

Writing good survey questions to construct reliable and valid surveys

The best reference is an Australian book, by David de Vaus. (David de Vaus (2013) *Surveys in Social Research* 6th ed Allen & Unwin)

The main concerns about writing survey questions fall into the following categories. (They are not discrete categories)

1. Language of questions
2. Length
3. Double-barrelled questions
4. Leading questions
5. Negative questions
6. Assumption of knowledge of respondents
7. Same meaning for everyone
8. Frame of reference clarity
9. Forced answer questions
10. Questions that are too hard to answer

1. Language

1.1 Avoid jargon, terminology that is not widely understood. This includes acronyms and colloquialisms. For example: *"Have you visited a health worker in the past 4 weeks?"* Are you sure there is a common understanding of the term "health worker"?

1.2 A change in wording causes different responses. This is a well-documented phenomenon. For example, Schuman and Presser (1981) found that nearly half the population would support **not allowing** communists to speak in public, but only about 20% would **forbid** it.

The meaning of questions can go beyond the literal interpretation of the words. Small word changes, however minor, can produce very different responses. Interviewers need always to read the questions exactly as worded and survey wording should never be changed. Trialing will draw attention to responses that do not have a range of responses (which is what you are looking for).

Another example:

- *Do you think anything **should be done** to make it easier for people to pay doctor or hospital bills? (82% agree)*
- *Do you think anything **could be done** to make it easier for people to pay doctor or hospital bills? (77% agree)*
- *Do you think anything **might be done** to make it easier for people to pay doctor or hospital bills? (63% agree)*

(Payne, S.L. (1951) *The Art of Asking Questions* NJ: Princeton University Press)

2. Length

The shorter the survey the better the survey. Respondents are more likely to complete a shorter survey. Recording responses is more accurate and analysis less onerous with a shorter survey. Shorter questions are also less likely to cause problems, as long as they contain sufficient information to be understood and answered.

3. Double Barrelled Questions

Double-barrelled questions ask more than one question, which means that they are impossible to interpret.

An example: **Have you and your partner ever considered seeing a marriage counsellor ?** (What if one had but not both?)

4. Leading Questions

Leading questions are those that push or bias the respondent into a particular direction.

For example: *"Have the cutbacks in health services made it more difficult for people in this community to get access to the hospital?"*

Questions that may start with *"Do you agree that..."* are more likely to be leading questions.

5. Negative Questions

In general, a question with a negative included is problematic because a negative response causes a double negative, which is then uninterpretable.

Questions using 'not' can cause confusion. E.g. "Heroin should not be decriminalised?" Agree or not.

6. Assumption of knowledge about a particular policy or situation. This is where you cannot assume that they have the same meaning for everyone: E.g. "Have you been a victim of crime in the last five years?" "Have you been abused?"

7. Same meaning for all

7.1 Take care when you use the words *often* or *seldom*. Their meaning varies from respondent to respondent. Either use a more specific word or define exactly what you mean by the term.

7.2 Avoid questions where there is no consensus about the meaning of a key word. For example. "What services for middle aged people are needed in this area?" raises the question of what is middle-aged?

8. Frame of reference clarity

How often do you visit a GP? Give them a time frame e.g. Within the past twelve months, can you tell me how often would you have visited your GP on average – weekly, fortnightly, monthly, never....

9. Forced answer.

This is when you give options for answers that don't include "don't know" or "no opinion". That is, when 'don't know' is the real answer, but that option hasn't been included.

10. Questions that are too hard to answer easily.

"How many times have you walked your children to school along the designated route"? (Too demanding. Response is unlikely to be accurate – can only be a guess unless recorded each time.)

"Do you agree or disagree with the recent changes to the Medicare Benefits Schedule? (Assumes knowledge of this schedule, an unlikely situation)

Pilot with friends or colleagues.

Revise pilot again with sample of respondents and revise. Look for lack of response to open-ended questions, Lack of variance in response or lots of 'don't know', or scaled item that has a lot of written-in answers.

If certain information is of critical importance, you could verify by asking similar questions at two different points . E.g. How often..... Then later: I havenever, once,...

Cultural sensitivity

If focusing on particular subgroups within the larger population it is worth doing a literature review to identify culturally specific or sensitive survey design and delivery techniques. For example, surveying of aboriginal communities need to examine preferred delivery mode, role of interpersonal relationships, the importance of concepts such as time and specific places, community movement, privacy and reciprocity.

e.g. Aboriginal: Donovan and Spark (1997) suggest using face-to face- interviews particularly for remote communities. Propose a range of guidelines. To ensure maximum sensitivity to culture and with minimum discomfort (p90) e.g. direct questioning is inconsistent with Aboriginal culture.

Information gathering is an exchange process for Aboriginal culture.

The concept of privacy is important in Aboriginal Culture.

Use of an appropriate language, particularly when English is not the first language.

Concepts of numeracy, intensity and specificity are different in Aboriginal and western cultures.

Concepts of, and attitudes towards, time are different in Aboriginal Culture.

Interpersonal interaction styles are different.

Aboriginal communities fluctuate considerably, and this needs to be taken into account in sampling.

Miller and Rainbow (1997) stress reciprocity and follow-up when conducting surveys in Aboriginal communities. E.g. if conducting an old people's survey, you should be prepared to collect firewood, or provide a plumber to fix broken toilets in a survey of sanitation for older people.

Wording of items

- All participants should receive the same items
 - Everyone responds to the same stimulus
 - Educational or Information bias
 - Everyone answers the same question
 - Don't change the questions!!!
 - Enable other studies to be comparable

Wording of items

- **General rules**
 - Simplicity
 - Brevity
 - Assume minimal knowledge
 - Probe specific issues
 - Make relevant to most respondents
 - Carefully select response categories
- **Avoid**
 - Double-barreled statements
 - Leading statements
 - Objectionable items
 - Double-negatives
 - Jargon
 - Value-laden words
 - Small unclear typefaces

Wording of items

- **Value laden**
 - *Do lawyers make too much money?*
 - *Do you often go to your doctor with trivial problems?*
- **Applicability/relevance**
 - *Do you experience difficulty going up stairs?*
 - No (I can even run a mile)
 - No (I am confined to bed)
 - *How often do you wash the dishes, vacuum the floors or do yard work?*
 - *Do you have difficulty catching a train or train?*

Wording of items

- **Minimal knowledge**
 - When writing items, assume the respondent does know or has base knowledge
 - Aim for the *lowest common denominator*
 - Introduce terms (tactfully!)
 - Should you include a *don't know* category?

Visual acuity refers to:

- How clearly a person sees objects
- An eye defect so that glasses are needed
- Limitations to sight at night

Wording of items

- **Potentially offensive or embarrassing questions**
 - Some questions may probe privacy such that confidentiality is threatened
 - Risk of losing respondent
 - If necessary:
 - Put these questions at the end of questionnaire
 - Make them optional

How satisfied are you with your sex life?

[if you prefer not to answer this question, please check this box and go to the next section]

I do not wish to this answer

Wording of items

- **Double-negative statements**
 - Difficult to understand and answer for respondents
 - Difficult to interpret what answers means

I do not feel less interested in sex?

yes

no

Wording of items

- **Vague/ambiguous concepts**
 - What question did they answer?
 - Unknown what a respondents answer means
 - *Have you seen a case manager recently?*
 - *Have you seen your case manager in the last year?*
 - During the last 12 months
 - Since this date one year ago
 - Since 1 January of this year

Wording of items

- **Adequate response categories**
 - All possibilities must be covered or include “other” with space for respondent to list other options.

How do you
travel to work?

- Drive a car
- Catch a train
- Ride a motorcycle
- Pedal a bicycle

Wording of items

- **Double- barreled**
 - Two concepts in the one question
 - Which concept might the respondent answer?
 - Common when probing for psychological or physical traits
 - I worry about the cancer returning or getting worse
 - I keep quite busy, so I do not have time to think about it
 - Drivers with many years of experience should not be required to submit to re-examination in later years

Wording of items

- **Leading statements**
 - ‘suggest’ certain responses
 - Common in questionnaires that explore socially sensitive issues (abortion, politics, violence, drugs etc)

Recently there has been a lot of concern with violence in the community. Several people have been bashed, robbed and raped in your local area. Should police resources be devoted to:

- Conducting bicycling programs in schools
- Catching the real criminals that threaten personal safety
- Trying to identify people using the internet illegally
- Crowd control at sporting events