OPEN-ENDED QUESTION

The selection of question structure is fundamental to the process of questionnaire construction. The open-ended question is one type of structure; the other, more commonly used alternative is the closed-ended question. The open-ended question does not provide answer categories. The person (respondent) who is asked an open-ended question formulates the answer and gives the response in his or her own words. Although this structure gives the respondent more freedom in crafting an answer, it also increases the cognitive effort. Without answer choices as cues to aid in understanding the question and deciding on an answer, the respondent has to perform additional cognitive tasks before he or she responds.

Reasons to Use Open-Ended Questions

All open-ended questions are alike in that the respondent is not given answer choices. However, the reasons for using this structure and the level of cognitive effort needed to respond can vary. The following are seven examples that illustrate different reasons for open-ended questions.

1. Build rapport and encourage participation. Asking an easy-to-answer question at the beginning of the questionnaire signals expressing an opinion as a benefit of survey participation and acknowledges the importance of what the respondent has to say. Sometimes initial questions used for this purpose are considered “warm-up” questions because one of the main objectives is to engage the respondent (e.g., In your opinion, what is the most important issue facing the United States today?).

2. Get factual information. When there is a wide range of answers expected to provide individual factual information, an open-ended structure can address the problem of having a list of more response choices than it is practical to include in a questionnaire. Factual information may be a request for a verbatim or for a numeric response (e.g., What is your occupation? How much do you plan to spend on holiday gifts? Last year, what was your total annual household income?).

3. Expand a list. When a closed-ended question offers a list of specific items or response choices (e.g., places where people get their news), a follow-up question asking about additional information can ensure that the pre-listed choices have not omitted any options (e.g., Are there any others?).

4. Explain a prior answer. An open-ended question can deepen the understanding of the response to a preceding question by obtaining additional details on the reason for the answer choice (e.g., Why were you satisfied/dissatisfied with your last doctor’s appointment?).

5. Establish knowledge. A test question can distinguish between more and less informed respondents to enhance the understanding of opinion formation (e.g., Who are the U.S. senators from your state?).

6. Clarify terminology. Asking respondents to define a key word in a question documents their level of understanding. It can also inform the variation in the meanings of words used among the respondents.
who gave an answer (e.g., *What does welfare mean to you?*).

7. **Explore new topics.** The questionnaire can be an opportunity to get suggestions for future survey topics that are especially salient to the respondent. In particular for longitudinal studies, this information can inform the development of future questionnaires (e.g., *Questionnaires by their nature are limited. What city services, not included in this questionnaire, should be evaluated in future surveys?*).

**Data Quality Considerations**

When an open-ended question is used, particular attention must be paid to other aspects of the survey process that can affect the data quality and are specifically related to this structure: method of data collection, coding verbatim responses, and time and expenditure trade-offs.

**Method of Data Collection**

There are two basic methods used to collect information: self-administered (the respondent self-records answers by writing on a paper questionnaire or by entering a response into a computer) and interview (the respondent answers questions that are read and then recorded verbatim by another person, i.e., the interviewer). With the self-administered method, the respondent is responsible for providing a quality answer. The types of respondent-related errors specific to the open-ended structure are (a) missing answers; (b) incomplete responses; (c) misunderstood terminology; and (d) illegible writing. The format of a self-administered paper or electronic questionnaire can provide some assistance in reducing these errors. For example, the size of the space provided is a visual cue on how much information the respondent is expected to report—a smaller space results in less information, while more information is provided when there is a larger space. When there is a request to write in numeric factual information (e.g., *What was the last date you saw your doctor?*), clear instructions on how to provide the month, day, and year will reduce the variation, and possible errors, on how respondents report this information.

An interview can reduce some of the self-administered errors because an interviewer guides the respondent; however, there are other data quality considerations that need attention. The types of errors that can result from interviewer effects are biased answers as result of leading probes; answers given in order to provide socially desirable responses; and inaccurate verbatim recording. Specific interviewer training on how to ask open-ended questions is essential to minimize these types of errors.

In general, compared to the self-administered mode, more complete and accurate information can be expected when an interview method is used. When a survey includes both methods to give respondents a choice on how to participate, the variation in responses associated with each method needs to be considered.

**Coding Verbatim Responses**

Coding verbatim responses is necessary with open-ended questions. While one of the main advantages of using an open-ended structure is getting specific, individual information, the lists of verbatim answers need to be organized to be useful for data analysis and reports. Developing numeric codes to accurately represent the verbatim responses is challenging. The quality of open-ended data is diminished when careful attention is not given to code development. Errors can also occur when a person reads a verbatim answer and has to make a judgment about the most appropriate code to assign. Thorough training on how to make these judgments improves the accuracy and the confidence in reliable coding results. When multiple people are coding verbatim responses, the quality of the data also depends on intercoder reliability. To minimize the amount of coding that is needed on a questionnaire completed with an interviewer, a list of precoded answers can be provided. While the question is still asked using an open-ended structure, the interviewer uses the precoded list to classify a verbatim answer. There are two possible sources of error associated with a list of precoded choices: the reliability of the interviewer’s judgment in selecting the appropriate answer and the accuracy of the items on the precoded list.

To obtain quality information, open-ended questions require sufficient time and financial resources to support the actions required for data quality. Time needs to be allowed when the questions are being answered and for coding the answers after the completed questionnaires are returned. A typical open-ended question can take two or three times longer for a respondent to complete than a closed-ended question because of the
cognitive process associated with formulating a response and the extra time required to record a complete, legible verbatim answer. Also, because coding is needed to organize and quantify open-ended questions for data analysis and reporting, additional time has to be allocated for this process. Including open-ended questions means additional funds are needed to provide training for interviewers and coders and for professional time used to develop a coding system and to monitor the quality of the codes.

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See also Closed-Ended Question; Coding; Interviewer Effects; Interviewer-Related Error; Mode Effects; Precoded Question; Questionnaire Design; Questionnaire Length; Respondent Burden; Respondent-Related Error; Verbatim

Further Readings