



Writing Questions for Mail Questionnaires¹

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Questions are the basic components of a questionnaire. They are designed to collect specific pieces of information related to the general research question. The quantity and quality of information collected really depends on the quality of specific questions included in the questionnaires. If the questions are not well written, you may not get what you want, or the information may be insufficient to answer your research question. The information collected will be irrelevant and your effort, money, and time will be wasted. Well written questions should be relevant and contribute to your study. The structure of the questions should be suitable for the kinds of information sought and the choice of words should be precise to maximize the validity of data collected. Keep those factors in mind when formulating your questions:

- The Kind of Information Sought
- The Question Structure
- The Choice of Words

KINDS OF INFORMATION SOUGHT

Questions can usually be classified as requesting one or more of the following types of information.

1. What people say they want: *Attitudes*.
2. What people think is true: *Beliefs*.

3. What people do: *Behavior*.
4. What people are: *Attributes*.

Attitudes

Attitudes describe how people feel about something. Attitudes are evaluative in nature and reflect respondents' views about the desirability of something. Attitude questions require respondents to show positive or negative feelings about the "attitude object" (good vs. bad, favor vs. oppose, prefer vs. not prefer, should vs. should not, right vs. wrong, and desirable vs. undesirable). Attitude questions can be asked in a variety of ways, sensitive to wording variations and interpretation by the respondent; consequently, a series of questions (statements) is often used to provide a composite assessment of an attitude.

- Examples of three ways to state an attitude item:
 - a. Should land use planning be implemented on a county-wide basis in Sunshine County?
 - (1) YES
 - (2) NO

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b. In general, how do you feel about land use planning?

- (1) Strongly oppose
- (2) Mildly oppose
- (3) Neither oppose nor favor
- (4) Mildly favor
- (5) Strongly favor

c. Do you tend to agree or disagree with this statement?

"Land use planning is primarily for the benefit of developers."

- (1) AGREE
- (2) DISAGREE

Beliefs

Beliefs are assessments of what one thinks is true or false. There is no implied goodness or badness, only an assessment of what exists or does not exist (correct vs. incorrect, accurate vs. inaccurate, what happened vs. what did not happen). Belief questions can be expressed in a variety of ways:

- a. They can test knowledge of specific facts.
 - 1. Is this statement true or false? "The R-value of a material is a number that indicates how much 'resistance' a material presents to heat passing through it."
 - (1) TRUE
 - (2) FALSE
- b. They can ascertain perceptions about something (no "correct" answer).
 - 1. Do you think that the outlook on hog prices will result in a decrease in the number of pigs farrowed next year?
 - (1) TRUE
 - (2) FALSE

There is often a gray area between attitudes and beliefs. The following question is an example:

- To what extent is the use of illegal drugs a problem in our community?
 - (1) No problem
 - (2) A slight problem
 - (3) A moderate problem
 - (4) A serious problem

Some might respond "a serious problem" because of beliefs that illegal drugs are widely used and produce many medical problems. Others might possess no knowledge about extent of illegal drug use, but respond "a serious problem" because they feel that drug use is morally wrong. It is likely that responses would reflect both an assessment of the prevalence of illegal drug use and feelings about the moral aspects of their use.

Although sometimes gray areas may be unavoidable, it is generally desirable to try to phrase questions to fall clearly into either the attitude or belief categories.

Behavior

Questions on behavior tend to elicit answers based on respondents' beliefs about their behavior. Behavioral questions may concern what people have done in the past, are currently doing, or plan to do in the future.

Examples:

- a. Past behavior
 - Were you ever a 4-H member?
 - (1) YES
 - (2) NO
- b. Present behavior
 - Are you currently feeding silage to your dry cows?
 - (1) YES
 - (2) NO

c. Plans for future

Do you plan to add additional insulation to your home before next winter?

- (1) NO
- (2) PROBABLY NO
- (3) PROBABLY YES
- (4) YES

Attributes

Attributes are often referred to as personal or demographic characteristics. People tend to think of attributes as something they possess, rather than something they do. The usual purpose for collecting the information is to explore how the other types of information (beliefs, attitudes, and behaviors) differ for people with various attributes.

Examples:

a. What is your present age?

___ years

b. How many brood cows do you have?

c. What percent of your total farm income is derived from swine production?

- (1) Less than 10 percent
- (2) 10 to 25 percent
- (3) 26 to 50 percent
- (4) Over 50 percent

QUESTION STRUCTURE

Question structure is based on the nature of the response behavior asked of the respondent. Questions may be (1) open-ended, (2) closed-ended with ordered response options, (3) close-ended with unordered response options, and (4) partially close-ended with unordered response options.

1. Open-ended

Respondents "create" their own answers and state them in their own words.

Example:

"What should be done to improve the community?"

Using open-ended questions allows people to say something they could not say otherwise, but the responses are difficult to summarize, especially if ambiguous, and difficult to quantify, since others may have felt the same way but did not express it. Also, the questions demand of the respondents time and effort.

2. Close-ended with ordered response options

Answer choices are provided, each a graduation of a single dimension of some thought or behavior. Respondent's task is to find the most appropriate place on an implied continuum for his or her response. This type of question is used for many items, to determine attitude, belief, behavior, attributes.

Example:

"What is your present age?"

- (1) Under 25 years
- (2) 26-50 years
- (3) 51-75 years
- (4) Over 75 years

3. Close-ended with unordered response options

Answer choices are provided, but no single dimension underlies them. Respondents must choose from among distinct, unordered categories by independently evaluating each choice and selecting one that best reflects their situation. They are generally more difficult for respondents than ordered answer choices, because they often have to balance several ideas in the mind at the same time.

Example:

"What best describes the kind of house in which you live?"

- (1) Single family dwelling
- (2) Duplex or triplex

- (3) Apartment
- (4) Condominium
- (5) Mobile Home

4. Partially close-ended questions

Although options are provided, respondents also have the choice of creating their own responses. This provides for options that may have been overlooked by the researcher. However, this also creates some problems in analyses.

Example:

"Please indicate your role as a 4-H leader."

- (1) Organizational leader
- (2) Project leader
- (3) Activity leader
- (4) Other _____

Partially close-ended questions are easy for the respondent to complete and the responses they elicit provide specific information and are easy to quantify. However, the questions cannot capture the unique responses that open-ended questions can.

THE ACTUAL CHOICE OF WORDS

Writing questions would be a lot easier if we did not have to use words! The wrong choice of words can create any number of problems—from excessive vagueness to too much precision, from being misunderstood to not being understood at all, from being too objectional to being too uninteresting and irrelevant. There are no simple answers, but there are some guidelines.

Writing questions for a particular questionnaire means doing them for (1) a particular population, (2) a particular purpose, and (3) for placement next to other questions in the questionnaire. Words that are too difficult for use with some populations may be perfectly acceptable to others. A question that is fairly vague may satisfy the exploratory objectives of one study, but not satisfy the analytic ones of another. A question that makes little sense by itself may be quite clear when asked after ones preceding it in the questionnaire. The following guidelines may be helpful when wording questions.

1. Select words that are uniformly understood.

People who do surveys are more likely to overestimate than underestimate the vocabularies of respondents. Thus, it is usually important to keep wording as simple as possible. When a word exceeds six or seven letters, chances are that a shorter word can be substituted. However, shorter words can turn simple sentences into complex ones. Some groups have a particular vocabulary or "jargon," and the use of simpler words would only confuse them. Again, one must consider the audience and the type of terminology they are used to.

- Example of some words that might be substituted:

"honest" for "candid"
 "most important" for "priority"
 "free time" for "leisure"
 "work" for "employment"
 "help" for "assistance"
 "correct" for "rectify"
 "stomach ache" for "gastroenteritis"

2. Avoid abbreviations or unconventional phrases.

Usually avoid abbreviations or unconnected phrases unless they are a part of the common vocabulary of a specific respondent group. Most farmers would understand PCA, ASCS, SCS, DDT, etc., especially when used in context. However, people might not understand AMA, HUD, HRS, i.e., e.g., etc.

3. Avoid words with vague meanings.

Vague questions usually produce vague answers. People interpret vague terminology in so many different ways that their responses are equally varied. However, vagueness is a matter of degree. The issue is often deciding how much of it is useful.

- Examples of vague terms:

majority (more than one half or what?)
 regularly (daily, weekly, monthly?)
 government (state, local, federal?)
 older people (how old?)
 policies (what policies?)

4. Avoid questions that are too precise.

People may not be able to recall exact information.

- Example:

How many books did you read last year?

_____ Number

People are more likely to be able to relate to broad categories.

- Example:

How many books did you read last year?

1. None
2. 1-10
3. 11-25
4. 26-50
5. More than 50

5. Avoid biased questions.

A biased question is one that influences people to respond in a manner that does not accurately reflect their position in the investigation. A question may be biased if (1) it implies that the respondent should be engaged in a particular behavior, (2) unequal categories may be represented, and/or (3) it contains words with strong positive or negative emotional appeal (freedom, justice, socialist, bureaucrat).

- Examples of biased questions:

"The 4-H Horse Show should be held on Wednesday night of fair week, shouldn't it?"

- (1) YES
- (2) NO

"More farmers in Florida are using Braxton than any other variety of soybean. Are you using Braxton?"

- (1) YES
- (2) NO

"How would you rate the housing in which you live?"

- (1) Excellent
- (2) Good
- (3) Satisfactory
- (4) Poor

In this last example, (4) Poor is the only negative option provided.

6. Avoid objectionable questions.

Certain information may be considered quite personal. Or, a question may convey implications about which the respondents have very negative feelings or feel incriminates them. Only one or two such questions may result in a complete refusal to answer a questionnaire. Eliminate or revise the question.

- Example of an objectionable question:

"What was your gross income in 1979?"

_____ Dollars

- Example of a less objectionable question:

"Which of the following categories best describes your gross income in 1979?"

- (1) Less than \$5,000
- (2) \$5,000 to \$9,999
- (3) \$10,000 to \$14,999
- (4) \$15,000 to \$19,999
- (5) \$20,000 or above

7. Avoid questions that are too demanding.

- Examples of demanding questions:

- a. "Listed below are 25 programs carried out by Extension in Sunshine County in 1979. Please rank them from first to 25th in terms of their importance."

b. "What percent of your citrus acreage is irrigated?"

- Examples of less demanding questions:

"What is your total citrus acreage?" _____

"How many acres are irrigated?" _____

8. Avoid a double question.

Double questions ask for more than one piece of information in one question. The result confuses the respondent or makes it impossible to answer the question.

- Example:

Do you like dogs and cats?

This question asks whether respondents like dogs and cats. Suppose they like only one of them. How can they answer the question? A better way to ask the question would be to separate it into two questions:

- Do you like dogs?
- Do you like cats?

- Example:

Is the text informative and interesting?

If "informative" and "interesting" mean the same thing, then one of them should be eliminated. If they mean different things, the question is a double question. When analyzing data, it is hard to decide whether the answers given refer to both parts or only one part. Interpretation of the information collected is ambiguous.

9. Avoid a double negative.

Sometimes respondents are asked to say "yes" when the answer really means "no."

- Example:

"Should our 4-H advisory committee not meet quarterly?"

1 NO

2 YES

- The following example avoids the double negative:

"How often should our 4-H advisory committee meet?"

1 BIMONTHLY

2 QUARTERLY

3 SEMI-ANNUALLY

4 ANNUALLY

10. Don't assume too much knowledge.

Most questions assume that a certain amount of knowledge is possessed by the respondent. Respondents may be too embarrassed to admit their lack of knowledge and take a wild guess. One solution is to ask them to indicate their understanding before asking if they agree or disagree. An "uncertain" or "don't know" or doesn't apply category may be desirable.

- Example of a question that assumes too much knowledge by the respondent:

The respondent may not know the operating hours of the cannery. The following question avoids the assumption of too much knowledge by the respondent:

"Are the current operating hours of the county cannery satisfactory for your needs?"

(1) YES

(2) NO

"The current operating hours of the county cannery are 1-5 p.m. Monday through Friday. Is this schedule satisfactory to you?"

(1) YES

(2) NO

11. Word the questions technically correctly.

It is important that the information in the question be accurate, leaving no doubt that the researcher accurately comprehends the topic under investigation and that the respondent has appropriate response options to choose from.

- Example of inappropriate response options to the question:

"Which of the following herbicides do you use most often in your farming operation?"

- a. ROUNDUP
- b. DUAL
- c. CAPTAN
- d. MALATHION

Malathion and Captan are not herbicides.

SUMMARY

When writing questions it is important to give much consideration to (1) the kind of information one is seeking; (2) the question structure, and (3) the choice of words used.

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