

Introduction to HCI (Human Computer Interaction)

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Interview

Prof. Narges Mahyar
UMass Amherst

`nmahyar@cs.umass.edu`

Courses, projects, papers, and more:

<http://groups.cs.umass.edu/nmahyar/>

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Team formation activity [15 min]

- ▶ Pick your project and team members.
- ▶ Pick a team leader.
- ▶ By the end of today you should update the Google sheet, with your project name and team members.

Today

- ▶ Quizz [10 min]
- ▶ Team formation [15 min]
- ▶ Field studies: interviews [20min]
- ▶ Watch a video [15 min]
- ▶ Project questions & team formation [15 min]

Learning goals

- ▶ explain when and why interviews may be appropriate evaluation technique choice
- ▶ describe different types of Interviews
- ▶ discuss pros/cons of interviewing
- ▶ outline criteria for a good interview, and things you want to avoid doing

Interviews: when and why

- ▶ a tool that can be used at any point in design process
- ▶ are well suited for:
 - ▶ 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)

kinds of interviews

- ▶ three main types:
 - ▶ open-ended / unstructured
 - ▶ semi-structured
 - ▶ structured
- ▶ other categories:
 - ▶ 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

- ▶ 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

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

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

UD Co-Spaces: A Table-Centred Multi-Display Environment for Public Engagement in Urban Design Charrettes



Mahyar et al, UD Co-Spaces: A Table-Centred Multi-Display Environment for Public Engagement in Urban Design Charrettes, ISS 2016 **[Honorable Mention Award]**

Comparative study



UD Co-Spaces evaluation study

<i>Workshop agenda</i>	<i>Time allowed (minutes)</i>
1. Arrival, role assigned	10
2. Entry survey	10
3. Introductory lecture	5
4. Instruction on design task and tools	2
5. Work on design task	20
6. Targets provided by researchers	3
7. Continue to work on design task	25
8. Break	20
9. Post-task questionnaire	15
10. Focus group discussion	30
TOTAL	140

Interview 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

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 they are there, what you hope to learn
 - ▶ if they don't know, they can't tell you
- ▶ use props and visuals
 - ▶ (e.g., prototypes, photos)
 - ▶ sometimes it's easier to show than to tell
- ▶ listen
- ▶ make eye contact

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?

Primary and secondary

- ▶ there is often too much for one person to do!
- ▶ primary
 - ▶ usually the person who has contacted the participant and guides the discussion
- ▶ secondary
 - ▶ responsible for most data capture (all recording devices, primary notes, artifact collection)

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

What are the attributes of the greatest interviewers in the world?



Communication tips from some of the world's best interviewers

1. First Prepare Notes, Then Toss Them
2. Match Your Partner – in mood, energy level, language and body language
3. Practice Flexible Listening
4. Activate the Power of the Pause
5. Cultivate Curiosity
6. Practice Ego Suspension: The Power of Forgetting Yourself

<https://buffer.com/resources/6-powerful-communication-tricks-from-some-of-the-worlds-best-interviewers>

On deck...

- ▶ Next class (Tuesday) ...
 - ▶ Readings (as posted)
 - ▶ Team contract is due

Extra slides

Interweaving 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

Pros and Cons of Interview

Advantages	Challenges and limitations
Can provide more detailed information than other data collection methods, such as surveys	Can be time-intensive because of the time it takes to conduct interviews, transcribe them, and analyze the results
May provide a more relaxed atmosphere in which to collect information through conversation, in comparison to filling out a survey	Interviewer must be appropriately trained in interviewing techniques in order to extract the most detailed and rich data from an interviewee
Interviewee can provide firsthand and more personal knowledge of a given topic that was not anticipated by the researcher	Not generalizable; generalizations about the results are usually incapable of being made because small samples are chosen and random sampling methods are not used
	Prone to bias; responses from interviewees (community members, program participants, etc) might be biased due to their stake in the program

Boyce, C., Neale, P. (2006) Conducting In-depth interviews: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input, Pathfinder international, pp.1-12.

Pros and Cons of Focus Groups

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

Hancock, B., Windridge, K., Ockleford, F. (2007). *An Introduction to Qualitative Research*. Trent RDSU

Pros and Cons of Participant Observation

Advantages	Challenges and limitations
Permits access to the “backstage culture,” allows for richly detailed description of behaviours, intentions, situations, and events as understood by one's informants	Interpretation of data collected by researchers might be skewed by the researcher's individual interest rather than what actually happens in a culture
Provides opportunities to participate in unscheduled events	Understanding of the participant and what he/she thinks is being said is limited
Can afford the researcher the opportunity to experience the real emotions and feelings of those being observed	Researchers experience a feeling of having been excluded particularly at the beginning the research process
Useful for explaining “what is going on” in a specific culture and in particular social situations	community's discomfort with having an outsider may compromise the “reality” of what is being observed
Heightens the researcher’s awareness of significant social processes	Interpretations of observations are subjective

DeMunck, V. C., Sobo, E. J. (Eds) (1998). *Using methods in the field: a practical introduction and casebook*. Walnut Creek, CA: AltaMira Press.

Kawulich, B. (2005). Participant Observation as a Data Collection Method, *Forum: Qualitative Social Research*, 6(2).