

SO5041 Unit 12: Surveys and Questionnaires

Brendan Halpin, Sociology

Autumn 2019/0



Surveys and Questionnaires

- The main way of collecting survey data is by means of questionnaires and structured interviews
- The questionnaire used in structured interviewing is sometimes referred to as the interview schedule
- Questionnaires filled out by the respondent him/herself are referred to as self-completion questionnaires
- There are several important issues relating to the design and implementation of questionnaire-based surveys
- A good reference is DA de Vaus, *Surveys in Social Research*, chapter 6 (“Constructing Questionnaires”)

Purpose of questionnaire

- The practical purpose of a questionnaire survey is to get standard info from a large number of people relatively cheaply and reliably
- This requires a minimum of ambiguity in the meaning of the recorded answers – need to be clear and precise
- It also requires a minimum on non-response
 - Item non-response: refusal to answer or “don’t know” to specific questions
 - Respondent refusal: flat refusal to participate
- Hence good design is important:
 - Clarity of questions and structure
 - No unnecessary burden on the respondent

Measurement Theory

- A questionnaire is a **data collection instrument**
- This implies that what is measured must be standardised: the same questions asked of every respondent, in the same way, in order that the data recorded means the same thing – standardisation is what allows the use of computers (and statistics) to analyse it
- This is related to **Reliability**: the instrument will get the same results in the same circumstances

Validity

- **Validity** is also important: an instrument (e.g., a set of questions) is valid insofar as it measures what it is intended to measure
- An instrument can be valid without being reliable, and vice versa
- For instance, a set of questions designed to assess right-wing attitudes may be reliable (provide consistent results) but not valid (if scoring high is not very strongly associated with being right-wing, etc.)

Reliability, comparison, validity

- Reliability is very important for **comparison**: without it we cannot compare cases or attribute differences between cases to their other characteristics – reliability is essential for analysis
- Without validity, there is no point to analysis – you're not studying what you think you're studying

Questionnaire Design

- There are two aspects to questionnaire design
 - The overall structure of the document
 - The individual questions

Composing questions

- The questions themselves must be clear and unambiguous
 - Express the questions in clear and simple language
 - Don't use leading questions (Avoid "Isn't it the case that X is a good idea?"; prefer "Do you think X is a good idea or a bad idea?")
 - Ask a single thing at a time (Avoid "Do you have a job, and if so how much do you earn?")
 - Avoid hypothetical questions: often don't give useful information (e.g., "If you had a grant how much more money would you spend on drink?")
 - If you need to ask for information about others, restrict it to factual information ("What is your husband's job?", but not "What does your husband think about X?")
 - Make the questions easy to answer:
 - provide a set of options (perhaps on a prompt card)
 - with amounts (time, money etc.) provide options help to precision (e.g., times per week, ranges)

Document structure

- The document must be structured simply and logically
 - Group questions in a way that will seem reasonable to the respondent
 - Use clear routing:

5: Do you have a job?
(if yes, ask qn 6, else skip to qn 7)
6: What is your job?
7: ...

- Reserve sensitive questions (e.g., income, drug use) to the end of the questionnaire: less likely to scare off respondents there

Question structure

- The structure of questions is also important
- Each question must have its answer space: a tick-box, a space for writing, a set of categories
- Closed questions are preferred: a fixed set of options makes it easier to answer and to analyse
- Always allow the category “Other” with closed questions, with space to write (“If other, please specify:”)

Types of closed question

- Closed responses can take several forms:
 - One only: “Tick the category that best describes your job”
 - One or more: “Tick all of the following reasons that are relevant”
 - Ranking: “Rank the importance for you of each of the following reasons (1, 2, 3 etc.)”

Likert scales

- Measurement of attitudes often uses “Likert” scales:
 - a set of statements relevant to the attitude being measured
 - with options indicating agreement:
 - Strongly disagree
 - Disagree
 - Neither agree nor disagree
 - Agree
 - Strongly agree

Practical organisation

- The practical organisation of the questionnaire must take question structure into account: easy to answer and easy to process
- Processing involves several steps
 - Recording the information as it is being collected
 - Checking it is consistent and the right questions are answered
 - Coding it onto a computer
 - Checking it is consistent once on computer
 - Adding variable and value labels to help the computer data set to make sense

Design principles

- The design of the questionnaire should keep the first three of these in mind
 - It should be easy to record the information
 - It should be easy to read the recorded information to see that it makes sense, to see that the correct routing has been followed
 - The layout of the questionnaire should anticipate the structure of the computer data set

Example questionnaire

Example Questionnaire Extract

1: Sex: Male ₁ Female ₂

2: Age: 18 or under ₁

19 – 23 ₂

24 – 30 ₃

31 – 40 ₄

41 – 50 ₅

51 – 64 ₆

65 or more ₇

Office use only

_{q1}

_{q2}

Many options, tick one

3: Which of the following options best describes your current situation? (show card):

Self-employed

1

Employed

2

Unemployed

3

Retired

4

Family care

6

Full time student, school

7

Long-term sick, disabled

8

Training scheme

9

Other

10

If "Other" please specify: _____

q3

Ordinal options (with a flaw)

4: How often do you read newspapers? Tick the category that is closest:

Never

1

(Skip to question 6)

More than 1 per day

2

1 every day

3

2-4 per week

4

1 per week

5

Less than 1 per week

6

 q4

Picking zero or more from a list

5: Which of the following newspapers do you read? (show card) Tick each one that applies:

Irish Times

a

q5 a

Irish Independent

b

q5 b

Irish Examiner

c

q5 c

Limerick Leader

d

q5 d

Sunday Independent

e

q5 e

etc. etc.

f

q5 f

Other

g

q5 g

If "Other" please specify: _____

Attitude questions with Likert answers

6: People have different views about women's role in society. Please indicate whether you agree or disagree with each of the following things people might say, using the categories provided:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	
A woman's place is in the home	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> q6a
Young children suffer if the mother works outside the home	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> q6b
Women are entitled to the same pay for the same work as men	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> q6c
When a wife works it is important for the husband to do his share of the housework	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> q6d

Pilot your questionnaire

- It is very important that a questionnaire work well once in the field
- Test it beforehand,
 - on friends/colleagues
 - on a “pilot” subsample drawn from the reference population
- Are the questions comprehensible?
- Are the categories in closed questions adequate? Do they cover everything? Make the right distinctions? No very unlikely ones? Will they make sense to the respondent?

Piloting

- Is the structure okay? Not too complicated or illogical?
- Is there anything likely to confuse the respondent **or interviewer?**
- Exactly how long will it take? If too long, **shorten it now!**
- Piloting will also allow you to create closed categories for questions, using real-world feedback rather than your imagination

Distribution and collection

- How to choose a sample? Depends on research question and resources
- Types of sample
 - Random sample from explicit sample frame
 - Multi-stage random sample
 - Quota sample
 - Accidental/convenience sample

Samples

- The first two are the most powerful – true random sample – and it is enormously important to get as many of the sample to respond – each individual counts
- When it is not possible to generate a sampling frame, quota or convenience samples may be worthwhile
- With quota sampling, representativity is “enforced” by quota, and the emphasis is on filling the quotas as efficiently as possible

Convenience and snowball

- With convenience sampling (e.g., snowball sampling), representativity isn't possible in the same way, so more emphasis on getting **enough** people, though still very important to minimise refusals (very likely, people who refuse are different in some interesting way)
- With quota and convenience sampling, also very important to make sure respondents fit the requirements – quite formal for quota, related to the research problem definition for convenience sampling

Accessing respondents

- With a sample from a frame there is a clear identification of **exactly** whom to interview, often with addresses – the work is then in arranging times suitable to the respondent (and in a large survey, dividing respondents among interviewers)
- With quota or convenience sampling, some other strategy has to be found to contact potential respondents, e.g., random telephone dialling or stopping people in the street for quota sampling; snowball sampling (asking respondents to tell you about other people you could interview), working through groups or organisations or locations etc. for convenience sampling

Modes of delivery

- How a questionnaire is delivered has consequences for how it is answered and who answers it
- We can distinguish between face-to-face interviews and self-completion questionnaire

Face to face

- Face to face (perhaps not literally) involve an interviewer mediating the questions and the responses – e.g., s/he reads the questions, provides prompts and clarifications, and writes down the answers
 - Can be carried out by the researcher
 - or a delegated interviewer
 - Can be carried out on the phone

Interviewer delivered

- Questionnaires applied by an interviewer have certain advantages:
 - Interviewer can clarify questions
 - Can also clarify ambiguous answers
 - More likely to get a complete response
 - More likely to get a response in the first place (harder to refuse a person, easy to ignore a piece of paper)
- And disadvantages:
 - Very costly
 - Certain sorts of information may be suppressed in a face-to-face interviewer that may be written down
 - Answers possibly more likely to be slanted towards an expectation of what the interviewer would like to hear

Self completion

- Self-completion questionnaires are completed by the respondent, perhaps under supervision or perhaps in his/her own time
- They can be distributed to a sample (e.g., pupils in schools, workers in organisations, by post to addresses etc.)
- They can also be distributed in an “opportunistic” way: handed out at an event (e.g., after mass, at a concert) or left in a public place (perhaps with some publicity or an endorsement by someone “in authority” – e.g., the priest brings the congregation’s attention to the fact that they are there)

Response rate

- Response rate is a big problem with self completion
 - With distribution to specific people (i.e., sample, though non-random) make sure there is a covering letter to the individual indicating that the research is valuable and the data will be confidential
 - Follow up with reminders some time later to those who haven't replied
 - With “opportunistic” distribution, make sure the questionnaire makes the research seem valuable, and guarantee confidentiality
 - With opportunistic distribution, you can't issue personal reminders (ask the priest to remind the congregation a couple of weeks later, etc.)

Advantages and disadvantages

- The advantages of self-completion are
 - more privacy for the respondent
 - cheap and easy
- The disadvantages are many
 - More possibilities for misunderstanding
 - No control over meaningless, ambiguous or illegible answers
 - Much harder to control response rate: will be low
 - More room for response bias to enter: only those with an axe to grind will bother replying (in the extreme case) – for instance, people who have experienced sexual harassment in the workplace are far more likely to respond to a relevant survey than those who have not, so don't use such a technique to estimate the prevalence of sexual harassment