



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

BA COMPUTER GAMES DESIGN

USER EXPERIENCE DESIGN

User Research 2



User Research 2

Lecture Contents

- ① Asking Questions
- ② Focus Groups
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Asking Questions



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ASKING QUESTIONS

User research generally involves **asking real people real questions**.

There are three basic types of questions:

- OPEN
- LEADING
- CLOSED / DIRECT



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ASKING QUESTIONS

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There are three basic types of questions:

- OPEN

e.g. “*How usable is this software?*”

This allows for a wide range of answers – good for qualitative data



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ASKING QUESTIONS

User research generally involves **asking real people real questions.**

There are three basic types of questions:

- **LEADING**

e.g. ***“What are the good things about this software?”***

Guided wording narrows down the answers to a certain subject. However, careless use might exclude things you want to know



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ASKING QUESTIONS

User research generally involves **asking real people real questions**.

There are three basic types of questions:

- **CLOSED / DIRECT**

e.g. ***“Which is better, the tablet version or the phone version?”***

Closed questions normally lead to a binary answer (either A or B). This is generally quantitative in nature as there is very little room for expression



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ASKING QUESTIONS

There are **different ways of asking questions** depending on the data you hope to obtain.

Some of these methods are best for obtaining **quantitative data** while others are more suitable for **qualitative data**.



Focus Groups

Get a group of people together to discuss something



Observation

Watch people doing things then ask questions



Interviews

Ask people a set of questions one by one



Surveys

A form that people can answer anonymously



Card-sorting

Each person gets a set of ideas or categories (on cards or post-its) which they sort into groups that make sense to them personally



Google

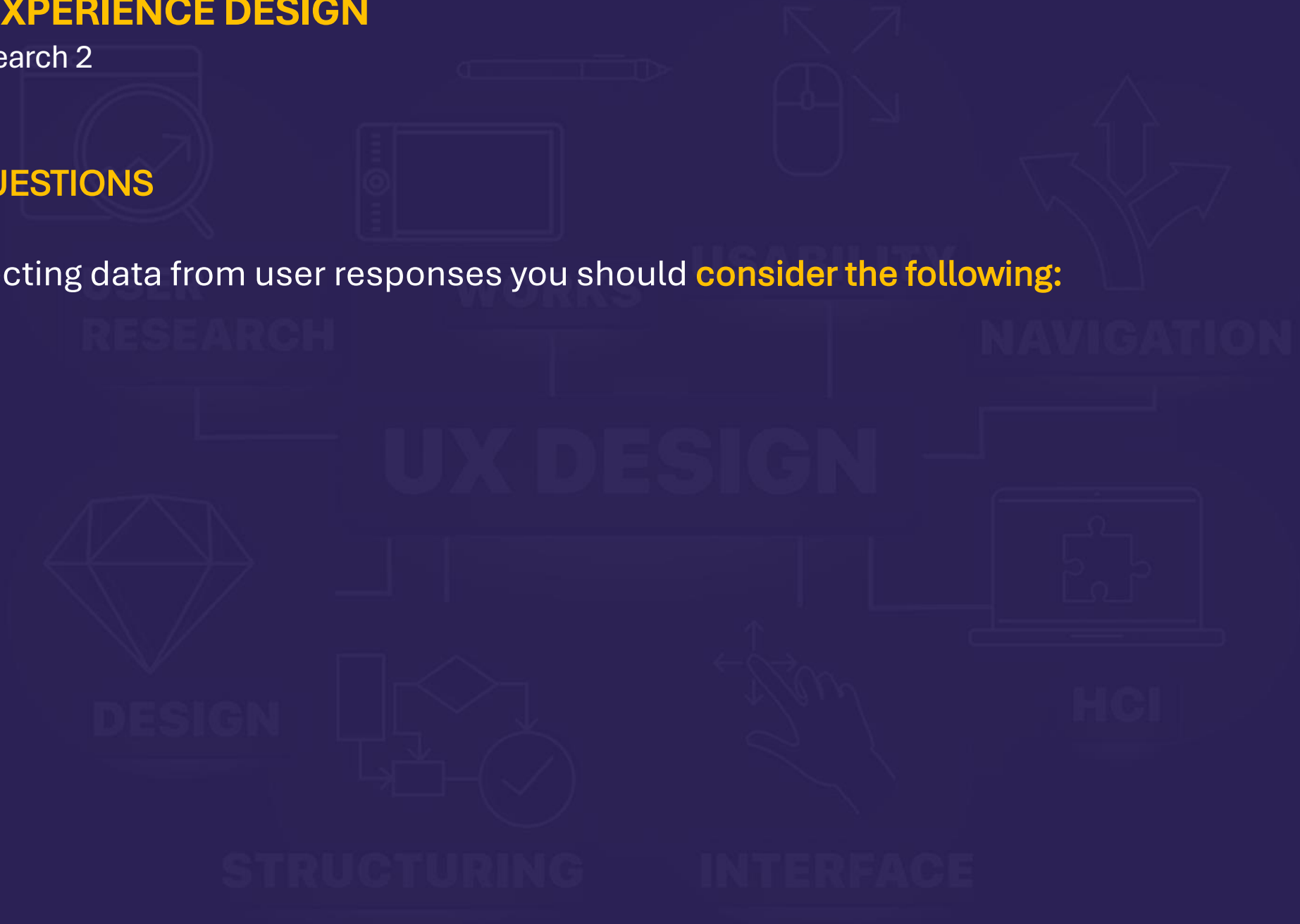


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ASKING QUESTIONS

When collecting data from user responses you should **consider the following:**





ASKING QUESTIONS

When collecting data from user responses you should **consider the following:**



Ask the same questions in the same way to everyone



Avoid interpreting questions or suggesting answers



Remember that people may lie to avoid embarrassment if it seems you prefer a particular answer



Take notes or record interviews.
Never rely on your memory of what was said



Get a broad range of people, not just your friends/colleagues.
Oddballs often provide useful insights



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Focus Groups



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FOCUS GROUPS

Focus groups are a somewhat informal technique that can **help you assess user needs and feelings** both before interface design and long after implementation.

In a focus group, you **bring together 6–9 users** to discuss issues and concerns about the features of a user interface. The group typically lasts **about 2 hours** and is run by a moderator who maintains the group's focus. [1]





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FOCUS GROUPS

Focus groups often **bring out users' spontaneous reactions and ideas** and let you observe some group dynamics and organizational issues.

You can also ask people to discuss how they perform activities that span many days or weeks: something that is **expensive to observe** directly.

However, they can only assess what customers *say* they do and not the way customers actually operate the product. Since there are often major differences between what people say and what they do, **direct observation of one user at a time always needs to be done to supplement focus groups.** [1]



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Observing Users



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OBSERVING USERS

“Too frequently, I hear about companies basing their designs on user input obtained through misguided methods. A typical example? Create a few alternative designs, show them to a group of users, and ask which one they prefer. Wrong.”[1]

If the users have **not actually tried to use the designs**, they'll base their comments on **surface features**. Such input often contrasts strongly with **feedback based on real use**.

For example: A spinning logo might look pretty cool if you don't need to accomplish anything on the page.



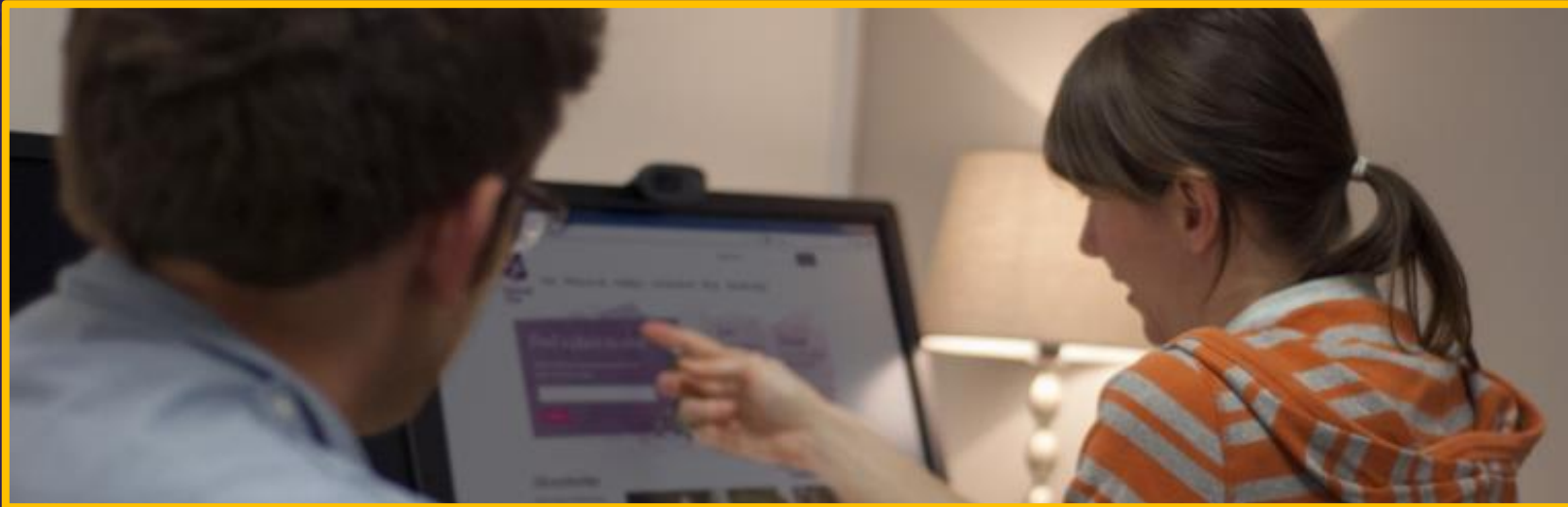
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OBSERVING USERS

To discover which designs work best, **watch users as they attempt to perform tasks** with the user interface. This method is so simple that **many people overlook it**, assuming that there must be something more to usability testing.

Of course, there are many ways to watch and many tricks to running an optimal user test or field study. But ultimately, the way to get user data boils down to the **basic rules of usability**. [1]





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OBSERVING USERS

These are the **basic rules of usability** [1]:

- Watch what people actually do
- Do not believe what people *say* they do
- Definitely do not believe what people predict they *may* do in the future



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OBSERVING USERS

Say, for example, that **50% of survey respondents claim** they would **buy more from ecommerce sites that offer 3-D product views**. Does this mean you should rush to implement 3-D on your site?



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OBSERVING USERS

Say, for example, that **50% of survey respondents claim** they would **buy more from ecommerce sites that offer 3-D product views**. Does this mean you should rush to implement 3-D on your site?

No. It means that "3-D" sounds cool.



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OBSERVING USERS

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The world is littered with failed businesses that banked on people's attitude toward hypothetical products and services. **In speculative surveys, people are simply guessing how they might act** or which features they'll like; **it doesn't mean they'll actually use or like them in real life** [1].



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OBSERVING USERS

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Analysing video takes time, so allow for that in your project plan



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OBSERVING USERS

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- **Don't just watch what they do, watch how they do it**
Body language and facial expressions reveal thoughts and feelings



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- **Do not help**
Sometimes people get confused or uncomfortable when they don't know what to do next. Letting users fail is sometimes a great learning experience



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Remember: People lie!



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OBSERVING USERS

The less obvious the problem, the **more people you need** to find it. Imagine two problems:

1 out of 3 people don't notice the button that opens a menu



1 in 20 people don't notice that a particular product is free



Things are commonly tested with around 5 users, so the **pricing problem would be missed**.



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OBSERVING USERS

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You need *at least* 3 people to spot this
In practice it may take 4-5 people

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OBSERVING USERS

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You need *at least* 3 people to spot this
In practice it may take 4-5 people

1 in 20 people don't notice that a particular product is free

You need *at least* 20 people to spot this
In practice it may take 30-40 people

Things are commonly tested with around 5 users, so the **pricing problem would be missed.**



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User Interviews



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USER INTERVIEWS

User interviews are a research method where an **interviewer asks participants questions about a topic, listens to their responses**, and follows up with **further questions to learn more**.

The term “user interview” is unique to the UX field. In other areas, like market research or social science, **the same method is called an in-depth interview, a semi-structured interview, or a qualitative interview** [1].

User interviews help you learn who your users are, what their experiences are like, what they need, value, and desire.



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USER INTERVIEWS

When performed well, user interviews provide **in-depth insight into who your users are, their lives, experiences, and challenges**. Learning these things helps teams **identify solutions to make users' lives easier**. As a result, user interviews are an excellent tool to use in discovery [1].

Here are **some of the many things you can learn** by interviewing your users:

- What users' **experiences** were like, what was **memorable, and why**
- Users' **pain points** during an experience
- How users think or feel about a **topic, event, or experience**
- What users **care about**
- Users' **mental models**
- Users' **motivations, aspirations, and desires**



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Career Foundry - *How To Conduct User Interviews Like A Pro* (9 mins) [2]



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USER INTERVIEWS

User interviews **help teams build empathy for their users**. When teams watch interviews, they can put themselves in their users' shoes.

Nielsen Norman Group's online resources contain **information on how to do a user interview**. They specify the following steps [1]:

1. Identify What You'd Like to Learn
2. Prepare a Guide
3. Pilot Your Guide
4. Start Easy
5. Build Rapport
6. Follow Up and Probe



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USER INTERVIEWS

1. Identify What You'd Like to Learn

Think of an interview as a **research study**, not a sales session or an informal conversation. Like any research study, an **interview should have research goals** (or research questions). Goals that are too broad (like *learning about users*) can result in **interviews that fail to produce useful or actionable insights** [1].

Examples of reasonable research goals include:

- ▶ What **causes** customers to consider and try our product?
- ▶ What are the **highs and lows** of their experience?
- ▶ How much **knowledge of the process** do users have?
- ▶ What makes users **abandon** the product?



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USER INTERVIEWS

1. Identify What You'd Like to Learn

A **concise, concrete set of goals** that relate to your **target users' specific behaviours** or **attitudes** can help you gather **helpful and actionable insights**.

These goals will **influence the questions you'll ask** in your interviews [1].



USER INTERVIEWS

2. Prepare a Guide

An interview guide is used to direct the conversation and help you answer your research goals. An interview guide should contain **a few well-designed, open-ended questions** that get participants talking and sharing their experiences. **Examples of good open-ended questions include:**

- ▶ *Walk me through a typical day for you.*
- ▶ *Tell me about the last time you [did something].*
- ▶ *Tell me about a time when you [had a particular experience].*

Log the memory by asking about **specific events** rather than about general processes. Remembering a particular incident will **nudge the user's memory** and enable them to give you meaningful details [1].



USER INTERVIEWS

2. Prepare a Guide

An interview will also contain **follow-up questions to gather more-detailed information**. When constructing the guide, these questions are often **nested underneath the main questions**.

Construct follow-up questions based on your research goals. Anticipating different responses can help you identify what follow-up questions to ask [1]. Examples include:

- ▶ *When did this happen?*
- ▶ *How long did it take you?*
- ▶ *Has this happened to you before?*
- ▶ *How did you feel during this experience?*



USER INTERVIEWS

2. Prepare a Guide

An interview guide can be used flexibly. Interviewers don't need to move through questions linearly.

You can **skip questions**, spend **longer** on some questions, or **ask questions not in the guide** [1].

Nielsen Norman Group have an example PDF for user interview guides – **this can be found in the resources on the module's Moodle page.**

Example Guide for a Semistructured Interview

This example interview guide is available from: www.nngroup.com/articles/interview-guide.

1. Before we begin, would you mind telling me a bit about yourself?
 - Do you live alone or with anyone else?
 - What do you do for a living?
2. Walk me through what a typical meal in your home looks like.
 - How do you decide what to have?
 - Are you typically cooking for yourself or for others?
 - You mentioned you [do / don't] like to cook. Why is that?
 - i. Tell me more about that.
 - ii. Why is that important to you?
3. For the days that you cook, walk me through how you plan what to cook for your meals.
 - How do you decide that's what you'll have each day?
 - Where do you get your ingredients from?
 - Do your plans ever change?
 - i. Can you give me an example of a time where they changed?
 - ii. Why did you need to change your plans?
 - iii. How did you feel about that?
4. Can you tell me about a time where you cooked something new?
 - When was this?
 - What did you cook?
 - Why did you cook that dish?
 - Did you follow a recipe?
 - i. What happened?
 - ii. What did you think about that?
 - How did it turn out?
 - Has this happened to you before?
 - iii. What do you think about that?
 - iv. Tell me more about that.
 - v. Why is that important to you?



USER INTERVIEWS

3. Pilot Your Guide

Even the best guide may need to be tweaked after the first interview. Piloting allows you to **identify what tweaks are needed before running all your interviews**. You can **pilot your guide with a friend or colleague** if the interview topic isn't too specialized or you can recruit a target user or two [1].

Piloting helps you learn:

- ▶ Whether any **questions were misunderstood** or caused confusion
- ▶ If there are **questions that should be added** to the guide
- ▶ If **any questions should be removed** because they aren't likely to provide helpful information
- ▶ Whether the order of the questions felt **natural**



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USER INTERVIEWS

3. Pilot Your Guide

Since interviews are a qualitative research method, **it's okay to continue making minor tweaks** to your guide as you complete all your interviews.

However, **avoid changing your research goals** throughout the study. It may become difficult to achieve your research goals without collecting enough **relevant data** [1].



USER INTERVIEWS

4. Start Easy

Some participants **can feel nervous at the beginning of the interview**, especially if they're not sure what to expect.

Start by **talking through the purpose** of the interview, **what kinds of questions will be asked**, and **how the information will be used**.

Slow down your pace of speech. Talking slowly has a **calming effect** and indicates that you are not anxious and have time to listen [1].



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USER INTERVIEWS

4. Start Easy

Start with questions that are easy to answer, such as:

- ▶ *Tell me a bit about yourself*
- ▶ *What do you like to do in your spare time?*

These questions are easy to answer and can get participants comfortable talking. Avoid asking questions likely to be interpreted as personal or judgmental, such as *What was the last book you read?* This question assumes the user read a book recently; if they didn't, they might feel stupid [1].



USER INTERVIEWS

5. Build Rapport

People are more likely to **remember, talk, and let their guard down if they feel relaxed** and trust the interviewer and the process. Keep in mind that there's a big difference between *rapport* and *friendship*.

The user **does not have to like you**, think you're funny, or want to invite you out for a cup of coffee in order to **trust you enough to be interviewed**.

Build rapport by showing you're listening and by asking related questions. You can show you're listening by using **verbal and nonverbal cues** [1].

NOTE: Avoid interrupting or rushing participants as these behaviours will harm your ability to build rapport.



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USER INTERVIEWS

5. Build Rapport

Verbal cues include [1]:

- ▶ Neutral acknowledging like, *I understand, okay, I see*
- ▶ Making noises like *mmmh*
- ▶ Echoing what the participant has said
- ▶ Adjusting the speed, volume, and intonation of your questions



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USER INTERVIEWS

5. Build Rapport

Nonverbal cues include [1]:

- ▶ Frequent eye contact
- ▶ Nodding
- ▶ Raising eyebrows occasionally
- ▶ Smiling when the participant smiles (also known as mirroring)



USER INTERVIEWS

6. Follow Up and Probe

Ask your **prepared follow-up questions** if the participant did not cover them when sharing their experiences.

Additionally, ask further questions that probe into your participant's responses. **These questions help you to uncover those important motivations, mental models, perceptions, and attitudes.**

Since you won't know when you might use them, **probing questions are not usually prepared in advance.** However, if you know you might forget to use them, write them at the top of your guide or on an index card [1].



USER INTERVIEWS

6. Follow Up and Probe

Probing questions include [1]:

- ▶ *Tell me more about that.*
- ▶ *Can you expand on that?*
- ▶ *What do you think about that?*
- ▶ *How do you feel about that?*
- ▶ *Why is that important to you?*



USER INTERVIEWS: LIMITATIONS

Since interviews are an attitudinal method, they collect **reported behaviours** (rather than observed behaviour). Some **limitations of self-reported data** include:

- 1. Poor or faulty recollection:** Human memory is flawed, so **people don't recall events fully**. If the event in question occurred in the distant past, your participants might not recall it accurately.
- 2. Missing details:** Participants don't know precisely **what is relevant for the interviewer**, so sometimes **leave out important details**.
- 3. Social-desirability bias:** Some people are very conscious of how they're perceived and may **withhold information** or may want to **present themselves and their behaviours in a certain light**. If we want to know what users actually do, we need to **observe them or collect data about their behaviour** (such as through analytics and other behavioural metrics) [1].



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USER INTERVIEWS: LIMITATIONS

Another limitation of interviews is that the quality of the data collected is very much **dependent on the interviewer's skill**. If the interviewer asks many **leading questions**, the validity of the data will be compromised.

REMEMBER THE DIFFERENT TYPES OF QUESTIONS:

- OPEN
- LEADING
- CLOSED / DIRECT



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Bias in Research



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BIAS IN RESEARCH

Research bias is an important concept to understand when it comes to evaluating the **quality** of research.

Bias in research refers to **a systematic error that can occur during the design, conduct, or interpretation of a study**, leading to **inaccurate conclusions**.

It can occur at **any stage of the research process** and can have a **significant impact on the reliability and validity** of the findings [3].



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BIAS IN RESEARCH

Some of the common biases include [4]:





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- ▶ **Question order bias:** Affects responses based on the sequence of questions



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BIAS IN RESEARCH

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- ▶ **Confirmation bias:** Only ask questions that affirm what you already believe



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- ▶ **Hindsight bias:** Respondents say events were foreseeable



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- ▶ **Hindsight bias:** Respondents say events were foreseeable
- ▶ **Assumption bias:** Assumes respondents know certain information
- ▶ **Clustering bias:** People see patterns where none exist



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BIAS IN RESEARCH

Understanding and identifying these biases is crucial for ensuring the **scientific integrity of research studies**.

By being aware of bias and implementing strategies to reduce it, researchers can **improve the quality of their data collection** and ultimately **contribute to more accurate and reliable research findings**.

As you are often trying to figure out solutions to problems in UX design, this can have a **significant influence on all of your creative and design decisions** [3].



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