

Interviews and Questionnaires

(thanks to Marilyn Termaine for sharing notes)

Agenda:

- Formulation of questions
- Avoiding response bias
- Questionnaire response formats

Interviews and questionnaires

- **GOAL:** Find out stuff about users
 - Prior knowledge
 - Skills and abilities
 - Beliefs
 - Personality traits
 - Attitudes
 - User satisfaction

Interviews and questionnaires

- **Interviews** are "conversations with a purpose" (Kahn and Cannell, 1957)
- **Questionnaires** are like interviews
 - Can be given to lots of people to get wide general opinions
- Both techniques involve careful question design and planning
- There are no concrete rules to designing these, just guidelines to help us along the way

Formulation of questions

- Short and sweet → Clear and concise
- Avoid long questions
 - Wouldn't you agree that exceedingly long queries exemplify poor question formation design because it is difficult to remember each part and what's more, it facilitates the blurring of one's train of thought - especially if it's worded terribly poorly?
- Beware of response bias

Response bias

- When answers received don't reflect the truth, the answers become useless!
- Types of response errors
 - Motivated errors
 - Hiding info to create a good impression
 - Memory errors
 - Not being able to remember
 - Communication errors
 - Questions are not clear OR answers not clear

Response bias example 1: Probing

- **Bad:**
"Have you ever driven a car while legally drunk?"
 - **Better:**
"There are times when it's impossible to find alternative transportation after drinking with friends at a party. Have you ever been in such a situation and had to drive home?"

Response bias example 2: Embarrassing

- **Bad:**
“How much time do you spend reading the newspaper?”
- **Better:**
“Did you have a chance to read the newspaper yesterday?”
(If respondent says yes)
“About how much time did you spend reading it yesterday?”

Response bias example 3: Asking ppl to organize info

- **Bad:**
“How many hours did you spend using a word processor yesterday?”
- **Better:**
“Below we list the hours for yesterday in half hour slots. Please mark with X those half hour slots in which you used a word processor.
6:00 AM __
6:30 AM __ ...”

Avoiding the bias monster

- Aim to be neutral – biases can be introduced unconsciously!
- Take care of wording!
 - Users may be embarrassed to ask the meanings of gobbledeygook
- Avoid directing and leading questions
 - **Bad:** “Your ‘*Treasure Troll*’-like hairstyle looks great! What do you think of the hairstyles of toys these days?”
 - Children are often prone to this leading

More question guidelines 1

- Order of questions
 - general before specific
- Avoid complex/compound questions
 - **Bad:** “How do you like this hair removal product compared to the ones you've owned?”
 - **Better:** “Why do you like this hair removal product? ... Have you owned others before? ... If so, did you like them?”

More question guidelines 2

- Each question should contribute to the evaluation goal
 - Think about what you would do with the answer; **YES/NO** responses aren't that useful as they don't convey **WHY**
 - Ask open-ended questions at the end to gather information you may have missed
- For questionnaires, choice of response format can bias responses too!

Questionnaire response formats

- **Check boxes**
 - gender
- **Ranges**
 - age ranges
- **Likert scales**
 - opinions, attitudes, beliefs, user satisfaction
- **Other response scales**
 - **Semantic differential scales** bipolar attitudes

Ranges

- Ensure that ranges:
 - Don't overlap
 - Are appropriate
 - "How many hours do you spend on the Internet per week?"
Bad: 0-1 1-2 2-3 3-40 40+
- Ordering of scales should be:
 - Consistent with other questions
 - Intuitive

Likert scales

- Pick a number from a range of numbers
 - "I'm falling asleep in this stuffy classroom."

Strongly agree	Agree	Neutral	Disagree	Strong disagree
1	2	3	4	5
- Steps:
 - Create statements about features to be evaluated
 - Place statements into groups
 - Choose proper scale (3-, 5-, or 7- pt scales, fence sitting?)
 - Select statements for final questionnaire

Other response scales

- A good scale
 - "When I press the mystery button, my computer will ____ reboot."
Always Most of the time Some of the time Rarely
- A bad scale
 - "Please choose the answer that best assesses how well the mystery button works."
 - Very well
 - Good, but it gets stuck sometimes
 - Average
 - Fair, but didn't meet my expectations of a mystery button
 - Poor
- Stick to scales proven to give *linear* responses!

Semantic differential scales

- Less popular than Likert scales
- Explores bipolar attitudes
 - Each attitude pair represented as adjectives
 - Participant chooses between extremes
- Example:
 - "How often do you watch trashy soap operas on TV?"

Never	+	+	+	+	Very often
1	2	3	4	5	6

Interviews and questionnaires

- **Designing questions**
 - Formulation of questions
 - Avoiding response bias
 - Questionnaire response formats
- "Any questions?" (no pun intended)