HCI
Week 5 Tutorial

Report Structure: Introduction and Methods

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Coursework steps – suggested timeline

- **Weeks 1/2** Team formation
- **Week 2** Ethics & Data protection training
- **Weeks 2/3** Choose topic, technology & research methods
- **Week 4** Obtain ethics & prepare study material
- **Weeks 4/5** **Recruit participants**
- **Weeks 5/6** **Conduct study: collect data**
- **Weeks 5/6** Analyse data, derive design recommendations
- **Weeks 6 – 8** Write up your findings in form of a group report

Timeline may vary slightly across groups!

where you should be with your project

- Group formed
- General topic and technology in focus settled
- General project aim(s) defined
- General idea of “say”, “do” and “make” methods that you want to apply to address the aim(s) of your project
  - Study materials prepared (e.g., interview guide)
- Data Protection Training done (all group members individually)
  - If not, find it on on Learn under “essentials”
  - Once completed, please fill out this form to confirm your completion of the training.
- All students are clear about what is covered by the HCI ethics application (see Week 03 lecture)
- Preparation of ethics documents done and approved by tutor
  - i.e., participant information sheet & consent form
- Participants have been recruited or are in the process of being recruited
- (Maybe) Data collection has begun

Today

- Understanding the structure of a HCI research paper
- Analysing an introduction
- Analysing methods/study design
- Applying what we learn to CW1
- Next steps

Example Paper

- Capel et al. (2024) - Studying Self-Care with Generative AI Tools: Lessons for Design
- Explores how people use GenAI tools for self-care, including perceived opportunities and risks
- Combines workshops, a two-week diary study and follow-up interviews
- Today: focus on Introduction and Study Design

Structure of a HCI Research Paper

- Introduction: What is the problem and why does it matter? What does the research aim to explore/understand?
- Related Work: What do we already know?
- Study Design/Methods: How was the study conducted and why?
- Findings: What did the research discover?
- Discussion/Implications: What does this mean for HCI or for the design of new technology?

Activity 1

Map the Paper

- Skim headings, opening paragraphs and figures
- What are the paper's main sections?
- What does each section do within the paper?
- How does this structure compare with your CW1 report template?

[5 min]

What does an introduction do?

- Establishes the broader research topic and context
- Identifies a challenge, problem or gap
- Explains why investigating the issue matters
- States what the study aims to understand
- Positions the work in relation to existing research

Activity 2

Deconstruct the Introduction

Read through the Introduction section

- Context: What broader HCI topic is being studied?
- Problem/gap: What is the problem or gap motivating the study?
- Motivation: Why do the authors argue this matters?
- Research aim: What does the study aim to understand?
- Prior research: How do the authors position their work in relation to existing research?

[10 min; 5 min discussion]

What does a methods section do?

- Ethics: Describe the ethical process followed in the study
- Participants: Who took part and how were they recruited?
- Study procedure: What happened at each stage of the study?
- Method choice: Justify the methods used and why these are appropriate for the research aim?
- Data and analysis: What data was collected and how was it analysed and interpreted?
- Limitations: Acknowledge and discuss the limitations of your research (this is also found in the discussion section of some papers)

Activity 3

Deconstruct the methods section

Read through the Study Design section

- Ethics: What was the ethical process followed in the study?
- Participants: Who? How many? How were they recruited?
- Study procedure: What did participants do and when?
- Choice of method: Why those methods?
- Data collection and analysis: What data was collected? How was the data analysed and turned into findings?
- Limitations: What are the limitations of the research (note this is found in the discussion)

[10 min ; 5 min discussion]

Description vs Justification

- Description: We conducted semi-structured interviews with participants
- Justification: Interviews supported detailed exploration and follow-up questions about participants experiences captured in the diary study
- Both are needed as readers should understand both what you did and why
- Consider how each method connects to your research aim

Activity 4

Apply this to CW1

- What specific problem are you investigating, and why does it matter?
- What is the aim of your study?
- How will you position your work in relation to existing research?
- What does each of your say, do and make methods contribute to addressing your research aim? Why combine them?
- How will you report the ethics, participants, study procedure, data collection and analysis, and limitations?

[5 min]

Next steps...

Recruit participants and start data collection

- Start recruiting participants (min. 3; max. 5; no minors)
- Collect data
  - Use the instruments created over the past weeks to study the experiences and needs of 3 to 5 participants
- Transcribe recordings
  - Transcribe your recordings (MS Teams preferred).
  - Anonymise data (transcripts by changing names to pseudonyms; photos or images by covering or blurring faces).

Reminder that you cannot recruit participants or run any study activities before your ethics documents have been approved!

Any questions?