistance services among Medicaid beneficiaries in Washington state. The survey was primarily conducted through telephone interviews using a computer-assisted telephone interviewing system, but there also were a few in-person interviews. The survey found that, among the older population, but not younger people with disabilities, beneficiaries receiving consumer-directed services were more satisfied than individuals receiving agency-directed care.

### **Teen Drivers' Licensing Preferences and Practices**

This survey used probability sampling methods to identify 1,383 15- to 18-year-olds from a nationally representative sample of American households. The teens completed an online survey so that the surveyors could learn about national licensing rates, interest in early licensure, and reasons for delay. Some of the teens came from cell phone-only households; internet access was provided to those without it. The survey found that at 16 years, teens were about equally divided among those in the learner stage and those with a restricted or full license. For teens old enough to start the licensing process, lack of a car, costs, parent availability, ability to get around without a car, and being busy with other activities were leading reasons for delay.

### **Parents' Choice of Treatment for Their Children With Autism**

Parents of children with autism spectrum disorders have a limited number of evidence-based treatments from which to choose. Nine hundred and seventy parents responded to an online survey that asked about the treatments currently in use, those discontinued, and reasons for discontinuation. The survey found that most families adopt multiple treatment approaches. Parents were most likely to discontinue nonevidence-based treatments when they did not see improvement in their child's functioning.

### **Analyzing Social Media Use, Mental Health, and Gender Identity Among American Youths**

Mental health among children and adolescents is a critical public health issue, and transgender and gender nonbinary youths are at an even greater risk. Social media has been consistently associated with youth mental health, but little is known about how gender identity interacts with this association. A random sample of 1,231 youths between 10 and 17 years old living in the United States responded to an online survey. The survey found that gender identity was associated with youths' experiences of social media in ways that may have distinct implications for their mental health and that research about social media effects on youths should attend to gender identity,



Evaluate the adequacy of the following section of a survey organization's privacy policy. Which criteria did you use in making your evaluation?

## INFORMATION SECURITY

The Survey Organization's employees understand the need for user privacy, and we maintain strict security procedures to protect your information. The organization has appointed a privacy policy administrator to monitor privacy practices. Access to user data is strictly limited to specific individuals who are trained to respect user privacy. The access given to these employees is restricted to their need of such information for business reasons. A log of those who accessed the data is maintained and monitored to prevent security breaches.

## WEBSITES

<https://www.canr.msu.edu/news/using-mobile-phones-to-do-research-in-the-time-of-covid-19-lockdowns-and-beyond>

<https://news.gallup.com/opinion/methodology/235367/spam-call-blocking-apps-challenge-survey-researchers.aspx>

<https://news.gallup.com/opinion/methodology/221159/using-text-messaging-reach-survey-respondents.aspx>

<https://aapor.org/standards-and-ethics/>

U.S. Department of Health and Human Services' Office for Human Research Protections (<https://www.hhs.gov/ohrp/index.html>)

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