Interview Techniques for UX Practitioners

A User-Centered Design Method

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INTERVIEWS

Much of the work of user-centered design (UCD) practitioners involves some type of interviewing. Interviewing is used, for example, when you are performing the following tasks:

- Selecting participants for research
- Moderating usability studies
- Briefing and debriefing during usability evaluations
- Conducting focus groups
- Doing phone interviews when you can't afford to travel to a site or bring users to your site
- Gathering information about users, tasks, and workflows in the field
- Performing site visits
- Discussing reactions to storyboards
- Developing scenarios and use cases.

While interviewing is an important skill in our field, many colleagues have little or no formal training in interviewing methods and often learn on the job with limited feedback on the quality of their interviews. What does it take to be a successful interviewer? Kvale (1996) lists 10 criteria for successful interviewers:

- **Knowledgeable:** The interviewer is familiar with the research questions and focus of the interviews and has done some background research into the domain, potential participants, and context of the interview. The interviewer is familiar with at least the basic terminology of the domain.
- **Clear:** The interviewer uses language that is appropriate for the participants and avoids technical jargon and acronyms.
- **Gentle:** The interviewer gives people time to finish their responses without interrupting them and understands that silence and reflection are part of good interviews.
- **Structuring:** The interviewer explains the goals of the interview clearly and asks if the participant has any questions about the topic or procedures.

- **Sensitive:** The interviewer is a good listener and notices things like subtle shifts in tone (e.g., from a normal voice to one that is critical or dubious).
- **Open:** The interviewer is flexible about topics that the participant feels are important when the survey is semi-structured or unstructured.
- **Steering:** The interviewer is clear on the goals of the interview and steers the interview appropriately, especially for semi-structured and unstructured interviews. The interviewer does not go too far off the main topic of the interview except when there is evidence of a new line of inquiry that has great promise.
- **Critical:** The interviewer can challenge the participant gently when inconsistencies emerge during the interview.
- **Remembering:** The interviewer can recall what the participant has been previously stated and bring that information into the interview session. The interviewer also remembers if a question has already been answered and does not re-ask a question that has been fully covered already.
- **Interpreting:** The interview can clarify and extend statements made by the participant without unduly influencing the participant's original meaning.

The chapters in this book will discuss specific ways to meet these criteria and become a successful interviewer.

Chapters 1–3 describe the three basic interview methods: **structured interviews, semi-structured interviews, and unstructured interviews**. These chapters provide best practices and procedures for conducting effective and efficient interviews.

Chapter 4 focuses on **phone interviews** and some of the issues with conducting long-distance interviews, which is becoming more common with remote testing and collaboration technologies (as well as travel limitations). While phone interviews may not be considered as glamorous as focus groups of usability testing, they are a key part of many user research plans because they allow a wide geographic reach at a low cost. Along with the many benefits of phone interviews, there are some pitfalls that practitioners must consider such as the legal issues with recording across state and country borders, memory limitations when asking questions (you can't have as many choices as you would with a written or online questionnaire), and the pacing of the questions.

Chapter 5 covers the **focus group** method. This may seem like an odd choice for a book on interviewing, but a focus group is really a group interview and there are times when you want to take advantage of groups that are visiting or attending conferences. You can plan a focus group or you might (serendipitously) have a group of users available for a short time and use focus group techniques to gather useful information The focus group method is sometimes maligned in our field because we are asking users their opinions about products rather than observing them actually using the products. The focus group method is also susceptible to the “loud participant” bias where one or a few vocal people sway the comments of others, especially if the moderator is not well prepared and experienced. These and other problems of group interviews can be mitigated and you can even combine focus groups with other methods like testing, surveys, and inspections This chapter describes some techniques for making focus groups useful and usable for UCD practitioners.

Chapter 6 focuses on two general issues, sampling and the use of incentives, that are relevant to multiple interview (and other UCD) methods.

CHAPTER 2

Semi-Structured Interviews

Alternative Names: Focused interview, qualitative research interview

Related Methods: Focus group, structured interview, unstructured interview

OVERVIEW OF SEMI-STRUCTURED INTERVIEWS

A semi-structured interview combines predefined questions like those used in structured interviews (see Chapter 1) with the open-ended exploration of an unstructured interview (see Chapter 3). Interviewers using the semi-structured interview approach generally follow a document called an interview guide or interview schedule that includes the following:

- An introduction to the purpose and topic of the interview
- A list of topics and questions to ask about each topic
- Suggested probes and prompts
- Closing comments.

The general goal of the semi-structured interview is to gather systematic information about a set of central topics, while also allowing some exploration when new issues or topics emerge.

Semi-structured interviews are used when there is some knowledge about the topics or issues under investigation, but further details are still needed. Semi-structured interviews can be based on topics, issues, and questions that emerged from unstructured interviews or other sources of information.

Semi-structured interviews allow discretion on the number and order of predefined questions posed to the participant (unlike the structured interview described in Chapter 1 where interviewers are required to follow a detailed script with little latitude for asking emergent questions or varying from the script). This type of interview involves the use of both open-ended and closed-ended questions and can provide both quantitative and qualitative data.

WHEN SHOULD YOU USE SEMI-STRUCTURED INTERVIEWS?

You can use semi-structured interviewing to do the following:

- Gather facts, attitudes, and opinions.
- Gather data on topics where the interviewer is relatively certain that the relevant issues have been identified, but still provide users with

the opportunity to raise new issues that are important to them through open-ended questions.

- Gather data when you cannot observe behavior directly because of timing, hazards, privacy, or other factors. You might, for example, use a structured interview approach to gather data on the usability of Army command and control systems.
- Understand user goals.
- Gather information about tasks, task flow, and work artifacts such as job aids, forms, best practices documents, workflow diagrams, signs, equipment, photographs, and posters.

Interviews and Artifacts

When you visit a home, work, or recreational site to conduct interviews, you are often trying to understand the culture. Each site is filled with artifacts—objects that have work or cultural significance—that can help you understand users and their environments. A flowchart of a company's development process, for example, can be the stimulus for an interview and helps the participant to tell a powerful story. Artifacts, such as collages or workflow diagrams, can be generated and discussed as part of an interview. Workplace artifacts are often associated with ethnographic interviews but are also useful in semi-structured and unstructured interviews where the interviewer has freedom to explore new paths and ask questions about particular artifacts.

- Gather data on complex issues where probing and clarification of answers are required.

Semi-structured interviews can obviously vary in length from several minutes to several hours. Interviews that are too long may reduce the pool of qualified participants who don't want to give up valuable work time; interviews that are too short may not provide enough time to establish rapport and cover the topic in sufficient depth. Consider arranging semi-structured interviews that last from half an hour to two hours (including introductions, building rapport, and winding down at the end) unless you know that the participants are quite dedicated and willing to give up more time (Robson, 2002, p. 273).

If you are doing interviews in environments where people are in a rush (airports, fast food restaurants, and city streets), your interview might use mostly closed-ended questions with a limited number of choices and a few short open-ended questions that are relatively easy to answer. Semi-structured interviews can be used during any phase of product development (Table 2.1). The small bar charts in Table 2.1 provide a sense of the overall effort, planning time, skill, resources, and analysis time required to conduct semi-structured interviews.

STRENGTHS

Semi-structured interviews have the following strengths:

- May uncover previously unknown issues (in contrast to a structured interview).
- Address complex topics through probes and clarification.
- Ensure that particular points are covered with each participant and also allow users and interviewers to raise additional concerns and issues.
- Provide a mechanism for redirecting conversations that digress too far from the main topic.
- Provide some flexibility for interviewers and also allows some broad comparisons across interviews.
- Require less training time than unstructured interviews because the interviewer has a set of specific questions available as a starting point.
- Can be conducted by an outside consulting company because there is a base set of questions (although you should research any external interviewing organization to ensure that they are competent at interviewing, data analysis, and interpretation).

WEAKNESSES

Semi-structured interviews have the following weaknesses:

- There can be an "interviewer effect" where the background, the sex, the age, and other demographics influence how much information people are willing to reveal in an interview (Denscombe, 2010). If you (a usability practitioner with a background in human–computer interaction) were interviewing a structural engineer about work practices, your lack of engineering background might influence how much detail the engineer provided and how much he/she trusted you to understand his/her work practice.

Table 2.1 Method Scorecard for Semi-Structured Interviews

Overall Effort Required	Time for Planning and Conducting	Skill and Experience	Supplies and Equipment	Time for Data Analysis
■■■□□	■■□□□	■■■□□	■□□□□	■■■□□
Most Useful During These Phases				
✓	✓	✓	✓	✓
Problem Definition	**Requirements**	**Conceptual Design**	**Detailed Design**	**Implementation**

- Some training and experience are required so that interviewers do not put words into the participant's mouth.
- Interviewers can give cues that might guide the participants into a particular answer.
- Consistency among interviewers is required. Too much flexibility among interviewers might make comparisons difficult. If you have multiple interviewers, consider training the group about how much flexibility they have in probing existing questions or asking new ones.
- The mixture of quantitative and qualitative data that results can be time-consuming to analyze.
- The findings of semi-structured interviews might be hard to generalize because different interviewers may ask some different questions.

WHAT DO YOU NEED TO USE SEMI-STRUCTURED INTERVIEWS?

This section provides a brief description of the basic resources needed to conduct a semi-structured interview.

Personnel, Participants, and Training

Semi-structured interviews are often best conducted using two-person teams where one person conducts the interview and the other person takes notes, handles the recording equipment and acts as a memory aid when recording is not allowed. A dedicated notetaker may not always be available because of funding. If you include a dedicated notetaker, that person should have familiarity with the domain, terminology, and product to make note-taking easier and more accurate. If you cannot record the interview and have no one to take notes, give yourself time between interviews to fill in what you remember but didn't have time to write down during the session.

Ganging Up on the Participant

While two-person interview teams can make the interview somewhat easier, having two people for face-to-face interviews might intimidate the participant, especially if there is any sensitivity to the interview. If the interviews are sensitive, consider having one person to conduct the interview and use an audio recorder to capture details that the interviewer might not be able to catch with manual note-taking.

Training for semi-structured interviews should include the following topics:

- How to write an interview guide.
- How to probe for more detail using neutral prompts that do not suggest an answer to the participant.

Make a List of Neutral Prompts and Practice Using Them

Many UCD activities call for the use of neutral (nonleading and nondirective) prompts such as these:

"Tell me about. . ."
"Could you explain a bit more what you meant by. . .?"
"How do you feel about. . .?"
"Could you describe. . .?"

You might find it useful to keep a list of good prompts and include them in the interview guide or even on a notecard that can be used as a cognitive aid for participants during a set of interviews.

- How to deal with silences and how to cut off answers that are not providing anything new.
- How to use verbal prompts to aid the participant's memory.
- How to control body language so that you convey interest without introducing the opinions of the interviewer.
- How to take notes if you don't have help and can't record the interview.
- How to be sensitive to the ethics of the interview. The interviewer should be sensitive to ethical issues involving privacy, sensitive topics, and confidentiality of the data (Bryman, 2004).

Hardware and Software

Semi-structured interviews can benefit from audio or video recorders so you have a complete record of the interview. Digital cameras can be useful for documenting the physical environment and any artifacts that are important to the study topic. If you plan to conduct a large number of interviews (or have large amounts of open-ended data from surveys or other UCD methods), consider using specialized qualitative data analysis tools such as ATLAS.ti, QSR NVivo, THE ETHNOGRAPH, or HyperRESEARCH. Note that these tools are not ones that you pick up quickly. They all require training and practice and may take weeks or months to master.

Documents and Materials

Documents and materials for semi-structured interviews include the following:

- An interview project plan that describes the goals of the study, the recruiting plan, background on the companies and people you are going to visit, the general topics that are of interest, guidelines for interviewers, and the data collection and analysis plan. The level of detail depends on the magnitude of the study, but even small studies can benefit from a project plan.
- A letter of introduction that you can send or email to perspective participants and their management.
- Informed consent forms that explain the purpose of the study, any risks associated with the interview sessions, how the data will be used, and permission for data recordings.
- NDAs are required if the participants have not already signed a form. Check with your legal office on your company's NDA policies. For example, some people may not have the authority to sign an NDA (you might need someone at the director or higher level to do so).
- Some types of database or software are required for storing and analyzing qualitative data (if you have large amounts of data). You may want to examine data over a period of time or compare it to other sources of data, so some way to store it can be beneficial in the long run.
- Interview agendas or guides with the general areas that you will cover and potential probing questions.
- Maps and good directions.
- Small gifts or incentives for your hosts and those you will interview.

PROCEDURES AND PRACTICAL ADVICE ON SEMI-STRUCTURED INTERVIEWS

This section provides a brief description of the basic resources needed to conduct a semi-structured interview.

Planning and Developing the Semi-Structured Interview

To plan and develop a semi-structured interview, follow these steps:

1. **Determine the goals or research focus of your semi-structured interview.** Why are you doing this study? General goals of semi-structured interviews can include the following:
   - Exploring a particular topic, problem, or issue
   - Understanding how a process or function works

- Understanding how particular groups in an organization work together
- Determining what is efficient and inefficient about particular workflows
- Gathering background material for creating personas, task models, or other artifacts
- Testing ideas or hypotheses from other sources
- Confirming (or discomfirming) results from other methods.

2. **Develop a list of general questions that you want to ask during the interview.** Semi-structured interviews have some "standard" questions as well as *ad hoc* questions that are prompted by the respondent. Here are some example questions that can apply to many user or customer interviews (Goodwin, 2009; Hackos & Redish, 1998):
   - What is your background and your role in your organization?
   - What is a description of a typical day/week/month at your job?
   - What do you do with a product (function or service)?
   - What are the problems with this product (function, process, or service)?
   - What are the best things about this product (function, process, or service)?
   - Please list two to three things that you like best about this (function, process, or service).
   - Please list two to three things that you dislike best about this (function, process, or service).
   - What tools, software, or hardware do you use to accomplish your goals? How often do you use these tools?
   - What are the primary outputs of your work? Can you show me some examples?
   - What are the major tasks that you need to complete successfully to accomplish your goals?
   - What are the busiest times of the year?
   - Can you give me a specific example?
   - What factors were involved in choosing this tool (function, process, or service)?
   - How does your company measure success?
3. **Develop your interview guide with the general questions and basic script for the interview**. Table 2.2 is an outline of a sample interview guide. Following are some basic guidelines for developing questions for the interview guide:
   - Avoid the tendency to add "interesting" questions that do not relate to a research goal. Ensure that each question is relevant to

Table 2.2 Rough Outline of a Semi-Structured Interview Guide

Activity	Comments/Questions	Approximate Time
Introduction	Brief the participant. Introduce self. Explain goals of interview. Review interview method, use of data, confidentiality, and so on.	10 min
Structured topics	Topic 1: Background Question 1a Probe 1 Probe 2 Probe 3 Topic 2: Context of Work Question 2a Probe 1 Probe 2 Question 2b Probe 1 Topic 3: Use of Product Question 3a Probe 1 Topic *N*: Additional topics	40 min
General questions and open dialogue with participant		30 min
Closing comments and completion of any paperwork (receipts, final questionnaire, etc.)		10 min

the goals or hypotheses of your project. It should be possible to connect each question to a clear business or research goal. If you can't connect a question to a clear goal, then delete it.

- Use language that is appropriate for your participants.

Adapt Your Language to Match the Participant

As you conduct your interviews, you will learn about technical terms and phrases that are part of the language of the group you are investigating. Consider incorporating that language into the unstructured aspect of your interviews. If, for example, you hear people consistently using a particular word that you weren't familiar with, you might ask what it means and use it in your interview. Be sure you understand what new terms mean before you use them so that you don't look foolish. Knowing some of the terms of your users can enhance your credibility and help build rapport.

- Avoid questions that are overly long or complex. You can use probes to get more details and clarify responses.

- Don't ask double questions such as "How would you describe the usability and reliability of the new software?" Break questions like this into two questions.
- Do not tax the cognitive abilities of the participant significantly with the range of responses to closed and partially closed questions (e.g., don't ask the person to rank and order 10 items that are presented verbally). If you have questions with response categories that may tax the participant's cognitive abilities, consider putting the question and response categories on a card and hand the card to the participant.
- Review the question order for obvious biases and sensitivities. You may not want to ask a threatening initial question that might influence later responses.
- Listen closely. Interviewers should be trained to be good listeners. Good listeners have the following characteristics:
  - They don't jump in too quickly when a participant is talking.
  - They balance neutrality with motivation. Avoid obviously biased prompts but provide some general reinforcement for the participant.

4. **Recruit participants who meet your screening criteria.**

Tip

Be careful about overrecruiting from your favorite companies. You can wear out your welcome if you keep coming back or you might miss problems that your not-so-favorite customers are having.

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5. **Create and assemble any forms or documents that you need, including the following:**
   a. The interview guide with opening remarks, topics and questions, probes, and closing statements.
   b. Screeners and letters that you use to recruit participants.
   c. An informed consent form if required. An informed consent spells out the purpose of the study, the rights of the participant, and any physical or mental stress associated with the study.
   d. An NDA, if necessary. An NDA lists the rules for disclosure of information learned during a study. Some organizations combine the informed consent form and NDA while others keep them separate. If you discuss upcoming development activity, you

may need to have your participants sign an NDA. Conversely, you may have to sign an NDA for each organization you visit if the interviews deal with any sensitive information about your customers or their clients.

e. Any receipts for compensation. If, for example, you are using Amazon gift certificates, which can be considered as cash, you may ask a person to sign a paper receipt or electronically acknowledge receiving the gift certificate. See Chapter 6 for more details on the use of incentives.

6. **If you are visiting different companies, prepare a briefing memo that describes each company, how the company uses your product, what main issues the company faces, and the agenda for the day.** Also include the names of the participants, their locations, their phone numbers, and a brief note about their role with the product of interest.
7. **Your first few minutes with the participant are likely to set the stage for the success of your interview.** Work on those first few minutes in pilot interviews and keep in mind that the first impressions of the interviewer can be critical to success. An interviewer must be calm, confident, credible, knowledgeable, flexible, and professional—without being arrogant.
8. **Pilot test the entire interview process from meeting your hosts through packing up your equipment and materials, thanking your participant and hosts, and leaving the site.** Refine the process and materials based on the pilot testing. Use the pilot testing to get a good estimate of how long the interview will last.

Conducting the Semi-Structured Interview

To conduct the semi-structured interview, follow these steps:

1. **If possible, meet with all the people you plan to interview at a particular location at the beginning of the day and give the group of participants an overview of your general plans (e.g., you will be audiotaping, the interview will take about an hour, etc.).** If you can set up this "group introduction," you can save time (you don't have to repeat the material for each person), make sure that there is a schedule setup for the day's interviews, start building rapport, and, if appropriate, have everyone fill out any required forms.

Emotion, Body Language, and Self-Disclosure

Be aware of expressions of support, sympathy, joy, anger, and other emotions. In contrast to structured interviews, you may need to show some emotion during the interview (expressing sympathy when the person describes a particularly bad incident with a product) to gain trust and show interest, but avoid any expressions of emotion that might induce participants to tell you "what you want to hear."

Consider carefully your body language during interviews. Are you showing approval or disapproval with facial expressions or changes in posture? A useful training exercise is to set up some interviews where you videotape the interviewer (if you have the equipment, you can tape both the interviewer and participant and use a split screen) and then have several observers review the tape and critique the interviewer on the following:

- Vocal and facial tics or extreme displays of emotion
- Loaded and biased questions
- Transitions between questions
- Ability to get participants to either expand on or curtail their discussions
- Appropriate pauses, interruptions, and listening skills.

Avoid talking too much about yourself. The participant might try to guess what kind of answers you expect. There is a fine line here because some self-disclosure can lead to trust, but too much may lead to biased answers.

2. **When you meet each respondent, ask them where you should sit.** If you need to set up any equipment, make sure that you don't interfere with anything in the participant's space. Consider whether privacy is more important than being in the participant's actual work space. If the interview is potentially sensitive, consider going to a more private space such as a conference room or even a remote area of a cafeteria.
3. **Review the interview process briefly with each participant (this should be outlined as part of your script).** Mention the following to the participant:
   a. A brief description of the interview topic and goals, the stages in the interview process, recording and ethical issues, and comments about prompting and also cutting short some discussions to ensure that there is good coverage.
   b. The amount of time that is allocated to the interview.

c. What you will do if the person has to answer the phone or leave momentarily (shut off all recording equipment and offer to step away).
d. What you will be doing with the data and (if you plan to send anything back to the participant) how they can get a summary of the results. If you do not plan to let the participant (or the managers who arranged the interview) see any data, be very careful what you say about the results. Remind the participant that the data will be confidential and describe how you will keep it that way.

Remember that the participant is doing you a favor, so this introduction is important for making the interview a pleasant experience.

4. **Begin the interview with some warm-up or introductory questions that are easy, nonthreatening, and relevant.** It is generally important to gather some background on the participants and also to understand the context in which they are using a product or service at the beginning of the interview.
5. **During the main part of the interview, you will begin with the questions on the interview schedule that you want everyone to answer and then ask the remaining questions.** Modify or expand these questions as needed depending on the responses of the participant.
6. **Signal a clear end to the conversation by thanking the participant, putting away note-taking materials, and turning off any recording devices.** If you have promised any payment or other compensation for the interview, give it to the participant, have him or her sign a receipt, if necessary, and ask if it is okay to contact the participant if any questions occur during the data analysis and interpretation.

After the Semi-Structured Interview Session

After the interview, follow these steps:

1. **After you put away your notes and shut off any recording systems to signal the end of the interview, there is a good chance that your participant will engage you in some post-interview conversation that has some valuable nuggets of information or insight, or you may have some reflections immediately after the interview.** Bryman (2004) recommends that you don't switch off the recorder as the interview winds down. Keep recording until the last possible moment. Make brief notes on the participant's comments and your reflections

before you move on to the next interview. According to Bryman, things that you might consider noting include the following:

- A description of the location and setting with a focus on any aspect of the setting that might have affected the conversation between the interviewer and participant. Were you interviewing the person in a cubicle, a private office, or the cafeteria?
- A description about how the interview went. Were you nervous? Was the participant nervous?
- Was there anything in the area that might have affected the interview? For example, was there a manager hovering nearby?
- Was there anything about the interview that was out of the ordinary or that you might want to let others know about?

2. **After each individual interview, collate and mark all your materials (notes, tapes, forms, artifacts, etc.) clearly.** If you are working with a team, meet everyone who has conducted daily interviews and walk through how well things went and analyze if there are any major issues that need to be dealt with before the next set of interviews (from simple things such as correcting a typo on the informed consent form to adding questions to the interview).
3. **Schedule sufficient time between interviews to make some general notes, including questions and issues that you might want to bring up with the next participant.** If you had a colleague serve as notetaker, you might review the session together.

VARIATIONS AND EXTENSIONS TO THE SEMI-STRUCTURED INTERVIEW METHOD

The following section describes variations and extensions to the semi-structured interview method.

Building Work Models Through Multiple Interviews with One or More Experts

Semi-structured interviews can be used to build models that incorporate the objects and processes of a system. One approach to building work models is to interview a number of experts and use the combined results to create a work model that can be refined using additional interviews or other methods. Wood (1997) suggests an alternative approach based on repeated semi-structured interviews with a single expert.

Wood conducted a set of interviews with a single expert to understand how telecommunications equipment was ordered at Brigham Young University. After each interview with this expert, he created an updated version of the model and then conducted another semi-structured interview with the same expert.

This process of *interview–refine–interview* continued until Wood felt that the interviews had yielded a comprehensive model of the ordering process. This model was then shown to other stakeholders who were interviewed regarding their specific perspectives on the process. Feedback from these additional stakeholders was used to refine the model until they were satisfied with the composite work model. This approach of iterative semi-structured interviews with a single expert assumes that the expert has a broad understanding of the work process and can provide information that leads to a good work model prototype.

MAJOR ISSUES WITH SEMI-STRUCTURED INTERVIEWS

The following section describes some major issues that you need to consider if you are planning semi-structured interviews.

Putting Participants at Ease and Making Them Feel Comfortable in Your Presence

You can do some basic things to make your participants comfortable during an interview (Goodwin, 2009; Hackos & Redish, 1998):

- Don't judge your participants. Don't make them wrong.
- Try to conduct the interview outside the influence of managers or supervisors.
- Remind the participant that you will give them privacy if they need it for phone calls or interruptions. If the phone rings, for example, turn the tape recorder off and don't take notes.
- Keep in mind that your posture and body language can affect the participant. If you are tired and slouching or yawning, your participant may feel that you are not interested in what she has to say.
- Provide minimal encouragement. Express understanding in a neutral fashion, perhaps by nodding to show interest without biasing answers.
- Explain the limits of your ability to help the participant or give them solutions or advice during the interview. One way to leave a positive impression is to give the participants some tips when the interview is

complete. The tips should be simple, have a positive impact, and have very little risk. You don't want the participant to try something you suggested after you leave only to suffer a major data loss.
- Ask your hosts what type of clothes are appropriate when you are planning your interviews. If you are interviewing bank managers, wear a business suit. If you are interviewing students about video games, casual clothes might be preferred over business attire although you still want to be viewed as the interviewer to legitimize your role. The following key principles apply (Bailey, 1994):
  - **Legitimacy**. Dress so that you look like an interviewer.
  - **Simplicity and conservative dress**. Dress in a way that does not distract or bias the participants.
  - **Avoid wearing clothes or objects (rings, jewelry, pins) that might identify you with a particular group or organization**. For example, do not wear any pins that identify a particular political leaning.

Just How Much Discretion Should Interviewers Have?

Interviewers using the semi-structured approach can be given discretion to do the following:

- Probe the user on a question until no new information emerges (Preece, Rogers, & Sharp, 2002).
- Prompt the user to help with recall (Preece et al., 2002).
- Modify questions to fit the particular context.
- Add or delete questions (although you may have a core question set that generally should not be deleted).
- Change the order of questions posed to the participant (unlike the structured interview where interviewers generally follow a detailed script that does not allow *ad hoc* changes to the question order).
- Vary the time spent on each question.

There are no formulaic answers to how much discretion to allow, but interview organizers should consider the experience of their interviewers (more experienced interviews can have more discretion), interviewers' depth of knowledge on the topic (more depth might allow deeper probing), and the importance of consistency of the results (part of the reason for using the semi-structured method is to have the ability to make some broad comparisons). It is important to consider how much discretion your interviewers will have during the planning and training for the semi-structured interviews.

How Should You Order Questions in a Semi-Structured Interview?

Determining the best order of questions is not an easy task, and the research is quite mixed with regard to the impact of question order on participant responses. Here are some general guidelines to consider (Schuman & Presser, 1996; Dillman, 2009; Schensul, Schensul, & LeCompte, 1999):

- Arrange questions by topic, category, or domain.
- Ask the more important questions first in case you run short on time.
- Avoid difficult, threatening, or emotionally laden questions at the beginning of the interview. Generally, you should order questions from least-to-most threatening overall or within a particular domain or category.

What Is Sensitive or Threatening Varies by Setting and Culture

When you are generating questions and are thinking about how to order them, consider that the level of sensitivity or threat associated with a question can vary by setting and culture. Even something as seemingly straightforward as asking people to describe how they do their work might be viewed as threatening if those people are using unofficial shortcuts not approved by management, which is a common situation in business settings (Schensul et al., 1999).

- Order questions according to complexity with easy questions coming first and more complex ones later.
- For questions dealing with events over time, ask first about earlier events and then move to more recent events.
- Avoid asking basic demographic questions at the beginning unless they are required for screening purposes. Ask these questions at the end of the interview or provide it to the user on a questionnaire.
- Before asking questions that might be viewed as personal, remind the participant that this information is confidential, and participants won't be identified in any way on the final report.
- Have several colleagues review the order of the questions to see if the answers to a particular question might obviously bias subsequent questions.

CONCLUSIONS

The semi-structured interview is a cross between the structured interview and the unstructured interview that allows some standardization of questions and also the freedom to explore and add new questions as unexpected topics emerge. The goals of the interview will guide how much exploration is needed.