

QUESTIONNAIRE DESIGN

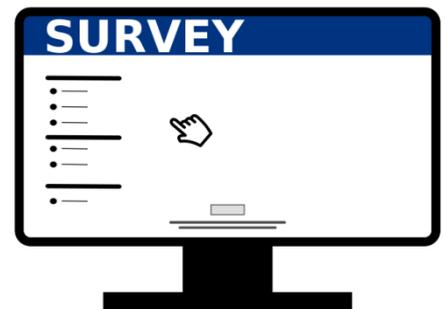
This Advice Sheet introduces you to the some of the basics of designing a good questionnaire.

Many research projects and dissertations demand the collection of primary data from individuals. Questionnaires are often the best way of gathering such information and views. However, a badly designed questionnaire may get only unusable responses or none at all. This Advice Sheet offers guidance on avoiding the pitfalls and ensuring a successful result.

What do you want to know?

Before you even write the first question, it is important that you have a very clear idea about what you want your questionnaire to achieve. Write down your research goals and think about what information you need to elicit from respondents to meet those goals.

Think also about how you are going to analyse each question to get the results you need. Remember there is a difference between things you need to know, and those it would be nice to know. Eliminate unnecessary lines of questioning at the planning stage.



Maximise your chances of success

The aim of questionnaire design is to a) get as many responses as you can that are b) usable and accurate. To maximise your response rate:

- Give your questionnaire a short and meaningful title
- Keep the questionnaire as short and succinct as possible
- Offer incentives for responding if appropriate
- Be creative – use different colours and images to make it attractive
- Make it convenient

Who should you ask?

It may not be possible to survey every person who could provide a useful response to your questionnaire. In such cases, you will need to choose a sample from your population to survey.

Population: *all the members of the group you are interested in.*

Sample: *the subset of the population selected to receive the questionnaire*

Respondents: *the subset of the sample that actually complete and return the questionnaire*

When choosing your sample make sure it is representative of the population you are studying. For example, does it cover all ages, socio-economic groups, genders, etc.

Clear instructions

Maximise your response rate by providing clear information and instructions as follows:

- State who you are
- Outline what the purpose of the survey is and why their response is important
- Explain how answers will be treated with confidentiality and anonymity (unless agreed with the respondent)
- Provide clear instructions as to how each question should be answered – e.g. whether you are expecting one or more answers, or whether answers should be ranked – and if so, is 1 high or low?
- How to return the questionnaire and by what date

Types of question

There are many different types of question you can use to get the information you need. In the main, these fall into **open** and **closed** questions.



An open question allows the respondent to use their own words to answer, e.g. *“what do you think are the main causes of racism?”*.

A closed question gives them pre-defined options, e.g. *“which of the following do you think are the main causes of racism: A,B,C or D?”*.

Open questions	Closed questions
Elicit “rich” qualitative data	Elicit quantitative data
Encourage thought and freedom of expression	Can encourage ‘mindless’ replies
May discourage responses from less literate respondents	Are easy for all literacy levels to respond to
Take longer to answer and may put some people off	Are quick to answer and may improve your response rate
Are more difficult to analyse – responses can be misinterpreted	Are easy to ‘code’ and analyse

General principles when writing questions

- **Avoid leading questions** - *“Wouldn’t you say that...”, “Isn’t it fair to say...”*
- **Avoid ambiguity** – ensure your questions are not open to interpretation. For example, *“If the man plays tennis with his brother and he’s a regional champion, is he likely to win?”* is ambiguous because we do not know which brother is the

regional champion. Also, the word 'likely' is too imprecise and may be interpreted differently by each respondent. Avoid words like "regularly", "often" or "locally" for the same reason. Questions must be clear, the wording specific and mean the same thing to all respondents. Otherwise, your survey results will be invalid.

- **Avoid jargon and colloquialisms** - ensure your language caters for all levels of literacy. Remember, for some respondents, English may be their second language.
- **Avoid double-barrelled questions** – e.g. *“Do you enjoy playing badminton and tennis?”* If only one response is permitted, what about respondents who enjoy one of these sports but not the other? Ask for one piece of information at a time.
- **Avoid double negatives** - e.g. asking respondents whether they agree with the statement, *“Is there **never** a valid reason for **not** giving up smoking?”* The use of two negative words, **never** and **not**, in the same sentence cancel each other out and make this a positive statement. Better to write, *“Is there a valid reason for not giving up smoking?”*
- **Minimise bias** - people sometimes answer questions in a way they perceive to be socially acceptable. Make it easy for respondents to admit social lapses by wording questions carefully. For example, *“How many times have you broken the speed limit because you were late?”* could be rephrased, *“Have you ever felt under pressure to drive over the speed limit in order to keep an appointment?”* Then you could ask, *“How many times have you prioritised the appointment over keeping the speed limit?”*
- **Handling difficult or embarrassing questions** - to encourage a greater response to difficult questions, explain why you need to know that information. E.g., *“It would be very helpful if you could give us some information about yourself to help us put your answers in context.”*
- **Ensure options are mutually exclusive** - e.g. *“How many years have you worked in academia: 0-5, 6-10, 11-15, over 15.”* Not, *“0-5, 5-10, 10-15...”*

Question order

Once you've got your list of questions, you need to think about the order in which they appear. Here are some general principles:

- **Put the most important items in the first half of the questionnaire or interview** - many people don't complete questionnaires. This will ensure you get the most significant data from non-finishers.
- **Don't start with awkward or embarrassing questions** - respondents may just give up.
- **Start with easy and non-threatening questions** - this encourages respondents to carry on with the questionnaire.
- **Go from the general to the particular.**
- **Go from factual to abstract questions.**
- **Go from closed to open questions.**
- **Leave demographic and personal questions until last.**

Layout and design

The appearance of your questionnaire will go a long way towards encouraging (or discouraging) responses. Always allow enough room for respondents to answer questions. Use clear headings and numbering if appropriate. Think about including pictures if this helps to explain what you are asking about.



Electronic versus print questionnaires

When your entire target population has access to email, it is tempting to send a questionnaire electronically for speed and convenience. However, there are some drawbacks to using email for circulating questionnaires and you need to weigh up the pros and cons. For example, although quick and cost-free to send they may be viewed as spam and deleted. They can be sent to large numbers of people but if emailed to discussion lists, you may have no idea of the sample size and likely response rate. It can also be difficult to encourage respondents to complete the whole survey. Similarly, print copies have their associated pros and cons. They can be time-consuming and costly to produce but may be perceived as more anonymous than electronic, thereby encouraging respondents to answer more honestly. If completed face-to-face respondents can be encouraged to answer all questions.

Piloting your questionnaire

Having created your questionnaire, it is important that you test it out on a small target group before you circulate it more widely. This will not only help you pick up any typing errors, but also highlight any ambiguity in the wording of your questions. You may also discover that in order to analyse the data in the way you want, you will need some extra questions. Or you may find out that some questions are not necessary. Give your pilot group the same information – and a deadline!

Further reading

Further resources on questionnaire design can be found at:

<http://www.lboro.ac.uk/services/library/students/learningsupport/topics/questionnairedesign/>

All study advice sheets are available to view and download on the Library website:

<http://www.lboro.ac.uk/services/library/students/learningsupport/adviceandplanningsheets/>



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