Survey Research

Claudia J. Stanny
PSY 6217 – Research Design

University of West Florida

Writing Questionnaire Items

- Open-ended items
- Partially open-ended items
- Closed (Restricted) items
  - *Provide a choice for all potential responses*
  - *Response choice should not overlap*
    - *Wrong: AGE 5 - 10 10 - 15 15 - 20*
    - *Right: AGE 5 - 9 10 - 14 15 - 19*
- Rating Scales
  - *Likert-type scales*
  - *Rank order responses*

Likert-type Scales

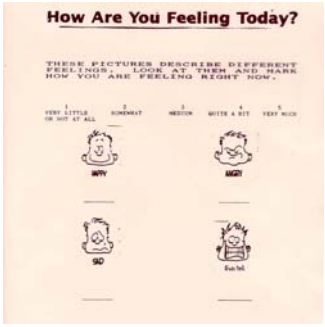
Strongly Disagree ① ② ③ ④ ⑤ Strongly Agree

- Label the endpoints only
- Label endpoints and middle
- Label every point on the scale

① ② ③ ④ ⑤

SD D N A SA

Non-Verbal Variants of Likert-type Scales



Non-Verbal Variants of Likert-type Scales

☹ ○ 😐 ○ ☺

Guidelines for Writing Questionnaire Items

- Keep the wording simple
  - *Consider the language skills of respondents*
  - *Avoid abbreviations and jargon*
  - *Avoid tasks that are too demanding*
- Avoid making assumptions about the respondent's knowledge
  - *Do you agree with the mayor's philosophy of government?*
- Questions about sensitive topics must be worded carefully – avoid biased wording

Guidelines for Writing Questionnaire Items

- Avoid ambiguous questions
  - *State questions precisely*
  - *Be as specific as needed to answer your question*
- Response options should be precise
  - *VAGUE: frequently, several, seldom, usually*
  - *PRECISE: once a week, once a month, twice a day*
- State questions in concrete terms
  - *ABSTRACT: Did you enjoy the book?*
  - *CONCRETE: Would you recommend the book to a friend?*

Guidelines for Writing Questionnaire Items

- Negative constructions are confusing and should be avoided
  - *POOR: He did not disagree with the suggestion*
  - *BETTER: He agreed with the suggestion*
- Avoid double-barreled questions
  - *Should adolescents be allowed to choose their own friends and drink on weekends?*
- Each question should ask only one thing
  - *Should adolescents be allowed to choose their own friends?*
  - *Should adolescents be allowed to drink on weekends?*

Guidelines for Writing Questionnaire Items

- Avoid leading questions
  - *Given that fact that installing scrubbers at utility plants could increase electric bills by 20%, do you believe the Clean Air Act should be strengthened, weakened, or left alone?*
- Avoid loaded questions (using emotionally-charged words)
  - *Do you believe the Federal government wastes money?*
- Use a neutral wording to avoid creating response biases

Guidelines for Writing Questionnaire Items

- Loading can occur in subtle ways
  - *Would you vote for Dr. John Smith?*
  - *Would you vote for John Smith?*
  - *How fast were the cars going when they touched each other?*
  - *How fast were the cars going when they collided?*
  - *How fast were the cars going when they smashed into each other?*

Ordering Items on a Questionnaire

- The first questions set the tone for later questions
- Best order might depend on mode of administration
  - *Paper and pencil: Begin with questions that capture the respondent's interest*
  - *Interviews: Begin with simple questions that give the respondent something easy to answer (a sort of "small talk" to establish rapport)*

Ordering Items on a Questionnaire

- Funnel Questions
  - *General questions*
  - *Specific questions*
- Filter Questions
  - *Shorten length of questionnaire by directing respondents to skip to another section based on their response*
  - *Do you own a dog?*
    If no, skip to question 17; if yes, complete the following questions:

Administration

- Mail surveys
  - *Non-response bias*
  - *Provide incentives to respond*
  - *Follow-up reminders and duplicate questionnaires*
- Internet surveys
  - *Who has access to the internet (sampling bias)*
  - *Control of the number of times an individual responds*
  - *Are the respondents who they claim they are?*
- Telephone surveys
  - *Answering machines, cell phones, unlisted numbers*

Administration

- Group Administration
  - *Convenience of sampling many people at one time*
  - *Will respondents take the questionnaire seriously?*
  - *Potential loss of anonymity*
  - *Potential for coerced participation*
- Face-to-face interviews
  - *Potential to clarify misunderstandings*
  - *Added effects of the social interaction between interviewer and respondent (experimenter effects)*

Reliability

- Test-retest reliability can be assessed for measures of stable attitudes
- Split-half reliability for single-administrations
  - *Only suitable if questions can be randomly divided and still make sense as a measure*
  - *KR-20 looks at the average of all possible split-half correlations for a given set of items*

Increasing Reliability

- Increase the number of items
  - *More items provide a larger sample of responses*
  - *Assumes all items are intended to measure the same thing*
  - *Too many items can undermine motivation*
- Standardize procedures for administration
- Standardize scoring procedures
- Write questionnaire items carefully

Sampling Issues

- Representative Samples
  - *Sampling error – distortions in sample due to random processes in sampling procedure*
  - *Sampling bias – distortions in sample due to non-random processes*
    - *Systematically exclude some members*
    - *Systematically include some members*

Sampling Techniques

- Simple Random Sampling
  - *With replacement*
  - *Without replacement*
- Stratified Sampling
  - *Divide population into well-defined strata*
  - *Randomly sample within strata*
  - *Size of each sample might depend on characteristics of the strata sampled*
    - *Larger n for more variable strata*
    - *Consideration of cost of sampling each individual*

Sampling Techniques

- **Proportionate Sampling**
  - *Identify categories of individuals in population*
  - *Match proportion of each category in the sample to its proportion in the population*
- **Systematic Sampling**
  - *Sample every kth element*
- **Cluster Sampling**
  - *Identify natural clusters in the population*
    - ***Classrooms, blocks of a neighborhood, households, etc.***
  - *Randomly select clusters*
  - *Survey all members of the cluster*