Questionnaire Development

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Outlines

- 1.Development
- 2. Designing questions and responses
- 3.Pre-survey evaluation

- Why we want to measure?
- What we want to measure?
- Who we want to measure?
- How we want to measure?

- Objective?
 - **— ???**
- Outcomes?
 - 555
- Target?
 - 333
- → Content.

Content

Content

- Focus on the study objectives. [Why?]
- Focus on the outcomes. [What?]
- Sources:
 - Expert opinion.
 - Focus groups.
 - Qualitative studies.
 - Literature theories & research findings.

How we want to measure?

- Types of questionnaires.
- Methods of administration.
- Types of questions and response options.

Types of Questionnaires

Types

- 1.Self-administered
- 2.Interviewer-administered

Methods of administration

Methods of administration

1.Self-administered:

- Pen-and-paper direct, mail.
- Computerized Google Form, Survey Monkey, pdf Form.

2.Interviewer-administered

- In-person interview
- Phone

Types of questions

Questions

- Types:
 - Open
 - Closed

Open

Open ended questions.

- Fill in the blank self-administered.
- Short answer, elaborate interviewer-administered.

Closed

Choices:

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

Designing questions and responses

Design Objectives

- To ensure quality response, 5 general objectives (McDonald et al., 2003):
 - 1. Consistent meaning.
 - 2.Expected response.
 - 3. Ability to response.
 - 4. Willingness to response.
 - 5. 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 "jarangjarang". 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"

Same types, modes and methods of administration

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

Pre-survey evaluation

Pre-survey evaluation

- Evaluation by (McDonald et al., 2003):
 - 1.Review by other researchers and experts.
 - 2. Focus group discussion (FGD).
 - 3. Cognitive debriefing.
 - 4. Field pretest.

1. Review by researchers and experts.

- Covers the most important and extensive part of content evidence of validity.
- [The concept of validity] lecture.

2. Focus group discussion (FGD).

- Consists of representative sample of target population.
- Focused on general feedback on comprehension of key/problematic items – to ensure consistent meaning.
- Problematic items → consider suggestions from the respondents – improve wording.

3. Cognitive debriefing.

- Individual interview.
- More on how the respondent understand and answer questions.
- Understanding ask him to rephrase and explain the questions.
- Answer how they arrive at the answers.
- More intensive than FGD.

4. Field Pretest / pilot study

- Field testing the <u>complete</u> questionnaire
- Representative sample
- Evaluate:
 - the form:
 - Wording understanding, grammar, syntax
 - Formatting well edited and professional looking (don't use Comic Sans!)
 - Flow logical and organized

4. Field Pretest / pilot study

Evaluate (cont.):

- the administration process:
 - Length
 - Timing
 - Interviewer/Rater training & reliability
 - Flow of questionnaire administration
 - Logistic
- the data entry preparation:
 - Coding
 - Data entry procedure
 - Frequency of item non-response

References

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (1999). Standards for educational and psychological testing. Washington DC: American Educational Research Association.

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