Getting The Right Answers: 10 Tips To Better Questionnaire Design (January 2010)

One may think that designing a questionnaire is easy (it's just a list of questions, right?). While some of us are able to "nail it" on the first draft, others struggle with wording, question order and other aspects of questionnaire design. Proper questionnaire construction is one of the most important steps in achieving a successful research project. Good design will aid in increasing the willingness of respondents to complete the survey, as well as improving the accuracy of data collected. The following guidelines and tips will help you to create the most effective data collection tool possible.

1. **Make sure each question is clear, reflects what you are asking and how you want it answered.**

   For example, if you ask "What is your income?" the respondent will not know whether you mean weekly, monthly, annual or pre-tax. Instead, be specific and ask, "What was your total annual household income in 2009, before taxes?" Where beneficial, always include explicit instructions to the respondent. For example, when items are to be rank-ordered, provide instructions to use each number only once.

   Avoid ambiguous words or response categories such as 'regularly' or 'often'. Instead of "Do you regularly go to a gym?" ask "How many times per week..." Don't leave anything to interpretation by respondents.

2. **Do not make the list of response choices too long and be sure they don't overlap.**

   The more choices listed, the harder it will be for the respondent to evaluate them all. This is especially important when asking respondents to rank-order a list of items.

   Numeric ranges presented to respondents should be clear, without ambiguity and mutually exclusive. Avoid response choices such as 1-5, 5-10, 10-15, etc.

3. **Do not use "emotional language" or leading questions.**

   Avoid using unnecessary adjectives and adverbs, for example, "Should the mayor spend even more tax money trying to keep the streets in top shape?" Stay away from the use of leading questions such as, "You don't drink, do you?" or, "I assume you would agree that the fire department is full of heroes?" While most violations of this rule are not going to be as blatant as the above examples, it is always a good idea to have a second, impartial party review the questionnaire keeping this in mind.

4. **Be sure each question asks about a single topic.**

   For example, "Does your company offer pension and health insurance benefits?" would be problematic for a respondent whose company offers one but not the other. The logical response in this situation would be "no." Two simpler questions are easier to answer than one tricky one.

5. **Avoid negatives - especially double negatives.**

   For example, "Do you agree that it is not a good idea to not turn in your homework?" In this example, the respondent could be unsure if they should answer "yes" or "no," even if it is clear in their mind that turning in homework on time is a good idea. The use of the double negative causes confusion. Do not expect respondents to work hard thinking about a question's intent - do the thinking for them.
6. Avoid difficult recall questions.

A respondent's memory becomes increasingly unreliable as the time frame increases. For example, instead of asking "Approximately how many times in the past year have you rented a movie from Redbox?" consider "How many times in the past month did you rent a movie from Redbox?" Or, ask about an average month and do the math yourself.

7. Put difficult or personal questions toward the end of the survey.

Question placement can have a positive or negative effect on the quality of the data that is collected. Respondents will generally be more likely to answer personal or demographic questions once they have become more comfortable with the interview. Also, sensitive questions may cause respondents to drop off before completing, so if these questions are at the end, you may be able to salvage the partial interview and use any answers that they have already provided.

8. Always proof your questionnaire for question routing (i.e. use of skip patterns).

Unclear instructions may leave the respondent confused as to what question they are supposed to answer next, possibly resulting in invalid or inaccurate data. Luckily, with increased usage of web-based surveys, this is not as much of an issue as traditional paper methodologies, since skip patterns are programmed in.

9. Consider ahead of time how to handle missing data.

- Not all respondents are willing or able to answer all questions. There are at least three ways of dealing with non-response choices such as "don't know," "not applicable," etc.:
  - Include only the desired response choices and allow respondents to skip questions to which they cannot or don't want to provide an answer.
  - Include "don't know," etc. as possible answers.
  - Use a filtering question, where the respondent is screened about the subject matter before the question is asked. This may be the best approach for a follow-up question with a very long list of choices, or for a question of a more complicated nature.

Any of these three options can be dealt with during the tabulation/analysis phase of the project; however, the last two will allow better discrimination between reasons as to why a question was not answered.

10. Keep the number of open-ended questions to a minimum.

There are advantages and disadvantages to closed and open-ended question types. Keep these in mind when designing your questionnaire. In general, closed-ended questions are quick and easy to answer, help respondents provide desired information and make for straightforward tabulation and comparison of results. Open-ended questions allow for more top-of-mind or "outside-the-box" responses and may yield unanticipated results. The main downside of open-ended questions is that data analysis can become more complicated as coding will be required to quantify the results. Open-ended questions will also lengthen the interview - an important consideration where time is at a premium.

Questionnaire design is a learned skill and requires attention to more than just what questions are going to be asked. The types of questions, wording, answer choices provided and various other factors all contribute to creation of a quality survey instrument. These tips are intended to help you to design the best questionnaire possible and enable you to collect the most accurate data for your research project.