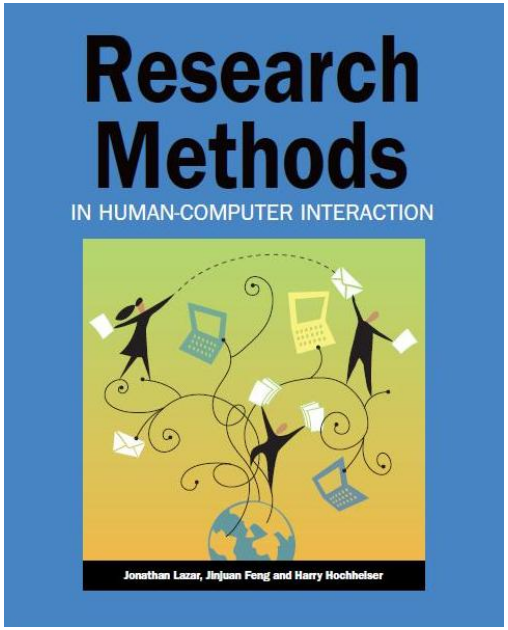
Research Methods in Human-Computer Interaction



Chapter 8- Interviews & Focus Groups

Ask the users

- Direct conversations as tools for data collection
  - Understand requirements, needs, problems

- Interviews – one at a time
- Focus groups – many

Pros & Cons of Interviews/Focus Groups

- Pros
  - Go deep
  - Flexible

- Cons
  - Skill to manage
  - Time and resource intensive
  - Recall problems

Applications of Interviews

- Initial exploration
- Requirements elicitation
- Evaluation and Subjective Reactions

Who to Interview

- Beyond users – Stakeholders
  - Anyone who may be affected by the use of a system
- Interview representatives of different groups from different perspectives.

- *Key informants:* particularly useful/ informative individuals

Types of Interviews

Fully Structured

Semi-Structured

Unstructured

Less structure: greater difficulty in conducting and interpreting interview

But

More opportunity for insight

Comparing the types

- Fully structured – Orally-presented survey
  - Stick with the script.
  - Good for comparison across individuals

- Semi-structured – pre-specified questions serve as starting point for discussion. Digression is ok.

Comparing the types

- Unstructured – initial question, possible list of topics, but no pre-defined script
- Less structure good for open ended exploration

Focused & Contextual Interviews

- Go beyond asking questions
- Ask participant to
  - Demonstrate use of technology
  - Show artifacts (papers, photos, etc.)
  - React to “probes” - props or prototypes designed to elicit reaction

Interviews vs. Focus Groups

- Interviews take time –
  - 1 hour or more/response
  - Several hours for analyzing notes

- Focus groups
  - More people in less time
  - Up to 8-12 people at once.

Focus Groups: Pros & Cons

- Pros
  - Broad range of viewpoints and insights
  - Each group will likely have at least one person who will stimulate others to talk
- Cons
  - Hard to manage group dynamics
  - Generally can't be fully structured
  - May need to ask fewer questions
  - Selection can be challenging

Closed-ended Questions

- Closed-ended
  - "On a scale of 1-10, 10 being best, how did you like the web page?"

- Easy to analyze, but may not be informative.

Yes/no questions

- Remember, the goal is to get interviewees to give you useful insight
- Simple questions get simple answers
- “Did you like the home page?”
  - You'll get a one-word answer

Open-ended questions

- "What did you think about the web page?"
- Invite elaboration, discussion.
- Ask users to complete a sentence
  - "My favorite web browser feature is..."
- Conceptual mapping
  - Draw pictures or layouts to describe understanding of a situation or problem

Other Guidelines

- Simple questions – no jargon
- Avoid compound questions with multiple parts
  - Not "“What were the strengths and weaknesses of the menu layout and the toolbar?”
  - Ask two separate questions instead.
- Avoid judgmental phrasing or tone
  - Possible bias

Questions in un- or semi-structured interviews

- Often, questions are generated in response to participant comments
- Can be hard to do this well.
- Start with structured interviews
  - Get a few under your belt before moving to unstructured.

Preparing for Interviews

- Pilot test – w/ colleagues and participants
  - Good for logistics and for confidence
- Write an interview guide listing what to do and when
  - Particularly good if multiple researchers are involved
- Logistical backups
  - Batteries for laptop, audio recorder, extra paper, etc.

Notes

- Audio and video recordings are fine, but
- Paper notes are still important
  - Record insights, non-verbal responses, etc.
  - Try to record what you can, but
  - Don't do so at the expense of listening
- Summarize written notes as soon as possible after the interview

before you forget...

Recordings

- Complete, but expensive
- Transcription can take many hours.
- Video is tricky, but gets useful information
- Consider audio + still pictures
- Respect privacy and anonymity
- Have a consistent policy for comments made after the notebook is away and the recorder is off.
  - Ok to restart, but be consistent about it.

During the Interview

- You're the Host: Build Rapport
  - Be friendly, respectful, nonjudgmental
  - Listen carefully
- Outline
  - Briefly introduce research goals
  - Complete paperwork (informed consent)
  - Simple questions first, hard questions later

During the Interview, cont.

- Be flexible
  - If your interview is not fully structured
- But, try to keep things on track
- Explain why you are asking each question
- Define terms, avoid jargon
- Ask for clarification

Read between the lines…

- Is the interviewee telling you what they think you want to hear?

- If so, make a note of it
- Might want to downplay in interpretation

Challenges of focus groups

- Manage the room. Be prepared to deal with
  - Digressions
  - Arguments
- Give everyone a chance to talk
  - Address them directly
    - “Joan, what do you think about...?”

Promoting Discussion

- What if they won't talk?
- Fully-structured – not much to do
- Otherwise
  - Rephrase questions
  - Dig deeper into specifics
- Use props and probes to stimulate feedback
- Focus groups – ask for dissenting or concurring feedback

Closing it out: Debriefing

- Ask for any final comments
- Provide more detail about research goals
- Brief summary of findings
- Turn off recording devices
  - Interviewees might make additional useful comments
- Say “thanks”!
- Reflect and summarize notes immediately

Telephone or online

- Phone, web chat, email, conference calls
- Pros
  - Easy, inexpensive
  - Reach more people with less effort
- Cons
  - Lack of face-to-face contact
  - Fewer non-verbal cues
  - Pacing can be harder

Data Analysis

- Do it as soon as possible
- Avoid “cherry-picking”
- Fully-structured, closed-ended: tabulate answers
- Open-ended questions require coding
  - Transcribe audio?
  - Written notes?

Qualitative Analysis

- Content analysis – frequency of terms, patterns in the notes
- Categorization
  - Affinity Diagrams
- Critical-incident analysis

- Multiple analyses can increase validity

Reporting Results

- Be as clear as possible
  - “7 out of 10”, instead of “most”
- Use quotes or paraphrases from respondents
  - But don't use participant name
  - use identifiers (Subject 3) or pseudonyms

End-of-chapter

- Summary
- Discussion questions
- Research design exercise