

Understand the role of research in design

Explore UX research methods

Identify biases in UX research

Video: Identify types of bias in UX research

9 min

Reading: Learn more about bias in UX research

20 min

Video: Deana - Identify bias in UX research

1 min

Practice Quiz: Activity: Optional - Implicit bias quiz

1 question

Discussion Prompt: How to reduce research bias in user research

10 min

Week 4 review

Course review

Learn more about bias in UX research

The human brain is an incredible processing machine, and it can store an amazing amount of information. One way brains are able to store so much information is by creating mental shortcuts based on repeated patterns. These shortcuts allow humans to relate and group information together for quicker processing. But, these repeated patterns of thinking can lead to inaccurate or unreasonable conclusions that are **biased** — favoring or having prejudice against someone or something. Biases can seriously impact your user research and negatively influence the design of your final product. So, let's explore how bias can affect your work as a UX designer and how to combat it during your research.

Preventing bias in data collection

It's important to note that everyone has biases. It's just a natural part of being human. Being able to recognize your own biases and prevent them from affecting your work is what really matters. As a UX designer, you'll need to know how to anticipate, identify, and overcome biases in your research, in particular.



Choose your words carefully

Choose your words carefully. While conducting research, it's important to use words that don't lead the user in one direction or another. Of course, as a designer, you're going to be partial to the designs you've created, and you'll likely assume that users will appreciate them too. That's why you designed them! But when asking users questions about their experience using your product, you don't want them to answer in a particular way just to please you. Choosing leading words can cause the **framing effect**, where users make a decision or choice based on the way information was presented to them.

This is especially critical in usability studies. For example, imagine a participant is testing your designs. You ask the participant: "Do you like or dislike the improved layout of these buttons?" Because you used the word "improved," the user will most likely reply positively. But, this isn't very useful feedback because you framed the question in a way that led the participant to respond accordingly. To improve your product, you need *honest* feedback.

Instead, a better way to frame the same question is: "Explain how you feel about the layout of the buttons." This phrasing allows the user to come to their own conclusions without any outside influence, which will give you better data about their thought process and experience.



Foster independent thinking

Foster independent thinking. Group interviews can be affected by the **bandwagon effect**, or going along with the group's opinion instead of thinking creatively, which can discourage open discussion by people who have an opinion that doesn't align with the majority of the group.

For example, imagine you're conducting research with a group of five participants. You ask each person in the group to share their thoughts one at a time about a particular product design choice, like the placement of a button on the home page. By the time the last person shares their thoughts, their feedback will be affected by all of the answers that were shared before them. To combat the bandwagon effect, ask participants to write down or record their thoughts before discussing as a group.



Avoid specific language

Avoid specific language. It's important to be mindful about the types of questions you ask users and how those questions are framed. You'll need to be careful to avoid **confirmation bias**, which is trying to find evidence to prove a hypothesis you already have.

Confirmation bias is particularly prevalent in online surveys. For example, imagine that you're conducting an online survey with a large group of participants. One of your survey questions is: "How do you use our product?" As the designer, you have a few ideas about how you *think* people use your product, so you provide four options with specifically worded language that the participant has to choose from. If none of the options you've provided apply to the user, they can't select "other" or skip the question, so they'll be forced to choose one of the multiple-choice answers that doesn't match their actual experience. That means you'll end up with false information that skews your research data and potentially provides incorrect evidence for a hypothesis you already had.

Remember, in a survey, you want measurable results, which is known as quantitative data. You can reframe the question in your survey to ask participants to rate their experiences using the product, which will be a more accurate way to gauge how they felt about using it.



Limit the guidance you give users

Limit the guidance you give users. Everyone learns and thinks in different ways. When you're conducting any type of UX research, you have to be cautious to avoid experiencing any **false consensus**, which is the assumption that others will think the same way as you do.

If you're conducting a usability study, some of the participants will not follow the product's user flow in the way that you might expect. For example, a user might click through the menu, select a folder, and then select a subfolder to complete a task you assigned them, when there's actually a simple hyperlink on the homepage that could have saved them time. In addition, some participants may use assistive technology to navigate the product and might follow an entirely different flow.

It's important to let participants follow their own paths through your product, without interrupting them. Interrupting a participant while they're experiencing your product will deprive you of useful data that can help you understand how to improve your designs. Instead, ask participants to narrate or break down their user journey with your product, as they move through the flow. This will allow you to better understand their thought process as they navigate through your designs.



Consider users' tone and body language

Consider users' tone and body language. You'll work with many different users and participants throughout your UX career, and part of your job will involve interpreting their nonverbal cues, like vocal tone and body language. To avoid experiencing **implicit biases**, which are based on the collection of attitudes and stereotypes you associate with people without your conscious knowledge, it's important to clarify when you think you're getting mixed signals from a participant.

For example, imagine you're conducting a one-on-one interview, and the participant has their arms crossed over their chest. This can be interpreted as a sign of feeling defensive or insecure, which might contradict the positive feedback they are sharing verbally about your product. This is a great time to ask the participant questions, like "Is any of this making you uncomfortable?", which can encourage them to explain that it's cold in your office and they're just trying to warm themselves up. Always ask questions if you're unsure about the intention of a user's tone or body language!

For this feedback process to work, however, it's important to make sure participants are comfortable sharing their thoughts with you. Before the research begins, ask participants about themselves or make light conversation. Starting with easier questions can help reduce anxiety or awkwardness throughout the study.



Be careful of your own body language and reactions

Be careful of your own body language and reactions. You also have to be mindful of your *own* tone and body language while interacting with participants. **Social desirability bias** can happen when a participant answers a question based on what they *think* you want to hear. If you ask a question to a participant, and they notice you exhibiting a visual or audible clue that suggests your own opinion about the question, they might answer in a way that they think will please you.

For example, imagine you're describing a feature of the app you've designed that really excites you, and your tone of voice changes. If this happens, it's likely that the participant won't be honest about their negative opinions of the feature, since you're so positive about it. If you want the data you collect to be useful, the user has to feel comfortable sharing their true, unfiltered feelings about the product. It's your job to guide them through the process without accidentally influencing their answers. One way to do this is to reassure participants that their answers won't hurt anyone's feelings and that you really want to hear their honest opinions in order to improve your work.



Plan your research effectively

Plan your research effectively. Tight deadlines are inevitable. But as a UX designer, it's essential you get enough time to recruit the right users for your research. **Availability bias** occurs when you rush the user recruitment process or skip screener questions to attract a bigger pool of users, even if they don't fit the qualifications or characteristics that you've already determined are present in your ideal user.

The research that you collect is vital to your product design process. So interviewing users that don't fall under your personas won't give you the data you need to improve your designs. If you're having trouble recruiting the right users before your deadline, offer a better incentive for participating in your study, adjust your recruitment strategy, or ask your project manager for more time. Don't just take any user who's available.





Remain open minded

Remain open minded. One more tip: When you're conducting research, you have to work hard to treat all information equally to avoid both **primacy bias**, which is remembering the first user more than others, and **recency bias**, which is most easily remembering the last thing you heard. To help combat these biases in your own research, it's helpful to space out the scheduling of interviews, ask your colleagues to join you during interviews to provide additional opinions, and take careful notes.

Combating bias as a UX designer

Although having biases is normal, it's essential to try to eliminate bias from your research process to get the most accurate understanding of your users' needs. Knowing the types of biases that exist and how you can avoid them will help you recognize when it's happening, so you're already off to a great start!

If you'd like to learn more about biases in UX research, check out [this article on overcoming cognitive bias in user research](#)   from Design at NPR.

