Survey Design Best Practices

By the WPI Atlas for Development IQP Group

Surveys can be enormously powerful. They are an amazing tool for reaching large groups of people and gathering quantitative data. Putting effort into carefully designing a survey can lead to a much better response rate and far more useful data. Below are a couple of important guidelines for designing a survey as well as some common mistakes when designing survey questions and answers.

General Guidelines

Make the survey easy

Try to make your survey as easy as possible. People are much more likely to finish a short, simple, and easy survey than a long, complex, and difficult survey. Additionally, people may lose focus during a long or difficult survey and pick answers that don't necessarily represent their true thoughts. You will get more responses and better data with an easy survey.

Appreciate the people taking the survey

The people taking your survey, also called the respondents, are doing you an incredibly valuable service. Without them, there would be no point to your survey. Show your respondents respect. Motivate them to take and finish your survey by giving them some background about the goal of the survey before they begin. You don't need to go into too much detail, but make sure to briefly explain the purpose of the survey. Finally, remember to thank them.

Decide what you want to learn

Before you begin making your survey, think about the purpose of your survey. Think about who will be taking your survey and decide what you want to learn from them. Then, design your survey with this purpose in mind. This will help you decide what questions are most important to include in your survey and how you should design those questions. Besides what questions to ask, also consider how respondents should be able to answer. If you need statistics, your survey should have more multiple-choice, checklist, rating, and drop-down style questions. If you need detailed qualitative data, your survey should have more short answer and open response questions. And if a question doesn't serve the purpose of your survey, get rid of it.

Common Mistakes: Survey Questions

It is important to carefully design survey questions. Some questions can make respondents less likely to take your survey or bias their response. The following list includes some common mistakes when designing survey questions, and an example, explanation, and suggestion for how to address each.

Asking for identifying information

Example: "What is your name?" or "What country are you from?"

When people are anonymous, they are more likely to give honest feedback. To protect the respondents' privacy, avoid asking questions that might let you identify who a specific respondent is.

Fix: Remove questions that ask for identifying information.

Asking for personal information

Example: "What is your income?" or "What is your family situation?"

Questions that asked for personal information require a lot of trust in the people reading survey responses. Respondents may not be comfortable taking this type of survey if they aren't sure this information will be kept private.

Fix: Unless the questions are important to the purpose of the survey, remove questions that ask for personal information.

Asking leading questions

Example: "How much do you like movies?" or "You enjoyed the workshop, right?"

These questions bias respondents towards one kind of answer and lead to inaccurate data. Make sure questions are balanced. Try not to make assumptions within the question about a respondent or how they will answer. For example, the above questions assume that the respondent likes movies and enjoyed the workshop.

Fix: Try to frame questions as looking for the respondent's perspective instead of checking if they hold a specific opinion. One way to do this is to ask respondents how much they agree or disagree with a statement.

Asking double-barreled questions

Example: "How interesting and relevant was this workshop?" or "How colorful and fun is this toy?"

These questions ask about two different things (in this case, interesting and relevant or colorful and fun) and force respondents to pick one or the other when they answer. This makes analyzing responses to these questions very difficult.

Fix: Split the question up into two separate questions. If you don't need one of the questions, remove it.

Common Mistakes: Survey Answers

Like poorly designed questions, poorly designed answers can also dissuade respondents from taking your survey or answering honestly. The following list includes some common mistakes people make when designing survey answers and an example, explanation, and suggestion for how to address each.

Unbalanced answers

Example: (Disagree, Agree, Strongly Agree)

Presenting questions with unbalanced answers like this will bias responses because there are more ways to answer positively than negatively, or vice versa.

Fix: Make sure questions have a balanced number of each type of response.

An even or odd number of choices

Example:

How much do you agree with the following statement? I know how to change a tire. (Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree)

How much do you agree with the following statement? I like cats. (Strongly disagree, Disagree, Agree, Strongly agree)

Consider whether it is actually possible to be neutral on the topic. For example, looking at the questions above, it is difficult to imagine how someone could neither know nor not know how to change a tire, but it is reasonable that someone might not have an opinion on cats.

Fix: Add or remove the neutral choice as appropriate.

Confusing answer choices

Example: How much do you like cats? (1 to 10)

Questions with confusing answers are difficult for respondents to answer accurately. Above, it's unclear if the answer 1 means the person likes cats a lot or hates cats. Even if

the scale was labeled, an answer like 3 might still be difficult to interpret. Answers such as not all, a little, and a lot would be easier to understand.

Fix: Make sure the answers make sense based on the type of question. Label any numerical scales in your answer choices. Think about how someone would answer the question verbally.

Overlapping answers

Example: How many glasses of water do you drink a day? (1-2, 2-5, 5-10, over 10)

In the example above, someone who drinks 2 or 5 glasses of water a day would be able to honestly pick two answer choices. This makes data difficult to analyze and makes the survey more difficult.

Fix: Create new answer choices which do not overlap.

Not considering all answers

Example: How many glasses of water do you drink a day? (1-5, 6-10, 11-15, 16-20)

In the example above, someone who drinks more than 20 glasses of water a day wouldn't be able to select an accurate option. This leads to inaccurate data and makes the survey more difficult.

Fix: Make sure to consider all of the possible ways someone could answer the question and provide a choice for each.

Source: CITE SURVEY DESIGN WORKBOOK