

Questionnaire & Survey Techniques

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Last update: Jun 16, 2025

Outlines

- Introduction
- Question formats
- Writing questions
- Administration methods

Learning outcomes

- Understand the basics of a questionnaire
- Identify different question formats
- Understand the principles in writing questions
- Identify methods of questionnaire administration

Questionnaire

- A structured document that is used to collect information from respondents about themselves or others
- Scientific instrument for measurement for data collection
- Relatively less expensive way of collecting data
- Collection of questions

Questionnaire

- Options
 - Take from well-established questionnaires
 - Translate from well-established questionnaires
 - Develop own self from discussion, other research or literature reviews
- Development of a new questionnaire need:
 - Skill, experience, careful thought & practical testing

Aims

- Information required?
- Standardization in obtaining information?
- Simple to conduct?
- Time?
- Cost?

Question formats

- Open-ended: no response option is given
- Close-ended: comprehensive response options are given

Open-ended questions

- Fill in the blank
- Allows many possible responses
- Freedom to respondents to explain and elaborate answers

Open-ended questions

Name: _____

Date of birth: __ / __ / ____

Number of children: ____

Occupation (please specify): _____

For the past 1 week, on average how long did you spend for exercise per day?
_____ minutes.

What is your opinion on [...]?

Open-ended questions

- Disadvantages:
 - Difficult to analyze and summarize
 - Time consuming

Close ended questions

- Fixed, predetermined, standardized responses
- Give clue to respondent as to how to answer
- Quicker and easier to answer
- Easy for data entry, analysis, interpretation
- Must include ALL possible responses – should be comprehensive, exhaustive and mutually exclusive

Close ended questions

- Choices:
 - Dichotomous (Yes/No)
 - Multiple choice
 - Checklist
 - Ranking of response options
 - Rating
 - Likert Scale
 - Visual analog scale

Close ended questions

I am diabetic: Yes/No

Gender: Male [] Female [] Rather not say []

Food categories for past 1 week:

Grains [] Poultry [] Vegetable [] Fruits []

Rank your favourite food from 1 (most preferred) to 5 (least preferred):

Nasi ayam [] Nasi goreng [] Nasi dagang [] Nasi kerabu [] Nasi kandar []

Please rate your experience using App XYZ:

[1] [2] [3] [4] [5] [6] [7]

I love ayam percik.

Strongly Disagree [] Disagree [] Neutral [] Agree [] Strongly Agree []

Please rate your boredom level right now:

|-----|
I'm fine, thank you I'm falling asleep

Close-ended questions

- Disadvantages:
 - Leading questions
 - Do not allow explanation and elaboration of answers
 - Limit respondent to the provided response options
 - Risk of missing responses – when the options given are not extensive

Writing questions

- Principles:
 - Consistent meaning
 - Expected response
 - Ability to response
 - Willingness to response
 - Same type & mode of administration

Consistent meaning

- Meaning as understood by respondent, other respondent and researcher itself should be similar.
- Simple, clear, straight-forward words.
- Language level suitable for respondent.
- No “OR” – multiple concepts.
- No ambiguous term “kadang-kadang” vs “jarang-jarang”. Specify frequency.
- Overlap. “w/in 1 year” vs “w/in 2 years”?

Expected response

- Be specific.
- Open-ended question may suffer.
- “When?” could mean age, date, year, period of time etc.

Ability to response

- Ask something that respondent can easily recall and answer.
- “How many cigarette have you smoked for the past 10 years?”

Willingness to response

- Ask something that respondent can provide answer honestly.
- Respondent may withhold the information or answer dishonestly. Socially desirable answer.
- “Have you ever robbed anyone? Yes/No”
- “I never ever lie to anyone? Yes/No”

Consistent way of asking

- The way interviewer ask question should be standard
- The way respondents answer the questionnaire is similar – self-administered vs guided, pen-and-paper vs online form
- The form of presentation of questionnaire similar for all – format, method

Tips

- Sensible, brief, relevant
- Good sequence
 - At the beginning, need an introductory explanation e.g. who are you, purpose of study, confidentiality, instruction
 - Start with easier questions, usually socio-demography
 - Sensitive questions towards the end

Administration methods

- Self-administered
- Interviewer administered
- Interviewer guided

Self-administered

- Must be able to read
- More efficient and uniform way to administer questions
- High response rate, minimum interviewer bias
- Question sequence
 - Start with easy non-personal / broad question then progressively narrows down the scope until it comes to very specific

Self-administered

- Need to be self explanatory
- Filter questions
- Open or close questions
- Should aims to get information with minimum distortion
- Close question easier & can be attitudinal or factual

Interviewer administered

- Need a good rapport, to enforce motivation from respondent
- Interview can be flexible and can be adapted as they progress, but questionnaires are fixed and cannot be change once the survey has started
- Interviewer bias
 - Respondents react differently to different interview styles and answer in biased manners

Interviewer administered

- Flexibility in interview
 - Can ask further explanation
 - Observe reactions
- Cost more for interview
 - Time
 - Money
 - Logistic e.g. place for privacy to conduct the interview
- Low intelligence / education
 - Better interview
- Poor completeness response for self-administered questionnaires

Interviewer administered

- Interview is better for collecting answers to complicated questions that require explanation or guidance
- Ensure completeness
- Response depends on rapport
- Respondent's tendency to give socially acceptable answers
- Need interviewer skills

Interviewer guided

- Mixed between self-administered + interview
- Better for complicated questions that require explanation or guidance
- Respondents read and response on their own, but free to ask and clarify ambiguous questions

References

- McDonald, J. A., Burnett, N., Corodano, V. G., & Johnson, R. L. (2003). Questionnaire design. Georgia: Division of Reproductive Health.

Acknowledgment

- This lecture note was adapted from the original lecture note by Prof. Dr. Norsa'adah Bachok, 2023