FIELD STUDIES
INTERVIEWS

CPSC 544 FUNDAMENTALS IN DESIGNING INTERACTIVE COMPUTATION TECHNOLOGY FOR PEOPLE (HUMAN COMPUTER INTERACTION)
WEEK 3 – CLASS 4

© Joanna McGrenere and Leila Aflatoony
Includes slides from Karon MacLean and Jessica Dawson
TODAY

• Field studies
  • Interviews

• In class activity
• Discussion of readings
• Project questions
DUE BY NOW...

Team Formation

• HCI course ethics.
• You should know by now who you will be working with for the project.
• Update the piazza post to list the team members.

Researcher journals

• Any further questions?
INTERVIEWS: WHEN AND WHY

a tool that can be used at any point in design process

are well suited for (among others):

• exploring issues
• learning more about tasks, scenarios of use
• involving users (+ making them feel involved)
• getting inside the user’s head
INTERVIEWS: INFINITELY MALLEABLE

Some things that can vary:

- number of people
  - individual, pairs, groups
- scope
  - duration, depth and breadth
- type
  - structured, semi-structured, unstructured
- location
  - in the lab vs. reality (in context)
- in combination with other techniques
KINDS OF INTERVIEWS

three main types:

• open-ended / unstructured
• semi-structured
• structured

• early stages of research use unstructured. Why?
• later stage more structured. Why?

other categories (can include types above):

• group - e.g. focus groups
• retrospective – user recalls and describes
• contextual inquiry – user is interviewed while working
UNSTRUCTURED INTERVIEWS

• most like a conversation, often go into depth
• open questions
• exploratory

*absolute key is to listen rather than talk: practice silence!*

pros/cons:
• rich data, things interviewer may not have considered
• easy to go off the rails
• time-consuming & difficult to analyze
• impossible to replicate
SEMI-STRUCTURED INTERVIEWS

in between structured & unstructured:

• seek a mix of constrained and unconstrained responses
• make sure to cover bases
  • e.g. list of items to definitely cover, responses to definitely get
• flexibility for open-ended follow-up as situation evolves

in HCI, un- and semi-structured are the most common
STRUCTURED INTERVIEWS

- predetermined questions
  - (like questionnaire, often with a flowchart)
- closed questions
- short, clearly worded questions
- confirmatory

pros/cons:
- replicable
- potentially important detail can be lost
GROUP INTERVIEWS (FOCUS GROUP)

- 2-10 people interviewed at one time
- usually has agenda, but may be either structured or unstructured
- skilled moderator critical!
- usually recorded

pros/cons:
- can accommodate diverse and sensitive issues
- opinions developed within a social context
  - some participants may be reluctant to take opposing view
- good way to locate “proto-users”: most articulate, imaginative participants can help later w/participatory design
- some interviewees may dominate
RETROSPECTIVE INTERVIEW

post-test interview to clarify events that occurred during system use:
record what happened, replay it, and ask about it

pros/cons:
• excellent for following up and grounding an evaluation
• avoids erroneous reconstruction
• users often offer concrete suggestions
• takes time; might require a second session
INTERVIEWING GUIDELINE

• interview in everyday, familiar settings – take cues from context
• be flexible to adapt line of questioning
• establish and maintain good rapport
• casual conversation is not bad
• assume respondent is expert
• do not interrupt unnecessarily
• plan questions that allow triangulation
  • ask the same question in different ways
INTERVIEWING GUIDELINE

• do not pre-suppose answer
  • How often do you use your mobile phone to call family members? VERSUS
  • What are the ways in which you communicate with your loved ones?
• be open-ended - avoid yes/no questions

avoid:

• asking long questions
• using compound sentences
• using jargon
• asking leading questions

… and generally be alert to unconscious biases.
Imagine you are trying to understand how home inhabitants communicate with one another using post-it notes.

Which interview question is most appropriate? Why?

1. Can you show me where you leave information for someone else?
2. Can you show me where others leave information for you?
3. Where do you leave information for someone else?
4. Where do people leave information for other people?
HOW WILL DATA BE RECORDED?

• handwritten notes (free form, coding sheet)
  • written notes can provide context, but not always details
• audio recording
  • audio recording helps capture terminology, common phrases, specific details
• video capture
  • video recording helps provide body language
• still photos
WHAT DO YOU NEED TO BRING?

be organized BEFORE you start:

• consent forms
• screening forms (if participant selection not done in advance)
• audio/video equipment
  • *extra tapes, microphone?*, *extra batteries, tripod*
• note taking equipment
• instruments: interview scripts, questionnaire?

just because it is a qualitative method does not mean that detailed preparation is not required!
SOME CRITERIA FOR A GOOD INTERVIEW

structure the time
  • have a clear beginning, middle and end

give participants context
  • explain why are there, what you hope to learn
    • if they don’t know, they can’t tell you

use props and visuals
  • combat artificial contexts with props relevant to questions/topics (e.g., prototypes, photos)
    • sometimes it’s easier to show than to tell

listen
  • make eye contact
  • refer back to things that have been said
  • be attentive, respectful, sympathetic, and flexible
  • give the participant time to think
    • but if they go off topic, OK to steer them back
there is often too much for one person to do!

• primary
  • usually the person who has contacted the participant guides the discussion

• secondary
  • responsible for most data capture (all recording devices, primary notes, artifact collection)
PILOT TESTING

check for:

• *duration*
• *clarity of interview questions*
  • non-repetitive, ability to deliver the script fluidly
• ability to operate *recording equipment*

bottom line: do you get meaningful data?
POST SESSION

- debrief immediately with partner/team
- type notes right away – expand as appropriate (make sure to note clearly what are expansions b/c they are subject to recall)
- check your recordings and label media
- make a log of all the items from the session (artifacts, audio/video tapes, still images, notes…)
- write up reflection on session (things that were not clear, surprising, …)
- plan for transcripts of dialog, as appropriate
ACTIVITY: COMPARING AND CONTRASTING INTERVIEWS [20 MIN]

“how to do a research interview”

• link to full video:
  • https://www.youtube.com/watch?v=9t-_hYjAKww
    • Contains more advice on good interviewing

Note
example is from social sciences
... many similarities to interviews in HCI
DISCUSSION ON INTERVIEW READINGS [20 MIN]

Get into group of 3-4 answering the following questions:

• What surprised you? or
• What you disagreed with?
• Others?
PROJECT QUESTIONS [5 MIN]
ON DECK...

Next class (Thursday) …

1. Readings (as posted) and researcher journals
2. Team contract is due on Thursday
3. First interim-milestone: unstructured observation in public place
   • The finalized team report needs to be posted to the Piazza
EXTRA SLIDES
## PROS AND CONS OF INTERVIEWS

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Challenges and limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can provide more detailed information than other data collection methods, such as surveys</td>
<td>Can be time-intensive because of the time it takes to conduct interviews, transcribe them, and analyze the results</td>
</tr>
<tr>
<td>May provide a more relaxed atmosphere in which to collect information through conversation, in comparison to filling out a survey</td>
<td>Interviewer must be appropriately trained in interviewing techniques in order to extract the most detailed and rich data from an interviewee</td>
</tr>
<tr>
<td>Interviewee can provide firsthand and more personal knowledge of a given topic that was not anticipated by the researcher</td>
<td>Not generalizable; generalizations about the results are usually incapable of being made because small samples are chosen and random sampling methods are not used</td>
</tr>
</tbody>
</table>

Prone to bias; responses from interviewees (community members, program participants, etc) might be biased due to their stake in the program

# PROS AND CONS OF FOCUS GROUP

## Pros and Cons of Focus Groups

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Challenges and limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate many ideas through dynamic discussions; “snowballing effect” can occur as participants develop ideas together</td>
<td>Where focus groups are conducted within an organization, participants may be concerned about confidentiality</td>
</tr>
<tr>
<td>Bottom-up generation of concerns and issues, which can help to establish survey variables</td>
<td>Researcher must be highly skilled in facilitating and managing group discussions</td>
</tr>
<tr>
<td>Can offer validity to research and avoid issues of bias in researcher’s interpretation</td>
<td>Some participants may not speak openly and may be inhibited because of the group</td>
</tr>
<tr>
<td>Relatively quick and efficient when compared with participant observation</td>
<td>Dominance by one, or some, participant(s) could limit findings relevant to the group as a whole</td>
</tr>
</tbody>
</table>

# PROS AND CONS OF OBSERVATION

## Advantages

<table>
<thead>
<tr>
<th>Pros and Cons of Participant Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td>Permits access to the “backstage culture,” allows for richly detailed description of behaviours, intentions, situations, and events as understood by one's informants</td>
</tr>
<tr>
<td>Provides opportunities to participate in unscheduled events</td>
</tr>
<tr>
<td>Can afford the researcher the opportunity to experience the real emotions and feelings of those being observed</td>
</tr>
<tr>
<td>Useful for explaining “what is going on” in a specific culture and in particular social situations</td>
</tr>
<tr>
<td>Heightens the researcher’s awareness of significant social processes</td>
</tr>
</tbody>
</table>

---
