

## Chapter 4: Survey Research

Definition



*Survey research is an important and useful method of data collection. The survey is also one of the most widely used methods of media research, primarily due to its flexibility. Surveys, however, involve a number of steps. **Researchers must decide whether to use a descriptive or an analytical approach; define the purpose of the study; review the available literature in the area; select a survey approach; a questionnaire design, and a sample; analyze and interpret the data; and, finally, decide whether to publish or disseminate the results.** These steps are not necessarily taken in that order, but all must be considered before a survey is conducted.*

*To ensure that all the steps in the survey process are in harmony, researchers should conduct one or more pilot studies to detect any errors in the approach. Pilot studies save time, money, and frustration, since an error that could void an entire analysis sometimes is overlooked until this stage.*

**Questionnaire design is also a major step in any survey.** In this chapter, examples have been provided to show how a question or interviewing approach may elicit a specific response. The goal in questionnaire design is to avoid bias in answers. Question wording, length, style, and order may affect a respondent's answers. Extreme care must be taken when questions are developed to ensure that they are neutral. To achieve a reasonable response rate, researchers should consider including an incentive, notifying survey subjects beforehand, and personalizing the questionnaire. Also, researchers should mention the response rate in their description of the survey.

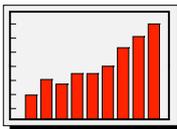
**Finally, researchers are charged with selecting a survey approach from among four basic types: mail, telephone, personal interview, and group administration.** Each approach has advantages and disadvantages that must be weighed before a decision is made. The type of survey will depend on the purpose of the study, the amount of time available to the researcher, and the funds available for the study. In the future, survey researchers may depend less on the face-to-face survey and more on computer-assisted telephone interviewing.

*Surveys are now used in all areas of life. Businesses, consumer groups, politicians, and advertisers use them in their everyday decision-making processes. Some firms, such as Gallup and Harris, conduct public opinion surveys on a full-time basis.*

The importance of survey research to the public at large is confirmed by the frequent reporting of survey results in the popular media. This is especially evident during campaign periods, when the public continually hears or reads about polls conducted to ascertain candidates' positions with the electorate.

The increased use of surveys has created changes in the way they are conducted and reported. More attention is now given to sample selection, questionnaire design, and error rates. This means that surveys require careful planning and execution; mass media studies using survey research must take into account a wide variety of decisions and problems. This chapter acquaints the researcher with the basic steps of survey methodology.

Descriptive  
and  
Analytical  
Surveys



## 4.1 Descriptive and Analytical Surveys

**At least two major types of surveys are used by researchers: descriptive and analytical. A descriptive survey attempts to picture or document current conditions or attitudes, that is, to describe what exists at the moment.** For example, the Department of Labor regularly conducts surveys on the amount of unemployment in the United States. Professional pollsters survey the electorate to learn its opinions of candidates or issues. Broadcast stations and networks continually survey their audiences to determine programming tastes, changing values, and lifestyle variations that might affect programming. In descriptive surveys of this type, researchers are interested in discovering the current situation in a given area.

**Analytical surveys attempt to describe and explain why certain situations exist. In this approach two or more variables are usually examined to test research hypotheses.** The results allow researchers to examine the interrelationships among variables and to draw explanatory inferences. For example, television station owners occasionally survey the market to determine how lifestyles affect viewing habits, or to determine whether viewers' lifestyles can be used to predict the success of syndicated programming. On a much broader scale, television networks conduct yearly surveys to determine how the public's tastes and desires are changing and how these attitudes relate to the perception viewers have of the three commercial networks.

Advantages  
of Survey  
Research



## 4.2 Advantages of Survey Research

Surveys have certain well-defined advantages. **First, they can be used to investigate problems in realistic settings.** Newspaper reading, television viewing, and consumer behavior patterns can be

examined where they happen, rather than in a laboratory or screening room under artificial conditions.

**Second, the cost of surveys is reasonable considering the amount of information gathered. In addition, researchers can control expenses by selecting from four major types of surveys: mail, telephone, personal interview, and group administration.**

**A third advantage is that large amounts of data can be collected with relative ease from a variety of people.** The survey technique allows the researcher to examine many variables (demographic and lifestyle information, attitudes, motives, intentions, and so on) and to use multivariate statistics to analyze the data. Also, geographic boundaries do not limit most surveys.

**Finally, data helpful to survey research already exist. Data archives, government documents, census materials, radio and television rating books, and voter registration lists can be used as *primary* sources (main sources of data) or as *secondary* sources (supportive data) of information.** With archive data, it is possible to conduct an entire survey study without ever developing a questionnaire or contacting a single respondent.

Disadvantages  
of Survey  
Research



### 4.3 Disadvantages of Survey Research

Survey research is not a perfect research methodology. The technique also possesses several disadvantages. **The first and most important is that independent variables cannot be manipulated as in laboratory experiments.** *Without control of independent variable variation, the researcher cannot be certain whether the relations between independent and dependent variables are causal or noncausal.* That is, a survey may establish that A and B are related, but it is impossible to determine solely from the survey results that A causes B. *Causality is difficult to establish because many intervening and extraneous variables are involved. Time series studies help correct this problem sometimes, but not always.*

*A second disadvantage is that inappropriate wording and placement of questions within a questionnaire can bias results.* The questions must be worded and placed to unambiguously elicit the desired information. This problem is discussed later in the chapter.

*A third disadvantage of survey research, especially in telephone studies, is the potential problem of talking to the wrong people.* For example, a respondent may claim to be 18 to 24, but may in fact be well over 30 years old.

**Finally, some survey researches are becoming more and more difficult to conduct.** *This is especially true with telephone surveys*

where answering machines, and respondents unwilling to participate, are creating very low incidence rates. Telemarketers (telephone salespeople) are essentially destroying mass media research. More and more people refuse to participate in legitimate studies for fear of attempts by the interviewer to try to sell something.

Even considering some of the problems, surveys can produce reliable and useful information. They are especially useful for collecting information on audiences and readership. General problems in survey research are discussed at the end of the chapter.

Constructing  
Questions



## 4.4 Constructing Questions

Two basic considerations apply to the construction of good survey questions: (1) The questions must clearly and unambiguously convey the desired information to the respondent, and (2) the questions should be worded to allow accurate transmission of respondents' answers to researchers.

*Questionnaire design depends on choice of data collection technique.* Questions written for a mail survey must be easy to read and understand, since respondents are unable to obtain explanations. Telephone surveys cannot use questions with long lists of response options; the respondent may forget the first few responses by the time the last ones have been read. Questions written for group administration must be concise and easy for the respondents to answer. In a personal interview the interviewer must tread lightly with sensitive and personal questions, which his or her physical presence might make the respondent less willing to answer. (These procedures are discussed in greater detail later in this chapter.)

*The design of a questionnaire must always reflect the basic purpose of the research.* A complex research topic such as media use during a political campaign requires more detailed questions than does a survey to determine a favorite radio station or magazine. Nonetheless, there are several general guidelines to follow regarding wording of questions and question order and length.

Types of  
Questions



### 4.4.1 Types of Questions

Surveys can consist of two basic types of questions, open-ended and closed-ended. An open-ended question requires respondents to generate their own answers. For example:

What do you like most about your local newspaper?

What type of television program do you prefer? What are the three most important problems in your community?

*Open-ended questions allow respondents freedom in answering questions and the chance to provide in-depth responses.*

*Furthermore, they give researchers the opportunity to ask: "Why did you give that particular answer?" or "Could you explain your answer in more detail?" This flexibility to follow up on, or probe, certain questions enables the interviewers to gather information about the respondents' feelings and the motives behind their answers.*

*Also, open-ended questions allow for answers that researchers did not foresee in the construction of the questionnaire—answers that may suggest possible relationships with other answers or variables. For example, in response to the question, "What types of programs would you like to hear on radio?" the manager of a local radio station might expect to hear "news" and "weather" or "sports." However, a subject may give an unexpected response, such as "obituaries" (Fletcher & Wimmer, 1981). This will force the manager to reconsider his perceptions of some of the local radio listeners.*

*Finally, open-ended questions are particularly useful in a pilot version of a study. Researchers may not know what types of responses to expect from subjects, so open-ended questions are used to allow subjects to answer in any way they wish. From the list of responses provided by the subjects, the researcher then selects the most-often mentioned items and includes them in multiple-choice or forced-choice questions. Using open-ended questions in a pilot study generally saves time and resources, since all possible responses are more likely to be included on the final measurement instrument; there would be no reason to reconduct the analysis for failure to include an adequate number of responses or response items.*

*The major disadvantage associated with open-ended questions is the amount of time needed to collect and analyze the responses. Open-ended responses required interviewers to spend a lot of time writing down or typing answers. In addition, because there are so many types of responses, a content analysis (Chapter 8) of each open-ended question must be completed to produce data that can be tabulated. A content analysis groups common responses into categories, essentially making the question closed-ended. The content analysis results are then used to produce a codebook to code the open-ended responses. A codebook is essentially a menu or list of quantified responses. For example, "I hate television" may be coded as a 5 for input into the computer.*

*In the case of closed-ended questions, respondents select an answer from a list provided by the researcher. These questions are popular because they provide greater uniformity of response, and because the answers are easily quantified. The major disadvantage is that researchers often fail to include some important responses. Respondents may have an answer different from those that are supplied. One way to solve the problem is to include an "other" response followed by a blank space, to give respondents an opportunity to supply their own answer. The "other" responses are*

then handled just like an open-ended question—a content analysis of the responses is completed to develop a codebook. A pilot study or pretest of a questionnaire often solves most problems with closed-ended questions.

Problems in  
Interpreting  
Open-Ended  
Questions



#### 4.4.2 Problems in Interpreting Open-Ended Questions

**Open-ended questions often provide a great deal of frustration.** *In many cases, respondents' answers are bizarre. Sometimes respondents don't understand a question and provide answers that are not relevant. Sometimes interviewers have difficulty understanding respondents, or they may have problems with spelling what the respondents say. In these cases, researchers must interpret the answer and determine which code is appropriate.*

The following examples are actual verbatim comments from telephone surveys conducted by Paragon Research in Denver, Colorado. They show that even the most well-planned survey questionnaire can produce a wide range of responses. The survey question asked: "How do you describe the programming on your favorite radio station?" Some responses were:

1. The station is OK, but it's geared to Jerry Atrics.
2. I only listen to the station because my poodle likes it.
3. The music is good, but sometimes it's too Tiny Booper.
4. It's great. It has the best floor mat in the city.
5. The station is good, but sometimes it makes me want to vomit.
6. It's my favorite, but I really don't like it since my mother does.
7. My parrot is just learning to talk, and the station teaches him a lot of words.
8. My kids hate it, so I turn it up real loud.
9. It sounds great with my car trunk open.
10. My boyfriend forces me to listen.

General  
Guidelines



1. Make  
questions  
clear

#### 4.4.3 General Guidelines

**Before examining whether specific question types are appropriate for survey research, some general do's and don'ts about writing questions are in order.**

**1. Make questions clear:** *This should go without saying, but many researchers become so closely associated with a problem that they can no longer put themselves in the respondents' position. What might be perfectly clear to researchers might not be nearly as clear to persons answering the question. For example, "What do you think of our company's rebate program?" might seem to be a perfectly sensible question to a researcher, but to respondents it might mean, "Is the monetary amount of the rebate too small?" "Is the rebate given on the wrong items?" "Does it take too long for the rebate to be paid?" or "Have the details of the program been poorly explained?" Questionnaire items must be phrased precisely so that respondents*

know what is being asked.

*Making questions clear also requires avoiding difficult or specialized words, acronyms, and stilted language.* In general, the level of vocabulary commonly found in newspapers or popular magazines is adequate for a survey. Questions should be phrased in everyday speech, and social science jargon, whereas, technical words should be eliminated.

*The clarity of a questionnaire item can be affected by double or hidden meanings in the words that are not apparent to investigators.* For example, the question, "How many television shows do you think are a little too violent—most, some, few, or none?" contains such a problem. Some respondents who feel that all TV shows are extremely violent will answer "none" on the basis of the question's wording. These subjects reason that all shows are more than "a little too violent"; therefore, the most appropriate answer to the question is "none." Deleting the phrase "a little" from the question helps avoid this pitfall. In addition, the question inadvertently establishes the idea that *at least some* shows are violent. The question should read, "How many television shows, *if any*, do you think are too violent—most, some, few, or none?" Questions should be written so they are fair to all types of respondents.

2. Keep questions short

**2. Keep questions short:** *To be precise and unambiguous, researchers sometimes write long and complicated items.* However, respondents who are in a hurry to complete a questionnaire are unlikely to take the time to study the precise intent of the person who drafted the items. Short, concise items that will not be misunderstood are best.

3. Remember the purposes of the research

**3. Remember the purposes of the research:** *It is important to include in a questionnaire only items that directly relate to what is being studied.* For example, if the occupational level of the respondents is not relevant to the hypothesis, the questionnaire should not ask about it. Beginning researchers often add questions merely for the sake of developing a longer questionnaire. Keep in mind that parsimony in questionnaires is a paramount consideration.

4. Do not ask double-barreled questions

**4. Do not ask double-barreled questions:** *A double-barreled question is one that actually asks two or more questions.* Whenever the word *and* appears in a question, the sentence structure should be examined to see whether more than one question is being asked. For example, "This product is mild on hands and gets out stubborn stains. Do you agree - or disagree?" Since a product that gets out stubborn stains might at the same time be highly irritating to the skin, a respondent could agree with the second part of the question while disagreeing with the first part. This question should be divided into two items.

5. Avoid biased words or terms

**5. Avoid biased words or terms:** Consider the following item: "In your free time, would you rather read a book or just watch television?" The word just in this example injects a pro-book bias into the question because it implies that there is something less than desirable about watching television. In like manner, "Where did you hear the news about the president's new program?" is mildly biased against newspapers; the word here suggests that "radio," "television," or "other people" is amore appropriate answer. Questionnaire items that start off with "Do you agree or disagree with so-and-so's proposal to . . ." almost always bias a question. If the name "Adolph Hitler" is inserted for "so-and-so," the item becomes overwhelmingly negative. By inserting "the President," a potential for both positive and negative bias is created. *Any time a specific person or source is mentioned in a question, the possibility of introducing bias arises.*

6. Avoid leading questions

**6. Avoid leading questions:** A leading question is one that suggests a certain response (either literally or by implication) or contains a hidden premise. For example, "Like most Americans, do you read a newspaper every day?" suggests that the respondent should answer in the affirmative or run the risk of being unlike most Americans. The question "Do you still use marijuana?" contains a hidden premise. **This type of question is usually referred to as a double bind:** regardless of how the respondent answers, an affirmative response to the hidden premise is implied — in this case, he or she has used marijuana at some point.

7. Do not use questions that ask for highly detailed information.

**7. Do not use questions that ask for highly detailed information.** The question "In the past 30 days, how many hours of television have you viewed with your family?" is unrealistic. Few respondents could answer such a question. A more realistic approach would be to ask, "How many hours did you spend watching television with your family yesterday?" A researcher interested in a 30-day period should ask respondents to keep a log or diary of family viewing habits.

8. Avoid potentially embarrassing questions unless absolutely necessary

**8. Avoid potentially embarrassing questions unless absolutely necessary:** *Most surveys need to collect data of a confidential or personal nature, but an overly personal question may cause embarrassment and inhibit respondents from answering honestly. Two common areas with high potential for embarrassment are age and income.* Many individuals are reluctant to tell their exact ages to strangers doing a survey. Instead of asking directly how old a respondent is, it is better to allow some degree of confidentiality by asking, "Now, about your age — are you in your 20s, 30s, 40s, 50s, 60s, . . . ?" Most respondents are willing to state what decade they fall in, and this information is usually adequate for statistical purposes. Interviewers might also say, "I'm going to read several age categories to you. Please stop me when I reach the category you're in."

Income may be handled in a similar manner. A straightforward, "What is your annual income?" often prompts the reply, "None of your

business." It is more prudent to preface a reading of the following list with the question "Which of these categories includes your total annual income"

- More than \$30,000
- \$15,000-\$29,999
- \$8,000-\$14,999
- \$4,000-\$7,999
- \$2,000-\$3,999
- Under \$2,000

*These categories are broad enough to allow respondents some privacy but narrow enough for statistical analysis.* Moreover, the bottom category, "Under \$2,000," was made artificially low so that individuals who fall into the \$2,000-\$3,999 slot would not have to be embarrassed by giving the very lowest choice. The income classifications depend on the purpose of the questionnaire and the geographic and demographic distribution of the subjects. The \$30,000 upper level in the example would be much too low in several parts of the country.

*Other potentially sensitive areas include people's sex lives, drug use, religion, business practices, and trustworthiness.* In all these areas, care should be taken to ensure respondents of confidentiality and even anonymity, when possible.

*The simplest type of closed-ended question is one that provides a dichotomous response, usually "agree/disagree" or "yes/no."* For example:

Television stations should editorialize.

- Agree
- Disagree
- No opinion

While such questions provide little sensitivity to different degrees of conviction, they are the easiest to tabulate of all question forms. Whether they provide enough sensitivity is a question the researcher must seriously consider.

*The multiple-choice question allows respondents to choose an answer from several options.* For example:

In general, television commercials tell the truth. . .

- All of the time
- Most of the time
- Some of the time
- Rarely
- Never

*Multiple-choice questions should include all possible responses.* A question that excludes any significant response usually creates

problems. For example:

What is your favorite television network?

- Channel 1
- Channel 2
- Channel 3

Subjects who favor Channel 4 or 5 (although not *networks* in the strictest sense of the word) cannot answer the question as presented.

Additionally, *multiple-choice responses must be mutually exclusive*: there should be only one response option per question for each respondent. For instance:

How many years have you been working in newspapers?

- Less than one year
- One to five years
- Five to ten years

Which blank should a person with exactly five years of experience check? One way to correct this problem is to reword the responses, such as:

How many years have you been working in the Cairo University?

- Less than one year
- One to five years
- Six to ten years

*Ratings scales are also widely used in social research. They can be arranged horizontally or vertically:*

There are too many commercials on TV.

- Strongly agree (translated as a 5 for analysis)
- Agree (translated as a 4) Neutral (translated as a 3)
- Disagree (translated as a 2)
- Strongly Disagree (translated as a 1)

What is your opinion of TV news?

Fair \_\_\_\_\_ Unfair  
(5) (4) (3) (2) (1)

Semantic differential scales are another form of rating scale and are frequently used to rate persons, concepts, or objects. These scales use bipolar adjectives with seven scale points:

How do you perceive the term public television?

Good	-----	Bad
Happy	-----	Sad
Uninteresting	-----	Interesting
Dull	-----	Exciting

*In many instances researchers are interested in the relative perception of several concepts or items. In such cases the rank ordering technique is appropriate. Here are several common occupations. Please rank them in terms of their prestige. Put a 1 next to the profession that has the most prestige, a 2 next to the one with the second most, and so on.*

- Police officer
- Banker
- Lawyer
- Politician
- TV reporter
- Teacher
- Dentist
- Newspaper writer

*Ranking of more than a dozen objects is not recommended because the process can become tedious and the discriminations exceedingly fine. Furthermore, ranking data imposes limitations on the statistical analysis that can be performed.*

*The checklist question is often used in pilot studies to refine questions for the final project. For example:*

What things do you look for in a new television set? (Check as many as apply.)

- Automatic fine tuning
- Remote control
- Large screen
- Cable ready
- Console model
- Portable Stereo sound
- Other \_\_\_\_\_

The most frequently checked answers may be used to develop a multiple-choice question; the unchecked responses are dropped.

*Forced-choice questions are frequently used in media studies designed to gather information about lifestyles and are always listed in pairs. Forced-choice questionnaires are usually very long — sometimes dozens of questions — and repeat questions (in different form) on the same topic. The answers for each topic are analyzed for patterns, and a respondent's interest in that topic is scored. A typical forced-choice questionnaire might contain the following pairs:*

Select one statement from each of the following pairs of statements:

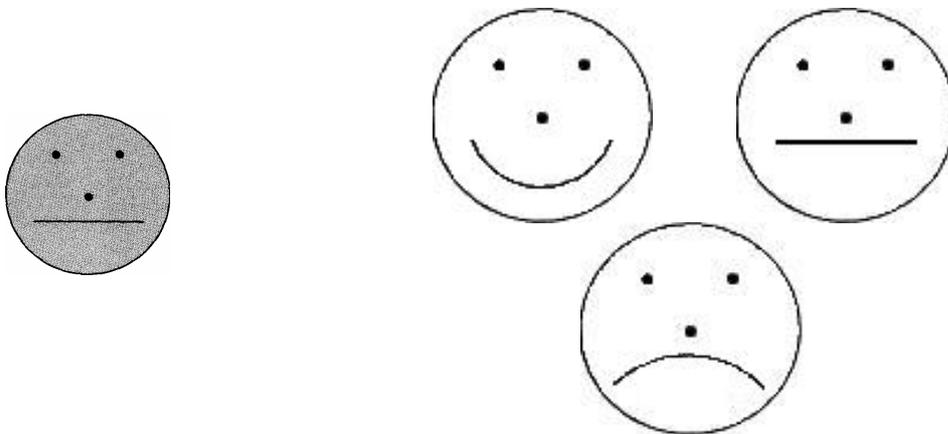
- I enjoy attending parties with my friends.
- I enjoy staying at home alone.
- Gun control is necessary to stop crime.
- Gun control can only increase crime.

- ◆ If I see an injured animal, I always try to help it.
- ◆ If I see an injured animal, I figure that nature will take care of it.

Respondents generally complain that neither of the responses to a forced-choice question is satisfactory, but they have to select one or the other. Through a series of questions on the same topic (violence, lifestyles, career goals), a pattern of behavior or attitude generally develops.

*Fill-in-the-blank questions are used infrequently by survey researchers.* However, some studies are particularly suited for fill-in-the-blank questions. In advertising copy testing, for example, they are often employed to test subjects' recall of a commercial. After seeing, hearing, or reading a commercial, subjects receive a script of the commercial in which a number of words have been randomly omitted (often every fifth or seventh word). Subjects are required to fill in the missing words to complete the commercial. *Fill-in-the-blank questions can also be used in information tests.* For example, "The senators from your state are \_\_\_\_\_ and \_\_\_\_\_." Or, "The headline story on the front page was about \_\_\_\_\_."

*Tables, graphs, and figures are also used in survey research.* Some ingenious questioning devices have been developed to help respondents more accurately describe how they think and feel. The next page shows a simple picture scale for use with young children, Figure 4.1.



**Figure 4.1: A simple picture scale for use with young children**

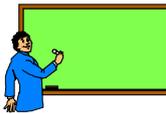
*Some questionnaires designed for children use other methods to collect information.* Since young children have difficulty in assigning numbers to values, one logical alternative is to use pictures. For example, the interviewer might read the question, "How do you feel about Saturday morning cartoons on television?" and present the faces to elicit a response from a 5-year-old. Zillmann and Bryant (1975) present a similar approach in their "Yucky" scale.

Questionnaire  
Design

## 4.5 Questionnaire Design

*The approach used in asking questions as well as the physical appearance (in a self-administered questionnaire) can affect the response rate. Time and effort invested in developing a good questionnaire always pay off with more usable data. The following section offers some useful suggestions.*

## Introduction



### 4.5.1 Introduction

*One way to increase response rate in any type of survey is to prepare a persuasive introduction to the survey. Backstrom and Hursh-Cesar (1981) suggest six principles for writing a successful introduction to a questionnaire; namely, the introduction should be short, realistically worded, nonthreatening, serious, neutral, and pleasant, but firm.*

*Generally speaking, there is no need to explain the purpose or value of a survey to respondents. It is also not necessary to tell respondents how long the survey will take to complete. In a telephone survey, telling the respondents that "the survey will take only a few minutes" gives them the opportunity to say they don't have that long to talk. An introduction should be short so the respondent can begin writing answers, or the interviewer can start asking questions. An effective introduction for a telephone survey is:*

"Hello, my name is ----- with [INSERT COMPANY NAME]. We're conducting an opinion survey about radio in the Chicago area. We're not trying to sell anything, and this is not a contest or promotion. We're interested only in your opinions. For this survey, we need to talk to people who are between the ages of 25 and 49. Are you in this group? [IF 'YES,' CONTINUE. IF 'NO,' ASK FOR SOMEONE WHO IS. IF NO ONE IN AGE GROUP, TERMINATE]."

With some modifications, the same introduction is appropriate for a self-administered questionnaire. The introduction would include the second and fourth sentences and add at the end:

"Please answer the questions as completely and honestly as possible."

*The goal of the introduction in telephone surveys is to start the interview as quickly as possible so the respondent does not have a chance to say "No" and hang up. This may sound overly aggressive, but it works. The goal of the introduction in self-administered questionnaires is to make it as simple as possible.*

Regardless of the survey approach used, a well-constructed introduction usually generates higher response rates than a simple "Please answer the following questions...."

Instructions

## 4.5.2 Instructions



All instructions necessary to complete the questionnaire should be clearly stated for respondents or interviewers. **These instructions vary depending on the type of survey conducted.** *Mail surveys usually require the most specific instructions, since respondents are not able to ask questions about the survey. Respondents and interviewers should understand whether the correct response consists of circling, checking, placing in a specific order, or skipping an item.*

**Procedural instructions for respondents are often highlighted using a different typeface, capital letters, or some graphic device, perhaps arrows or lines.** *The following is an example from a mail survey:*

Do you have a favorite radio station that you listen to most of the time?

---- Yes            ---- No

If yes, can you remember the names of any of the disc jockeys or newscasters who work for that station? **WRITE THE NAMES BELOW.**

Some questionnaires require respondents to rank a list of items. In this case, the instructions must clearly describe which response represents the highest value:

Please rate the following professions in order of importance to you. Place a 1 next to the profession you prefer most, a 2 next to the profession in second place, and so on up to 5.

- ◆ Doctors
- ◆ Engineers
- ◆ Policemen
- ◆ Teachers

*The following suggestions should be taken into account for putting together a self-administered questionnaire:*

1. *The questionnaire must be self-explanatory.*
2. *Questionnaires should be limited to closed-ended items. Checking a box or circling an answer should be the only task required.*
3. *The question forms should be few in number.*
4. *The questionnaire should be typed and laid out to ensure a clear and uncluttered product.*
5. *Instructions should be kept to a minimum. If people can be confused about what they are supposed to do, they will be.*

The second point in the above suggestions is strict. Respondents are usually able to answer open-ended questions with the same ease (or complication) as closed-ended questions.

*Whether open-ended or closed-ended, all questions should be tested in a pretest to determine whether directions for answering questions are clear.*

*Procedural instructions for interviewers are often typed in capital letters and enclosed in parentheses, brackets, or boxes. For example, instructions for a telephone survey might look like this:*

We'd like to start by asking you some things about television. First, what are your favorite TV shows?

RECORD ALL NAMES OF TV SHOWS. PROBE WITH "ARE THERE ANY MORE?" TO GET AT LEAST THREE SHOWS.1.

1. \_\_\_\_\_ 3. \_\_\_\_\_  
2. \_\_\_\_\_ 4. \_\_\_\_\_

**Screening questions, or filter questions**, which are used to eliminate unwanted respondents (or to include only respondents who have specific characteristics or answer questions in a specific manner), often require respondents or interviewers to skip one or more questions. Skips must be clearly specified. For example:

In a typical week, do you listen to AM radio?

Yes  
 No [SKIP TO Q. 17]

A survey using this question might be designed to question only subjects who listen to AM radio. The screening question immediately determines if the subject falls into this group. If the respondent responds "No", the interviewer (or respondent if the survey is self-administered) skips a certain number of questions, or may terminate the survey immediately.

When interviewers are used, as is the case with telephone and one-on-one interviews, the questionnaires must have easy-to-follow instructions (including how many responses to take for open-ended questions), simple skip patterns, and enough space to record answers (if survey responses are written down on paper). Telephone questionnaires must include everything an interviewer will say, including introductions, explanations, definitions, transitions, and pronunciations. The last point is particularly important because interviewers should sound like they know the topic. For example, the rock group INXS should have a phonetic spelling in parentheses; (n excess), following its first appearance in the questionnaire. Otherwise, some interviewer is *sure* to say something like: "Do you think music by the group 'Inks' should be played on your favorite radio station?"

*All instructions should be clear and simple. A confusing questionnaire impairs the effectiveness of the interviewer, lowers the number of*

respondents who complete the test, and, in the long run, increases costs.



### 4.5.3 Question Order

All surveys flow better when the initial questions are simple and easy to answer. Researchers often include one or two "warm-up" questions about the topic under investigation so respondents become accustomed to answering questions and begin thinking about the survey topic. Preliminary questions can also serve as motivation to create interest in the questionnaire. Demographic data, personal questions, and other sensitive items should be placed at the end of the questionnaire to allow the interviewer to establish a rapport with each respondent, or for any suspicions to be alleviated in a self-administered questionnaire. Although some respondents may still refuse to answer personal items, or may hang up the telephone, at least the main body of data is already collected. Age and sex information are usually included in the first part of a questionnaire, so at least some respondent identification is possible.

**The questionnaire should be organized in a logical sequence, proceeding from the general to the specific.** Questions on similar topics should be grouped together, and the transitions between different question sections should be clear and logical.

**Poor question order may bias a respondent's answers.** For example, suppose that after several questions about the presence of violence in society, the respondent is asked to rank the major problems facing the country today from the following list:

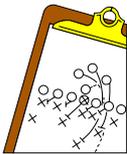
- ◆ War
- ◆ Communism
- ◆ Violence on TV
- ◆ High prices
- ◆ Corrupt government
- ◆ Pollution

It is possible that violence on television might receive a higher ranking than it would if the ranking question had been asked before the series of questions on violence. Or, to take another example, suppose a public relations researcher is attempting to discover the public's attitudes toward a large oil company. If the questionnaire beginning with attitudinal questions concerning oil spills and inflated profits asked respondents to rate certain oil companies, it is likely that the ratings of all the companies would be lower, due to general impressions created by the earlier questions.

There is no easy solution for the problem of question "contamination." Obviously, some questions have to be asked before others. *Perhaps the best approach for researchers is to be sensitive to the problem and test for it in a pretest.* If they think that question order A, B, C may

have biasing effects, they should test another version using the order C, B, A. Completely neutral positioning is not always possible, however, and when bias may enter because of how responses are ordered, the list of items should be rotated. The word [ROTATE] after a question indicates that the interviewer must alter the order of responses for each respondent. Different versions of question order can be printed for self-administered questionnaires.

Layout



#### 4.5.4 Layout

The physical design of the questionnaire is another important factor in survey research. **A badly typed, poorly reproduced questionnaire is not likely to attract many responses in a mail survey.** Nor does a cramped questionnaire with 40 questions to a page help to instill respondents with a positive attitude. Response categories should be adequately spaced and presented in a nonconfusing manner. For example, the following format might lead to problems:

There are too many commercials on television.

Do you strongly agree \_\_\_\_\_ Agree \_\_\_\_\_ Have no opinion \_\_\_\_\_  
Disagree \_\_\_\_\_ Strongly disagree.

*A more effective and less confusing method is to provide a vertical ordering of the response choices:*

There are too many commercials on television.

- Strongly disagree
- Agree
- No opinion
- Disagree
- Strongly disagree

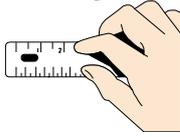
*Some researchers recommend avoiding blanks altogether* because respondents and interviewers tend to make large check marks or X's that cover more than one blank, making interpretation difficult. If blanks are perceived as a problem, boxes to check or numbers to circle are satisfactory. In any case, the response form should be consistent throughout the questionnaire. **Format changes generally create confusion for both respondents and interviewers.** *Finally, each question must have enough space for answers.* This is especially true for open-ended questions. Nothing is more discouraging to respondents and interviewers than to be confronted with a presentation like the following.

Why do you go to the movies? \_\_\_\_\_

Who are your favorite movie stars? \_\_\_\_\_

What are your favorite television shows? \_\_\_\_\_

If a research budget does not allow for enough paper, subjects should be asked to add further comments on the back of the survey.

Questionnaire  
Length

### 4.5.5 Questionnaire Length

Questionnaire length is an important concern in any type of survey. One basic reason is that questionnaire length is directly related to completion rate. Long questionnaires cause fatigue and respondent mortality, and low completion rates. Shorter questionnaires guarantee higher completion rates.

There are no strict guidelines to help in deciding how long a questionnaire should be. The length depends on a variety of things. Some of these include:

1. Purpose of the survey
2. Type of problems or questions investigated
3. Age of respondents involved in the survey
4. Type and complexity of questions in the questionnaire
5. Location in the country where the study is conducted
6. Specific setting of the testing situation
7. Time of year
8. Time of day
9. Type of interviewer used (professional or amateur)

**In most cases, questionnaire length is determined by trial and error.** A survey developed with significantly less than 100% respondent completion is too long. The authors' experience during the past 10 years has shown the following time limits as *maximum*:

Self-administered in a group	Situation supervised by a
Researcher:	60 min.
One-on-one interviews:	60 min.
Telephone:	25 min.
Self-administered mail survey:	20 min.
Shopping center intercept:	15 min.

Telephone interviewing can be a difficult approach to use because there is a talent required in keeping people on the phone to answer questions. Professional interviewers can usually hold respondents' attention for about 25 minutes. There is a severe drop-off in incidence (respondents hang up) when an interview lasts more than 25 minutes.

Pretesting



### 4.6 Pretesting

Without a doubt, the best way to discover whether a research instrument is adequately designed is to pretest it. That is, *conduct a mini-study with a small sample to determine if the study approach is correct and for refining questions. Areas of misunderstanding or confusion can be easily corrected without wasting time or money.*

There are several ways to pretest a questionnaire. When an acceptable draft of the questionnaire is completed, a focus group

(Chapter 7) can be used to discuss the questionnaire with potential respondents. However, this is usually too expensive. The best pretest in telephone surveys is to have interviewers call 10-20 people and do a run-through. Any problems emerge quickly. Self-administered questionnaires should be pretested with the type of respondent who will participate in the actual study. Once again, any problems should be noticed immediately.

In any type of pretesting situation, it is appropriate to discuss the project with respondents after the questionnaire is completed. They can be asked if they understood the questions, whether questions were simple to answer, and so on. Respondents are always willing to help researchers.

Gathering  
Survey Data



## 4.7 Gathering Survey Data

Once a questionnaire is developed and one or more pretests or pilot studies have been conducted, the next step is to gather data from an appropriate group of respondents. **There are four basic methods for doing this: the mail survey, the telephone survey, the personal interview, and group administration.** Researchers can also use variations and combinations of these four methods, such as disk-by-mail surveys and mall interviews. Each procedure has definite advantages and disadvantages that must be considered before a choice is made. The remainder of this chapter highlights the characteristics of each method.

Mail Surveys



### 4.7.1 Mail Surveys

Mail surveys involve mailing self-administrable questionnaires to a sample of individuals. Stamped reply envelopes are enclosed to encourage respondents to mail completed questionnaires back to the researcher. Mail surveys are popular because they can secure a great deal of data with a minimum expenditure of time and money. At the outset, however, researchers should be aware that respondents are busy people with many demands on their time. Consequently, many people do not share the researcher's enthusiasm for questionnaires and often simply throw them away.

The general  
stages of a  
mail survey  
are:

**The general stages of a mail survey are discussed below.** Even though the steps are listed in numerical sequence, many of these tasks are often accomplished in a different order or even simultaneously.

1. Select a  
sample.

**1. Select a sample:** Sampling is generally done from a prepared frame (Chapter 4) that contains the names and addresses of potential respondents. *The most common sampling frame used is the mailing list, a compilation of names and addresses in narrowly defined groupings that commercial firms sometimes prepare* (see

accompanying boxed material).

2. Construct the questionnaire.

**2. Construct the questionnaire:** As discussed earlier, *mail survey questionnaires must be concise and specific, since no interviewer is present to alleviate misunderstandings, answer questions, or give directions.*

3. Write a cover letter.

**3. Write a cover letter:** *A brief note explaining the purpose and importance of the questionnaire usually increases response rates.*

4. Assemble the package.

**4. Assemble the package:** *The questionnaires, cover letters, and return envelopes are stuffed into mailing envelopes. Researchers sometimes choose to use bulk mail with first-class return envelopes. An alternate method is to send questionnaires first class and use business reply envelopes for responses. This method allows researchers to pay postage only for the questionnaires actually returned. Postal options always depend on the research budget.*

5. Mail the surveys.

**5. Mail the surveys.**

6. Closely monitor the return rates.

**6. Closely monitor the return rates.**

7. Send follow-up mailings.

**7. Send follow-up mailings:** *The first follow-up should be sent 2 weeks after the initial mailing, and a second (if necessary) 2 weeks after the first. The follow-up letters can be sent to the entire sample or only the subjects who failed to answer.*

8. Tabulate and analyze the data.

**8. Tabulate and analyze the data.**

Advantages



### A) Advantages

*Mail surveys cover a wide geographic area for a rather reasonable cost. They are often the only way to gather information from people who live in hard-to-reach areas of the country (or in other countries). Mail surveys also allow for selective sampling through the use of specialized mailing lists. In addition to those mentioned, lists are available that include only people with annual incomes exceeding \$50,000, or consumers who have bought a car within the past year, or subscribers to a particular magazine, or residents of a specific zip code area. If researchers need to collect information from a highly specialized audience, the mail technique can be quite attractive.*

*Another advantage of the mail survey is that it provides anonymity, so that subjects are more likely to answer sensitive questions candidly. Questionnaires can be completed at home or in the office, affording subjects a certain sense of privacy. People can answer questions at their own pace and have an opportunity to look up facts or check past information. Mail surveys also eliminate interviewer bias, since there is no personal contact.*

Probably the biggest advantage of this method, however, is its relatively low cost. Mail surveys do not require a large staff of trained workers. The only costs are for printing, mailing lists, envelopes, and postage. If the cost per completed questionnaire were to be computed, it is likely that the mail survey would prove to be the most inexpensive of all the survey methods. At a minimum, it can be said that researchers who are willing to spend time, energy, and money in a mail survey can usually ensure an above-average return rate.

Disadvantages



## B) Disadvantages

First, mail questionnaires must be self-explanatory. There is no interviewer present to answer questions or to clear up misunderstandings. Mail surveys are also the slowest form of data collection. Returns start to trickle in around a week or so after the initial mailing and continue to arrive for several weeks thereafter. In fact, it may be months before some responses are returned. Many researchers simply set a cutoff date, after which returns are not included in the analysis.

Another problem with mail surveys is that researchers never know exactly who answers the questions. A survey sent to corporate executives, for example, may be completed by assistants. Furthermore, replies are often received only from people who are interested in the survey, and this injects bias into the results. Most researchers agree, however, that the biggest disadvantage of the mail survey is the typically low return rate. A typical survey (depending on the area and type of survey) will achieve a response rate of 20% - 40%. This low return casts doubt on the reliability of the findings.

Increasing  
Response  
Rates



## C) Increasing Response Rates

A number of procedures for improving return rates have been investigated by survey researchers. There are no hard and fast guarantees, however, in a *meta-analysis* (the findings of several studies are treated as independent observations and combined to calculate an overall or average effect) of numerous studies concerning mail surveys. Previous studies have shown that on the average, response rates can be increased in a variety of ways. In descending order of importance. *It was also found that following procedures to increase mail survey response rates: university sponsorship, stamped return postage as opposed to business reply, written prenotification of the survey sent to the respondent, postcard follow-up, first-class outgoing postage, questionnaire color (green paper as opposed to white), notification of cutoff date, and stamped outgoing postage as compared to metered stamping. Offering monetary incentives also increases response rates, but the authors did not pursue this area since only a few studies offering incentives were available to them.*

*The authors further suggest that additional research is required to determine which combinations of the procedures, if any, can have an interactive effect to increase response rates even more than any*

*single element does alone.*

Telephone  
Surveys



## 4.7.2 Telephone Surveys

*Telephone surveys and personal interviews must employ trained members of a research team to ask questions orally and record the responses. The respondents generally do not get a chance to see the actual questionnaire. Since telephone and personal interviewing techniques have certain similarities, much of what follows applies to personal interviews as well.*

**Telephone surveys seem to fill a middle ground between mail surveys and personal interviews.** *They offer more control and higher response rates than most mail surveys but are limited in the types of questions that can be used. They are generally more expensive than mail surveys but less expensive than face-to-face interviews. Because of these factors, telephone surveys seem to represent a compromise between the other two techniques, and this may account for their growing popularity in mass media research.*

Interviewers are extremely important to both telephone and personal surveys. An interviewer ideally should function as a neutral medium through which the respondents' answers are communicated to the researcher. The interviewer's presence and manner of speaking should not influence respondents' answers in any way. Adequate training and instruction can minimize bias that the interviewer might inject into the data. For example, if he or she shows disdain or shock over an answer, it is unlikely that the respondent will continue to answer questions in a totally honest manner. Showing agreement with certain responses might prompt similar answers to other questions. *Skipping questions, carelessly asking questions, and being impatient with the respondent might also cause problems. To minimize interviewer bias, the interviewers should follow the following recommendations:*

1. **Read the questions exactly as worded.** Ask them in the exact order listed. Skip questions only when the instructions on the questionnaire tell you to. There are no exceptions to this.
2. **Never suggest an answer, try to explain a question, or imply what kind of reply is wanted. Don't prompt in any way.**
3. **If a question is not understood, say, "Let me read it again," and repeat it slowly and clearly.** If it is still not understood, report a "no answer."
4. **Report answers and comments exactly as given,** writing fully. If an answer seems vague or incomplete, probe with neutral questions, such as, "Will you explain that?" or, "How do you mean that?" Sometimes just waiting a bit will tell the respondent you want more information.

5. **Act interested, alert, and appreciative of the respondent's cooperation. But never comment on his or her replies.** Never express approval, disapproval, or surprise. Even an "Oh" can cause a respondent to hesitate or refuse to answer further questions. Never talk up or down to a respondent.
6. **Follow all instructions carefully,** whether you agree with them or not.
7. **Thank each respondent.** Leave a good impression for the next interviewer.

A general procedure for conducting a telephone survey follows:

- A general procedure for conducting a telephone survey follows.** Again, the steps are presented in numerical order, but it is possible to address many tasks simultaneously.
1. Select a sample.
 

**1. Select a sample.** Telephone surveys require researchers to specify clearly the geographic area to be covered and to identify the type of respondent to be interviewed in each household contacted. Many surveys are restricted to people over 18, heads of households, and so forth. The sampling procedure used depends on the purpose of the study.
  2. Construct the questionnaire.
 

**2. Construct the questionnaire.** Phone surveys require straightforward and uncomplicated response options. Ranking a long list of items is especially difficult over the telephone, and this task should be avoided. In addition, the length of the survey should not exceed 10 minutes for nonprofessional interviewers. Longer interviews require professionals who are capable of keeping people on the telephone.
  3. Write a cover letter.
 

**3. Prepare an interviewer instruction manual.** This document should cover the basic mechanics of the survey (what numbers to call, when to call, how to record times, and so on). It should also specify which household member to interview and should provide general guidelines on how to ask the questions and how to record the responses.
  4. Assemble the package.
 

**4. Train the interviewers.** Interviewers need to practice going through the questionnaire to become familiar with all the items, response options, and instructions. It is best to train interviewers in a group using interview simulations that allow each person to practice asking questions. It is advisable to pretest interviewers as well as the questionnaire.
  5. Mail the surveys.
 

**5. Collect the data.** Data collection is most efficient when conducted from one central location (assuming enough telephone lines are available). Problems that develop are easier to remedy, and important questions raised by one interviewer can easily be communicated to the rest of the group. A central location also makes it easier for researchers to check (validate) the interviewers' work. The completion rate should also be monitored during this stage.

6. Closely monitor the return rates.

**6. Make necessary callbacks.** Additional calls (usually no more than two) should be made to respondents whose lines were busy or who did not answer during the first session. *Callbacks done on a different day or night tend to have a greater chance of success in reaching someone willing to be interviewed.*

When the first call produces a busy signal, the rule is to wait one-half hour before calling again. If the first call produced a "no answer," wait 2 to 3 hours before calling again, assuming it will still be a reasonable hour to call. If evening calls produce no answer, call during the following day.

In addition, interviewers should keep track of the disposition or status of their sample numbers. **Figure 4.2 contains a sample disposition sheet.**

Sample Telephone Interview Disposition Sheet				
Phone number	_____			
Call #1	#2	#3	#4	#5
Date	Date	Date	Date	Date
Time	Time	Time	Time	Time
Code				
1	Completed interview			
2	Answering machine			
3	Busy			
4	No answer			
5	Refusal			
6	Appointment to call again (when _____)			
7	Nonworking number (out of order, disconnected, nonexistent)			
8	Nonresidential number			
9	Reached but respondent not available (out of town, hospital, etc.)			
10	Reached but not interviewed (ineligible household, speech or physical problem, age disqualification)			

**Figure 4.2: Sample disposition sheet**

7. Send follow-up mailings

**7. Verify the results.** *When all questionnaires have been completed, a small sub sample of each interviewer's respondents should be called again to check that the information they provided was accurately recorded.* Respondents should be told during the initial survey that they may receive an additional call at a later date. This tends to eliminate any confusion when subjects receive a second call. A typical procedure is to ask the subject's first name in the interview so that it can be used later. The interviewer should ask, "Was James called a few days ago and asked questions about television viewing?" The verification can begin from there, and need consist of only two or three of the original questions (preferably open-ended and sensitive questions, since interviewers are most likely to omit these).

8. Tabulate and analyze the data.

**8. Tabulate the data.** Along with the normal data analysis, telephone researchers generally compute a response rate: how many completed interviews, how many refusals, how many no-answers, and how many disconnects.

Advantages



### A) Advantages

*The cost of telephone surveys tends to be reasonable.* The sampling involves minimal expense, and there are no elaborate transportation costs. *Callbacks are simple and economical.* Wide Area Telephone Service (WATS) enables researchers to conduct telephone surveys on a nationwide basis from any location.

*Compared to mail surveys, telephone surveys can include more detailed questions, and, as stated earlier, interviewers can clarify misunderstandings that might arise during the administration of the questionnaire.*

*The nonresponse rate of a telephone survey is generally low, especially when multiple callbacks are employed.* In addition, *phone surveys are much faster than mail.* A large staff of interviewers can collect the data from the designated sample in a relatively short time.

*In summary, phone surveys tend to be fast, easy, and relatively inexpensive.*

Disadvantages



### B) Disadvantages

First of all, researchers must recognize that much of what is called survey "research" by telephone is not research at all, but an attempt to sell people something. Unfortunately, many companies disguise their sales pitch as a "survey," and *this has made respondents suspicious and even prompts some to terminate an interview before it has gotten started.* Additionally, *visual questions are prohibited.* A researcher cannot, for example, hold up a picture of a product and ask if the respondent remembers seeing it advertised. *A potentially severe problem is that not everyone in a community is listed in the telephone directory, the most often used sampling frame.* Not everyone has a phone, and many people have unlisted phone numbers; also, some numbers are listed incorrectly, and others are too new to be listed. These problems would not be serious if the people with no phones or unlisted numbers were just like those listed in the phone book. Unfortunately, *researchers generally have no way of checking for such similarities or differences, so it is possible that a sample obtained from a telephone directory may be significantly different from the population.*

Personal Interviews



## 4.7.3 Personal Interviews

*Personal interviews usually involve inviting a respondent to a field service location or research office (called a one-on-one interview).* Sometimes interviews are conducted at a person's place of work or at

home. **There are two basic types of interviews, structured and unstructured.** In a **structured interview**, standardized questions are asked in a predetermined order; relatively little freedom is given to interviewers. In an unstructured interview, broad questions are asked, which allows interviewers freedom in determining what further questions to ask to obtain the required information. Structured interviews are easy to tabulate and analyze but do not achieve the depth or expanse of unstructured interviews. Conversely, the **unstructured type** elicits more detail but takes a great deal of time to score and analyze.

The steps in constructing a personal interview:

The steps in constructing a personal interview survey are similar to those for a telephone survey. **The list below discusses instances in which the personal interview differs substantially from the telephone method.**

1. Select a sample

**1. Select a sample.** Drawing a sample for a personal interview is essentially the same as sample selection in any other research method. In one-on-one interviews, respondents are selected on the basis of a predetermined set of screening requirements. In door-to-door interviews, a multistage sample is used to first select a general area, then a block or neighborhood, and finally randomly select a household from which a person will be chosen.

2. Construct the questionnaire

**2. Construct the questionnaire.** Personal interviews are flexible: detailed questions are easy to ask, and the time taken to complete the survey can be greatly extended (many personal interviews last 30-60 minutes). Researchers can also make use of visual exhibits, lists, and photographs to ask questions, and respondents can be asked to sort photos or materials into categories, or to point to their answers on printed cards. Respondents can have privacy and anonymity by marking ballots, which can then be slipped into envelopes and sealed.

3. Prepare an interviewer instruction

**3. Prepare an interviewer instruction guide.** The detail of an instruction guide depends on the type of interview. One-on-one interviewer guides are not very detailed because there is only one location, respondents are prerecruited by a field service, and times are arranged. Door-to-door interviewer guides contain information about the household to select, the respondent to select, and what to do in the event the target respondent is not at home. Interviewer guides often contain information about how to conduct the interview, how to dress, how to record data, and how questions should be asked.

4. Train the interviewers

**4. Train the interviewers.** Training is important because the questionnaires are longer and more detailed. Interviewers should receive instruction on establishing a rapport with subjects, administrative details (when to conduct the interviews, how long each will take, and how much the interviewers will be paid), and follow-up

questions. *Several practice sessions are necessary to ensure that the goal of the project is met and that interviewers follow the established guidelines.*

5. Collect the data

**5. Collect the data.** *Personal interviews are both labor and cost intensive. These problems are why most researchers prefer to use telephone or mail surveys. A personal interview project can take several days to several weeks to complete because turnaround is slow. One interviewer can only complete a handful of surveys each day. In addition, costs for salaries and expenses escalate quickly. It is not uncommon for some research companies to charge as much as \$1,000 per respondent in a one-on-one situation.*

Data gathering is accomplished by either writing down answers or by audio taping or videotaping the respondents' answers. Both methods are slow and detailed transcriptions and editing are often necessary.

6. Make necessary callbacks

**6. Make necessary callbacks.** *Each callback requires an interviewer to return to a household originally selected or the location used for the original interview. Additional salary, expenses, and time are required.*

7. Verify the results

**7. Verify the results.** *As with telephone surveys, a sub sample of each interviewer's completed questionnaires is selected for verification. Respondents can be called on the phone or re-interviewed in person.*

8. Tabulate the data.

**8. Tabulate the data.** *Data tabulation procedures for personal interviews are essentially the same as with any other research method. A codebook must be designed, questionnaires are coded, and data input into a computer.*

Advantages



### A) Advantages

Many of the advantages of the personal interview technique have already been mentioned. *It is the most flexible means of obtaining information, since the face-to-face situation lends itself easily to questioning in greater depth and detail. Furthermore, some information can be observed by the interviewer during the interview without adding to the length of the questionnaire. Additionally, the interviewers can develop a rapport with the respondents and may be able to get replies to sensitive questions that would remain unanswered in a mail or phone survey.*

*The identity of the respondent is known or can be controlled in the personal interview survey. Whereas in a mail survey it is possible that all members of a family might confer on an answer, in a face-to-face interview, this can usually be avoided. Finally, once an interview has begun, it is harder for respondents to terminate the interview before all the questions have been asked. In a phone survey, all the subject needs to do is to hang up.*

Disadvantages



## B) Disadvantages

*As mentioned, time and costs are the major drawbacks to the personal interview technique. Another major disadvantage is the problem of interviewer bias.* The physical appearance, age, race, sex, dress, nonverbal behavior, and/or comments of the interviewer may prompt respondents to answer questions untruthfully. Moreover, *the organization necessary for recruiting, training, and administering a field staff of interviewers is much greater than that required for other data collection procedures.* If large numbers of interviewers are needed, it is usually necessary to employ field supervisors to coordinate their work, which in turn will make the survey even more expensive. Finally, if personal interviews are conducted during the day, most of the respondents will not be employed outside the home. If it is desirable to interview respondents with jobs outside the home, it is necessary to schedule interviews on the weekends or during the evening. *A hybrid of personal interviewing is intensive or in-depth interviewing.*

Mail Interviews



## 4.7.4 Mail Interviews

Although mail interviews are essentially a form of personal interview as just discussed, their recent popularity and widespread use warrant individual consideration.

During the late 1980s, mall intercepts became one of the most popular research approaches among marketing and consumer researchers. Studies found that of all people who participated in a survey in 1984, 33% were mall intercepts.

*Although mall intercepts use convenience samples and sampling error cannot be determined, the method has become the standard for many researchers.* It is rare to go into a shopping mall without seeing a man or woman with a clipboard trying to interview a shopper. The method has become commonplace, and some shoppers resent the intrusion. In fact, it is common for shoppers to take paths to avoid the interviewers they can so easily detect.

By the way, purposely avoiding an interviewer isn't necessary. There is another way out if you don't wish to take the time for the interview. Remember from previous discussions that all research requires specific types of people — **a screener is developed to eliminate respondents who do not qualify.** Nearly every questionnaire has security screening questions to eliminate respondents who work for a company in any way related to the company sponsoring the study, or anyone who works for a marketing research firm. The last part of the security screener is your way out. When the interviewer stops you, simply say, "I work for a marketing research company." Your chances of being recruited are very slim. We're not advocating the practice of lying here, just offering a suggestion. Mall interviewers are generally

nice people. It's easier for them to hear the security bail-out than a caustic remark about their presence in the mall.

*The procedures involved in conducting mail intercepts are the same as those for personal interviews. The only major difference is that it is necessary to locate the field service that conducts research in the particular mall of interest. Field services pay license fees to mall owners to allow them to conduct research on the premises. Not just any field service can conduct research in any mall.*

Advantages



### A) Advantages

*Mail intercepts are a quick and inexpensive way to collect personal interview data.*

Disadvantages



### B) Disadvantages

*Some of the major problems are: convenience sampling restricts the generalizability of the results, the length of interviews must be short; and there is no control over data collection (researchers are at the mercy of the field service to conduct a proper job).*

Disk-By-Mail  
Surveys  
(DBM)



### Disk-By-Mail Surveys

During the late 1980s, a **high-tech form of mail surveys has been used that appears to offer promise in the future. The procedure is called disk-by-mail surveys, or DBM.** The name of the survey approach essentially explains the procedure: *respondents are sent computer disks that contain a self-administered questionnaire, and are asked to complete it by using a personal computer. This method obviously involves several new areas to consider when conducting a research project.*

*DBM surveys are essentially the same as a typical self-administered mail survey. The normal steps involved in problem definition, questionnaire design, and pretesting are used. **However, there are several unique considerations researchers must address when using DBM.***

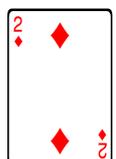
Type of  
Study



### Type of Study

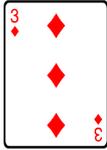
Most DBM surveys are conducted with professionals or other business related samples. The reason is simple. Only about 20% of American households have personal computers. Sample selection would be time-consuming and costly. However, computer ownership will certainly increase in the future, and in-home DBM surveys may become commonplace. For the time being, DBM surveys are conducted with professionals who generally have access to personal computers in their workplace.

Sample  
Selection



### Sample Selection

Locating qualified respondents for DBM surveys is the same as for any other research project, except that in addition to the other screener questions, *there must be one about the availability of a personal computer.*

Computer  
Hardware

### Computer Hardware

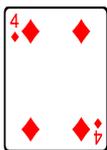
A typical self-administered mail survey requires that the respondent only have a writing instrument. DBM surveys complicate the process in several ways. First of all, computers can use one of several different operating systems, or languages, which run the computer (Chapter 17). Fortunately, the systems used by IBM and Apple are the most widely used. The problems with the two operating systems can be solved by preparing two different DBM disks, or by asking one of the groups of users to try and locate the other type of computer to complete the survey.

A second problem with the DBM method is whether to use a color or monochrome display to present the questionnaire. Not all color monitors are equal, and the color appearance may be drastically different from one monitor to another. A monochrome display is best to avoid problems.

The type of disk drive is a third problem. The screener must include questions about the type of drive (for example, 5.25 or 3.5) so respondents receive the correct disk format.

Another problem, and not necessarily the last, relates to problems respondents may have with the computer disks. Disks are fragile and may be damaged in the disk duplication process, in shipment, or by the respondent. Replacement disks may have to be sent to some respondents.

Support



### Support

Because computer problems may occur, or respondents may be unable to complete the survey, most DBM surveys offer respondents a toll free number to call for assistance. This adds further costs to the project.

Reliability  
and Validity

### Reliability and Validity

Significant questions are raised about these two areas in relation to DBM surveys. Who actually completes the surveys? Are responses more or less accurate than those provided to interviewers or in typical mail interviews? Does the novelty of the approach have any effect on respondents?

As mentioned earlier, DBM surveys are a totally new approach in research. Not much is known about the procedure, but in all likelihood, DBM surveys will be used more frequently in the future.

Group  
Administration

## 4.7.5 Group Administration

**Group administration combines the features of mail surveys and personal interviews.** The group-administered survey takes place when a group of respondents is gathered together (pre-recruited by a field service) and given individual copies of a questionnaire, or asked

to participate in a group interview (a large focus group). *The session can take place in a natural setting, but is usually held at a field service location or a hotel ballroom.* For example, respondents may be recruited to complete questionnaires about radio or television stations, students in a classroom may complete questionnaires about their newspaper reading habits, or an audience may be asked to answer questions after viewing a sneak preview of a new film.

The interviewer in charge of the session may or may not read questions to respondents. Reading questions aloud may help respondents who have reading problems, but this is not always necessary (it is possible to screen respondents for reading and/or language skills). *The best approach is to have several interviewers present in the room so individual problems can be resolved without disturbing the other respondents.*

*Some group-administered sessions include audio and/or video materials for respondents to analyze.* The session allows respondents to proceed at their own pace, and in most cases, interviewers allow respondents to ask questions, although this is not a requirement.

Advantages



### A) Advantages

The group administration technique has certain advantages. In the first place, *a group-administered questionnaire can be longer than the typical questionnaire used in a mail survey.* Since the respondents are usually assembled for the express purpose of completing the questionnaire, the response rates are almost always quite high. The opportunity for researchers to answer questions and handle problems that might arise generally means that fewer items are left blank or answered incorrectly.

Disadvantages



### B) Disadvantages

On the negative side, *if a group-administered survey leads to the perception that the study is sanctioned by some authority, suspicion or uneasiness on the part of respondents might result.* For example, if a group of teachers is brought together to fill out a questionnaire, some might think that the survey has the approval of the local school administration and that the results will be made available to their superiors. Also, *the group environment makes it possible for interaction among the respondents; this has the potential for making the situation more difficult for the researcher to control.* In addition, *not all surveys can use samples that can be tested together in a group. Surveys often require responses from a wide variety of people, and mixing respondents together may bias the results.*

Finally, *group administration can be expensive.* Costs usually include recruiting fees, coop payments, hotel rental, refreshments, and salaries for interviewers.

Achieving a  
Reasonable  
Response  
Rate



### 4.7.6 Achieving a Reasonable Response Rate

No matter what type of survey is conducted, it is virtually impossible to get a 100% response rate. Researchers have more control over the situation in some types of surveys (such as the personal interview) and less in others (such as the mail survey). But no matter what the situation, not all respondents will be available for interviews and not all will cooperate. Consequently, the researcher must try to achieve the highest response rate possible under the circumstances.

**What constitutes an acceptable response rate?** Obviously, *the higher the response rate the better, since as more respondents are sampled, it becomes less likely that response bias is present.* **But is there a minimum rate that should be achieved?** Not everyone would agree on an answer to this question, but there are some helpful data available. Several studies have calculated the average response rates for surveys of various kinds. A comparison with these figures can at least tell a researcher if a given response rate is above or below the norm. For example, Dillman (1978) noted that response rates for face-to-face interviews have dropped sharply in recent years. In the 1960s, the average rate was 80%-85%. More recently, the completion rates of general population samples interviewed by the face-to-face technique is about 60%-65%. Yu and Cooper (1983) studied the completion rates reported in 93 social science journal articles from 1965 to 1981. They found the completion rate for personal interviews to be 82% and for telephone surveys about 72%. Mail surveys had an average completion rate of about 47%. (Note that many of the personal interviews included in this study were done in the 1960s and early 1970s. This should be kept in mind when comparing these figures to Dillman's data mentioned above.)

Regardless of how good the response rate, the researcher is responsible for examining any possible biases in response patterns. Were females more likely to respond than males? Older respondents more likely than younger ones? Whites more likely than nonwhites? A significant lack of response from a particular group might weaken the strength of any inferences from the data to the population under study. To be on the safe side, the researcher should attempt to gather information from other sources about the people who did not respond; by comparing such additional data with those from respondents, it should be possible to determine whether under representation introduced any bias into the results.

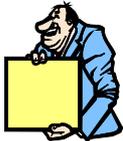
**Using common sense will help increase the response rate.** In phone surveys, respondents should be called when they are likely to be at home and receptive to interviewing. Don't call when people are likely to be eating or asleep. In a one-on-one situation, the interviewer should be appropriately attired. In addition, the researcher should spend time tracking down some of the nonrespondents and asking them why they refused to be interviewed or did not fill out the

questionnaire. Responses such as "The interviewer was insensitive and pushy," "The questionnaire was delivered with postage due," and "The survey sounded like a ploy to sell something" can be quite illuminating.

Along with common sense, certain elements of the research design can have a significant impact on response rates. **Yu and Cooper (1983) in their survey of 93 published studies discovered the following.**

1. *Monetary incentives increased the response, with larger incentives being the most effective. Nonmonetary incentives (for example, ballpoint pens) were also helpful.*
2. *Preliminary notification, personalization of the questionnaire, follow-up letter, and assertive "foot-in-the-door" personal interview techniques all significantly increased the response rate.*
3. *Things that were not significantly related to an increased response rate were a cover letter, assurance of anonymity, and stating a deadline.*
4. *Stressing the social utility of the study and appealing to the respondent to help out the researcher did not affect response rates.*

General  
Problems in  
Survey  
Research



## 4.8 General Problems in Survey Research

Although surveys are valuable tools in mass media research, there are problems present in any survey. **Experience in survey research confirms the following points:**

1. *Subjects or respondents are often unable to recall information about themselves or their activities.* This inability may be caused by memory failure, nervousness related to being involved in a research study, confusion about the questions asked, or some other intervening factor. Questions that are glaringly simple to researchers may create severe problems for respondents. For example, during focus group sessions, radio station managers often ask the moderator to ask respondents which radio stations they have set on their vehicle's radio. The managers are surprised to discover how many people not only do not know which stations are programmed on their radio buttons, but how many do not know how many buttons are on their radio. Radio general managers and program directors worry about the finite aspects of their radio station, and many average listeners don't know if they have five or six (or any) buttons on their radio.
2. *Due to a respondent's feelings of inadequacy or lack of knowledge about a particular topic, they often provide "prestigious" answers rather than admit they don't know something. **This is called prestige bias.*** For example, when respondents claim to watch public TV and listen to public radio,

- when, in fact, they don't.
3. *Subjects may purposely deceive researchers by giving incorrect answers to questions.* Almost nothing can be done about respondents who knowingly lie. A large sample may discount this type of response. However, there is no acceptable and valid method to determine whether a respondent's answers are truthful; the answers must be accepted as they are given.
  4. *Respondents often give elaborate answers to simple questions because they try to "figure out" the purpose of a study, and what the researcher is doing.* People are naturally curious, but become more so when they are the focus of a scientific research project.
  5. *Surveys are often complicated by the inability of respondents to explain their true feelings, perceptions, and beliefs — not because they don't have any, but because they can't put them into words.* The question "Why do you like to watch soap operas?" may be particularly difficult for some people. They may watch them every day, but respond only by saying "Because I like them." Probing respondents for further information may help, but not in every case.

**Survey research can be an exciting process.** It's fun to find out why people think certain ways, or what they do in certain situations. But researchers must continually be aware of obstacles that may hinder data collection, and deal with these problems. The United States is the most surveyed country in the world, and many citizens now refuse to take part in any type of research project. Researchers must convince respondents and subjects that their help is important in decision making and solving problems.

**The face of survey research is continually changing.** One-on-one and door-to-door interviews are now very difficult to accomplish. This means there is a greater emphasis on mail surveys, mall intercepts, and electronic data gathering procedures. In telephone surveys, for example, computer-assisted telephone interviewing (CATI) is now common.

CATI uses video display terminals operated by interviewers to present questions and accept respondent answers, thus eliminating the need for the traditional pencil-and-paper questionnaires. The computer displays the proper questions in the proper order, eliminating the possibility of the interviewer making an error by asking the wrong questions or skipping the right ones. The respondent's answers are entered by the interviewer through the keyboard, making data coding much easier. Groves and Mathiow-etz (1984) found that there was little difference in results from using CATI and non-CATI techniques. The response rates, reactions of the interviewers and respondents, and quality of data were virtually equivalent. CATI interviews tended to take slightly more time, but this was balanced by the presence of fewer interviewer errors due to skipping questions. As new software is developed in this area, it

seems likely that a greater proportion of surveys will use the CATI technique.

Other areas of change include computer-generated, voice-synthesized surveys where respondents answer by pushing Touch-Tone telephone buttons; 800 telephone numbers for recruited respondents to call to answer questions asked by an interviewer or computer; and various types of touch sensitive TV screens that present questionnaires to respondents. Survey research is changing very quickly.