Ninth Edition

# MASS MEDIA RESEARCH

An Introduction

ROGER D. WIMMER Wimmer Research

JOSEPH R. DOMINICK University of Georgia



Australia - Brazil - Japan - Korea - Mexico - Singapore - Spain - United Kingdom - United States



# Mass Media Research: An Introduction, Ninth Edition Roger D. Wimmer and Joseph R. Dominick

Senior Publisher: Lyn Uhl Publisher: Michael Rosenberg Developmental Editor: Stacey Sims Assistant Editor: Jillian D'Urso Editorial Assistant: Erin Pass Media Editor: Jessica Badiner
Marketing Manager: Bryant Chrzan
Marketing Coordinator: Darlene Macanan

Marketing Coordinator: Darlene Maca Marketing Communications Manager: Christine Dobberpuhl Senior Content Project Manager: Rosemary Winfield Art Director: Linda Helcher Production Service: Pre-PressPMG, SIni Sivaraman Manufacturing Buyer: Justin Palmeiro Manufacturing Manager: Denise Powers Rights Acquisitions Manager, Text: Margaret Chamberlain-Gaston

Rights Acquisitions Manager, Image: Mandy Groszko

Cover Image: © Corbis
Compositor: Pre-PressPMG

© 2011, 2006, 2003 Wadsworth, Cengage Learning

6. 2011, 2006, 2003 Wasaworm, Lengage Learning ALL RIGHTS RESERVED. No pair of this work covering the herein may be reproduced, transmitted, stored, or used in any form or by any mans graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitating, taging, with distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 106 of the 1976 United States Copyright Act, without the prior written permission of the publisher.

For product information and technology assistance, contact us at Cengage Learning Customer 6 Sales Support, 1800-354-9706, For permistion to use material from this text or product, submit all requests orline a: twen cengage, com/permissions, Further permissions questions can be enalled to permissionnequestio-cengage.com.

Library of Congress Control Number: 2009936675 ISBN-13: 978-1-4390-8274-4

ISBN-10: 1-4390-8274-X

Wadsworth 20 Channel Center Street Boston, MA 02210 USA

Cengage Learning is a leading provider of customized learning solutions with office locations around the globe, including Singapore, the United Kingdom, Australia, Mexico, Braril, and Japan. Locatey our local office at www.cengage.com/global

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

To learn more about Wadsworth, visit www.cengage.com/wadsworth
Purchase any of our products at your local college store or at our preferred
online store www.ichapters.com

Printed in the United States of America 1 2 3 4 5 6 7 13 12 11 10 09

# SURVEY RESEARCH

## CHAPTER OUTLINE

Descriptive and Analytical Surveys
Advantages and Disadvantages of Survey
Research
Advantages and Disadvantages of Survey
Research
Summary

Constructing Questions Questionnaire Design

Pretesting
Gathering Survey Data
A Special Note on Using the Internet for Data Collection

Achieving a Reasonable Response Rate

Key Terms Using the Internet

Questions and Problems for Further Investigation References and Suggested Readings Audience and consumer surveys are commonplace in all areas of life. This becomes immediately evident by search-ing the Internet for "audience surveys" or "consumer surveys." Decision makers in businesses, consumer and activist groups, pusinesses, consumer and activits groups, politics, and the media use survey results as part of their daily routine. Fortunately, the increased use of surveys has created changes in the way many of the studies are conducted and reported. More attention (although not enough) is given to sample selection, questionnaire design, and error rates.

Survey research, including online surveys, requires careful planning and execution, and the research must take into account a wide variety of decisions and problems. The purpose of this chapter is to introduce the basics of survey research.

# DESCRIPTIVE AND ANALYTICAL

There are two major types of surveys: de-Inere are two major types of surveys: descriptive and analytical. A descriptive survey attempts to describe or document current conditions or attitudes—that is, to explain what exists at the moment. For example, the Department of Labor regularly conducts surveys on the rate of unemployment in the United States. Professional pollsters survey to alternate to be the international pollsters survey. the electorate to learn its opinions of candi-dates 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, the interest is in discovering the current situ-

the interest is in discovering me current situ-ation in the area under study.

An analytical survey attempts to describe and explain why situations exist. In this ap-proach, two or more variables are usually examined to investigate research questions or test research hypotheses. The results allow researchers to examine the interrelationships

among variables and to develop explana-tory inferences. For example, television station owners survey the market to deter-mine how lifestyles affect viewing habits or to determine whether viewers' lifestyles can be used to predict the success of syndicated be used to predict the success of syndicated programming. On a broader scale, television networks conduct yearly surveys to determine how the public's tastes and desires are changing and how these attitudes relate to viewers' perceptions of the three major commercial networks.

## ADVANTAGES AND DISADVANTAGES OF SURVEY RESEARCH

Surveys have several advantages:

- They can be used to investigate prob-lems in realistic settings. Newspaper read-ing, television viewing, radio listening, and consumer behavior patterns can be examined where they happen rather than in a laboratory or screening room under artificial
- 2. The cost of surveys is reasonable when one considers the amount of information gathered (some online surveys are free). Researchers also can control expenses by
- Researchers also can control expenses by selecting from five major types of surveys: mail, telephone, personal interview, group administration, and the Internet.

  3. A large amount of data can be collected with relative ease from a variety of people. Surveys allow researchers to examine many variables (demographic and lifestyle information, attitudes motives intentions). information, attitudes, motives, intentions
- and so on) and to use a variety of statistics to analyze the data.

  4. Surveys are not constrained by geographic boundaries; they can be conducted almost anywhere.

  5. Data helpful to survey research already
- exist. Data archives, government documents,

census materials, radio and television rating census maternals, 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.

While survey research has many advan-tages over other research approaches, it is not a perfect research methodology:

1. The most important disadvantage is that independent variables cannot be manipulated the way they are in laboratory experiments. Without control over independent variables, the researcher cannot be certain whether the relationships between independent variables and dependent variables are causal or nonand dependent variables are causal or non-causal. 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 can sometimes help correct this problem. 2. Inappropriate wording or placement.

sometimes help correct this problem.

2. Inappropriate wording or placement of questions within a questionnaire can bias results. The questions must be worded and organized unambiguously to collect the desired information. This problem is discussed in detail later in the chapter.

3. The wrong respondents may be included in survey research. For example, in telephone interviews, a respondent may claim to be between 18 and 24 years old but may in fact be over 30 years old, a mail survey or Internet survey may be completed by a teenager when the target respondent is a parent in the household.

4. Some survey research is becoming dif-

4. Some survey research is becoming dif-4. Some survey research is becoming difficult to conduct because response rates continue to decline. This is especially true with telephone surveys, where answering machines, call blocking, caller IDs, various state and local regulations against calling people at home, and respondents unwilling to participate lower the incidence rates (the percentage of people who agree to participate in the survey). Tele-marketers (telephone salespeople) continually affect research in all areas because an increas-ing number of people refuse to participate in legitimate studies for fear of attempts by the interviewer to ry to sell something. interviewer to try to sell something

Despite these problems, however, surveys can produce reliable and useful information. They are especially useful for collecting in-formation on audiences and readership.

The remainder of this chapter discusses The remainder of this chapter discusses the various aspects of survey design. While not always mentioned, the discussions relate to all types of surveys—mail, telephone, personal interview, group administration, and the Internet.

#### CONSTRUCTING QUESTIONS

Although most people think that survey design is simple—just put together a series of questions—the fact is that survey design takes a lot of practice. Part of this practice is to understand five basic rules of questionnaire design:

- Understand the goals of the project so that only relevant questions are included.
- 2. Questions should be clear and un-
- 3. Ouestions must accurately comunicate what is required from the respondents.
- Don't assume respondents under-stand the questions they are asked.
   Follow Ockham's Razor in question
- development and order.

The specifics of questionnaire design depend on the choice of data collection tech-nique. Questions written for a mail survey must be easy to read and understand because

respondents are unable to ask questions. Telephone surveys cannot use questions with long lists of response options; the respondent may forget the first few responses by the time the last items are read. Questions written for group administration must be concise and easy for the respondents to answer. In a personal interview, an interviewer must tread lightly with sensitive and personal questions because his or her physical presence might make the respondent less willing to answer. (These procedures are discussed in later in this chapter.)

A questionnaire's design must always reflect the basic purpose of the research. A com-

A questionnaire's design must always re-flect the basic purpose of the research. A com-plex 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 for all types of surveys.

Surveys can include two basic types of questions: open-ended and closed-ended. An open-ended question requires respondents to generate their own answers, as in these examples:

What could your favorite radio station change so that you would listen more often?

What type of television program do you prefer to watch most often?

Why do you subscribe to the Daily

Open-ended questions give respondents freedom in answering questions and an opportunity to provide in-depth responses. Furthermore, they give researchers the option to ask, "Why did you say that?" or "Could you explain your answer in more detail?" The lexibility to follow up on, or probe, certain questions enables the interviewers to gather information about the respondents' feelings and the motives behind their answers. In addition, open-ended questions allow for answers that researchers did not foresee in designing the questionnaire—answers

in designing the questionnaire-answers and uesgining tie questionianne-answers that may suggest possible relationships with other answers or variables. For example, in response to the question, "Which radio stations do you have programmed on the buttons in the vehicle you drive most often?" the manager of a local radio station might expect to receive a list of the local radio stations. However, a subject may give an unexpect to receive a list of the local radio stations. However, a subject may give an un-expected response, such as, "I have no idea. I thought the stations were programmed by the car dealer." This forces the manager to reconsider his or her perceptions of radio literature.

listeners.

Finally, open-ended questions are particularly useful in a pilot test 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 may select the items most often mentioned and include them in multiple-choice or forced-choice questions. Using open-ended questions in a pilot study usually saves time and resources, since all possible responses are more likely to be included on the final measurement instrument, avoiding the final measurement instrument, avoiding

the man measurement instrument, avoiding the need to repeat the analysis.

The major disadvantage associated with open-ended questions is the amount of time needed to collect and analyze the responses. Open-ended responses require interviewers to record long answers. In addition, because

# A CLOSER LOOK

## Questionnaire Design

There can be significant differences when designing questionnaires for academic use and those used for the private sector. Academic research usually requires additional explana-tions, procedures, and anonymity guarantees. Because of the differences, it is extremely important to contact the appropriate academic

committee that oversees research to ensure that all rules are followed before designing any type of academic research project.

If you are in an academic setting, what rules or regulations does your school have in reference to conducting research with humans?

there are so many types of responses, a content analysis of each open-ended question must be completed to produce data that can be tabulated—called coding—(see Chapter 6). A content analysis groups common responses into categories, essentially making the question closed-ended. The content analysis results are used to produce a codebook to code the open-ended responses. A codebook is a menu or list of quantified responses. For example, "I hate television" may be coded as a 5 for analysis.

In the case of closed-ended questions, respondents select an answer from a list

may be coded as a 5 for analysis.

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 in responses and the answers are easy to quantify. 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 usually solves most problems with closed-ended questions. questions.

Special Note: Virtually every question in any questionnaire, even the simplest question, should include some form of "Don't Know! No Answer" (DK/NA) response. In many sections of this chapter, we provide samples of questions but don't always include a DK/ NA response to save space. Realize, however, that in a real questionnaire, we always include some form of DK/NA response (No opinion, Doesn't apply, etc).

# Problems in Interpreting Open-Ended Questions

Open-Ended Questions
Open-ended questions often cause a great
deal of frustration because respondents' answers are often bizarre. Sometimes respondents do not understand a question and
provide answers that are not relevant to anything. Sometimes interviewers have difficulty
understanding respondents, or they may
have problems spelling what the respondents
say. In these cases, researchers must interpret
the answers and determine which code is
appropriate.

appropriate.

The following examples are actual comments (called verbatims) from telephone surments (called verbatms) from telephone sur-veys and self-administered surveys conducted by the senior author of this text. They show that even the best-planned survey question-naire can produce a wide range of responses. The survey question asked, "How do you

# A CLOSER LOOK

## **Open-Ended Questions**

Open-ended questions always include an opportunity for interviewers to ask for additional information. From experience, we have learned that interviewers should ask the

respondent "What else?" instead of "Anything more?" or "Is that all?" The "What else?" ap-proach does not give the respondent the same opportunity to say, "Nothing."

describe the programming on your favorite radio station?"

- The station is OK, but it's geared to Jerry
- · I only listen because my husband listens to it.
- I don't listen to that station because I live on Chinese time
- It's great. It has the best floormat in the city.
- The station is good, but sometimes it makes me want to vomit.
- My parrot is just learning to talk, and the station teaches him a lot of words.
- · It sounds great with my car trunk open.
- There is no way for me to answer that question before I eat dinner.

And then there was a woman who, when asked what her spouse does for a living, wrote "Arrow Space Engeneer." Part of the research process is learning how to decipher respondents' answers.

#### **General Guidelines**

Before we examine specific types of questions appropriate in survey research, here are some general dos and don'ts about writing questions:

Make questions clear. This is logical, but many researchers become so closely associated with a problem that they can

no longer put themselves in the respon-dents' position. What might be perfectly clear to researchers might not be nearly clear to researchers might not be nearly as clear to the respondents. For example, after finding out which radio stations a re-spondent has been listening to more lately, the researcher might ask, "Why have you been listening more lately to WXXX?" been listening more lately to WXXXY? and expect to receive an answer such as "I like the music a lot more." However, the respondent might say, "It's the only station my radio can pick up." The question would be much clearer to a respondent fis form: "Which radio station, or stations, if any, do you enjoy listentee, to more lately as compared to a few.

asked in this form: "Mitch radio Station, or stations, if any, do you enjoy listening to more lately as compared to a few months ago?" The word, enjoy, poses a totally different question that will elicit good information. 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 pretentious language. In general, the level of vocabulary commonly found in newspapers or popular magazines is appropriate for a survey. Questions should be phrased in everyday speech, and social science jargon and technical words should be eliminated. For example, "If you didn't have a premium channel, would you consider PPV?" might be better phrased, "If you didn't have a pay channel like Home Box Office or Showtime, would you consider a service where you pay a small

amount for individual movies or specials you watch?"

The item "Should the Satellite TV System consider offering an interactive channel for news and weather information" assumes that respondents know what an "interactive channel" actually provides. A better approach is, "An interactive scallite channel is one where viewers can personalize the news and weather information presented on the channel, rather than watch information presented by a local or national source. Do you think the Satellite TV System should add this free channel to TV System should add this free channel to satellite service?"

IV System should add this free channel to your satellite service?"

Question clarity can also be affected by double or hidden meanings in the words that are not apparent to researchers. This question, for example, causes such a problem: "How many television shows do you think are a little too violent—most, some, few, or none?" Some respondents who feel that all TV shows are extremely violent will answer "none" based on 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 problem.) 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?" are too violent-most, some, few, or none? Ouestions should be written so that they are

Questions should be written so that they are fair to all respondents.

2. Keep questions short. To be precise and unambiguous, researchers sometimes write long and complicated questions. Yet, respondents who are in a hurry to complete a questionnaire are unlikely to take the time a questioniant are unitacy to take the through the form of the person who drafted the items. Short, concise, and clear questions are best. A good question should not contain more than two short

3. Remember the purposes of the research. It is important to include in a questionnaire only items that relate directly to what is being studied. For example, if the occupation of respondents is not relevant to the purpose of the survey, the questionnaire should not include a question about it. Beginning researchers often add questions for the sake of developing a longer questionnaire or because the information "will be interesting." Any question that is included only because it would be interesting to find out the answer should be deleted from the questionnaire. questionnaire.

questionnaire.

4. Do not ask double-barreled questions. A double-barrelled question is one that asks two or more questions in the same sentence. Whenever the word and appears in a question, the sentence structure should be examined to see whether more than one question is being asked. Consider "The ABC network has programs that are funny and sexually explicit, Do you agree or disagrees?" Since a program may be funny but not necessarily sexually explicit, a respondent could agree with the second part of the question even though he or she disagrees with the first part. This question should be split into two items.

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 desirable about watching television. Similarly, "Where did you hear the news about the president's new economic program?" is mildly biased against newspapers; the word bear suggests that "radio," "television," or "other people" is a more appropriate answer. Items that start with "Do you 4. Do not ask double-barreled ques-

word near suggests that ratio, televi-sion," or "other people" is a more appropri-ate answer. Items that start with "Do you agree or disagree with so-and-so's proposal to ..." usually bias a question. If the name "Adolf Hitler" is inserted for "so-and-so," the item becomes overwhelmingly negative.

Inserting "the president" creates a potential for both positive bias and negative bias. Any time a specific person or source is mentioned in a question, the possibility of bias arises. If it is necessary to ask questions

arises. If it is necessary to ask questions about a specific person or source, the best way to approach the subject is to ask both positive and negative questions to reduce the possibility of bias.

6. Avoid leading questions. A leading question 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 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 called a double bind; regardless of how the respondent answers, an affirmative response to the hidden premise is implied—in this case, that the respondent has used marijuana at some point.

7. Do not use questions that ask for

to the nuden premise is implied—in this case, that the respondent has used marijuana at some point.

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 this question. A more realistic approach is to ask, "How many hours did you spend watching television with your family pesterday?" 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 they are absolutely necessary. Most surveys need to collect some form of confidential or personal data, but an overly personal question may cause embarrassment and inhibit respondents from answering honestly, such as asking the respondents from ensured income. Many people are reluctant to tell their income to strangers conducting a survey. A straightforward "What is your annual income?" often prompts the reply "None of

your business." It is better to preface a reading of the following list with the question, "Which of these categories includes your household's total annual income?"

31	Under \$25,000
9	\$25,000-\$29,999
	\$30,000-\$39,999
13 <u>.</u>	\$40,000-\$49,999
_	\$50,000-\$59,999
	A co coo

The categories are broad enough to allow respondents some privacy but narrow enough for statistical analysis. The income classifications depend on the purpose of the questionnaire and the geographic and demographic distribution of the subjects. Howgraphic distribution of the subjects. How-ever, the average household income in the United States is about \$60,000. The \$60,000 upper level in the example is too low for many parts of the country. Other potentially sensitive areas are people's sex lives, drug use, religion, and trustworthiness. In all these areas, care should be taken to ensure respondents' confidentiality and anonymity, when possible.

The simplest type of closed-ended ques-tion is one that provides a dichotomous re-sponse, usually "agree/disagree" or "yes/no." For example:

Local t	elevisio	n statio	ns	sho	uld	have	
longer	weather	reports	in	the	late	eve-	
nino ne	WS.						

34	Agree
<u> </u>	Disagree

Although 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 or information about the purpose of the research project are questions the researcher must seriously consider.

192

Part Two Research Approaches

Next, in situations where there is an interest in the relative perception of several concepts or items, the rank-ordering technique is appropriate, such as:

Here is an alphabetical list of 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. (The list is alphabetical to avoid presentation bias.)

\_\_ Banker \_\_\_\_Lawyer Newspaper reporter \_\_\_ Police officer \_\_\_\_\_Politician \_\_\_\_\_Teacher \_Television news reporter

Asking respondents to rank 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 apply.)

	evision set? (Check as many as apply.)
_	Automatic fine-tuning
	HDTV
	Picture within a picture (the abil- ity to view more than one channel at a time)
	Portable
_	Remote control
-	Surround sound
200	Other

In this case, 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 they are always listed in pairs. Forced-choice questionnairies are usually long—sometimes containing dozens of questions—and repeat questions (in a 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 scored. A typical forced-choice questionnaire might contain the following pairs:

Select one statement from each of the

following pairs of statements:

Advertising of any kind is a waste of time and money.

\_\_\_\_I learn a lot from all types of advertising.

The government should regulate television program content.

The government should not regu-late television program content.

\_ I listen to the radio every day.

\_\_\_\_ I listen to the radio only when I'm alone.

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

Survey researchers use fill-in-the-blank mustions inforquently, bowever some stud-

questions infrequently; however, some stud-ies are particularly suited for this type of question. In advertising copy testing, for ex-ample, they are often used to test subjects' recall of a commercial. After seeing, hearing,



- 40 - 20 - 10

Figure 7.1 "Feeling Thermometer" for Recording a Subject's Degree of Like or Dislike

or reading an advertisement, subjects receive a script of the advertisement 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 also can be used in information restriction. tests, such as:

"The local news anchors on Channel 4 are \_\_\_\_\_" or "The headline story on the front page was about \_\_\_\_\_\_."

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. For example, the University of Michigan Survey Research Center developed the feeling thermometer, with which subjects can rate an idea or object.

The thermometer, which is patterned after a normal mercury thermometer, offers an easy way for respondents to rate their degree of like or dislike in terms of "hot" or "cold" (see Figure 7.1). For example:

How would you rate the coverage your local newspaper provided on the recent school board campaign? (Place an X near the number on the thermometer that most accurately reflects your feelings; [10] indicates strong approval, and 0 reflects strong disapproval.)

proval, and 0 reflects strong disapproval.)

A search on the Internet for "feeling thermometer" shows the diverse uses of the scale.

Some questionnaires designed for children use other methods to collect information. Since young children have difficulty 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 in Figure 7.2 to elicit a response from a five-year-old. Zillmann and Bryant (1975) present a similar approach with their "Yucky" scale.

#### QUESTIONNAIRE DESIGN

The approach used in asking questions as well as the physical appearance (in a self-administered questionnaire) can affect the response rate (the percentage of respondents who complete the questionnaire among those who are contacted/selected). The time and who are contacted/selected). The time and effort invested in developing a good questionnaire always pay off with more usable data. This section offers some useful suggestions. Many of the suggestions about questionnaire design and layout discussed here are intended for paper questionnaires, not CATI (computer-aided telephone interviewing), which eliminates many problems such as skip patterns and rotation of questions. However, all researchers must understand all of the idiosyncrasies of questionnaire design to work with paper questionnaires or review a CATI-designed questionnaire.

#### Introduction

One way to increase the response rate in any survey is to prepare a persuasive introduction to the survey. Backstrom and Hursh-Cesar

(1986) suggest six characteristics of a success-

(1986) suggest six characteristics of a successful introduction to a questionnaire: the introduction should be short, realistically worded, nonthreatening, serious, neutral, and pleasant but firm.

Although some academic research requires that the purpose of the survey be explained in detail to respondents, this is usually not the case in private-sector research. In private-sector research, there is no need to explain the purpose or value of a survey to respondents, or to tell them how long the survey will take to complete. For example, in a telephone survey, telling the respondents "the survey will take only a few minutes" gives them the opportunity to say they do not have time to talk. The introduction should be short so that the respondent can begin writing answers or the interviewer can start asking questions.

Here is an example of an effective introduction for a telephone survey conducted by a field service to show how the interviewer immediately gets into the questionnaire:

Histories of the product of the production of the productio

Hi, my name is \_\_\_\_\_ with [INSERT COMPANY NAME]. We're with [INSERT COMPANT NAME], we re-conducting an opinion survey about radio in the Chicago area and I'd like to ask you a few questions. We're not trying to sell any-thing, and this is not a contest or promotion. We're interested only in your opinions. Please tell me which of these age groups you belong

to-under 18, 18 to 24, 25 to 34, 35 to 44, 45 to 54, or over 54? [TERMINATE IF UN-DER 18 OR OVER 54.]

With some modifications, the same intro-duction is appropriate for a self-administered questionnaire. The introduction would in-clude the second, third, and fourth sentences along with a final sentence that says, "Please

along with a final sentence that says, "Please answer the questions as completely and honestly as possible."

The goal of the introduction in telephone surveys is toge tinto the interview as quickly as possible so that the respondent does not have a chance to say "no" and hang up. This may sound overly aggressive, but it works. (Note, however, that many academic research review boards would not approve such an approach and would require that a statement such as "May I continue?" be included before going on with the interview.) The introduction in with the interview.) The introduction in

with the interview.) The introduction in self-administered questionnaires should be as simple as possible. Regardless of the survey approach used, a well-constructed introduction usu-ally generates higher response rates than a simple "Please answer the following ques-tions..."

#### Instructions

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 and self-administered questionnaires usually require the most specific instructions because respondents are not able to ask questions about the survey. Respondents and interviewers should understand whether the correct response consists of circline or interviewers should understand whether the correct response consists of circling or checking an item, placing items in a specific order, or skipping an item. Procedural instructions for respon-dents are often highlighted with 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 ye favo	, please briefly e ite on the lines l	xplain why elow.	the radio	station is	your
002					

Some questionnaires require respondents to rank a list of items. In this case, the in-structions must clearly describe which re-sponse represents the highest value:

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

	American Iron Magazine
005 80 <del>0</del>	Better Homes and Gardens
-	Consumer Reports
-	Popular Science
	Time

Fowler (2002) offers these suggestions for designing a self-administered questionnaire:

- Make the questionnaire self-explanatory.
- Limit the questions to closed-ended items. Checking a box or circling an answer should be the only task required.
   Use only a limited number of question
- forms.
- Lay out and type the questionnaire in a clear and uncluttered way.
- Limit the amount of instructions. Respondents can be confused easily.

Fowler's second suggestion is too strict.
Most 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 pretested to determine if the directions for answering are clear.

Instructions for interviewers are usually 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 estart by asking you some

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

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

Screener questions, or filter questions, screener questions, or inter questions, are used to eliminate unwanted respondents or to include only respondents who have specific characteristics or who answer questions in a specific manner. These questions often require respondents or interviewers to skip one or more questions. Skips must be clearly specified (recall that a CATI-designed questionnaire automatically skips to the next question). Here is an example:

In a typical week, do you stations on the A.M. dial? you listen to radio

\_\_\_\_ Yes [ASK Q.16] No [SKIP TO Q.17]

A survey using this question might be A survey using this question might be designed to question only respondents who listen to AM radio. The screener question immediately determines whether the subject falls into this group. If the respondent says "no," the interviewer (or respondent if the

survey is self-administered) may skip a cer-tain number of questions or terminate the survey immediately. When interviewers are used, as is the case in telephone and one-on-one interviews, the questionnaires must have easy-to-follow the questionnaires must have easy-to-toliow instructions, including how many responses to take for open-ended questions, simple skip patterns, and enough space to record answers if survey responses are recorded. Telephone questionnaires must include everything an interviewer will say, includ-ing introductions, explanations, definitions. ing introductions, explanations, definitions, transitions, and pronunciations. The last transitions, and pronunciations. The last point is particularly important because in-terviewers should sound as if they know the topic. Don't assume interviewers know how to pronounce names or technical terms. Always use phonetic spellings for potentially troublesome users. troublesome words.

All instructions should be clear and simple. A confusing questionnaire impairs the effec-tiveness of the interviewer, lowers the number of respondents who complete the test, and in-creases costs.

## Question Order

All surveys flow better when the early questions are simple and easy to answer. Researchers often include one or two "warm-up" questions about the topic under investigation so that respondents become acinvestigation so untar responseines become ac-customed to answering questions and begin thinking about the survey topic. Preliminary questions can also serve as motivation to create interest in the questionnaire. Demo-graphic data, personal questions, and other sensitive items should be placed at the end of the questionnaire to allow the interviewer to the questionnaire to allow the interviewer to the questoniante to anow the intervewer to establish a rapport with each respondent or, for a self-administered questionnaire, to re-lieve any suspicions. Although some respon-dents may still refuse to answer personal items or may hang up the telephone, at least the main body of data is already collected.

## A CLOSER LOOK

## Questionnaire Design

The best way to start designing a question-naire is to make a "laundry list" of questions that need to be answered. In this stage, don't worry about how the questions will be asked

or what form the questions will take. This list will also help you design the flow of the ques-tionnaire: what should be asked first, second, third, and so on

Age and gender information are usually included in the first part of a questionnaire, so at least some respondent identification is

so at least some responses used.

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 question sections should

transitions between question sections should be clear and logical.

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

_	Communism
-	Corrupt government
<u> </u>	High prices
	Violence on TV
	War

Violence on TV might receive a higher ranking than it would if the ranking ques-tion had been asked before the series of questions on violence. Or, to take another example, suppose a public relations reexample, suppose a public relations re-searcher is attempting to discover the pub-lic's attitudes toward a large oil company. If the questionnaire that begins with atti-tudinal questions concerning oil spills and inflated profits asks respondents to rate certain oil companies, it is likely that the ratings of all the companies will be lower

ratings of all the companies will be lower because of general impressions created by the earlier questions.

There is no easy solution to the problem of question "contamination." Obviously, some questions have to be asked before others. Perhaps the best approach is to be sensitive to the problem and check for it in a pretest. If question order A, B, C may have biasing effects, then another version using the order C, B, A should be tested. Completely neutral positioning is not allways possible, however, and when bias may enter because of how responses are ordered, the list of items should be rotated. The command [ROTATE] after a question indicates that the interviewer must be rotated. The command [ROTATE] after a question indicates that the interviewer must change the order of responses for each subject (performed automatically by a CATI-designed questionnaire). In self-administered questionnaires, different question orders can be printed but make sure that the data are input and analyzed correctly. If several versions of a questionnaire are used, it's easy to get them confused.

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 create a positive attitude in respondents. Response

categories should be adequately spaced and presented in an unambiguous 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 agree

\_\_\_\_\_Agree

\_\_\_ No opinion

\_\_\_\_ Disagree

\_\_\_\_Strongly disagree

Some researchers recommend avoid-Some researchers recommend avoid-ing blanks altogether because respondents and interviewers tend to make large check marks or Xs that cover more than one blank, making interpretation difficult. If blanks are perceived as a problem, boxes to check or numbers to circle are satisfacto check or numbers to circle are satisfac-tory. In any case, the response form should be consistent throughout the questionnaire. Changes in format generally create confu-sion 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 disconvagine to respondents and interview. discouraging to respondents and interview-ers than to be confronted with a presenta-tion like this:

What would you change on your favorite radio station?

Why do you go to the movies?

What are your favorite television shows?

If a research budget limits the amount of paper for questionnaires, subjects can be asked to add further comments on the back of the survey.

#### Questionnaire Length

Questionnaire length is an important con-cern in any survey because it directly relates teril many survey because it unterly relates to the completion rate. Long questionnaires cause fatigue, respondent mortality, and low completion rates. Shorter question-naires guarantee higher completion rates. Unfortunately, there are no strict guide-lines to help in deciding how long a ques-tionnaire should be. The length depends on a variety of factors.

variety of factors:

- Amount of money in the research budget
- Purpose of the survey
- Type of problems or questions to be
- · Age of respondents involved in the survey
- Type and complexity of questions in the questionnaire
- · Location in the country where the study
- Specific setting of the testing situation
- Time of year and time of day
- Type of interviewer (professional or

In most cases, questionnaire length is determined by trial and error. A survey that has more than 10% incompletes or breakoffs (the respondent hangs up during a telephone survey or terminates the survey in some way) is probably too long. The length of the survey may not be the only problem, however, so it

# A CLOSER LOOK

## Questionnaire Design

There is a great website called Quaid: Question Understanding Aid from the University of Memphis [http://mnemosyne.csl.psyc.memphis.edu/QUAID/quaidindex.html]. The website state survey methodologists, social scientists, and designers

of questionnaires in improving the wording, syntax, and semantics of questions. The tool identifies potential problems that respondents might have in comprehending the meaning of questions on questionnaires." It's free. Try it.

is important to take a close look at the ques-tionnaire for other problems.

Our experience during the past 30 years has shown the following time limits as maximum:

Type of Survey	Maximum Time Limit
Self-administered mail	60 min.
Self-administered in a group situation supervised by a researcher	60 min.
One-on-one interview	60 min.
Telephone	20 min.
Internet/Online	20 min.
Shopping center intercept	10 min.

Telephone interviewing can be a diffi-Telephone interviewing can be a diffi-cult approach to use because it takes talent to keep respondents on the telephone an-swering questions. Professional interview-ers can usually hold respondents' attention for about 20 minutes. After 20 minutes, there is a severe drop-off in incidence due to breakoffs.

#### 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 whether the study approach is correct and to help refine the questions. Areas of misunderstanding or confusion can be easily corrected without wasting time or more.

There are several ways to pretest a questionnaire. When an acceptable draft of the questionnaire is completed, a focus group can be used to discuss the questionnaire with potential respondents. However, this is usually too expensive. The best pretest in telephone surveys is for interviewers to call 10 to 20 people and do a run-through. Any problems quickly emerge. Self-administered questionnaires should be pretested with the type of respondent who will participate in the actual study. Once again, any problems should be apparent immediately.

In any type of pretesting situation, it is

apparent immediately.

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

#### **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 conducted, the next step is to gather data from an appropriate group of respondents. The five basic methods for doing this are mail survey, telephone survey, personal interview, group administration, and Internet. Researchers can also use variations and combinations of these five methods, such as mall interviews. Each procedure has advantages and disadvantages that must be considered before a choice is made. This section highlights the characteristics of each method.

## Mail Surveys

Mail surveys

Mail surveys involve sending selfadministered questionnaires to a sample of
respondents. Stamped reply envelopes are
enclosed to encourage respondents to send
their completed questionnaires back to the
researcher. Mail surveys are popular in
some types of businesses because they can
secure a lot of information without spending a lot of time and money, such as consumer panels to gather information about
product purchasing behavior. However,
novice researchers must understand that product purchasing behavior. However, novice researchers must understand that mail surveys are usually difficult to conduct because most respondents simply throw the questionnaire in the trash. In research terms, the response rate for mail surveys is low—usually under 40%.

The general stages of a mail survey are discussed next. Although the steps are listed in numerical sequence, many of them are often done in a different order or even simultaneously.

 Select a sample. Sampling is usually accomplished from a prepared frame that contains the names and addresses of potential respondents

(see Chapter 4). The most com (see Chapter 4). The most com-mon sampling frame is the mailing list, a collection of names and ad-dresses of respondents who belong to a narrowly defined group, which commercial sampling companies prepare.

- Construct the questionnaire. As discussed earlier, mail questionnaires nust be concise and specific because no interviewer is present with the respondent to correct misunder-standings, answer questions, or give directions.
- Write a cover letter. A brief note explaining the purpose and impor-tance of the questionnaire usually increases the response rate.
- Assemble the package. The questionnaire, cover letter, and return envelope are stuffed into mailing envelopes. Researchers sometimes use bulk mail with first-class return enbulk mail with itrst-class return en-velopes. Another method is to send questionnaires via first-class mail and use business reply envelopes for responses. This allows researchers to pay postage for only the question-naires actually returned. Postal options always depend on the research budget.
- 5. Mail the surveys. Bulk-mail regulations require sorting envelopes into zip code areas.
- 6. Monitor return rates.
- Send follow-up mailings. The first follow-up should be sent two weeks after the initial mailing, and a second (if necessary) two weeks after the first. The follow-up letter can be sent to the entire sample or to only the subjects who fail to answer.
- 8. Tabulate and analyze data.

Advantages. Mail surveys cover a wide geo-graphic area for a 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 using specialized mailing lists. In addition to those mentioned, lists are available that include only needed with people with people. to those mentioned, lists are available that include only people with specific annual in-comes, consumers who have bought a car within the past year, subscribers to a par-ticular magazine, or residents of a specific zip code, If researchers need to collect information from a highly specialized audience, mail surveys are often better than other

approaches. Another advantage of the mail survey is that it provides anonymity; some respondents are more likely to answer sensitive questions candidly, Questionnaires can be completed at home or in the office, which afcompleted at home or in the office, which af-fords respondents a sense of privacy. People can answer questions at their own pace, and they have an opportunity to look up facts or check past information. Mail surveys also eliminate interviewer bias because there is

eliminate interviewer has because there is no personal contact.

Probably the biggest advantage of this method is its low cost. Mail surveys do not require a large staff of trained interviewers. The only costs are for printing, mailing lists, envelopes, and postage. When compared to other data collection procedures, the mail survey has the lowest cost per completed

Disadvantages. First, mail questionnaires must be self-explanatory. No interviewer is present to answer questions or to clear up present to answer questions or to clear up misunderstandings. Mail surveys are also the slowest form of data collection. Returns start to trickle in a week or so after the initial mailing and continue to arrive for several weeks thereafter. It may be months before some responses are returned. Many researchers set a cutoff date, after which re-

researchers set a cutoff date, after which re-turns are not included in the analysis.

One significant problem with mail sur-veys is that researchers never know exactly who answers the questions. For example, assistants may complete a survey sent to corporate executives, or a child in the home corporate executives, or a child in the nome may complete a survey sent to the "male head of household." Furthermore, replies are often received only from people who are interested in the survey, and this injects bias into the results. Another significant disadvantage of the mail survey is the low return rate. A typical survey (depending on area and type of survey) will achieve a response rate of 5%-40%, and this casts doubt on the reliability of the findings.

#### Increasing Response Rates

Increasing Response Kate Survey researchers have investigated a number of ways to improve response rates, but there are no surefire guarantees. In a meta-analysis (the findings of several stud-ies are treated as independent observations and combined to calculate an overall or average effect) of numerous studies con-cernine mail surveys. Fox Crask and Kim average errect) of numerous studies con-cerning mail surveys, Fox, Crask, and Kim (1989) found that, on average, response rates can be increased in a variety of ways. In descending order of importance, the fol-lowing procedures tend 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 rather than metered stampine metered stamping

Other ways to increase response rates in mail surveys as much as 50% include:

A drawing that offers a prize of a TV set, Blu-Ray, or MP3 player(academic researchers should check with

local Institutional Review Boards for

- guidelines before using this technique)

   Prepaid telephone calling cards activated
- when the questionnaire is returned
   Gift cards to local retailers
- · Cash (no less than \$10)

#### Telephone Surveys

Telephone surveys and personal interviews use trained interviewers who ask ques-tions and record the responses, usually on a computer terminal. The respondents gena computer terminal. The respondents generally do not see the actual questionnaire. Since telephone and personal interviewing techniques have certain similarities, much of what follows applies to both. Telephone surveys fill a middle ground between mail surveys and personal interviews. They offer more control and higher response rates than most mail surveys, but they are limited in the types of questions that can be asked. Telephone interviews are generally more expensive than mail surveys but less expensive than face-to-face interviews. Because of these factors, telephone surveys are a compromise between the other two techniques, and this may account for their popularity in and this may account for their popularity in

and this may account for their popularity in mass media research. Interviewers are extremely important to both telephone surveys and personal sur-veys. An interviewer ideally should func-tion as a neutral medium through which the respondents' answers are communithe respondents' answers are communi-cated 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 the bias that the interviewer might inject into the data. For example, if an interviewer shows disdain or shock if an interviewer shows disdain or shock over an answer, it is unlikely that the re-spondent will continue to answer questions in an honest manner. Showing agreement with certain responses might prompt simi-lar answers to other questions. Skipping

questions, carelessly asking questions, and being impatient with the respondent also cause problems. As an aid to minimizing interviewer bias, the National Association of Broadcasters (1976; pages 37–38) has published the fol-lowing recommendations for interviewers:

- 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.
- Never suggest an answer, try to ex-plain a question, or imply what kind of reply is wanted. Don't prompt in any way.
- If a question is not understood, say, "Let me read it again" and repeat it slowly and clearly. If it is still not un-derstood, record a "no answer."
- Report answers and comments exactly as given, writing them out 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 convey to the respondent that you want more information.
- · Act interested, alert, and appreciative 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.
- Follow all instructions carefully, whether you agree with them or not.
- Thank each respondent. Leave a good impression for the next interviewer.
- Discuss any communication prob-lems immediately with the researcher in charge.

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. 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 (see Chanter 4)
- used depends on the purpose of the study (see Chapter 4).

  2. Construct the questionnaire. Telephone surveys require straightforward and uncomplicated response options. For example, ranking a long list of items is especially difficult over the telephone, and this should be avoided. The survey should not exceed 10 minutes for nonprofessional interviewers; interviews up to 20 minutes long require professionals who are trained to keep respondents on the telephone.

  3. Prepare an interviewer instruction
- 3. Prepare an interviewer instruction manual. This document should cover the basic mechanics of the survey (telephone numbers to call, when to call, how to record times, and so on). It should also specify which household member to interview and provide general guidelines on how to ask the questions and how to record the responses.
- A. Train the interviewers. Interviewers need 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 a good idea to pretest interviewers as well as the questionnaire.
- 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 be monitored daily.

6. Make necessary callbacks. Up to three additional callbacks should be made to respondents whose lines were busy or who did not answer during the first session. Callbacks on a different day or evening tend to have a greater chance of reaching someone willing to be interviewed. In most situations, three callbacks produce a contact about 75% of the time.

callbacks produce a contact about 75% of the time.

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 two to three hours before calling again, assuming it is still a reasonable hour to call. If evening calls produce no answer, call the following day.

7. Verify the results. When all questionnaires are complete, 5%-10% of each interviewer's respondents should be called

- 7. Verify the results. When all questionnaires are complete, 5%-10% of each interviewer's respondents should be called to verify that their answers were accurately recorded. Respondents should be told during the initial survey that they might receive an additional call at a later date. This alerting 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, "Were you called a few days ago and asked questions about television viewing?" The verification can begin from there—two or three of the original questions are asked again (preferably openended and sensitive questions, since interviewers are most likely to muit these)
- wiewers are most likely to omit these).

  8. Tabulate the data. Along with the normal data analysis, telephone researchers generally compute response rates for the

following items: completed interviews, initial refusals, unqualified respondents, busy signals, language barriers, no answers, terminates, breakoffs, and disconnects. The summary of calls is known as a call disposition sheet.

Advantages. The cost of telephone surveys tends to be reasonable. The sampling involves minimal expense, and there are usually no significant transportation costs. Cailbacks are simple and economical. The variety of telephone plans from phone companies enable researchers to conduct telephone surveys from any location.

panies enable researchers to conduct telephone surveys from any location.

Compared to mail surveys, telephone strons, and, as stated earlier, interviewers can clarify misunderstandings that might arise during the administration of the questionnaire.

The incidences in telephone surveys for mas media research (once a qualified respondent is contacted) are generally high, especially when multiple callbacks are used. This is because most people enjoy answering questions about what they see, hear, or read, la addition, phone surveys are much faster than mail. A large staff of interviewers can collect the data from the designated sample in a short time—400 surveys often can be completed in less than seven days.

Disadvantages. First, much of what is called survey research by telephone is not research at all but rather an attempt to sell people something. Unfortunately, many companies disguise their sales pitch as a survey. This falsified approach has made many people suspicious about telephone calls to their home and prompts many potential respondents to terminate an interview before it has started.

Additionally, it is impossible to include questions that involve visual demonstrations.

A researcher cannot hold up a picture of a product and ask whether the respondent remembers seeing it advertised. Another 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 telephone, many people have unlisted phone numbers, some numbers are listed incorrectly, and others are too new to be listed. A more recent problem is that a growing number of people no longer have s landline telephone in their home and use only their cell phone. Cell phone numbers are not published. These problems would not be serious if the people with no telephones, unlisted numbers, or cell phone only, were just like those listed in the phone hook. Unfortunately, researchers generally have no way of check, so it is possible that a sample obtained from a telephone directory may be significantly different from the population. (See Chapter 4 concerning random digit dialing.)

Finally, telephone surveys require a large number of "dialings" to successfully inter-tiew the number of respondents required for a study. To demonstrate this, Table 7.1 shows a summary of the telephone call disposition sheets from 50 randomly selected telephone studies conducted by Wimmer Research in 2001. The studies include respondents between the ages of 18 and 54 and investigated topics such as radio listening, television viewing, automotive purchases, and other nonmedia topics.

The data in Table 7.1 show what a professional interviewer faces during a typical workday. Of more than 750,000 dialings, only 2.5% were completed interviews. That

The data in Table 7.1 show what a professional interviewer faces during a typical workday. Of more than 750,000 dialings, only 2.5% were completed interviews. That is, Table 7.1 indicates that for every 100 dialings made, only 2.5 will result in a completed interview. There aren't many other jobs with a success rate this low.

Table 7.1 50-Study Call Disposition

Percentag						
Call Result	Number	of Total				
No answer/machine*	443,200	56.3				
Initial Refusal	99,350	2.6				
Busy	74,600	9.5				
Did not qualify	34,550	4.4				
Call back	30,550	3.9				
Disconnect	28,400	3.6				
Wrong age	26,000	3.3				
Business	9,400	1.2				
Computer/modem	6,750	0.9				
Over age/sex quota	5,250	0.7				
Language barrier	3,750	0.5				
Security	3,000	0.4				
Breakoff	2,800	0.4				
Complete	20,000	2.5				
TOTAL CALLS	787,600					

<sup>\*</sup>Probably includes a significant number of caller ID

#### Personal Interviews

Personal interviews, also called one-on-one interviews, usually involve inviting a respon-dent to a field service location or a research office, and sometimes interviews are conoffice, and sometimes interviews are con-ducted at a person's place of work or home. There are two basic types of interviews: structured and unstructured. In a structured interview, standardized questions are asked in a predetermined order; little freedom is given to interviewers. In an unstructured interview, broad questions are asked that allow interviewers freedom to determine what further questions to ask to obtain the required information. Structured interviews are easy to tabulate and analyze, but they do not achieve the depth or expanse of unstructured interviews. Conversely, the 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 survey are similar to those for a telephone survey. The following list discusses instances in which the personal interview differs substantially from the telephone method:

method:

1. Select a sample. Drawing a sample for a personal interview is essentially the same as selecting a sample in any other research method. In one-on-one interviews, respondents are selected based on a predetermined set of screening requirements. In door-to-door interviews, a multistage sample is used to select first a general area, then a block or a neighborhood, and finally a random household from which a person will be chosen (see Figure 4.2 on page 100).

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 take up to one hour. Researchers can also use visual exhibist, slists, 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. Prebare an interviewer instruction

lopes and sealed.

3. Prepare an interviewer instruction guide. The detail needed in an instruction guide depends on the type of interview. One-on-one interviewer guides are not very detailed because there is only one location,

# A CLOSER LOOK

## Silence on the Telephone?

Many companies that conduct telephone inreviews use a computer system known as a predictive dialer. In short, telephone num-bers purchased from a sampling company are downloaded into the computer and the computer systematically dials each number in the database. When a voice is detected, the computer "sends" the call to an interviewer, who then begins the interview. When a person at home (or elsewhere) answers the phone and hoers a short delay (dead air), the person is receiving a call from a predictive dialer. Many people have learned this and simply hang up if they hear a pause on the other end of the line.

respondents are prerecruited by a field service, and interviewing times are prearranged. Door-to-door interviewer guides contain information about the household to select, the respondent to select, and an alternative action to take in the event the target respondent is not at home. Interviewer guides often have instructions on how to conduct the interview, how to dress, how to record data, and how to ask questions. (Keep in mind that although door-to-door interviews are mentioned in this chapter, they are rarely used in the United States because of cost and used in the United States because of cost and

used in the United States because of cost and hesitancy of respondents to participate.)

4. Train the interviewers. Training is important because the questionnaires in a personal interview are longer and more detailed. Interviewers should receive detailed instructions on establishing a rapport with subjects, on administrative details (for example, time and length of interviews and interviewer salaries), and on asking follow-up questions.

5. Collect the data. Personal interviews are both labor and cost intensive. These problems are why most researchers prefer to use other methods. A personal interview to use other methods. A personal interview to use other methods. A personal interview

to use oner inetuous. A persona interview project can take several days to several weeks to complete because turnaround is slow. One interviewer can complete only a handful of surveys each day. In addition, cost for salaries and expenses escalate quickly. It is common for research companies to charge

as much as \$1,000 per respondent in a

as much as \$1,000 per respondent in a one-on-one situation. Interviewers gather data either by writing down answers or by electronically recording the respondents' answers. Both methods are slow, and detailed transcriptions and editing

stow, and detailed transcriptions and eduting are often necessary.

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

required.
7. Verify the results. As with telephone 7. Verify the results. As with telephone surveys, a subsample of each interviewer's completed questionnaires is selected for verification. Respondents can be called on the phone or reinterviewed in person.

8. Tabulate the data. Data tabulation

procedures for personal interviews are es-sentially the same as with any other research method. A codebook must be designed, questionnaires coded, and data input into a computer.

Advantages. Many advantages of the per-Advantages. Many advantages of the per-sonal interview technique have already been mentioned. It is the most flexible means of ob-taining information because the face-to-face situation lends itself easily to questioning in greater depth and detail. Also, the interviewer can observe some information during the interview without adding to the length of the questionnaire. Additionally, the interviewer can develop a rapport with the respondents and may be able to elicit replies to sensitive questions that would remain unanswered in a mail or telephone survey. The identity of a mail or telephone survey. The identity of the respondent is known or can be controlled in the personal interview survey. Whereas in a mail survey all members of a family might confer on an answer, this can usually be avoided in a face-to-face interview. Finally, once an interview has begun, it is harder for respondents to terminate the interview before all the questions have been asked. In a telephone survey, the respondent can simply hang up the telephone.

Disadvantages. As mentioned, time and costs are the major drawbacks to the personal interview technique, but another major disadvantage is the potential for interviewer bias. The physical appearance, age, race, gender, dress, nonverbal behavior, and comments of the interviewer may prompt respondents to answer questions untruthrespondents to answer questions untruthfully. Moreover, the organization necessary nuly. 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 a large number of interview-ers are needed, it is necessary to hire field supervisors to coordinate their work, which makes 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 who have jobs outside the home, interviews must be scheduled on the weekends or during the evening.

One alternative now used in personal interviews is a self-administered interview that respondents answer on a personal computer. Respondents are usually invited to the re-search company or field service to participate

in the project by answering questions presented to them on the computer. A hybrid of personal interviewing is in-tensive, or in-depth, interviewing, which is discussed in Chapter 5.

#### Computer-Assisted Personal Interviewing (CAPI)

A recent methodology developed by a small number of research companies is Computer-Assisted Personal Interviewing (CAPI), where laptop computers are used for in-person interview surveys. The respondent or a professional interviewer enters the data directly into the computer of the comp enters the data directly into the computer, and the results are later uploaded to a master computer for analysis

Advantages. The main advantage of this approach is that the research questionnaire is taken to the respondent rather than the respondent answering the phone or attending a research location. Complicated questions and visual aids may be used in this approach.

Disadvantages. If CAPI involves respondent data entry, it requires that the respondent be able to use a computer and accurately input his or her responses. In addition, while CAPI may open the geographic area where respon-dents are contacted, data collection remains slow because only one questionnaire is com-pleted at a time. Finally, while CAPI may be valuable for certain applications, this use of a computer may actually be a technological step backwards. The goal of research in most cases is speed, and CAPI does not reduce the time required to collect data.

#### Mall Interviews

Although mall interviews are essentially a form of the personal interviews 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. As long ago as 1986, Schleifer found that of all the people who participated in a survey in 1984, 33% were mall intercepts. The popularity of mall intercepts continues, a fact that can be verified by a quick search on the Internet for "mall intercepts." Although mall intercepts use convenience samples so sampling error cannot be determined, the method has become the standard for many researchers. It is rare to enter a shopping mall without seeing an interviewer

stor many researchers. It is rare to enter a shopping mall without seeing an interviewer with a clipboard trying to stop a shopper. The method has become commonplace, but some shoppers often take paths to avoid the interviewers they can so easily detect.

The procedures involved in conducting mall intercents are the same as those for per-

and interveits are the same as those for per-sonal interviews. The only major difference is that it is necessary to locate the field ser-vice that conducts research in the particular mall of interest. Field services pay license fees to mall owners to allow them to conduct

rees to mail owners to allow mem to conduct research on the premises. Not just any field service can conduct research in any mall. One recent trend in mall intercept re-search is the use of a personal computer for data collection. As with one-on-one in-terviews conducted in a field service, the re-sondents imply answer questions posed to spondents simply answer questions posed to them on the computer monitor.

Advantages. Mall intercepts are a quick and inexpensive way to collect data.

Disadvantages. Most of the disadvantages of mall intercepts have been discussed in other sections of this book. The three major other sections of this book. I he three major problems are that convenience sampling re-stricts the generalizability of the results (not all people in a given area shop at the same mall), the interviews must be short (no more than about 10 minutes), and there is no control over data collection (researchers are at the mercy of the field service to conduct a proper interview).

#### Group Administration

Group Administration
Group administration combines some of the features of mail surveys and personal interviews. In the group-administered survey, a group of respondents is gathered together (prerecruited 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 it is usually held at a field service location or a hotel ballroom. For example, respondents may be recruited to

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 aloud may help respondents who have reading problems, but this is not always necessary. (It is possible to screen respondents for reading or language skills.) The best approach is for several interviewers to be present in the room so that

skills.) The best approach is for several in-terviewers to be present in the room so that individual problems can be resolved without disturbing the other respondents. Some group-administered sessions in-clude audio and video materials for re-spondents 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

Advantages. The group administration technique has certain advantages. For example, a group-administered questionnaire can be longer than the typical questionnaire used in a mail survey. Since the respondents are

usually assembled for the sole purpose of completing the questionnaire, the response rates are usually quite high. The opportunity for researchers to answer questions and handle problems that might arise generally means that fewer items are left blank or answer that the solution of the swered incorrectly.

Disadvantages. On the negative side, if a group-administered survey leads to the perception that some authority sanctions the study, respondents may become suspicious or uneasy. For example, if a group of teachers is uneasy, ror example, in a group or 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 interaction possible among the respondents; this can make the situation more difficult for the researcher to control. In addifficult 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.

may bias the results.
Finally, group administration can be very
expensive. Costs usually include recruiting
fees, co-op payments, hotel rental, refreshments, audio/visual equipment, and salaries
for interviewers. Many companies no longer
use group administration because of the high
costs involved. costs involved.

## Internet Surveys

Nothing has changed the world of research more than the Internet. While the valid-ity and reliability of some methods may be questioned, the fact is that virtually any type of research can now be conducted on, or via,

of research can now be conducted on, or via, the Internet. In this section, however, we will focus on survey research and the Internet. During the late 1990s, researchers capitalized on the popularity of the Internet, and collecting research data via the Internet is

now commonplace. The process is simple: A respondent is contacted via telephone, letter, or email and asked to participate in a research project. Respondents who agree are either sent a questionnaire via email or given a link to access the questionnaire online. a link to access the questionnaire online.

In most situations, respondents are given a
password to access the website. When finished, respondents either click on a "submitbutton or email the questionnaire back to
the research company or business conducting the study.

Online research, which often consists of

Online research, which often consists of only data collection, has become amazingly only data collection, has become amazingly easy to conduct with websites such as Survey Monkey, Zoomerang, PollDaddy, and many more. In many cases, small research studies can be conducted free and these websites have become extremely popular with students, and with professional researchers as well. The survey websites allow virtually anyone to conduct their own research.

Advantages. Online research offers a huge list of advantages including, but not limited to, low costs, no geographic limitations, no specific time constraints because respondents specinc time constraints because respondents can complete the survey or measurement in-strument at their convenience, flexibility in the approach used to collect data, and the ability to expose respondents to almost any type of audio or visual materials.

Disadvantages. The primary disadvantage of online research is that there is no way yet to ensure that the person recruited for the study is actually the person who completes the questionnaire. For example, an adult may be recruited for a study, but the adult may ask a child in the house to answer the may ask a child in the house to answer the questions. Internet research, like any elec-tronic gathering procedure, has no control over data-gathering procedures. This lack of control may have a profound negative ef-fect on the results gathered and the decisions usually assembled for the sole purpose of completing the questionnaire, the response rates are usually quite high. The opportunity for researchers to answer questions and handle problems that might arise generally means that fewer items are left blank or answer that the solution of the swered incorrectly.

Disadvantages. On the negative side, if a group-administered survey leads to the perception that some authority sanctions the study, respondents may become suspicious or uneasy. For example, if a group of teachers is uneasy, ror example, in a group or 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 interaction possible among the respondents; this can make the situation more difficult for the researcher to control. In addifficult 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.

may bias the results.
Finally, group administration can be very
expensive. Costs usually include recruiting
fees, co-op payments, hotel rental, refreshments, audio/visual equipment, and salaries
for interviewers. Many companies no longer
use group administration because of the high
costs involved. costs involved.

## Internet Surveys

Nothing has changed the world of research more than the Internet. While the valid-ity and reliability of some methods may be questioned, the fact is that virtually any type of research can now be conducted on, or via,

of research can now be conducted on, or via, the Internet. In this section, however, we will focus on survey research and the Internet. During the late 1990s, researchers capitalized on the popularity of the Internet, and collecting research data via the Internet is

now commonplace. The process is simple: A respondent is contacted via telephone, letter, or email and asked to participate in a research project. Respondents who agree are either sent a questionnaire via email or given a link to access the questionnaire online. a link to access the questionnaire online.

In most situations, respondents are given a
password to access the website. When finished, respondents either click on a "submitbutton or email the questionnaire back to
the research company or business conducting the study.

Online research, which often consists of

Online research, which often consists of only data collection, has become amazingly only data collection, has become amazingly easy to conduct with websites such as Survey Monkey, Zoomerang, PollDaddy, and many more. In many cases, small research studies can be conducted free and these websites have become extremely popular with students, and with professional researchers as well. The survey websites allow virtually anyone to conduct their own research.

Advantages. Online research offers a huge list of advantages including, but not limited to, low costs, no geographic limitations, no specific time constraints because respondents specinc time constraints because respondents can complete the survey or measurement in-strument at their convenience, flexibility in the approach used to collect data, and the ability to expose respondents to almost any type of audio or visual materials.

Disadvantages. The primary disadvantage of online research is that there is no way yet to ensure that the person recruited for the study is actually the person who completes the questionnaire. For example, an adult may be recruited for a study, but the adult may ask a child in the house to answer the may ask a child in the house to answer the questions. Internet research, like any elec-tronic gathering procedure, has no control over data-gathering procedures. This lack of control may have a profound negative ef-fect on the results gathered and the decisions made. However, we address this situation in

#### A SPECIAL NOTE ON USING THE INTERNET FOR DATA COLLECTION

Some researchers include a variety of questions to try to identify the person who participates in a research study. However, despite these efforts, when it comes to online research, no "Big Brother" mechanism exists to help researchers know with 100% certainty the identity of the respondents who complete an online research project. If appropriate controls are used, most of the respondents will probably belong to the target sample, but it is likely that the sample will include a number of bogus respondents. While the warnings about this problem are widespread, the reality is that both experienced and novice researchers in every field continue to use the Internet to conduct research. Online sampling problems are well known, but we predict that in the future, a majority of all data in all research areas will be collected via the Internet.

majority of an data in air research areas will be collected via the Internet.

With the maxim of "Use online research regardless of warnings" in mind, we would like to offer a suggestion that will reduce the amount of error in online data collection. Do not presume that our suggestion is a carte blanche endorsement of using the Internet for data collection. It is not. Instead, we offer this suggestion because we feel that regardless of how many warnings are presented, the warnings will fall on deaf ears and many (if not most) people who conduct online research continue to do so with little concern for the validity and reliability of the data. With that as a foundation, we offer this advice.

validity and reliability of the data. With that as a foundation, we offer this advice.

During our decades of mass media research in both the academic and private sectors, we have witnessed a countless number of characteristics and idiosyncrasies about

research, many of which are discussed in this book. In relation to respondent behavior, we have found that the responses in virtually all types of research tend to fall into a typical normal distribution pattern, that is, most respondents' answers cluster around the middle of the curve (the mean), with smaller groups of respondents "atiling off" to the right or left of the mean—the outliers, as we have mentioned in other chapters. However, we have also found in almost every study, a few respondents are extreme outliers—respondents who differ dramatically from the sample (standard deviation  $\geq \pm 2.0$ ), even with samples that are supposedly homogeneous. The phenomenon of omnipresent outliers and extreme outliers in all types of nononline research is the foundation for our suggestion in dealing with the fact that there is no way to know, with 100% certainty, the identity of the respondents who participated in an online research studies we have conducted during the past 30-plus years, we have made attempts to identify extreme outliers. In some cases, these respondents can be identified simply by

In virtually all of the research studies we have conducted during the past 30-plus years, we have made attempts to identify extreme outliers. In some cases, these respondents can be identified simply by looking at the data, such as when respondents' answers constitute a response set (the same or similar answers). However, to ensure accuracy, we always identify extreme outliers using one of two simple procedures: one is for questionnaires that include ratings and other numerical answer questions; the second is for questionnaires that include only open-ended questions.

is not questioniance that include ratings aim other numerical answer questions; the second is for questionnaires that include only open-ended questions.

In questionnaires with ratings and other numerical answer questions, we identify extreme outliers by first calculating the means and standard deviations of all respondents' answers for every rating or numerical-answer question in the study. Next, we convert the means and standard deviations to z-scores (see Chapter 10) to make identification easier. What we look for are respondents with z-scores that differ

substantially from the remaining sample, usually greater thanz ≥ ± 2.0, but there is no set guideline because each research study is unique. If an extreme outlier appears in the analysis, we review the person's entire questionnaire or instrument to determine if the person should remain in the sample. If enough evidence in the questionnaire indicates that the person differs markedly from the sample and does not qualify for the study, the respondent is discarded and replaced with someone else. In some situations, telephone calls to extreme outliers are useful to prove that the respondents do not belong in the sample.

useful to prove that the respondents do not belong in the sample.

In questionnaires with only open-ended questions, we always include a "Code 98" in the codebook used to code the respondents' answers. The 98 code stands for "Unique answer," and if coders find a respondent with an answer that differs substantially from the other respondents in the study, the respondent receives two codes—one for the answer and one for the unique answer. When the data tables are run, respondents with 98 codes are scrutinized to determine if they belong in the sample, If a detailed scrutiny determines that the respondent should not be included in the study, the person is replaced with a qualified respondent.

These same procedures can be used to obtain an indication of the correctness of respondents included in an online study.

These same procedures can be used to obtain an indication of the correctness of respondents included in an online study. Therefore, we suggest that researchers compute 2-scores on the standard deviations for all ratings and numerical answer questions, or use unique answer codes in open-ended surveys. The procedures do not offer a 100% guarantee that all invalidarespondents will be located. However, the procedures, which we have tested repeatedly for more than 30 years, have proven to be extremely successful in identifying respondents who do not belong in a study. The procedures have become known in many media research circles as the Wimmer Outlier Analysis.

Finally, the procedures do not violate the tenet of "letting the data fall where they may." On the contrary, the procedures are objective methods to determine if the data are valid and reliable.

One example may help, In a recent online

One example may help. In a recent online survey conducted by a radio station in New Mexico, respondents were asked several questions about their use of text messages. The sample was supposed to include Adults 35-34. One question asked the respondents how many text messages they sent during a typical week, which produced an average of 7.5 per week. However, 2-scores computed on the standard deviations and 98 codes for all questions identified five respondents who sent more than 200 text messages per week. After further investigation, as well as follow-up telephone calls to verify the respondents, the researchers discovered that all five respondents were teenagers, and their questionnaires were deleted.

# ACHIEVING A REASONABLE RESPONSE RATE

Regardless of which type of survey is conducted, it is virtually impossible to obtain a 100% response rate. Researchers have more control with some types of surveys (personal interview) and less with others (mail survey). However, in all situations, 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.

what constitutes an acceptance response rate? Obviously, the higher the response rate, the better: As more respondents are sampled, response bias is less likely. But is there a minimum rate that should be achieved? Not everyone agrees on an answer to this question, and it is difficult to develop a standard because of the variety of research studies conducted, the method of recruiting used, the research topic, the time of year the study is conducted, and where the study is conducted. However, this textbook's authors' experience provides these response rate

- Mail surveys: 1%-5%
- Telephone surveys: 5%-80%
- Internet surveys: 5%-80%
- Shopping-center intercept: 5%
- Personal (face-to-face) interviews: 40% (depends on recruiting method)

Regardless of the response rate, the re-searcher is responsible for examining any possible biases in response patterns. Were females more likely to respond than males? Older people more likely to respond than younger ones? A significant lack of response from a particular group might weaken the significance 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 comparthe people who did not respond; by compar-ing such additional data with those from

ing such additional data with those from respondents, the researcher may be able to determine whether underrepresentation introduced any bias into the results.

Using common sense will help increase the response rate. In telephone surveys, respondents should be called when they are likely to be at home and receptive to interviewing. Do not call when people are likely to be eating or sleeping. In a one-one situation, the interviewer should be appropriately attired. In addition, the researcher should spend time tracking down some of should spend time tracking down some of shound spent unite tracking down some of the nonrespondents and asking them why they refused to be interviewed or why they 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

sounded like a ploy to sen sometring can be 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, made these discoveries that continue to be important today:

- Monetary incentives increased the response rate, with larger incentives being the most effective.
- Preliminary notification, personaliza-tion of the questionnaire, a follow-up letter, and assertive "foot-in-the-door" personal interview techniques all significantly increased the response rate
- A cover letter, the assurance of ano-nymity, and a statement of a deadline did not significantly increase the response rate.
- 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

Although surveys are valuable tools in mass media research, several obstacles are fre-quently encountered. Experience in survey research confirms the following points:

 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 contrision about the questions assect, or some other intervening factor. Questions that are glaringly simple to researchers may cause significant problems for respondents. For example, as mentioned earlier, radio station managers often want to ask respon-dents which radio stations they have set

on their vehicle's radio pushbuttons. The managers are surprised to discover the number of people who not only do not know which stations are programmed on their radio buttons but also do not know how many buttons are on their radio.

many buttons are on their radio.

2. Due to respondents' feelings of inadequacy or lack of knowledge about a particular topic, they often provide "prestigious" answers rather than admit to not knowing something. This is called prestige bias. For example, as mentioned earlier in this book, some respondents claim to watch public TV and listen to public radio when, in fact, they do not.

3. Subjects may purposely deceive researchers by giving incorrect answers to questions. Almost nothing can be done about respondents who lie. A large sample may discount this type of response. However, there is no acceptable and valid method to determine whether respondents' answers are truthful; the answers must be accepted as they are given, although one way to discover deception is to ask the same question in different ways a few times throughout the

survey.

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 they become even more curious when they are the focus of a scientific research project. In addition, some respondents use a research study as a soapbox for their opinions. These people want to have all of their opinions known and use the research study to attempt to deliver the messages.

5. Surveys are often complicated by the inability of respondents to explain their true feelings, perceptions, and beliefs—not because they do not have any but because they cannot put them into words. The question "Why do you like to watch soap operas?" may be particularly difficult for

some people. They may watch soap operas every day, but respond by saying only "Because I like them." From a research perspective, this answer does not provide much information and probing respondents for further information may help, but not in every case.

Conducting survey research is an exciting activity, It is fun to find out why people think in certain ways or what they do in certain situations. But researchers must continually remain aware of obstacles that may hinder data collection, and they must deal with these problems. In many areas around the world,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 making decisions and solving problems.

The face of survey research is continually therein. One one read door to door

The face of survey research is continually changing. One-on-one and door-to-door interviews are now difficult to conduct. The emphasis is now on research via the Internet, and it will be interesting to see how the Internet continues to change the research survey process.

#### SUMMARY

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 because of its flexibility. Surveys, however, involve a number of steps. Researchers must decide whether to use a descriptive or analytical approach; define the purpose of the study, review the available literature in the area; select the survey approach, questionnaire design, and 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 in conducting a survey.

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 because an error that could void an entire analysis some-

ror that could void an entire analysis some-times surfaces at this stage.

Questionnaire design is also a major step in any survey. This chapter included exam-ples to show how a question or an interview-ing approach may elicit a specific response. The goal in questionnaire design is to avoid bias in answers. Question wording, length,

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 developing questions 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 questionaire. Also, researchers should mention the response rate when they report the results of the survey.

Finally, researchers must select the most appropriate survey approach from among four basic types: mail, telephone, personal interview, and group administration. Each approach has advantages and disadvantages that must be weighed. The type of survey used depends on the purpose of the study, It is another than the funds available for the study. It is clear that many researchers now depend less on the face-to-face survey and more on computer-assisted telephone interviewing and Internet data collection.

#### Key Terms

Analytical surveys Breakoffs Call disposition sheet CATI CATI Checklist question Closed-ended question

Codebook Descriptive surveys Door-to-door survey Double bind question Double-barrelled question Feeling thermometer

Filter question Forced-choice question Group administration Internet survey Leading question Mailing list Mall intercept Multiple-choice question Mutually exclusive One-on-one interview

Open-ended question Personal interview Pop-up survey Prestige bias Prestige bias
Response rate
Screener question
Structured interview
Telephone survey
Unstructured
interview
Wimmer Outlier
Analysis
Verbatims

# Using the Internet

1. Search the Internet for more information on these topics:

- "survey research," "surveys," "question-naire design," and "Internet research."

  "mail surveys" advantages disadvantages.
- · research survey advantages
- "constructing questions
- "questionnaire design"
- problems with question

# Questions and Problems for Further Investigation

- 1. Practical research example.
- Design a questionnaire with 5–10 ques-tions on a topic related to the mass media.
- Post your survey on one of the free online survey websites, such as Survey Monkey.
- survey websites, such as Survey Monkey.

  C. Collect 20–25 responses from respondents.

  Don't worry about a target sample or a
  small sample. The purpose of this exercise is
  to get you familiar with the online research
  process, data collection, and data analysis.

  d. Analyze your data and write a short report
  of your study. Be sure to include a section
  discussing any problems you encountered
  and what would need to be changed if
  someone else replicated your study.

- Locate one or more survey studies in journals on mass media research. Answer the follow-ing questions in relation to the article(s):
  - a. What was the purpose of the survey?
  - b. How were the data collected?
  - c. What type of information was produced?
- d. Did the data answer a particular research question or hypothesis?
- e. Were any problems evident with the survey and its approach?
- and its approach?

  3. Design a survey to collect data on a topic of your choice. Be sure to address these points:
- a. What is the purpose of the survey? What is
- b. What research questions or hypotheses are tested?
- c. Are any operational definitions required?
- d. Develop at least 10 questions relevant to the problem.
- e. Describe the approach to be used to col-lect data.
- f. Design a cover letter or an interview sched-ule for the study.
- g. Conduct a pretest to test the questionnaire.

For additional resources go to www.wimmer dominick.com and www.cengage.com/masscomm/ wimmer/mediaresearch9e.

#### References and Suggested Readings

- Babbie, F. R. (1990), Survey research methods (2nd ed.).
- Babne, E. K. (1990). Murvey researce methods (2nd cd.). Belmont, CA. Wadsworth.
  Rev. Cd.).
  Hillsdale, NJ: Lavernece Eribaum.
  Righton, M. (1981). Data capture in the 1980s. Communicare. Journal of Communication Science, 2(1), 23-16.
- 12–19.

  Chaffee, S. H., & Choe, S. Y. (1980). Time of decision and media use during the Ford-Carter campaign.

  Dillman, D. (1978). Multi-dry, 44, 53–70.

  Dillman, D. (1978). Multi-dry, 44, 53–70.

  Erdos, P. L. (1974). Data collection methods: Mail surveys. In R. Ferber (Ed.), Handbook of marketing research. New York: McGraw-Hill.

- Fletcher, J. E., & Wimmer, R. D. (1981). Focus group intervieus in radio research. Washington, DC: National Association of Broadcasters.
  Fowler, F. (2002). Survey research methods (3rd ed.). Newbury Park, CA: Sage Publications.
  Fox, R. J., Crask, M. R., & Kim, J. (1989). Mail survey response rate. Public Opinion Quarterly, 52(4), 467-491.
- Fox, R. J., Crask, M. R., & Kim, J. (1989). Mail survey response rate. Public Opinion Quarterly, 52(4), 467–491.
  Groves, R., & Mathiowetz, N. (1984). Computer assisted telephone interviewing: Effects on interviewers and respondents. Public Opinion Quarterly, 48(1), 356–369.
  Hornik, J., & Ellis, S. (1989). Strategies to secure compliance for a mall intercept interview. Public Opinion Quarterly, 52(4), 339–551.
  Hsia, H. J. (1988). Mass communication research methods: 4 step-by-step approach. Hillidale, NJ: Lawrence Filbaum.
  Kerlinger, F. N., & Lee, H. B. (2000). Foundations of behavioral research (4th ed.). New York: Holt, Rinchart & Winston.

- methods: A step-by-step approach. Hillsdale, NJ:
  Lawrence Fibnum.
  Kerlinger, F. N., & Lee, H. B. (2000). Foundations of
  behavioral research (4th ed.). New York: Holt,
  Rinchart & Winston.
  Lavrakas, P. J. (1993). Telephone survey methods:
  Sampling, selection, and supervision (2nd ed.).
  Newbury Park, C.A: Sage Publications.
  Marketing News. (1983). Inflation adjusted spending
  is on rise for consumer research. Marketing News,
  17(1), 13.
  Miller, D. C. (1991). Handbook of research design and
  social measurement (3th ed.). New York: Longman.
  National Association of Broadcasters, (1976). A broadcast research primer. Washington, Dc:National
  Association of Broadcasters.
  Oppenheim, A. N. (1992). Questionnaire design and
  attitude measurement. New York: Phite.
  Poindecute, P. M. (1979). Daily newspare nonreaders:
  Why they don't read, Journalism Quarterly, 56,
  Rea, L. M., Patker, R. A. & Strades, A. (1997). Designing
  and New York: Josey-Bass.
  Roucher, M. (1968). The logic of survey analysis.
  New York: Basic Books.
  Schleifer, S. (1966). Trends in attitudes toward and
  participation in survey research. Public Opinion
  Quarterly, 47(1), 36–53.
  Singer, E., & Presset, S. (1684). 1989). Survey research
  methods: A reader. Chicago: University of Chicago
  Press.
  Walshlag, J., & Greenberg, B. S. (1979). Programming
  for children. Journal of Communication, 6, 58–68.

- Waltzer, M. H., & Wienit, P. L. (1978). Research methods and analysis: Searching for relationships. New York: Heaper & Row.

  Wisherg, H. F., & Bowen, B. D. (1996). An introduction to survey research and data analysis (3rd ed.). Glenview, IL: Sout, Foresman, Williams, F., Rice, R. E., & Rogers, F. M. (1988). Research methods and the new media. New York: Free Press.

  Williams, E. D. (1976). A multivariate analysis of the uses and effects of the mass media in the 1968 presidential campaign. Unpublished doctoral dissertation, Bowling Green University, Ohio.

- Wimmer, R. D. (1995). Comparison of CATI and non-CATI interviewing. Unpublished company paper. Denver: The Eagle Group.
  Winkler, R. L., & Hays, W. L. (1975). Statistics: Probability, inference and decision (2nd ed.). New York: Holt, Rinchart & Winston.
  Yu, J., & Cooper, H. (1983). A quantitative review of re-search design effects on response rates to question-anies. Journal of Marketing Research, 20(1), 36–44.
  Zillmann, D., & Enyant, L. (1975). Newers' moral sensitions of retribution in the appreciation of dramatic presentations. Journal of Experimental Social Psychology, 11, 572–582.