Conducting surveys and designing questionnaires

Aims

- Provide students with an understanding of the purposes of survey work
- Overview the stages involved in designing a questionnaire, especially in terms of moving from an initial idea to the construction of specific questions

Surveys can be used to….

- Illustrate a phenomenon using descriptive statistics: mean, mode, median, range, distribution, as well as percentages and fractions.
- Test for the significance of differences and/or associations using inferential statistics that represent the probability of the difference/association occurring by chance - as opposed to being attributable to the intervention or variable in question
- (Latter is very ‘experimental model’)

Surveys can be….

- cross-sectional, providing a one-off snapshot
- longitudinal and follow the same cohort of people over a length of time
- time series - that is, the same questions over time but to different cohorts

Methods of administration of surveys

- Face to face
- Self completion
- Telephone

Processes

- Define the issue to be studied or the research hypothesis
- Define the research questions that you want answers to, this should lead to specific questions to ask
- Decide on the survey method (administration) and the survey type (snapshot etc)
- Define the survey population
- Construct a sample from the population
- Pilot instruments, review results and modify
- Conduct study
- Code and analyse findings, draw conclusions
- Summarise and report

Selecting samples (to recap)

- Population = the entire set that we want to generalise about
- Sample = subset of the population with whom research will be conducted
- Samples are either:
- Probability samples (proper random) from which we can generalise with confidence using inferential statistics
- Non-probability (purposive) from which we cannot generalise, although we can use descriptive statistics to describe what it true for that sample group and in so do make suggestions as to what might be the case elsewhere - but with much caution.

Concepts to indicators

- in attempting to measure behaviours and attitudes, it is not enough to ask people to report their behaviour or attitude where complex concepts are at stake: concepts need to be tied down to specifics so it is possible to compare one person with another. This involves moving from concepts (e.g. being a victim of crime) to indicators of crime (e.g. ‘How many times have you had your house broken into in the last 12 months?’ etc).

- also it is difficult to know if persons reporting an attitude (e.g to advertising) are doing so honestly - its better to try and capture actual instances of behaviour that reveal underlying attitudes (e.g. ‘do you turn the TV sound off in between programmes’ etc).

- Moving from concepts to indicators is called **operationalisation** and lies at the heart of a good survey.

Developing indicators

- Some concepts, e.g. marital status seem simple, so long as all permutations of what it means to be married are included
- Others, e.g. class consciousness, are complex and have multiple dimensions and indicators
- Indicators can be worked out by examining existing research, piloting questions and interviewing people to find the extent or exhaustive list of what how the concept can be perceived. For example what does it mean to be immoral? Is it the same as being unlawful? Always?

Indicators → questions

- Indicators themselves have to be converted into specific questions so that they can produce measures. Questions about:

- Behaviours = about what people do
- Beliefs = what people think to be true or false regardless of whether or not we agree or think they are right
- Attitudes = what people think is desirable
- Attributes = characteristics: age, gender, qualifications etc

Constructing questions

- Short and simple where possible
- Move from simple to complex and do the groundwork necessary to support questions that contain sensitivities – do not start off with '*how do you feel about your divorce*' etc.
- Avoid leading questions
- Avoid questions that ask more than one thing
- Avoid general and ambiguous phrases
- Do not force people into the positions on offer, always offer a 'don't know' and 'other'
- Have clear frames of reference: how often to you see you visit the supermarket doesn't give a clear frame of reference: within what period of time?
- Be mindful of social desirability response set

Setting out questions

- Clear instructions
- Go from easy to more complex
- Group questions into sections
- If using positive and negative responses to statements, mix it up
- Use filter questions to keep each question focussed and relevant

Format of questions

- Likert (rating) scales - usually 5 options for responding to a statement from strongly agree to strongly disagree
- Checklists – list from which to choose
- Ranking - rank in order of importance, relevance etc
- Attitude choices between two options
- ‘Temperature’ scale 1-10 etc

Analysis: correlation and causation - direct, indirect and spurious

- Direct = association between two variables where one is caused by the other e.g. wealth: size of house
- Indirect = relationship between two variables is mediated by a third: relationship between education and job satisfaction might: good education → well paid job → job satisfaction
- Spurious = association caused by something other than: you might find a correlation between height and academic achievement but neither is causing the other, access to resources might be having an impact though (on both).

To avoid/check for

- Over estimating the importance of correlation, don’t jump correlation to causation
- Assuming that statistical significance is the same thing as substantive importance
- Generalising from non-representative samples
- Ecological fallacy – assuming that relationships found in data will necessarily be found within groups of people
- Moving from description to prescription