Designing Questionnaire

Heman Lohano
Senior Economist
SANDEE
Perhaps now you'll fill in my questionnaire?
Questionnaire Design

• The way you collect data affects the data collected?

• The question wording affects people's answers.

• The validity of the results depends on the quality of questionnaire

• Obtain most accurate information as possible

• Make it easy for respondents to provide information

• Refer to existing questionnaires
Overview of Research Process

- Formulating a topic and research objectives
- Reviewing the literature
- Formulating a research design
- Selecting a sample
- **Data collection** (using Questionnaire)
- Data analysis
- **Ensure objectives have been accomplished**
- Writing/Presenting your research
- You will revisit each stage
Types of Interviews

• Structured interviews
  – Use questionnaires
  – Identical set of questions (standardized questions)
  – Interviewer administered
  – Quantitative data/research
  – Mostly used for descriptive and explanatory research

• Semi-structured interviews
  – List of themes and questions to be covered
  – Vary from interview to interview
  – Can add questions if required
Types of Interviews

• Unstructured or in-depth interviews
  – Informal
  – No list of questions
  – Need to have clear idea of aspects to explore
  – Interviewee can talk freely on related aspect
  – Mostly used for exploratory research
Interviews

- Standardised
  - Interviewer-administered questionnaires
    - Face-to-face interviews
    - Telephone interviews
    - Internet and intranet-mediated (electronic) interviews

- Non-standardised
  - One to one
    - Group interviews
      - Focus groups
  - One to many
    - Internet and intranet-mediated (electronic) group interviews
      - Focus groups
Types of Questionnaire

Design questionnaire keeping in view its type
Choice of Questionnaire

- Population’s characteristics
  - Literate, computer-literate,
- Importance of reaching a respondent
- Importance of respondents’ answers not being contaminated or distorted
- Sample size, nature of questions, questionnaire size
- Resource available:
  - time, finances, and accessibility
- Research questions/objectives
9 steps to develop a questionnaire

1. Define the target respondents
2. Decide the data/information required
3. Choose the method(s) of reaching your target respondents
4. Decide on questionnaire content
5. Develop the question wording
9 steps to develop a questionnaire

6. Put questions into a meaningful order and format

7. Check the length of the questionnaire

8. Pre-test the questionnaire

9. Develop the final survey form
1. Define the Target Respondent

- Refer to data analysis plan
  - Research questions/objectives
  - Conceptual framework / Model
- Identify objectives of the survey
- Define population and sample
- Unit of analysis (from which data are to be gathered)
  - Household/Individual level, Farm/Plot level
- Time period / Reference period
  - one year or one month
2. Decide Data/Information Required

- Sub-divide each research objective into specific investigative objectives
- Develop list of variables
  - Keeping in view the data analysis plan
- For each variable, develop list of sub-variables
2. Decide Data/Information Required

- Define unit of analysis
  - How do you define household?
  - Data from all individuals?
  - e.g. Education of head or all individuals > 15 years

- Define time period
  - Reference period
  - Sub-periods

- Refer to others’ questionnaires
3. Method of Reaching Respondent

Design questionnaire keeping in view its type
4. Decide on Questionnaire Content

• Identify data/information required and not required (Is this question really needed?)

• Exceptions
  – Opening questions or for gaining respondents’ involvement in survey

• Develop modules
  – HH level, individual level, farm plot level
  – Order modules
  – First module on basic information and simple to answer
  – Introduction / Consent or cover letter
4. Decide on Questionnaire Content

• Make the questionnaire time-efficient
• Make tables if required
• Make the data collection easier and quicker
• Helps avoid enumerators’ errors
5. Develop Question Wording

Question types:

- Open-ended

- Closed -ended
Open and Close Questions

• What is the average monthly household income?

• What is the average monthly household income? Tick any one range:
  – 1. Less than or equal to RS. 25,000
  – 2. RS. 25,001 - 50,000
  – 3. RS. 50,001 - 75,000
  – 4. RS. 75,001 - 100,000
  – 5. Greater than RS. 100,000
Closed-ended Questions

• Mutually exclusive options
• Open response-option in closed-ended
  – Other. Specify:
• “None” option (if applicable)
• Coding or tick mark for each option (for filling questionnaire and data entry)
• Consistent coding
  – 1. Yes
  – 2. No
• Skip codes
• What is the type of toilet that is used in your household?
  
  – 1. FLUSH TOILET » QUESTION 23
  – 2. TRADITIONAL LATRINE » QUESTION 24
  – 3. VENTILATED IMPROVED PIT LATRINE » QUESTION 24
  – 4. BOWL/BUCKET » QUESTION 24
  – 5. OTHER (SPECIFY ______________________) » QUESTION 24
  – 6. NO TOILET » QUESTION 27
None and Other Options

- What is your religion?

Please tick ✓ the appropriate box.

- Buddhist
- Christian
- Hindu
- Jewish
- Muslim
- Sikh
- None
- Other

Please specify:
• Questions should be written out in detail:
  – interviewer should read during survey
  – to ensure that the same questions are asked of all household by different enumerators
  – to minimize errors
  – otherwise: 7-20 times more errors (research shows)
• For example: “Main occupation”
  – during past one month or one year?
  – Main in terms of highest income? Or highest number of hours?

• During past one month, what was your occupation? If more than one, tell me the one for which you worked the most hours during past one month.
Question Wording

• Questionnaire should include
  – precise definitions of all key concepts used
    • e.g. household members
  – Instructional comments
  – 0 should be reminded to interviewer
  – Data entry: distinguish between 0 and missing observation

• primarily to allow the interviewer to refer to during the interview
• How much did your household pay in the last month for the following services?

IF THE HOUSEHOLD DIDN'T PAY ANYTHING, WRITE ZERO

– 30. Electricity
– 31. Gas
– 32. Coal
– 33. Oil
– 34. Wood
– 35. Other fuel (Specify:  )
• How much does your household pay in cash to rent this dwelling?

IF THEY DO NOT PAY, WRITE ZERO

– AMOUNT (UNITS OF CURRENCY)
– TIME UNIT

• Report the original units. Respondent should not make calculations.

• Other example:
  – Farm output in kg or maunds per acre or hectare
Question Wording

• Keep questions as short and simple as possible, using common, everyday terms.
• If the question is complicated, break it down into two or more separate questions.
• Avoid unwarranted assumptions.
6. Put questions into a meaningful order and format

- Opening questions
  - simple
- Questions flow
  - Make meaningful order
- Question variety
  - Closed and open
- Closing questions
7. Check Length and Appearance

- Not too long questionnaire
- Keeping the type of respondents and their availability
- Physical Appearance of Questionnaire
8. Pre-test Questionnaire to determine

- whether the questions as they are worded will achieve the desired results
- whether the questions have been placed in the best order
- whether the questions are understood by all classes of respondent
- whether additional or specifying questions are needed or whether some questions should be eliminated
- whether the instructions to interviewers are adequate.
9. Finalize Questionnaire

• Finalize based on pre-testing it
• Lay out
• Additional instructions for interviewer
Finalize Remarks

- Good questionnaires are difficult to construct
- Bad questionnaires are difficult to analyze
Acknowledgement

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