**THE FUNCTIONS OF A QUESTIONNAIRE**

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| Questionnaires translate research objectives into specific questions, standardize questions and response categories, foster respondent cooperation, serve as permanent records, can speed the process of data analysis, and can serve as the basis for reliability and validation measures.  Questionnaire design is very important. It is difficult to overcome defects in questionnaires. | A questionnaire serves six key functions. (1) It translates the research objectives into specific questions that are asked of the respondents. (2) It standardizes those questions and the response categories so every participant responds to identical stimuli. (3) By its wording, question flow, and appearance, it fosters cooperation and keeps respondents motivated throughout the interview. (4) Questionnaires serve as permanent records of the research. (5) Depending on the type of questionnaire used, a questionnaire can speed up the process of data analysis. Online questionnaires, for example, can be transmitted to thousands of potential respondents in seconds. In the case of WebSurveyor, questionnaires can be delivered and returned online. Some printed questionnaires may be designed to allow respondents' responses to be scanned into a statistical package. (6) Finally, questionnaires contain the information on which reliability assessments may be made, and they are used in follow-up validation of respondents' participation in the survey.  Given that it serves all of these functions, the questionnaire is a very important element in the research process. In fact, studies have shown that questionnaire design directly affects the quality of the data collected. Even experienced interviewers cannot compensate for questionnaire defects. 1 The time and effort invested in developing a good questionnaire are well spent. As you will soon learn, questionnaire development is a systematic process in which the researcher contemplates various question formats, considers a number of factors characterizing the survey at hand, and ultimately words the various questions very carefully. Questionnaire design is a process that requires the researcher to go through a series of interrelated steps. |
| It is normal to go through several versions of a questionnaire, revising it with each version.  Question bias refers to the ability of a question's wording or format to influence respondents' answers. | **THE QUESTIONNAIRE DEVELOPMENT PROCESS**  We now turn to a discussion of the steps a researcher goes through and how the questionnaire fits into this process. Figure 11.2 offers a flowchart of the various phases in a typical marketing research survey. The first two steps have already been covered in this book. During the problem definition phase, the researcher and manager will have determined the survey objectives for the study, and the researcher knows the resources to be applied to the project plus any special circumstances or constraints involved. The primary data collection method will be agreed on in the early stages of this process (see Chapter 9). Also, we considered basic question response formats and measurement issues discussed in Chapter 10. Questionnaire design begins, as shown by the interior outlined box in Figure 11.2, after these issues are resolved.  A questionnaire will ordinarily go through a series of drafts before it is inacceptable final form. In fact, even before the first question is constructed, the researcher mentally reviews alternative question formats to decide which ones are best suited to the survey's respondents and circumstances. As the questionnaire begins to take shape, the researcher continually evaluates each question and its response options for face validity. Changes are made, and the question's wording is reevaluated to make sure that. it is asking what the researcher intends. Also, the researcher strives to minimize question bias, defined as the ability of a question's wording or format to influence respondents' answers. |

**Figure 11.2: Steps in the Questionnaire Development Process**

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| Determine Survey Objectives |
| ⭣ |
| Decide Data Collection Method |
| ⭣ |
| Question Development |
| ⭣  Questionnaire Design Steps |
| Question Evaluation |
| ⭣ |
| Gain Approval from Client |
| ⭣ |
| Pretest |
| ⭣ |
| Revise as Needed |
| ⭣ |
| Finalize and Duplicate |
| ⭣ |
| Gather Data |
| ⭣ |
| Tabulation and Final Report |

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| A researcher should strive to minimize question bias.  Questionnaires are systematically checked and revised throughout the questionnaire design process. Clients should review the questionnaire to ensure that it covers the issues appropriate to the research objectives.  Client involvement and approval of the questionnaire are necessary to assure that the research will be on target in meeting the client's information needs. It is wise for clients to give signature approval of questionnaires.  Questionnaires should be pretested using sample members taken from the population. | There is little doubt that how we word questions affects how others answer. Consider this example: A young monk once asked his superior if he could smoke while he prayed. After being chastised by the superior, a friend of the monk suggested: "Why don't you ask him if you could pray while you smoke?” The wording of a question can greatly affect the response. Researchers are interested in objective information and they must avoid biasing questions.  We will describe aspects of this iterative process in more detail in succeeding sections of this chapter. For now, it is important only that you realize that with a custom-designed research study, the questions on the questionnaire, along with its instructions, introduction, and general layout, are systematically evaluated for potential error and revised accordingly. Generally, this evaluation takes place at the researcher's end, and the client will not be involved until after the questionnaire has undergone considerable development and evaluation by the researcher.  The client is given the opportunity to comment on the questionnaire during the client approval step, in which the client reviews the questionnaire and agrees that it covers all of the appropriate issues. This step is essential, and some research companies require the client to sign or initial a copy of the questionnaire as verification of approval. There are several good reasons for client approval of a proposed questionnaire. First, it serves as a check that the researcher is still in tune with the survey's objectives. The client may not appreciate all of the technical aspects of questionnaire design, but he or she is vitally concerned with the survey's objectives and can comment on the degree to which the questions on the questionnaire appear to address these objectives. Second, client approval ensures that the client will be apprised of the survey's progress. Third, approval and the initialed questionnaire ensure that the researcher is protected against the remote possibility that the manager will claim that the questions were incomplete or done incorrectly after the findings are revealed.  Following client approval, the questionnaire normally undergoes a pretest, which is an actual field test using a very limited sample to reveal any difficulties that might still lurk in wording, instructions, administration, and so on. We describe pretesting more fully later in this chapter.4 Revisions are made based on the pretest results, and the questionnaire is finalized. |
| A research question is employed in research projects to obtain overt, verbal communication from individual study participants. Its intended function is to elicit meaningful verbal responses from study participants, whether in writing or orally, and regardless of where it is asked-in the laboratory, home, or on the street.  Even one word may make a difference in how respondents answer questions.  Certain "problem" words should be avoided in questionnaires. | **DEVELOPING QUESTIONS**  Knowledge is acquired by either asking questions or through observation. There are several types of questions including nonverbal questions (a shrug of the shoulders or a hand gesture), verbal questions, rhetorical questions (more of an expression where no answer is expected), and nonrhetorical questions that explicitly seek information. Peterson has defined a specific type of nonrhetorical question as a research question. According to Peterson, a research question is employed in research projects to obtain overt, verbal communication from individual study participants. Its intended function is to elicit meaningful verbal responses from study participants, whether in writing or orally, and regardless of where it is asked-in the laboratory, home, or on the street.5 Marketing researchers are concerned with developing research questions because they measure (1) attitudes, (2) beliefs, (3) behaviors, and (4) demographics.6  Developing a question's precise wording is not easy. Even one word can make a difference in how study participants respond to a question. There is considerable research to illustrate this. In one study researchers changed only one word. They asked, "Did you see the broken headlight?" to one group of participants and asked, "Did you see a broken headlight?" to another group. Only the "a" and the "the" were different, yet the question containing the "the" produced more "don't know" and "Yes" answers than did the "a" question? We have claimed that developing questions for a questionnaire is an art. But just as there is good art and bad art, there are good questions and bad questions. In developing any question, the ultimate goal is to devise a way to tap the person's true response without influencing him or her either overtly or subtly. Compounding this problem is the fact that the researcher will have only one chance to accomplish this goal, so the wording of each question is critical.  Unfortunately, there is far greater potential to generate unreliable or inaccurate responses than we care to admit. Table 11.1 illustrates how certain words cause problems in questionnaires.  As we noted earlier, question bias occurs when the phrasing of a question influences a respondent to answer unreliably or with other than perfect accuracy. Ideally, every question should be examined and tested according to a number of crucial factors known to be related to question bias. For convenience, we discuss these factors as "shoulds" and "should nots." |
|  | **The Five "Shoulds" of Question Wording**  There are five "shoulds" of question wording: (1) The question should be focused on a single issue or topic; (2) the question should be brief; (3) the question should be interpreted the same way by all respondents; (4) the question should use the respondent's core vocabulary; and (5) the question should be a grammatically simple sentence if possible. A discussion of these "shoulds" follows. |
| Good questionnaires are very specific in terms of identifying issues for respondents. | **The Question Should Be Focused on a Single Issue or Topic**  The researcher must stay focused on the specific issue or topic. For example, take the question "What type of hotel do you usually stay in when on a trip?" The focus of this question is hazy because it does not narrow down the type of trip or when the hotel is being used. For example, is it a business or a pleasure trip? Is the hotel at a place en route or at the final destination? A more focused version is "When you are on a family vacation and stay in a hotel at your destination, what type of hotel do you typically use?" As a second example, consider how "unfocused" the following question is: "When do you typically go to work?" Does this mean when do you leave home for work or when do you actually begin work once at your workplace? A better question would be "At what time do you ordinarily leave home for work?" |
| Parsimony is important in questionnaire design. | **The Question Should Be Brief**  Unnecessary and redundant words should always be eliminated, regardless of the data collection mode. This requirement is especially important when designing questions that will be administered verbally, such as over the telephone. Brevity will help the respondent to comprehend the central question and reduce the distraction of wordiness. Here is a question that suffers from a lack of brevity: "What are the considerations that would come to your mind while you are confronted with the decision to have some type of repair done on the automatic icemaker in your refrigerator assuming that you noticed it was not making ice cubes as well as it did when you first bought it?" A better, brief form would be "If your icemaker was not working right, how would you correct the problem?" |
| Wording on questionnaires should be interpreted the same way by all respondents. | **The Question Should Be Interpreted the Same Way by All Respondents**  All respondents should "see" the question identically. For example, the question "How many children do you have?" might be interpreted in various ways. One respondent might think of only those children living at home, whereas another might include children from a previous marriage. A better question is "How many children under the age of 18 live with you in your home?" |
| Well-designed questionnaires should use respondents' core vocabulary. Vocabularies differ markedly from one subculture to the next. | **The Question Should Use the Respondent's Core Vocabulary**  The core vocabulary is the everyday language respondents use to converse with others like themselves, but it does not include slang or jargon. Obviously, if a question includes words with which some but not all respondents are familiar, these words are a potential source of error for those who do not interpret them properly. Sometimes the technical aspects of a product or marketing activity will slip into a question and violate the rule of using core vocabulary. For instance, "Did the premiums offered by the store attract you to it?" assumes that respondents know what premiums are and can relate them to being attracted to the store. So a better question would be "Was the offer of a free gift a reason for your last visit to The Village clothing store?" Core vocabularies differ from subculture to subculture and from one profession to another. The difficulty of dealing with this issue is the subject of Marketing Research Insight 11.1. |
|  | **The Question Should Be a Grammatically Simple Sentence if Possible**  A simple sentence is preferred because it has only a single subject and predicate, whereas compound and complex sentences are busy with multiple subjects, predicates, objects, and complements. The more complex the sentence, the greater the potential for respondent error. There are more conditions to remember, and more information to consider simultaneously, so the respondent's attention may wane or he or she may concentrate on only one part of the question. To avoid these problems, the researcher should strive to use only simple sentence structure-even if two separate sentences are necessary to communicate the essence of the question. Take the question, "If you were looking for an automobile that would be used by the head of your household who is primarily responsible for driving your children to and from school, music lessons, and friends' houses, how much would you and your spouse discuss the safety features of one of the cars you took for a test drive?" A simple approach is, "Would you and your spouse discuss the safety features of a family car?" followed by (if yes), "Would you discuss safety 'very little,' 'some,' 'a good deal,' or 'to a great extent'?" |
|  | **The 11 "Should Nots" of Question Wording**  There are more "should nots" than "shoulds" in question construction. In fact, there are 11. A discussion of these "should nots" follows. |
| When questions require respondents to make judgments, those judgments assume criteria. A well-designed questionnaire specifies the criteria upon which judgments should be based. | **The Question Should Not Assume Criteria That Are Not Obvious**  Questions frequently require respondents to make judgments, and judgment assumes that certain criteria are being applied. But sometimes the criteria on which the judgments are to be made are not obvious, and a danger exists in respondents using criteria different from those assumed by the question designer. A frequently omitted criterion is the respondent's frame of reference. The question "How important do you think it is for a Circle K convenience store to have a well-lighted parking lot?" has the potential for respondents to think in terms of the needs of others rather than their own. Perhaps a respondent never goes to a Circle K after dark, but he or she thinks that those who do should have good lighting. The better approach is to phrase the question as, "How important is it for you that a Circle K store has a lighted parking lot?" |
| It would make little sense to ask a respondent what factors are important to him or her in buying a car when the respondent has never bought a car. Questions should not be beyond a respondent's ability or experience. | **The Question Should Not Be Beyond the Respondent's Ability or Experience**  Questions should not transcend the respondent's experience. For example, it makes little sense to ask teenagers what type of family automobile they will purchase when they are married, just as it makes little sense to ask their parents about whether their teenagers would drink nonalcoholic beer at a party. Teenagers cannot predict this purchase decision accurately because they are not (usually) married and are unlikely to have bought a new automobile, and the conditions for a family automobile purchase are unknown. Similarly, most parents do not know what goes on at teenagers' parties, so their answers would be guesses at best. |
| The problem with using a specific example to represent a general case is that respondents will concentrate on the specific example. | **The Question Should Not Use a Specific Example to Represent a General Case**  The danger in using a specific example to measure a broader situation lies in the possibility that the respondent will concentrate only on that example. The question "Do you recall any advertising for Sears in the last week such as the inserts that are sometimes placed in your newspaper?" will cause some respondents to concentrate only on the newspaper inserts, but the intent of the question is to ask about all advertising. A better version is "Did you notice any newspaper, television, radio, or mailed advertising for Sears in the last week?" See the word "like" in Table 11.1 on page 307. |
| Keep in mind that respondents do not have a perfect memory. Do not ask questions that require respondents to recall specifics that they are not likely to remember. | **The Question Should Not Ask the Respondent to Recall Specifics When Only Generalities Will Be Remembered**  Sometimes a question designer forgets that people do not have perfect memory, and the detail requested in the question is beyond the respondent's abilities to reconstruct what actually happened. For instance, "How much was the price per gallon of gasoline when you last bought some at a convenience store?" certainly will require some respondents to think back several months, and it is very unlikely that they will recall the exact price per gallon. A more appropriate way to ask this question is to tap the generalities that the respondent will remember. For example, "The last time you bought gasoline at a convenience store, do you recall it costing more, less, or about the same per gallon as at a gasoline station?” |
| Instead of requiring the respondent to guess a generalization, ask a question with greater specificity. | **The Question Should Not Require the Respondent to Guess a Generalization**  When asked to respond to a question involving a generality, respondents may be inclined to respond with what they think "must" have happened or what "should" happen. This encourages guessing. Although guesses may be accurate, they are more likely to be inaccurate. Consider these two examples: "When you buy fresh fish at the supermarket, do you worry about its freshness?" and "If you bought a new 355millimeter automatic focus camera at a catalog showroom store, would you ask the store clerk about its warranty?" Both of these encourage the respondent to answer in the affirmative by tapping into generalizations. One generalization is that freshness is virtually always assessed when buying seafood, and the other is that a common concern of buyers of expensive cameras should be the warranty. A strategy for avoiding the generalization factor is to require specificity from the respondent. For instance, with the fresh fish example, the question might be posed as, "In the last five times you bought fresh fish at the supermarket, how many times did you worry about its freshness?" For the camera question, it would be advantageous to use a likelihood scale: "Would you be 'unlikely,' 'somewhat likely,' 'likely,' or 'extremely likely' to ask the clerk about the camera's warranty?" |
| Avoid questions that ask for information that is too detailed to remember. | **The Question Should Not Ask for Details That Cannot Be Related**  Marketers sometimes ask for information that is impossible to remember. For example, a question that asks respondents if they use e-mail to specify how many total minutes they have used e-mail and to how many persons have they sent e-mail is asking for information that is too detailed to be recalled. It would be better to ask the total number of minutes spent on e-mail, on average, during a day. |
| Overstatements, either positive or negative, should be replaced with neutral statements. | **The Question Should Not Use Words That Overstate the Condition**  Avoid using words that overstate conditions. It is better to present the question in a neutral tone rather than in a positive or a negative tone. Here is an example that might be found in a survey conducted for Ray-Ban sunglasses. An overstated question might ask, "How much do you think you would pay for a pair of sunglasses that will protect your eyes from the sun's harmful ultraviolet rays, which are known to cause blindness?" As you can see, the overstatement concerns the effects of ultraviolet rays, and because of this overstatement, respondents will be compelled to think about how much they would pay for something that can prevent their blindness and not about how much they would really pay for the sunglasses. A more toned-down and acceptable question wording would be, "How much would you pay for sunglasses that will protect your eyes from the sun's rays?" |
|  | **The Question Should Not Have Ambiguous Wording**  Ambiguity in wording allows respondents to apply their own situations, experiences, or interpretations to them. Two forms of ambiguous wording can occur: First, the question designer might use a word that has several legitimate connotations for anyone respondent. For example, a Society for the Prevention of Cruelty to Animals survey may ask, "When your puppy has an accident, do you discipline it?" There are two ambiguous words in this question. An "accident" could mean urinating on the floor, or spilling water out of the feeding dish, or any number of different mishaps. The definition of "discipline" is vague, and as you can imagine, the nature and severity of canine discipline can vary greatly. A series of questions would be needed to reduce the ambiguity by specifying the types of accidents and nature of the discipline applied. Second, the question designer might inadvertently select a word that has different interpretations for different subgroups of respondents. For example, ambiguous questions are evident in regional differences in the use of words. Let's say Oscar Mayer wants to perform a survey on the use of meats in sandwiches. A type of sandwich that is called a "grinder" in New England is referred to as a "submarine," "hero," "hoagie," or a "poor boy" in other parts of the United States. New Englanders cannot relate to a "poor boy" any more than someone living in New Orleans can relate to a "grinder." Obviously, Oscar Mayer would need to be concerned about the regional ambiguity of these words. |
| Make certain you ask one question at a lime. | **The Question Should Not Be "Double-Barreled"**  A double-barreled question is really two different questions posed in one question. With two questions posed together, it is difficult for a respondent to answer either one directly. Consider a question asked of patrons at a restaurant "Were you satisfied with the food and service?" How does the respondent answer? If they say "yes" does that mean they were satisfied with the food? The service? A combination? The question would be much improved by asking about a single item: one question for food and another question for service. Sometimes double-barreled questions are not as obvious. Look at the following question designed to ask for occupational status:  \_\_ Full-time employment  \_\_ Full-time student  \_\_ Part-time student  \_\_ Unemployed  \_\_ Retired  How does one who is retired and a full-time student answer the question? An improvement could be made by asking one question about occupational status and another about student status. |
| A leading question is worded in such a way as to give the respondent a clue as to how to answer and, therefore, it biases responses. | **The Question Should Not Lead the Respondent to a Particular Answer**  A leading question is worded in such a way as to give the respondent a clue as to how to answer. Therefore, it biases responses. Consider the question used by Alreck and Settle to illustrate a leading question: "Don't you see some danger in the new policy?" Obviously, the respondent is being led because the question wording stresses one side (in this case, the negative side) of the issue. Therefore, the respondents would expect that there are dangers in the new policy and, therefore, will likely respond with some of these dangers. Rephrasing the question as "Do you see any danger in the new policy?" is a much more objective request of the respondent. Here the respondent is free-that is, not led-to respond "yes" or "no." Examine the following questions for other forms of leading questions:  • Cadillac owners will be satisfied car owners, won't they? This is a leading question because the wording presupposes a state of mind. By saying" ... won't they?" presupposes that the respondent should agree.  • Have you heard Celine Dion's new CD everyone is talking about? This is a leading question due to its possessing the ability to condition the respondent in terms of answering in a socially desirable manner. In other words, few people would want to admit they are clueless about something "everybody is talking about."18  Closed-ended questions can be leading as well. When an answer alternative that should not be included is provided or when a legitimate answer is not provided, the closed-ended question is leading. Peterson gives an example of a closed-ended leading question similar to the following:  • How well do you like the Holiday Host Online Reservation Service?  \_\_ Extremely well  \_\_ Very well  \_\_ Pretty well  \_\_Not too well  This is a leading question because only positive responses are given. |
| A loaded question has buried in its wording elements that allude to universal beliefs or rules of behavior and, therefore, is biased and should be avoided.  Researchers often get other researchers' opinions on questionnaire design in an attempt to ensure that the questionnaire will be answered by respondents in an objective manner and that the answers will properly address the research objectives. | **The Question Should Not Have "loaded" Wording or Phrasing**  Leading questions are biased in that they direct the respondent to answer in a predetermined way. By contrast, a loaded question is more subtle, yet, they also are biased questions. Identifying this type of bias in a question requires more judgment, because a loaded question has buried in its wording elements that allude to universal beliefs or rules of behavior. It may even apply emotionalism or touch on a person's inner fears. For example, a company marketing mace for personal use may use the question, "Should people be allowed to protect themselves from harm by using mace as self-defense?" Obviously, most respondents will agree with the need to protect oneself from harm, and self-defense is an acceptable and well-known legal defense. Eliminating the loaded aspect of this question would result in the question "Do you think carrying a mace product is acceptable for people who are worried about being attacked?"  As you can see, the phrasing of each question should be examined thoroughly to guard against the various sources of question bias error. Seasoned researchers develop a sixth sense about the pitfalls we have just described; however, because the researcher can become caught up in the research process, slips do occur. This danger explains why many researchers use "experts" to review drafts of their questionnaires. For example, it is common for the questionnaire to be designed by one employee of the research company and then given to another employee who understands questionnaire design for a thorough inspection for question bias as well as face validity (if the questions "look right"). |
| The introduction may be a cover letter or a verbal statement depending on the method of data collection.  The first function of the introduction is to introduce the research firm and/or sponsoring client to the respondent.  The second purpose of the introduction is to tell the prospective respondent the purpose of the research.  The third purpose of the introduction is to tell the respondents how and why they were selected for the study.  The fourth function of the introduction is to ask for the potential respondent's cooperation.  Incentives are used to increase the likelihood a potential respondent will take part in the research.  Anonymity means the respondent is never identified with the data collected.  Confidentiality means that the respondent is known by the researcher but his or her name is not divulged to a client or any other third party.  Screening questions are used to screen out respondents who do not meet qualifications necessary to take part in the research study. | **QUESTIONNAIRE ORGANIZATION**  **The Introduction**  The introduction is very important in questionnaire design. If the introduction is written to accompany a mail surveyor online survey, it is normally referred to as a cover letter. If the introduction is to be verbally presented to a potential respondent, as in the case of a personal interview, it may be referred to as the opening comments. Of course, each survey and its target respondent group are unique, so a researcher cannot use a standardized introduction. In this section, we discuss the five functions to be provided by the introduction. The introduction serves five functions:  1. Identification of the surveyor/sponsor  2. Purpose of the survey  3. Explanation of respondent selection  4. Request for participation/provide incentive  5. Screening of respondent  First, it is not only common courtesy but it is also expected that you will introduce yourself at the beginning of a conversation. Some research companies opt for the direct approach with a statement such as, "Hello, my name is\_\_, and I am a telephone interviewer working with Nationwide Opinion Research Company here in Milwaukee. I am not selling anything." Here the researcher has identified himself or herself and the prospective respondent has been made aware that this is a bona fide survey and not a sales pitch. Additionally, the sponsor of the survey should be identified. There are two options with respect to sponsor identity. The sponsor may be undisguised or disguised. With an undisguised survey, the sponsoring company is identified, but with a disguised survey, the sponsor's name is not divulged to respondents. The choice of which approach to take rests with the survey's objectives or with the researcher and client who agree whether disclosure of the sponsor's name or true intent can in some way influence respondents' answers. Another reason for disguise is to prevent alerting competitors to the survey. However, as you read in Chapter 3, there is growing concern that all respondents should be debriefed as to the true sponsor of the research.  Second, the purpose of the survey should be described clearly and simply. In a cover letter, the purpose may be expressed in one or two sentences: "We are conducting a survey on personal computer presentation graphics packages used by successful executives such as yourself." Note that respondents aren't interested in the specific purposes of the survey. Rather, they are interested in knowing the subject you will address as you ask them questions. Consider a bank having a survey conducted by a marketing research firm. The actual purpose of the survey is to determine .the bank's image relative to that of its competitors. However, the research firm need only say, "We are conducting a survey on customers' perceptions of financial institutions in this area." This satisfies the respondent and does not divulge the name of the bank. Also, it doesn't bore the prospective respondent with details of the actual purpose of the survey.  Third, prospective respondents must be made aware of how and why they were selected. Just a short sentence to answer the respondent's question of "Why me?" will suffice. Telling respondents that they were "selected at random" usually is sufficient. Of course, you should be ethical and tell them the actual method that was used. If their selection wasn't random, you should inform them as to which method was used.  Fourth, you must ask for their participation. "Will you please take five minutes to complete the attached questionnaire and mail it back to us in the postage-paid, preaddressed envelope provided?" If you are conducting a personal interview or a telephone interview, you might say something like "I would now like to ask you a few questions about your experiences with automotive repair shops. OK?" You should be as brief as possible yet let the respondent know that you are getting ready for him or her to participate by answering questions. This is also the appropriate time to offer an incentive to participate. Incentives are offers to do something for the respondent in order to increase the probability that the respondent will participate in the survey. There are various incentives that may be used by the researcher to encourage participation. As consumers have become more resistant to telemarketers and marketing researchers' pleas for information, researchers are reporting they must offer increased incentives. Offering a monetary incentive, a sample of a product, or a copy of study results are examples. A more complete list is found in Chapter 14, which deals with nonresponse error and how it can be minimized. Other incentives encourage respondent participation by letting them know the importance of their participation: "You are one of a select few, randomly chosen, to express your views on a new type of automobile tire." Or the topic itself can be highlighted for importance: "It is important that consumers let companies know whether or not they are satisfied."  Other forms of incentives address respondent anxieties concerning privacy. Here again, there are methods that tend to reduce these anxieties and, therefore, increase participation. The first is anonymity, in which the respondent is assured that neither the respondent's name nor any identifying designation will be associated with his or her responses. The second method is confidentiality, which means that the respondent's name is known by the researcher, but it is not divulged to a third party, namely, the client. Anonymous surveys are most appropriate in data collection modes where the respondent responds directly on the questionnaire. Any self-administered survey qualifies for anonymity as long as the respondent does not indicate his or her identity and provided the questionnaire does not have any covert identification tracing mechanism. However, when an interviewer is present, appointments and/or callbacks are usually necessary, so there typically is an explicit designation of the respondent's name, address, telephone number, and so forth on the questionnaire. In this case, confidentiality may be required. Often questionnaires have a callback notation area for the interviewer to make notes indicating, for instance, whether the phone is busy, the respondent is not at home, or a time at which to call back when the respondent will be available. Here the respondent will ordinarily be assured of confidentiality, and it is vital that the researcher guard against the loss of that confidentiality.  A fifth function of the introduction is to screen respondents. Respondents are screened for their appropriateness to take part in the survey. Screening questions are used to screen out respondents who do not meet qualifications necessary to take part in the research study. Whether you screen respondents depends on the research objectives. If the survey's objective is to determine the factors used by consumers to select an automobile dealer for the purpose of purchasing a new car, you may want to screen out those who have never purchased a new car or those who have not purchased a new car within the last, say, two years. "Have you purchased a new car within the last two years?" For all those who answer "no," the survey is terminated with a polite "Thank you for your time." Some would argue that you should put the screening question early on so as to not waste the time of the researcher or the respondent. This should be considered with each survey. We place screening questions as last in the introduction because we have found it awkward to begin a conversation with a prospective respondent without first taking care of the first four items we just discussed. We place screening questions in the introduction because it is common practice to place them near the beginning of the questionnaire.  The creation of the introduction should entail just as much care and effort as the development of the questions on the questionnaire. The first words heard or read by the prospective respondent will largely determine whether he or she will take part in the survey. It makes sense, therefore, for the researcher to labor over a cover letter or opening until it has a maximum chance of eliciting the respondent's cooperation to take part in the survey. If the researcher is unsuccessful in persuading prospective respondents to take part in the survey, all of his or her work on the questionnaire itself will have been in vain. |
| Attention should be given to placing the questions developed into a logical sequence to ease respondent participation. Screening questions are among the first to be asked. | **Typical Question Sequence**  Each research objective gives rise to a question or a set of questions. As a result, questions are usually developed on an objective-by-objective basis. However, to facilitate respondents' ease in answering questions, the organization of these sets of questions should follow some understandable logic. A commonly seen sequence of questions found in questionnaires is presented in Table 11.2. As we discussed in the previous section, the first few questions are normally screening questions, which will determine whether the potential respondent qualifies to participate in the survey based on certain selection criteria that the researcher has deemed essential.23 Of course, not all surveys have screening questions. A survey of all charge account customers for a department store, for example, may not require screening questions. This is true because, in a sense, all potential respondents have already been qualified by virtue of having charge accounts with the store. |

**Table 11.2: The Location of Questions on a Questionnaire Is Logical**

**Questionnaire Organization**

|  |  |  |  |
| --- | --- | --- | --- |
| *Questionnaire Organization* | *Question Location* | *Examples* | *Rationale* |
| Screens | First questions asked | “Have you shopped at Gap in the past month?”  “Is this your first visit to this store?” | Used to select the respondent types desired by the researcher to be in the survey |
| Warm-ups | Immediately after any screens | “How often do you go shopping?”  “On what days of the week to you usually shop?” | Easy to answer; shows respondent that survey is easy to complete; generates interest |
| Transitions (statements and questions) | Prior to major sections of questions or changes in question format | “Now, for the next few questions, I want to ask about your family’s TV viewing habits.”  “Next, I am going to read several statements and, after each, I want you to tell me if you agree of disagree with this statement.” | Notifies respondent that the subject or format of the following questions will change. |
| Complicated and difficult-to-answer questions | Middle of the questionnaire; close to the end | “Rate each of the following 10 stores on the friendliness of their sales-people on a scale of 1 to 7. | Respondent has committed himself or herself to completing the questionnaire; can see (or is told) that there are not many questions left. |
| Classification and demographic questions | Last section | “What is the highest level of education you have attained?” | Questions that are “personal” and possible offensive are placed at the end of the questionnaire |

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| Warm-up questions are used near the beginning of the survey to get the respondent's interest and demonstrate the ease of responding to the research request.  Transitions are statements made to let the respondent know that changes in question topic or format are forthcoming.  A skip question is one whose answer affects which question will be answered next.  The more complicated and difficult-to-answer questions are placed later in the questionnaire.  Classification questions, sometimes called demographic questions, are used to classify respondents into various groups for purposes of analysis.  Classification, or demographic, questions should be placed at or near the end of the questionnaire because they are more personal questions. Some respondents will consider them to be an invasion of privacy and may terminate the survey. | Once the individual is qualified by the screening questions, the next questions may serve a "warm-up" function. Warm-up questions are simple and easy answer questions that are used to get the respondents' interest and to demonstrate the ease of responding to the research request. Warm-up questions may or may not pertain to the research objectives. In the latter case, if the first question dealing with a research objective is difficult, a warm-up question may be used to heighten the respondent's interest so that he or she will be more inclined to deal with the harder questions that follow. Some of our Blue Ribbon Panel members strongly recommend questions that get the respondents' interest near the beginning of online survey questionnaires.  **Transitions** are statements made to let the respondent know that changes in question topic or format are forthcoming. A statement such as "Now, I would like to ask you a few questions about your family's TV viewing habits" is an example of a transition statement. Such statements aid in making certain that the respondent understands the line of questioning. Transitions include "skip" questions. A skip question is one whose answer affects which question will be answered next. For example, a transition question may be "When you bake a cake, do you usually do it from scratch or do you use a box mix?" [f the person responds that he or she uses a box mix, questions asking more details about baking from scratch are not appropriate, and the questionnaire will instruct the respondent (or the interviewer, if one is being used) to skip over or to bypass those questions. "Skip" questions are tricky. It's a wise idea to check them over several times before finalizing a questionnaire. Some experienced researchers believe it's a wise idea to keep skip questions to a minimum because they are so prone to producing errors.  Deeper in the questionnaire you will find the most complicated and difficult-to-answer questions. Scaled-response questions such as semantic differential scales, Likert-type response scales, or other questions that require some degree of mental activity such as evaluation, voicing opinions, recalling past experiences, indicating intentions, or responding to "what if" questions are found here. There are at least two reasons for this placement. First, by the time the respondent has arrived at these questions, he or she has answered several relatively easy questions and is now caught up in a responding mode in which he or she feels some sort of commitment. Even though the questions in this section require more mental effort, the person will feel more compelled to complete the questionnaire than to break it off. Second, if the questionnaire is self-administered, the respondent will see that only a few sections of questions remain to be answered. That is, once he or she is through the present difficult section, the respondent will be finished. If the survey is being administered by an interviewer, the questionnaire will typically have prompts included for the interviewer to notify the respondent that the interview is in its last stages. Also, experienced interviewers can sense when respondents' interest levels sag, and they may voice their own prompts, if permitted, to keep the respondent on task.  The last section of a questionnaire is reserved for classification questions. Classification questions, sometimes called demographic questions, are used to classify respondents into various groups for purposes of analysis. For instance, the researcher may want to classify respondents into categories based on age, gender, income level, and so on. Therefore, demographic items are normally placed here. This placement is industry tradition, and it embodies the strategy of placing questions that may cause respondents to break off the survey at the end of the interview. Some respondents will consider certain demographic questions "personal," and they may refuse to give answers to questions about the highest level of education they attained or about their income level. In these cases, if the respondent refuses to answer, the refusal comes at the very end of the questioning process. If it occurred at the very beginning, the interview would begin with a negative vein, perhaps causing the person to think that the survey will be asking any number of personal questions. As a result, the respondent may very well refuse to take part in the survey at that point. |
| There are different approaches that can be taken to organizing the flow of questions in a questionnaire.  The funnel approach uses a general-to-specific flow.  The work approach is employed when the researcher realizes that respondents will need to apply different mental effort to groups of questions.  As a rule, closed-ended questions require the least work on the part of the respondent, followed by scaled-response questions. Open-ended questions are the most taxing for respondents.  A sections approach organizes questions into sets based on a common objective of the questions in the set.  No one single approach to the flow of questions is best. The best flow of questions is the one which encourages repondents to answer with valid and complete responses. | **Approaches to Question Flow**  The flow of questions we have just described is generally used by questionnaire designers, but there are at least three specific approaches to questionnaire organization that we can describe: the funnel approach, the work approach, and the sections approach. The funnel approach uses a wide-to-narrow or general-to-specific flow of questions that places inquiries at the beginning of a topic on the questionnaire that are general in nature and those requiring more specific and detailed responses later on.24  The **work approach** is employed when the researcher realizes that respondents will need to apply different mental effort to groups of questions. When questions tap responses that are deeper than simple recall, respondents must apply a higher degree of concentration in answering them. Difficult questions are customarily placed deep in the questionnaire. As a rule, closed-ended questions are easier to answer than either scaled-response or open-ended questions. Open-ended questions are thought to be the most taxing questions for respondents. In fact, some researchers recommend rarely using open-ended questions or using a minimum of open-ended questions.  As we just noted, when the respondent encounters the work questions, he or she should be caught up in the responding mode or otherwise committed to completing the questionnaire. If this is the case, the respondent will be more inclined to expend the extra effort necessary to answer them.  Perhaps the simplest format is to arrange the questions in logical sets on the questionnaire, referred to as the sections approach. A sections approach organizes questions into sets based on a common objective of the questions in the set. For example, several questions may be measuring media habits, others may be measuring frequency of purchasing different products, other sets of questions may all be measuring preferences for restaurant services and features. Sometimes the research objectives define the sections. Sections could also be based on question format. All Likert questions are placed in one section, for example. In our earlier baking example, we could have separate sections of questions for baking cakes, baking pies, baking cookies, baking from scratch, baking with box mixes, and so forth. Elsewhere on the questionnaire, the researcher may want to know respondents' opinions of baking by conventional oven, baking by microwave, and how well a certain brand of baking soda performs-all of these items can be placed in a single section in which the respondent is instructed to indicate his or her agreement with each statement along a seven-point, agree-disagree scale.  Which approach is best? There is no single questionnaire format that fits all cases. In fact, the three approaches we have just described are not mutually exclusive, and there is no reason a researcher cannot use a combination of approaches in a single questionnaire. In fact, a researcher may find that the survey topics influence the placement or approach used in question flow. However, while anyone or a combination of these approaches may be used, the guiding issue should be which approach best facilitates respondents in answering the questions. Researchers can analyze questions in any sequence they wish; it's the respondents that are important here.  As we indicated earlier, designing a questionnaire is a blend of creativity and adherence to simple, commonsense guidelines. The most important principle to keep in mind, though, is to design the questionnaire's flow of questions so as to make it respondent friendly27 by minimizing the amount of effort necessary to respond to it while maximizing the probability that each respondent will fill it out reliably, accurately, and completely.28 To achieve these results, the researcher selects logical response formats, provides clear directions, makes the questionnaire appearance visually appealing, and numbers all sections plus all items in each section. |
|  | **RECONDING THE QUESTIONNAIRE**  A final task in questionnaire design is precoding questions, which is the placement of numbers on the questionnaire to facilitate data entry after the survey has been conducted. Precodes are included as long as they are not confusing to respondents or interviewers.  The logic of precoding is simple once you know the ground rules. The primary objective of precoding is to associate each possible response with a unique number or letter. Ordinarily, a number is preferred for two reasons. First, numbers are easier and faster to keystroke into a computer file. Second, computer tabulation programs are more efficient when they process numbers. Table 11.3 illustrates code designa- |