

USER STUDY

Now you have learned different qualitative and quantitative methods that you can use to understand people, ethnography (including observation and interviews), survey and focus groups. You should also have learned about the different strengths of these methods, e.g. quantitative data tells us *what*, and qualitative data tells us *why*.

This week, you will start to practice user-centred design, by first drawing on these methods to inform a design which will be your final coursework. This design project, also done as a team, can be carried out until March 13. By March 13, you will need to submit a design report as well as a video prototype as the outcome of the whole user-centred design process.

In this coursework, you are asked to design digital technologies to help university students to achieve better Work Life Balance (WLB). Compared to students at earlier stages, university students are more independent and enjoy more freedom. It is important for them to manage WLB to have a happy and productive life. As the first step of the design process, you as a team will employ methods you just learned to collect data to understand how university students organize their various activities, including study, work, social life, personal interests, services, and hobbies, and how you can design digital technologies to address some of the issues and improve WLB based on the understanding.

In this lab (Lab 6, week 7), you do not need to worry about design yet. Instead, you will focus on understanding your target users. This exercise will help you develop related skills seen in HCIDE lectures, including planning, participant recruitment, observation, interviews, survey, focus groups as well as qualitative coding and/or survey analysis. You should decide what techniques you will use to collect data in your user study, but each team should at least conduct 5 semi-structured interviews (20-30 mins for each), or 1 focus group (with at least 5 participants), by following the stages below:

- **Research planning:** You should plan your research out by
 - generating an interview protocol/guide as a team ([sample interview protocol](#))
 - thinking about who and how you will recruit participants for interviews or the focus group, and trying to ensure the diversity of participants (e.g. different majors, different levels, local and/or international, etc.).
 - checking whether the study meets the criteria outlined in https://www.gla.ac.uk/media/Media_515046_smx.doc. If yes, you can sign the form and submit it as specified below; if not, you need to go through the official ethical application.
 - Reviewing related literature to see what others have said about this topic
- **Semi-structured interviews or focus groups:** Check out the lecture notes for details of how to do it. Ask permission for recording.
- **Analysis:** You should then transcribe the recordings and perform open, axial and selective coding to derive emerging themes from the transcripts. To streamline this process, each team member may do coding individually first, and the group can then meet and discuss to identify and finalize emerging themes.
- **Writing:** write up the method used, and results based on the themes identified.

In addition to the semi-structured interviews or focus groups, you can also optionally employ observations and/or surveys in your study.

HOW TO SUBMIT

You do not need to submit a separate report, but the methods used for the user study and a short synthesis of the key results should be part of your design report to be submitted by March 13.

If you have more questions, check the FAQs below.

FAQs

Research

1. Do we have to come up with a specific research question?

You do not have to come up with more specific research questions. Your process can be open and exploratory, especially at the beginning (e.g. How do university students go about their everyday lives, and organize their various activities?), when you might have the least knowledge or assumptions of a situation.

Consent

2. Shall we ask participants to sign the ethics consent form before the study?

As long as you follow the general guidelines of this exercise, and double check that your study complies with the ethics checklist, verbal consent will be fine for this exercise.

Recruitment

3. Are we allowed to recruit people from my HCIDE class? Can we recruit from other universities?

Yes. You can recruit students from any classes, any schools or any universities. You just need to provide a clear description of the context of the study or the relevant background of the study participants in your design report (e.g. if you focus on medical students, you need to describe their context, such as their study demands).

Related literature

4. We need to review what others have said in related literature. Does this mean we should look in scientific articles/journals and reference them in our report?

You do not have space to describe such work in detail; if you manage to identify relevant literature, a simple high-level summary is sufficient. You may introduce what others have studied and what their conclusions were, as a means to contextualize your results (to get a sense of how your results are similar to, an extension of, or different from theirs).

Interview

5. Can I ask questions that were not planned in the protocol?

Definitely. You can add, change the order, and change the ways you ask questions. That is the advantage of doing interviews. The protocol is for you to make sure you cover the things that you want to cover.

6. So do the questions need to be specific?

You can ask a few general or survey questions, but the quality of the data relies on specific details. Try to have your questions be about details of what students do, not what their opinions or attitudes are. It is your job to do the analysis of this information, not theirs.

7. How can I ask questions about their specific experience?

Try to avoid asking many survey type of questions such as "How many hours of class did you have today", as the purpose is not to get statistical data. Try to avoid "typical", or "usually", which means they will need to summarize and it is not very accurate or reliable data. Instead, you could ask, "could you describe what activities you have done today?" and pick a particular activity, "for that activity, how did you plan for it? How it happened?" By starting with what they have done that day, for one, their memory is still fresh, for two, it hones in on a specific experience, not a general description.

8. For the transcripts, some of the sentences don't make sense because of the poor transcription performance. Do I have to go back and manually change it? or can I submit it as it is?

It is not necessary to correct transcripts, as long as you and your team members can understand them and you can move forward with the qualitative coding. However, if you want to use some quotes in the report as evidence, you may need to correct them to make sure they are readable and understandable.

Analysis

9. Can I use pre-lecture, during lecture or after lecture as categories for my data?

You can, but these are existing and familiar categories. See if there are any new categories emerging from the data that you can use (what grounded theory means - grounded on your data.).