

Survey Research | Definition, Examples & Methods

Survey research means collecting information about a group of people by asking them questions and analyzing the results. To conduct an effective survey, follow these six steps:

1. Determine who will participate in the survey
2. Decide the type of survey (mail, online, or in-person)
3. Design the survey questions and layout
4. Distribute the survey
5. Analyze the responses
6. Write up the results

Surveys are a flexible method of data collection that can be used in many different types of research.

What are surveys used for?

Surveys are used as a method of gathering data in many different fields. They are a good choice when you want to find out about the characteristics, preferences, opinions, or beliefs of a group of people.

Common uses of survey research include:

- **Social research:** investigating the experiences and characteristics of different social groups
- **Market research:** finding out what customers think about products, services, and companies
- **Health research:** collecting data from patients about symptoms and treatments
- **Politics:** measuring public opinion about parties and policies
- **Psychology:** researching personality traits, preferences and behaviours

Surveys can be used in both cross-sectional studies, where you collect data just once, and in longitudinal studies, where you survey the same sample several times over an extended period.

Step 1: Define the population and sample

Before you start conducting survey research, you should already have a clear research question that defines what you want to find out. Based on this question, you need to determine exactly who you will target to participate in the survey.

Populations

The **target population** is the specific group of people that you want to find out about. This group can be very broad or relatively narrow. For example:

- The population of Brazil
- US college students
- Second-generation immigrants in the Netherlands

- Customers of a specific company aged 18-24
- British transgender women over the age of 50

Your survey should aim to produce results that can be generalized to the whole population. That means you need to carefully define exactly who you want to draw conclusions about.

Several common research biases can arise if your survey is not generalizable, particularly sampling bias and selection bias. The presence of these biases have serious repercussions for the validity of your results.

Samples

It's rarely possible to survey the entire population of your research – it would be very difficult to get a response from every person in Brazil or every college student in the US. Instead, you will usually survey a **sample** from the population.

The sample size depends on how big the population is. You can use an online sample calculator to work out how many responses you need.

There are many sampling methods that allow you to generalize to broad populations. In general, though, the sample should aim to be representative of the population as a whole. The larger and more representative your sample, the more valid your conclusions. Again, beware of various types of sampling bias as you design your sample, particularly self-selection bias, nonresponse bias, undercoverage bias, and survivorship bias.

Step 2: Decide on the type of survey

There are two main types of survey:

- A **questionnaire**, where a list of questions is distributed by mail, online or in person, and respondents fill it out themselves.
- An **interview**, where the researcher asks a set of questions by phone or in person and records the responses.

Which type you choose depends on the sample size and location, as well as the focus of the research.

Questionnaires

1. **Mail**
2. **Online**
3. **In-person**

Sending out a paper survey by mail is a common method of gathering demographic information (for example, in a government census of the population).

- You can easily access a large sample.
- You have some control over who is included in the sample (e.g. residents of a specific region).

- The response rate is often low, and at risk for biases like self-selection bias.

Interviews

Oral interviews are a useful method for smaller sample sizes. They allow you to gather more in-depth information on people's opinions and preferences. You can conduct interviews by phone or in person.

- You have personal contact with respondents, so you know exactly who will be included in the sample in advance.
- You can clarify questions and ask for follow-up information when necessary.
- The lack of anonymity may cause respondents to answer less honestly, and there is more risk of researcher bias.

Like questionnaires, interviews can be used to collect quantitative data: the researcher records each response as a category or rating and statistically analyzes the results. But they are more commonly used to collect qualitative data: the interviewees' full responses are transcribed and analyzed individually to gain a richer understanding of their opinions and feelings.

Step 3: Design the survey questions

Next, you need to decide which questions you will ask and how you will ask them. It's important to consider:

- The type of questions
- The content of the questions
- The phrasing of the questions
- The ordering and layout of the survey

Open-ended vs closed-ended questions

There are two main forms of survey questions: open-ended and closed-ended. Many surveys use a combination of both.

Closed-ended questions give the respondent a predetermined set of answers to choose from. A closed-ended question can include:

- A binary answer (e.g. *yes/no* or *agree/disagree*)
- A scale (e.g. a Likert scale with five points ranging from *strongly agree* to *strongly disagree*)
- A list of options with a single answer possible (e.g. age categories)
- A list of options with multiple answers possible (e.g. leisure interests)

Closed-ended questions are best for quantitative research. They provide you with numerical data that can be statistically analyzed to find patterns, trends, and correlations.

Open-ended questions are best for qualitative research. This type of question has no predetermined answers to choose from. Instead, the respondent answers in their own words.

Open questions are most common in interviews, but you can also use them in questionnaires. They are often useful as follow-up questions to ask for more detailed explanations of responses to the closed questions.

The content of the survey questions

To ensure the validity and reliability of your results, you need to carefully consider each question in the survey. All questions should be narrowly focused with enough context for the respondent to answer accurately. Avoid questions that are not directly relevant to the survey's purpose.

When constructing closed-ended questions, ensure that the options cover all possibilities. If you include a list of options that isn't exhaustive, you can add an "other" field.

Phrasing the survey questions

In terms of language, the survey questions should be as clear and precise as possible. Tailor the questions to your target population, keeping in mind their level of knowledge of the topic. Avoid jargon or industry-specific terminology.

Survey questions are at risk for biases like social desirability bias, the Hawthorne effect, or demand characteristics. It's critical to use language that respondents will easily understand, and avoid words with vague or ambiguous meanings. Make sure your questions are phrased neutrally, with no indication that you'd prefer a particular answer or emotion.

Ordering the survey questions

The questions should be arranged in a logical order. Start with easy, non-sensitive, closed-ended questions that will encourage the respondent to continue.

If the survey covers several different topics or themes, group together related questions. You can divide a questionnaire into sections to help respondents understand what is being asked in each part.

If a question refers back to or depends on the answer to a previous question, they should be placed directly next to one another.

Step 4: Distribute the survey and collect responses

Before you start, create a clear plan for where, when, how, and with whom you will conduct the survey. Determine in advance how many responses you require and how you will gain access to the sample.

When you are satisfied that you have created a strong research design suitable for answering your research questions, you can conduct the survey through your method of choice – by mail, online, or in person.

Step 5: Analyze the survey results

There are many methods of analyzing the results of your survey. First you have to process the data, usually with the help of a computer program to sort all the responses. You should also clean the data by removing incomplete or incorrectly completed responses.

If you asked open-ended questions, you will have to code the responses by assigning labels to each response and organizing them into categories or themes. You can also use more qualitative methods, such as thematic analysis, which is especially suitable for analyzing interviews.

Statistical analysis is usually conducted using programs like SPSS or Stata. The same set of survey data can be subject to many analyses.

Step 6: Write up the survey results

Finally, when you have collected and analyzed all the necessary data, you will write it up as part of your thesis, dissertation, or research paper.

In the methodology section, you describe exactly how you conducted the survey. You should explain the types of questions you used, the sampling method, when and where the survey took place, and the response rate. You can include the full questionnaire as an appendix and refer to it in the text if relevant.

Then introduce the analysis by describing how you prepared the data and the statistical methods you used to analyze it. In the results section, you summarize the key results from your analysis.

In the discussion and conclusion, you give your explanations and interpretations of these results, answer your research question, and reflect on the implications and limitations of the research.