

## Writing Survey Questions

Need to go back to your research question(s)

- What are your conceptual hypotheses?
- What questions will you need to ask to explore these hypotheses?

The validity of your data depends on the quality of your theory and your ability to write clear, understandable questions that reflect that theory.

Your theory determines which questions are asked.

If your theory is weak:

- You won't ask the right questions
- The questions you do ask may not be written well -- your sample may not interpret them as you do.
- Result: You won't be able to rule out alternative explanations.

Questions must reflect real life behavior, attitudes, beliefs and must represent or indicate the concepts in your research question. Operationalization is critical, both to obtain "good" data but also to achieve high response rates.

Whenever possible use questions with acceptable validity and reliability from the literature. This improves data quality. Allows comparison of results to previous and future research

If you write new questions: use literature on subject and on writing questions, use focus groups and pre-tests to help develop and improve questions.

Which questions should you include? At some point you will have to limit the number of questions you include on the final draft of the survey.

1. Don't ask respondents unnecessary questions:

- questions you don't need to answer the RQ
- questions you know the answer to
- questions about how other people think or believe

2. Can respondents provide the info we want?

- can they understand the question?
- is it asking for info that is too hard to provide? For example, asking exact income last year. Or asking "what charitable donations have you made in the last year?"

3. Must be written so respondent can understand the question:

4. No ambiguous words. Define terms. Use everyday language (unless the study is of a specific population with their own vocabulary, for example “socialization” is ok to use with sociologists)

5. Be specific: Example. How satisfied are you with the care you received? (Not specific) Vs. How satisfied are you with the info your nurse provided about your illness?

- Trade off: writing simple, easy to answer questions vs. getting the data necessary to answer RQ

6. Question should ask only question. Ex. Do you believe skill level and competency has improved among the staff? Vs. Do you believe skill level has improved among the staff?

7. Don't write loaded questions. Question should not imply a correct answer.  
Ex. Do you think our schools need improvement? Don't use loaded terms.  
For example, may not want to use the word “welfare,” use “poor” instead.

8. Don't write questions with a "it depends" answer:  
Ex. How many previous computer classes have you had?  
It depends on what counts as a computer class? Do we count high school and college?
9. Question length - generally shorter is better but as concept becomes more complex so does question
10. Mix up direction of questions. So you don't get a response effect.

### **Response Sets**

1. Needs to reflect true variation:

Example: race question on Census

Sometimes yes/no is appropriate. Sometimes you need a likert scale. Depends on subject.

2. Response sets need to generate variation.

Ex. What is your highest educational degree?

Some high school

HS degree

College degree

Most responses will be HS degree, unless special population

### 3. Open vs Closed questions: close up as many as possible

Open question: no response categories provided.

ex. How old are you..4

ex. What do you think about managed care?

Advantages: good when you don't know what the responses are likely to be

Disadvantages: missing and unreliable, biased against the inarticulate, rapport sensitive, high cost in time and coding. Exception - numerical answers to open behavioral questions: How many times last month did you X?

Closed questions: 2 or more mutually exclusive categories

5 categories is maximum without visual aids, otherwise people get confused. See page 70 Designing Surveys for common response sets

Common likert type - strongly satisfied to strongly dissatisfied

Categories should be specific, not subject to individual interpretation

Alternative: scales, Ex. 1-10. Don't use these unless each category is labeled. If not, won't have any standard of meaning for each category

Advantages: precise, pre-code

Disadvantages: measurement error

### 4. Don't Knows and No Opinions

Give it and people will take it. Result: no variation, little data to analyze

Theoretical measurement argument: what's more valid:

a. Forcing people to respond. Responses may not reflect true answers.

b. Leaving people an out. Don't knows/no opinions are not true answers.

Solutions:

a. Don't ask questions with true no opinion responses. Most people have an opinion.

b. Don't give them Don't knows/No Opinion. People who don't want to answer will skip questions anyway.

Exception: not applicable is a valid response. Don't want people responding when the question doesn't apply to them.

5. If you don't know what the response set should be, pre-test your question with an open response set.

6. Avoid agree/disagree - people tend to agree

7. Make sure your response set items are mutually exclusive. With the exception of multiple response questions (such as race), respondents should "fit" in only one response category. For example, don't write an income question that has overlapping response sets.

### **Scales as Response Sets**

- Likert scales
- 1-10 scales

### **Level of Measurement**

Consequences for statistical analyses

- Nominal
- Ordinal
- Interval
- Ratio