

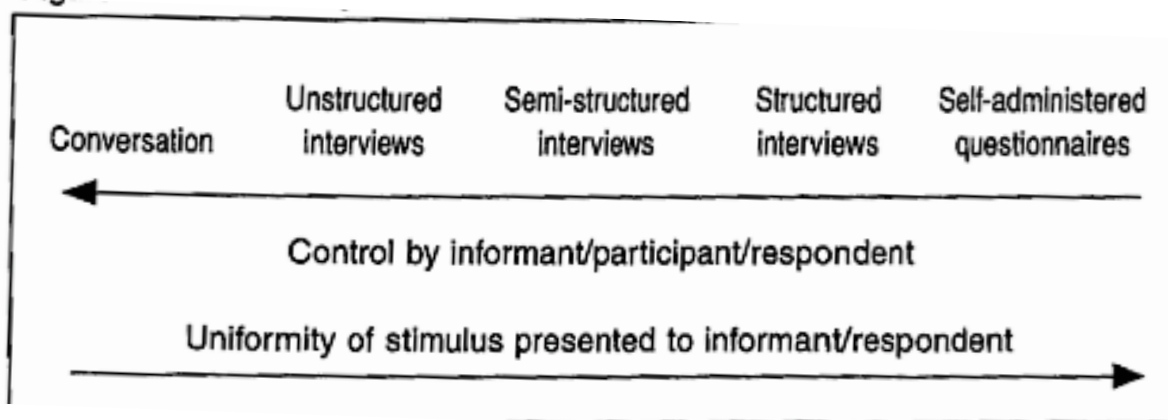
Interviews

Interviews

- An approach for data collection used by different research methods, including ethnographic, qualitative and even quantitative;
- There are different types of interviews and each one of these types is more often associated with a particular research method

Types of interviews

- In general, interviews can be classified along two continua (DeWalt and DeWalt, 2002):
 - The degree of **control** by the researcher and informants; and
 - The degree to which **the stimuli (questions)** presented to which informant is **uniform**.



The degree of control by the researcher and informants

- In one extreme, the researcher has no control and he is a pure observer in an **conversation**. The informant has control about what he or she wants to talk about; and
- In the other extreme, the researcher creates a **questionnaire or survey** with pre-defined questions with no accommodation for the concerns or understanding of an individual respondent.

Degree to which questions to each informant are uniform

- In on extreme the **survey** is defined beforehand and is presented to all informants with no room for his/her specific concerns; and
- In the other end of the continuum, each **conversation** is unique, there is no attempt to ask the same questions in the same way to each informant.

Types of interviews

- Between the extremes of these two continua (control and stimuli) lies the most common examples of interviews, namely:
 - Conversations;
 - Non-Structured interviews;
 - Semi-structured interviews;
 - Structured interviews; and
 - Surveys or questionnaires.

Types of interviews (2)

- In **conversations**, the researcher is observing participants as they go about their daily activities and are interacting in their natural way;
- In **informal interviewing**, researchers also observe participants, but ask clarification questions or questions to focus the point of interest;

Types of interviews (3)

- In **unstructured interviews** usually has an interview guide that includes topics to be addressed as reminders for himself, but presents these topics in an open-ended way;
- In **semi-structured interviews** the interview guide includes questions and prompts for questions to guarantee, to some extent, that the a set of topics will be addressed;

Types of interviews (4)

- In **structured interviews** a set of well-defined questions is used; and
- Finally, a **survey** is associated with a self-administered **questionnaire** where the information can answer questions without interacting with the researcher.

A trade-off between types of interview

- Un-structured interviews give informants control to talk about issues they believe are relevant,
 - This is in contrast to structured interviews or surveys in which the researcher “defines” beforehand what is or is not interesting;
- If the same aspect is raised by different informants, it is an important aspect to be investigated.
 - On the other hand, if the same topic is not raised, it does not mean it is not relevant, it only means that the subject did not arise in the interview.
- In other words, structured interviews or surveys allow comparison between informants because similar stimuli is presented. This is not always true for less structured interviews.

Types of Questions

- The distinction among the types of interviews is closely linked to the type of questions that are asked:
 - **Closed questions:** well-defined questions with a limited number of answers. The informant has to choose among this set of answers;
 - **Open questions:** ill-defined questions that require an opinion, an explanation, etc.

Example of Closed Questions

- Please indicate your level of agreement for the following statement: “My colleagues provide timely information about their changes in the source code that affect my work”.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

Example of Closed Questions (2)

- How much effort did you spend on modifying your code because of changes made by another developers located in a different site? (By effort, we mean the amount of physical and mental energy and the level of concentration that goes into your work.)
 - a. An extraordinary amount of energy;
 - b. A great amount of energy;
 - c. Quite a bit of energy;
 - d. A moderate amount of energy;
 - e. A limited amount of energy;
 - f. Not sure

Example of Open Questions

- Can you explain me what do you do as a software architect?
- Please, could you sort for me the features in [the current prototype] that you think would make your own work more effective for the group?

Questions, Interviews and Research Methods

- Closed questions are associated with surveys and questionnaires and used by quantitative research methods;
- Open questions are associated with conversations and unstructured interviews and, as such used by qualitative research methods including ethnographies;

Interview Techniques

“tricks of the trade” to make unstructured or semi-structured interviews more effective

Ask simple questions first

- Start the interview with the simple questions.
- In general, questions that require the informant to trust you should not be used in the beginning of the interview. Build rapport first.
- Even, if there already is rapport between you and him, ask simple questions first;

Ask short questions

- Instead of asking long and confuse questions, ask short questions: “tell me about your day, what did you do today?”
- “Grand tour” questions are questions that ask an informant to describe his reality, to provide an overview of his work
 - Can you explain me what do you do as a software architect?
- Based on the informant’s answer, you can follow up on different aspects of his work.

Avoid Generalizations

- When the informant generalize something (“I am usually late in my coding activities”), ask him to be specific (“Give me an example.”
“When was the last time you were late in your code activities”).
 - Specific cases often provide important insights about one’s work;
 - You can also explore why he **believes** in the generalization

Naive Questions (play dumb!)

- Over time the researcher becomes more and more familiar with the field. Despite that, he should avoid start making assumptions about what he knows about the field, he should **not** stop asking simple, even naive questions;
 - Avoid questions that confirm what you **think** you know!
 - Everyone here uses Eclipse, right?
 - Instead ask the informant to explain something again to you, so that you can confirm what you think you know.
 - Which software development tools are used here?

Naive Questions (2)

- Do not be afraid to use naive questions [DeWalt & DeWalt, 2002]:
 - Most people love to demonstrate and share their expertise;
 - Answers often will expand your understanding and /or knowledge about the topic far beyond what you already knew;
- Keep an open mind while in the field!

- A large part of doing good field work is that ability to make yourself vulnerable and slightly stupid. That willingness to suspend early assumptions about the way the world works, and to let other people's ways of making meaning be the ones that make sense for you. (Genevieve Bell, May 2004)

Naive Questions (3)

- If you have a CS degree or similar and is doing fieldwork in Software Engineering, the informants might make assumptions about what you already know (compilers, programming languages, etc).
- So, depending on your interest, you might even pretend to not know some of these aspects, i.e., play dumb!

Active Listening

- The researcher is **primarily a listener** who gains information in the terms used by the informants as the informant answers the questions.
 - This means, the researcher interrupts the informant **as less as possible**, and only when he thinks there is an interesting aspect that **is not fully developed** by the informant;

Active Listening (2)

- The researcher is quiet, but is *active*.
 - He is aware of what is being discussed;
 - He is making [mental or jot] notes about what is said, who said it and whether that makes sense in the context of the project;
 - He is demonstrating his interest to what is being said and his respect to the ideas of the informant;

Sensitive Silence

- In some cultures, just 1 or 2 seconds of silence is enough to encourage informants to continue talking without the need of the researcher to intervene;
 - This silent can be used as a way to let an informant expand on a particular topic;
- Note that being quiet during an interview should not be underestimated, this in fact, is one of the more difficulty skills to learn as one learns interviewing [DeWalt and DeWalt, 2002]

The Uh-hu Prompt

- “Uh-hu”, “hmmm-hmmm”, “ok”, “yes” , “really” are all prompts to active listening as a way of saying to the informant:
 - “I am following you”, or “This is interesting”, or “Please go on”

Repetition Feedback

- This basically is to repeat the last word or comment by the informant to stimulate him to continue the conversation and to demonstrate that the researcher is following the conversation, is interested
 - Be careful to not sound like a parrot ;-)

Summary Feedback

- According to this tricky, the researcher simply repeats what has been said by the informant to confirm his understanding and to encourage the informant to continue and make corrections;

Tell me more!

- “Tell me more!”. Use questions and comments that encourage the informant to continue talking about what happened, when happened, who was involved, etc:
 - Tell me more!
 - What else?
 - What happened?
 - What did you do?
- The idea here is to encourage the informant to keep talking about the same topic, instead of encourage him to change topics;

Interview Guide

- When possible, it is a good idea to create an interview guide. In this guide, you can have questions that you want to make sure you ask, for instance, demographics information, and questions about your research question.
- Do not overdo it. Instead of spending a lot of time framing the text of the questions, just write prompts / reminders about what you want to ask.

Practical Aspects

- The informant's time is precious.
 1. Use wisely
 - Do not plan interviews longer than one hour. People will be too tired after 45 minutes;
 2. Be careful:
 - Always have extra time for your interviews, i.e., save 45 minutes for a 30-minute interview;
 - Choose a quiet place without interruptions;
 - Ask permission to tape the interview. If that is acceptable, take extra batteries and tapes with you. Otherwise, take notes, jot down reminders without interrupting the informant.

- If you could not write notes during the interviews, do it in less than 24 hours. After that, details get lost;
- Write a summary of the interview:
 - What was interesting?
 - What was not interesting?
 - What did you learn different?
 - What was unexpected?
 - What would you do differently in the next interview?
- These summaries will allow you to find relevant information fast and reflect about the next interview.

Quality assurance

- *Pilot study*
 - Learn from your mistakes
- *Member checking*
 - Replay your observations – you may have it wrong (e.g. red bar)
- *Triangulation*
 - By data collection method
 - By analysis approach