## Attitude measurement



#### Attitude measurement

- Self-reports of attitudes are highly context dependent and minor changes in question wording, question format, and question order can profoundly affect the obtained results
- Key components of the response process: Comprehension – retrieval – judgment – formatting - editing

- Question comprehension
- Information retrieval and judgment
  - Question order effect
  - Response order effect
- Response formatting
  - Categorical response alternatives
  - Rating scales
- Response editing

## Question comprehension

How successful have you been in your life?

1 9 -4

#### Information retrieval and judgment



- Question order effect
- Response order effect

#### Question order effect

**1.** General satisfaction

1. Marriage satisfaction

2. Marriage satisfaction

**2.** General satisfaction

$$r = .43$$

$$r=.67$$

# WHAT TO DO?



"We now have two questions about your life. The first one pertains to your marriage and the second to your life in general."

r=.18

"Aside from your marriage, which you already told us about, how satisfied are you with your life in general"

r= .20

### Response order effect

- Written vs. Read alternatives
- Written primacy effect
- Read recency effect
- Response order effects are more significant for older and less educated respondents



## Response formatting

- Categorical Response Alternatives
  - Any opinion omitted from the list is unlikely to be reported
    - Q: "What is the most important thing for children to prepare them for life?"
      - A: "To think for themselves"

61.5% 4.6%

Advice: Provide "I don't know" alternative

- Rating Scales
  - The effect of numeric values
  - Context dependent (answer is compared with previous answer)

## Response editing

- Respondents may hesitate to report their attitude when they are concerned that their answer may present them in a negative light.
- Social desirability



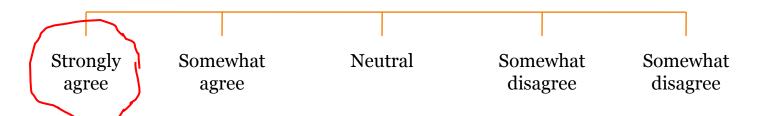
#### Attitude measurement tools

- Likert scale
- Semantic differential
- Error choice technique

#### Likert Scale

• An one-dimensional scale that consists of attitude-related statements and asks individuals to indicate their agreement/disagreement with each statement along a numerical scale

Stan is the best teacher in the world.



#### How to create the Likert scale?

- 1) Generate more questions than you need
- 2) Get a group of people to score the questionnaire
- 3) Sum the scores for all items
- 4) Calculate the intercorrelations between all pairs of items
- 5) Reject questions that have a low correlation with the overall score
- 6) For each item, calculate the t-value. Reject questions with lower t-values (higher t-values show questions with higher discrimination).

#### Semantic differential

- Osgood, Suci, Tannenbaum (1957)
- Respondents rate the attitude object on a number of (typically) 7point bipolar scales that are end-anchored by evaluative adjective
  pairs
- (connotative meaning of words (freedom, marriage); ideas (capitalism); products (cell phones); brands (Volvo); etc...)

#### **Barack Obama**

good				bad
honest				dishonest
harmful				beneficial
kind				cruel

#### Error-choice technique (Hammond, 1948)

- Attitudes can be indirectly measured by the bias shown in answering a mixture of factual and nonfactual questions concerning a given topic
- Respondents think it is a knowledge test

The average IQ of black people is:

A: 87%

B: 113%

The average IQ of Japanese people is:

A: 85%

B: 115%

## Summary - Attitude measurement

- Comprehension retrieval judgment formatting editing
- Likert Scale
- Semantic Differential
- Error-Choice Technique