The Questionnaire



"If you love surveys or sausages, you should not watch either being made." J. Kochevar

2 Types of survey error

- Assume object is to find out on average how many times in the past six months customers entered a store with the intention of purchasing a consumer durable (TV, video, fridge etc.)
- Assume that there is a 'true' answer
- Survey errors will come from two sources:
 - Sampling errors sample estimate will differ from 'truth' by a random amount which is itself estimable
 - Measurement errors especially non-random measurement error (bias)
- In constructing a questionnaire we try to ask questions in ways that will minimize **measurement error**

Crucial assumption

- Questionnaire (and its mode of delivery) provides a homogenous and unbiased stimulus to which all respondents can respond
 - Any variations in the way the questions are understood or in the manner and context of administration can be regarded as random noise

The basic premise

- Identically worded questions asked in equivalent contexts should elicit the identical distributions of responses (allowing for sampling error).
- What about small, trivial and seemingly irrelevant changes of wording or context?
- How big is the scope for changing things before questions become non-equivalent?
- 5 examples.

Example 1: Question Wording Effect

Rugg (1941):

A. "Do you think the United States should allow public speeches against democracy?" or

B. "Do you think the United States should forbid speeches against democracy?"

- A: 21% support free speech
- B: 39% support free speech

Example 2: Response Alternatives for Reported Daily TV Consumption

Low frequency High frequency

alternatives		alternatives	
Hours	% reporting	Hours	% reporting
Up to 1/2	7.4	Up to 21⁄2	62.5
½ to 1	17.7	21⁄2 to 3	23.4
1 to 1½	26.5	3 to 3½	7.8
1½ to 2	14.7	3½ to 4	4.7
2 to 21⁄2	17.7	4 to 4½	1.6
More than 21/2	16.2	More than $4\frac{1}{2}$	0.0

Example 3: Victimization Reports

- National Crime Survey (US)
- Respondents victimization experience during the preceding 12 months
- Split ballot: 16 attitude questions about crime preceded question
- Higher victimization reports, especially of less serious crime, in group with attitude questions first

Example 4: Order Effects on Communist and American Newspaper Reporter in 1948

• Communist reporter item:

Do you think the United States should let Communist newspaper reporters from other countries come in here and send back to their papers news as they see it?

• American reporter item:

Do you think a Communist country like Russia should let American newspaper reporters come in and send back to their papers news as they see it?

Example 4 cont'd

Order Com/Amer

Amer/Com

Percentage Yes to Communist reporter item 36.5% 73.1%

Percentage Yes to American reporter item 65.6% 89.8%

Respondents strive for consistency

Example 5: General and Marital Happiness by Question Order

• General happiness:

Taken altogether, how would you say things are these days: would you say that you are very happy, pretty happy, or not too happy?

Marital happiness:

Taking all things together, how would you describe your marriage: would you say that your marriage is very happy, pretty happy, or not too happy?

Example 5 cont'd

General happiness

	Order	
	General-Marital Marital-	General
Very happy	52.4%	38.1%
Pretty happy	44.2	52.8
Not too happy	3.4	9.1
	Marital happiness	
	Order	
	General-Marital Marital	General
Very happy	69.8%	63.1%
Pretty happy	28.3	32.4

2.0

4.5

Not too happy

Steps in Answering Questions

- 1. Understand intent of questions
- 2. Search memory for information
- 3. Integrate information into summary judgement
- 4. Translate judgement into response alternatives
- 5. Edit the answer

Modes of administration

- Self completion
 - Postal
 - Internet
- Interviewer administered
 - Face to face
 - Paper and pen
 - CAPI
 - Telephone CATI
- Mode Effects

Types of questions

Factual/behavioural

Attitudinal/opinion

Knowledge

Types of Questions 1: Personal factual questions



 Problems: errors from recall problems; overstating; understating; socially desirable answers

Recall problems

Accuracy depends on

- how long ago
- salience of event
- telescoping

Measures

- collect data in chronological format
- give opportunity to check records
- related questions

Types of Questions 2: Questions about attitudes

• Asking about subjective phenomena

"Public sector workers should not be allowed to strike."

- Agree Strongly
- **Agree**
 - **Disagree**

Disagree Strongly

"The threat Iran poses to world peace is greatly exaggerated by the media."

□ Yes, highly exaggerated

□ No, not exaggerated

On the contrary, played down

Questions about Attitudes (cont'd)

• Respondent may not have an attitude

• Attitudes are often complex

Attitudes have intensities

Types of Questions 4: Questions about behaviour

- Questions about past, present or intended behaviour
- Often does not correspond to actual behaviour

"Nowadays there are various ways to pay bills through your bank.
Please tell me which of the ways given below you use most frequently?"
Cheque
Internet
Telephone

"When you travel to work, how often do you use public transport?"
☐ Always
☐ Mostly
Often
□ Rarely

Open or Closed Questions 1

Advantages open q.:

- respondents can answer in their own terms
- allow unusual / unforeseen responses
- no suggestion of what perceived as normal
- useful for exploring new areas

Disadvantages open q:

- time-consuming for interviewer
- answers have to be coded
 - very time-consuming
 - post-coding can be unreliable process
- require greater effort from the respondent
- different interviewers may record the answer differently

Open or Closed Questions 2

Advantages closed q.:

- answer easy to process
- enhance comparability of answers
- may clarify the meaning of question for respondent
- easy to complete for interviewer and interviewee

Disadvantages closed q.:

- loss of spontaneity in respondent's answer
- researcher structures responses
- categories may suggest what the researcher perceives as normal: alcohol units per week "0, 1, 2, 3-4, 5-6, 7+" or

"0, 1-2, 3-5, 5-10, 10-20, 20+"

Question Wording

K. Marx asked respondents in a postal questionnaire

... to consider whether those who worked in the so-called profit-sharing industries could go on strike "or are they only permitted to be humble servants of their masters?"

Question Wording

What, if anything, is wrong with the following questions?

- 3. Do you like to listen to music by Chopin and Wagner?
- 4. How much do you earn?
- 5. Do you not think that murderers should not be flogged?
- 6. Do you have a car?
- 7. When did you last go to church?
- 8. Which political party did you vote for at the last election?
- 9. In the last thirteen weeks how many times have you bought Galaxy fruit & nut chocolate?
- 10. Do you agree that honesty is always the best policy?
- 11. How often did you move house during your childhood?

Asking the Embarrassing Question: "Did you kill your wife?"

- 2. The Casual Approach: "Do you happen to have murdered your wife?"
- 3. The Numbered Card: "Would you please read off the number on this card which corresponds to what became of your wife?" (HAND CARD TO RESPONDENT)
 - 1. Natural death 2. I killed her 3. Other (What?)

(GET CARD BACK FROM RESPONDENT BEFORE PROCESSING)

4. The Everybody Approach:

"As you know, many people people have been killing their wives these days. Do you happen to have killed yours?"

Embarrassing Question (cont'd)

- 1. The "Other People" Approach:
 - a) "Do you know any people who have murdered their wives?"
 - b) "How about yourself?"
- 2. The Sealed Ballot Technique
- 3. The Projective Technique: "What thoughts come to mind as you look at the following pictures?" (Note: The relevant responses will be evinced by picture D.)
- 4. The Kinsey Technique: Stare firmly into respondent's eye and ask in simple, clear cut language such as that to which the respondent is accustomed, and with an air of assuming that everyone has done everything, "When did you kill your wife?"
- 5. Putting the question at the end of the interview.