# **QUESTIONNAIRE DESIGN**



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# What is a Questionnaire?

A questionnaire is a tool for gathering information from individuals or organizations. Questionnaires can be used to measure opinions, attitudes, behaviours, and perceptions on specific topics. They can also be used to collect demographic and background information. A well-designed questionnaire is essential for successful survey research (see our "Survey Research Methods" Tip Sheet for more information on survey research).

# What is a Questionnaire Item?

Each question or statement that appears in a questionnaire is called an "item." The wording and position of each item needs to be carefully considered because it can influence the answers you receive.

## Item Format

Questionnaire items can be either open-ended or closedended. A questionnaire usually includes both types of items so that participants can express their views in different ways.

**Open-ended items** ask respondents to answer in their own words. For example: "Why do you volunteer?" The information gathered from open-ended items is qualitative and requires qualitative analysis such as categorizing, coding, and searching for patterns and themes. Some qualitative data can be coded and analyzed like quantitative data.

Closed-ended items ask respondents to select an answer from a list that is provided. For example: "Which of the following is the main reason you volunteer?" Closed-ended items provide quantitative data that can be analyzed using a software program such as Excel or SPSS. The answers to close-ended items can take many different formats (see table for examples).

Examples of Closed-Ended Questions
Dichotomized responses:
Have you ever volunteered?
Yes No
List of possible responses:
How did you become involved in volunteering (select all that apply)?
I was asked by someone in the organization
I was asked by a friend or relative outside the organization
I approached the organization myself
☐ I am a member of the organization
My child or spouse is involved
Other, please specify:
List of possible categories:
How many people volunteered for your organization
over the past 12 months?  None
1 to 24
25 to 74
75 to 199
200 or more
Measurement Scale:
My organization supports the involvement of
volunteers.
Strongly agree
Somewhat agree Agree
Somewhat disagree
Strongly disagree

# Item Wording and Order

## Questionnaire items should:

- be easy to read and understand,
- probe one piece of information only,
- be related to the topic of the questionnaire,
- ask for information that respondents can provide with some degree of accuracy, and
- be free from bias and not lead respondents to any particular answer e.g., identifying a powerful person's ideas or referring to a prestigious agency can bias responses).

## Questionnaires should be organized so that:

- the items are arranged in a logical sequence, and
- the first few items are interesting, easy to answer, and not particularly personal or sensitive.

# Steps in Questionnaire Design

## Step One - Research questionnaire items:

- 1. Identify the topics you wish to gather data on.
- 2. Do some research to find out if other people have studied these topics using questionnaires and, if so, what type of questionnaire items they have used.

## Step Two – Determine the format of questions:

- 1. Identify items that should be in a closed-ended format and develop response options or measurement scales for these items.
- Identify items that should be in an open-ended format and decide how you will analyze the responses.
- 3. Arrange the items following the tips above.

#### Step Three – Test and finalize the questionnaire:

- Administer the questionnaire to a small group of people and ensure that:
  - a. it does not take too long (not longer than 30 minutes) to complete,
  - respondents understand all items,
  - all items are free of bias, and

- d. your measurement scales are appropriate and provide sufficient data for analysis.
- 2. Create a mock data set and analyze it to ensure that you can perform the analyses you require.
- 3. Revise the wording and order of items and length of the questionnaire as necessary.

## **Checklist for Designing a Questionnaire**

- Have you identified topics that require a questionnaire for gathering information? Are your questionnaire items clear and easy to understand? Are your items free of bias? Is each item focused on a single piece of information? Have you decided on the format for each item (open-ended or closed-ended)? Are you using appropriate measurement scales for closed-ended items? Is there a logical sequence to the order of the items?
- For More Information

data analysis?

Alreck, P.L., & Settle, R.B. (2004). The Survey Research Handbook (3rd ed.) McGraw Hill Irwin.

Have you planned for quantitative and qualitative

Athabasca University Centre for Psychology

Have you tested the questionnaire?

Resources. www.cc.gatech.edu/classes/cs6751\_ 97\_winter/Topics/quest-design/

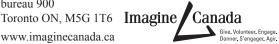
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Funded through the Community Participation Directorate of the Department of Canadian Heritage as part of the Canada Volunteerism Initiative. The views expressed in this publication do not necessarily reflect those of the Department of Canadian Heritage.

