

Survey and Questionnaire Design

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The aim of a survey is to collect information that is accurate, reliable and valid. This guide offers some simple design principles regarding the structure and layout of a survey, and ask the right questions.

Why use Surveys?

Before doing a survey, you should ask:

- What are the objectives of the survey?
- Are there specific questions to consider?
- Is it worthwhile doing a survey?
- Has a similar survey already been done?
- Are there other data sources that could be useful?
- Is a survey the best way of getting the information required?
- Are there any ethical implications?

Types of Surveys

There are a number of different types of surveys. The advantages and disadvantages of each should be weighed up before choosing which is appropriate:

	Advantages	Disadvantages
Postal Surveys	<ul style="list-style-type: none"> • Wide distribution • Low cost • No interviewer bias 	<ul style="list-style-type: none"> • Low response rate • Not suitable for everybody • Questions need to be short and simple
Face-to-face Interviews	<ul style="list-style-type: none"> • Higher response rates • Good for asking closed and open questions • Can get fuller replies 	<ul style="list-style-type: none"> • High cost • Time consuming • Interviewer bias
Telephone Interviews	<ul style="list-style-type: none"> • Low cost • Quick • Good response rate 	<ul style="list-style-type: none"> • Can't reach everyone • Limit question categories • Not for sensitive questions
Online Surveys	<ul style="list-style-type: none"> • Low cost • Quick • High response rate 	<ul style="list-style-type: none"> • Respondent bias • Not suitable for everybody • Questions need to be short and simple, clearly routed

Introducing a survey

The introduction to a survey by letter, telephone or face-to-face should include:

- Who is doing the research
- What the research is for
- Enough information to inform a decision about taking part
- Assurance that responses will be treated in confidence

Survey Design

It is important to get survey design right as it affects the number of responses, the data quality, and also how data will be handled once returned.

Structure and Layout

- Surveys should be well spaced
- Questions should be numbered
- Question responses should not be split across pages
- Instructions for each question should be clear
- Answers should allow irrelevant questions to be skipped
(This is known as routing and should be kept to a minimum)
- Answer categories should be boxes or numbers, presented in columns

Question Order

- First questions should be easy, short, interesting, and apply to everyone
- Questions on the same subject should be grouped together
- Sensitive questions should be placed late in the sequence
- Demographic questions (age, gender etc.) should be placed at the end

Question Wording

- Use every day language, not technical jargon
- Avoid asking multiple questions
- Use existing questions from other surveys or question banks.
(This is useful for standardising questions about age or ethnicity)
- Avoid leading questions
- Avoid questions that rely heavily on memory

Types of question

There are two main types of question that can be used in a survey: open-ended or closed questions.

Open-ended question (Qualitative)

Respondents answer the questions in their own words. This type of question is used to explore the views of the respondents and results in good **quality** information.

Question type	Comment	Example
Completely open-ended	Exploratory question with a wide range of answers and therefore difficult to process	<i>What do you think is the main issue for your local area?</i>
Directed open-ended	More focused question	<i>What town do you live in?</i>
Restricted open-ended	Very focused and usually a number	<i>How many children do you have?</i>

Closed questions (Quantitative)

Respondents choose from a list of options (can also include 'Other'). This is used to count the number of responses in different categories, in other words, the **quantity** of the information.

Question type	Comment	Example
Dichotomous	Yes/No response (can also include don't know)	<i>Do you receive Child Benefit?</i> Yes/No
Multiple-choice	Offers mutually exclusive and exhaustive list of choices – items should not overlap and should cover every possibility	<i>How far is your home from the nearest bus stop? (choose one)</i> Less than 1 mile 1 1 – 5 miles 2 More than 5 miles 3
Rank order rating scale	Give scores out of a total	<i>For each mode of public transport, please give a score from 1 to 5 on its reliability (1 is very unreliable, 5 is very reliable)</i> Bus 1 2 3 4 5 Train 1 2 3 4 5
Itemised rating scale	Used for attitudes or to describe something on an interval scale.	<i>How satisfied are you with the local bus service? (choose one)</i> Very satisfied / Fairly satisfied / Fairly dissatisfied / Very dissatisfied / Don't know

Analysing the Data

Before collecting the data, consideration must be given to how the data is to be analysed.

Closed questions produce **frequencies**, the number of times that respondents have answered a question in a particular way. **Cross-tabulations** can then be used to see if, for example, males or females differ in the way that they answer a question.

Open questions can be more difficult to analyse. Answers should be categorised systematically. The variety and content of responses is of more interest than the quantity of responses.

Piloting Survey Questions

It is always a good idea to test out survey questions in what is known as a 'pilot' in order to check that the design of the survey works in practice. It will highlight any problems that people may have in filling in the questionnaire and provide information to help improve the design of the survey. Some questions to think about are:

- Do you get the information you want from the questions asked?
- Are questions clear? If there are lots of missing results, this shows that they may not be
- Is the layout easy to follow?
- How long does the survey take to complete?
- Are there additional answers to pre-coded questions that could be added at this stage?

Who is the target audience for the survey?

Identifying a target audience and selecting people to receive the survey is known as **sampling**. It is important to be aware of how representative (or not) the sample is for the group of people that being targeted, as this can affect the conclusions that drawn from it or how widely the results can be generalised. Generally, the larger the number of responses, the smaller the sampling error, and the more confidence there is in the accuracy of the results.

Summary

Surveys are a useful way of gathering information. However, it is important that:

- Objectives are clear
- The right questions are asked
- The survey is easily understood and completed

References

Barclay, C (2004) KnowHow: Survey and Questionnaire Design

Social Research Association (2002) Better Questionnaire Design Training Course