

Designing a questionnaire

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Outline

- What is questionnaire
- Preparation steps for designing a questionnaire
- Formulating questions.
- Sequencing of the questions.
- Formatting of the questionnaire.
- Methods of administrating the questionnaire.
- Problems of response.

What is questionnaire

- Questionnaire is an objective mean to gather information from the respondents to answer the research questions.
- It is a very convenient way of collecting information from a large number of people within a period of time.
- The design of the questionnaire is of utmost importance to ensure accurate data is collected.

Formulating questions

- It is crucial to know how to ask the questions in written and spoken form.
- The way you ask the questions determines the answers.
- The question, as a rule, has to be broken up into different parts and made so specific that all respondents focus on the same thing.

Closed-end questions

- They are more common and form the basis for most standardized measures.
- Provide options to the respondents and require them to choose one or more items from the list.
- It is preferred if the range of answers are well known and the options are limited.

Closed-end questions: Advantages

- Quick.
- Easy to answer.
- Easier for analysis.
- The list of possible answers often helps to clarify the meaning of the questions.

Closed-end questions: Disadvantages

- Leading questions.
- The potential responses listed by the researcher may not include an answer that is most appropriate for a particular respondent.

Types of closed format

- **Choice of categories**

For example, “What is your marital status?”

Single, Married, Divorced, Widowed

- **Likert style scale**

For example, “Statistics is an interesting subject”

Strongly disagree, Disagree, Cannot decide, Agree and Strongly agree.

Types of closed format

- **Differential scales**

For example, “How would you rate the presentation?”

Extremely dull 1 2 3 4 5 6 7 8 9 10 Extremely
interesting

Types of closed format (Cont.)

- **Checklists:**

For example, “Circle the clinical specialties you are particularly interested in”

General medicine

General surgery

Ophthalmology

Paediatrics

Obstetrics and gynecology

Orthopaedics

Accident and emergency

General practice

Types of closed format (Cont.)

- **Ranking:**

For example, “Please rank your interests in the following specialties” (1= most interesting, 8= least interesting)

General medicine

Obstetrics and gynecology

General surgery

Orthopaedics

Ophthalmology

Accident and emergency

Paediatrics

General practice

Open-ended questions

- Useful when it is important to hear what respondents have to say in their own words.
- Allow the respondent to express their opinions freely and they are not restricted by the options.
- It is preferred if the answer options are multiple and unknown.

Open-ended questions(Cont.)

- Can form the bases for more structured items in a later phase.
- They require qualitative method to code and analyze the responses, which take more time and subjective judgment than coding closed ended questions.

e.g.: what habits do you believe increase a person's chance of having a heart attack?

Sequencing the questions

- The sequence of questions must be logical to the respondents and flow smoothly from one question to the next.
- At the beginning of the interview a limited number of questions concerning ‘background variables’ (e.g., age, education, marital status) may be asked.
- Questions tend to flow from:
 - General to specific.
 - Impersonal to personal.
 - Easy to difficult.

Formatting the questionnaire

Cover page :

- Code No.
- Title of the study
- A brief introduction.
- Explaining the purpose of the study.
- Requesting the informant's consent.
- Assuring confidentiality of the data obtained.
- Put instructions.

Formatting the questionnaire(Cont.)

- Put the questions and answer choices in attractive way.
- All aspects of wording should be consistent .
- Questions in similar area should be grouped together.
- Use large font size for old people and for those with visual problems.
- Use simple words, clear and short questions.
- Put heading for major subjects.

Formatting the questionnaire(Cont.)

- If the questionnaire is long, you may use subheadings for groups of questions.
- Neat format with plenty of space is more attractive & easy to use.
- For closed ended questions this will prevent overlap during circling or ticking a response.
- For open ended questions, more space is needed for people with large handwriting.
- Boxes for pre-categorized answers are placed in a consistent manner.

Translation of the questionnaire

- If interviews will be conducted in one or more local languages, the questionnaire should be translated in order to standardize the way questions will be asked.

Pilot test of the questionnaire

- Pilot test is a crucial step in the design of questionnaire before data collection begins.
- It will help to detect flaws in the questionnaire in terms of content, grammar and format.

Methods of administering questionnaire

- Directly to the person: It allows the researcher to explain the instructions.
- Electronic questionnaires: Immediate response, data collected easily and enter directly into database. Only clean data are received.
- Mailed questionnaires: Less likely to be returned

Selecting an existing questionnaire

- Before developing a new measure, identify existing instruments that measure the construct of interest.
- It is possible to use already available questionnaire for your study.
- It is more cost effective than starting from scratch to develop and validate an instrument.

Problems with response

Fatigue / disinterest:

- Agree with everything.
- Just say 'don't know'.
- Always choose first response.
- 'randomly' respond without considering the question.
- Aversion to extreme ends of the scale.

Problems with response(Cont.)

How to minimize fatigue / disinterest:

- Keep questions simple.
- Keep words short and easy to understand.
- Maintain motivation of participants.
- Ensure task is relevant.

References

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Thank You