

FAQ 16: What are the best ways to construct a survey questionnaire?

What's the issue?

Writing a survey questionnaire requires care and attention to the design and wording, as well as to the means of administering the survey and recording responses, especially when the respondents are children. The answers should be reliable (i.e., they provide consistent measures in comparable situations) and valid (i.e., they correspond to what they are intended to measure). In that sense, a good questionnaire maximizes the relationship between the answers given with respect to a particular question and what the research wants to measure through that question (facts, perceptions, experiences, etc.).

Common practice

- Once survey objectives are stated explicitly, the questions to be asked should be clear.
- The questionnaire should be structured into sections that address particular issues or topics, and that follow one from the other. The first questions should be particularly interesting/easy to answer.
- It should begin with a brief introductory text, and then provide transitional statements to give a conversational tone to the interview and to help the respondents to follow the shift from one topic to the next. This contributes to the perception of the questionnaire as a “coherent whole.”
- Almost all questions in a questionnaire should be asked using a standardized format for both question and answer, in order to produce answers that can be readily compared and that the child can produce reliably.
- For each section, state whether single or multiple answers are permitted. Try to convey the same type of information in the same way throughout the questionnaire (Dillman, 2000), and use answer spaces consistently.
- Questions may be asked using either closed questions (i.e., a list of acceptable responses is provided) or open questions (i.e., no list of acceptable questions is provided). Although open questions permit the researcher to obtain unanticipated answers or answers in the respondent's own words, they take a long time to complete. Moreover, the closed questions produce more analytically useful and reliable data.
- Standard response options include agree/disagree questions (these are generally preferable to yes/no questions), and a scale is often used. A five-point scale suffices for most purposes, and it is useful to code the negative pole as “1” and the positive pole as “5”: for example, “strongly disagree”, “disagree”, “partly agree and partly disagree”, “agree”, “strongly agree”.

Pitfalls to avoid

- Format and wording pitfalls must be avoided, especially when the self-completion questionnaire is employed (common in research with children). In self-completion surveys, the formatting is even more important than in other data collection procedures, as in this case there are no trained interviewers to guide and encourage the respondents. It works best if a self-completion questionnaire is self-explanatory (no further instructions required), if only closed questions are included, and if there are few question formats (to reduce confusion). It is important that all respondents interpret the question in the same way, so words that are ambiguous or that may be understood in different ways should be avoided.
- A questionnaire is poorly designed if it is cluttered, gives too many instructions, or does not leave enough space between questions. Complex skip patterns (i.e., occasions where the question flow varies depending on the responses given) are a common fault and should be kept to a minimum (if necessary, use arrows and boxes that communicate skips without verbal instructions). The layout should clearly differentiate instructions, questions, and response options.
- If a conversational tone in the sequence of questions is omitted, children in particular may feel distant from the context and subject matter of the research. However, the tone should be fairly neutral, not judgemental or patronizing.
- For each question, any ambiguous words and concepts need to be clarified. Yet at the same time, questions need to be short and simple. Long complex questions are best handled as a series of short simple questions.

At the same time, a “multi-question approach” lengthens the questionnaire, which can lead to non-response, so consider the right amount of these.

- In order to ensure good measurement, unless measuring the knowledge is the goal of the question, all respondents should have access to the information needed to answer the question from their experience. What constitutes an adequate answer should be consistently communicated.
- Try to avoid strong negative words (forbid, ban, restrain, oppose).
- Try to avoid a long list of response choices in order not to confuse respondents.
- Overall, lengthy questionnaires should also be avoided when children are participants. It can be tiring and lower the response rates or even affect the accuracy of the answers.

Questions to consider

After a pilot test, why are some questions not answered? Are all response options used appropriately? Do some answers suggest response biases that could be corrected? How long does the questionnaire take to complete? Did all respondents understand what they were meant to do? Are all the questions really needed? What exactly is being measured with each question and how will the data be analysed?

When constructing a survey questionnaire, ask yourself three questions: (1) Can the respondent understand the questions? (2) Is the respondent able to answer the questions? (3) Is the respondent willing to answer the questions? Be cautious of using common words/expressions. To the question: “What proportion of your evening viewing time do you spend watching news programmes?”, Belson (1981) found in his research that only one-quarter of respondents interpreted “proportion” as a “part”, “fraction”, or “percentage”. About one-third saw it as quantitative such as “how long”, “how many hours”, or “how often”. A larger group tapped other dimensions entirely such as “when they watch”, “which programmes”, or “which channels”. Therefore, it is important to avoid such common words or to try to be as specific with what you mean to ask.

An example of the importance of pilot testing

Mainly because of budget and time constraints our questionnaire was designed and piloted in the country of residence of the researcher (Belgium) instead of in the country where the data collection had to take place (Chile). Moreover, the questionnaire was piloted with 1st year bachelor students instead of with school children (the actual sample population). As a consequence, the English pilot questionnaire was not really useful in revealing essential problems such as language issues present in the Spanish version. Moreover, and probably due to the fact that the questionnaire was piloted with an older university population, we were not able to detect on time that our questionnaire was too lengthy for a secondary school population. (Verónica Donoso, Belgium)

References and further resources

Belson, W. A. (1981). *The design and understanding of survey questions*. Aldershot: Gower.

Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons, Inc.

Fowler, F. J. (1993). *Survey research methods* (2nd ed.). Newbury Park, CA, London, and New Delhi: Sage Publications.

Saris, W., E., & Gallhofer, I., N. (2007). *Design, evaluation and analysis of questionnaires for survey research*. Hoboken, Wiley.