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PSDS 3100 B

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10 Cognitive Biases

10 cognitive biases to avoid in User Research (and how to avoid them)

Good news! This individual assignment is the last reading you will be doing this semester. <u>Read</u> <u>10 cognitive biases to avoid in User Research (and how to avoid them)</u> This reading will alert you to the biases that often have a negative impact on data analysis.

The purpose of this reading is to raise your awareness of how cognitive biases can unintentionally cloud your interpretation of data you get through your research methods/

Here is what to do.

- 1. Read the article.
- 2. Summarize the readings key points.
- 3. Describe an experience you have had that in hindsight where biases have had an impact in your life.
- 4. **Describe how your group** using examples in the article can work effectively to better decipher, deconstruct and analyze the data you have collected.

Submit a pdf file (1-2 pages) named PSDS3100B_Bias_lastNameFirstInitial_S19

Response:

In his article, "10 cognitive biases to avoid in User Research (and how to avoid them)," the author Sundar Subramanian talks about cognitive biases in mainstream culture that researchers should keep in mind as to produce data and analysis that is useful. There are a numerous amount of cognitive biases; however, the author chooses to focus on the ten that reoccur most often in data collection. First, he explains the framing effect and how the context in which we ask a question is extremely important. If a researcher asks specifically about likes/dislikes, for example, then they are limiting what the subject thinks about in their answer. Second, he explains the confirmation bias and how we tend to agree to what has been presented to us. For example, if an answer is affirming what the researcher asks, we should question why that is. Third, he explains the hindsight bias and how the subject will try and give reasoning of why events might have occurred with no evidence. Fourth, he explains the social desirability bias and how we may change our actions and words to fit what would look good to others. For example, the author presents social media as a platform to do this. Fifth, he explains the sunk cost fallacy and how decisions aren't all logical. For example, he talks about emotions making it harder to make a tough choice but breaking research down makes it easy to be less attached. Sixth, he talks about the serial position effect and how, due to the placement of data in a specific order, researchers can give less value to that information. Seventh, he talks about the illusion of transparency and how we do not give full value to the non-verbal cues which tell researchers information which may affirm or contradict what we think we know. Eighth, he explains the clustering bias and how data is never consistent and researchers may get information that is improbable. The reason why this is important to consider is that we should remember to collect

enough data to detect patterns and that which are outliers. Ninth, he talks about implicit bias and how stereotypes may have an effect on how we interact with a person. For example, very commonly police will associate crime with what race a person is. Furthermore, the suggestion of writing down what we think we know about a person is a great tool to help, especially in an interview situation. Tenth and last, he talks about fundamental attribution error and how people emphasize personal characteristics about someone and ignore situational occurrences. Hindsight bias is another of the ten that I have a personal relationship with. When I am attached to a situation or are upset about, I try to understand what happened better by speculation. I think it is a coping mechanism, but when used with data it can be harmful because a researcher needs to consider just the facts to make a logical conclusion.

Sunk cost fallacy has been especially important to me because I know that I have made decisions based on the emotion and attachment built up rather than what I should do or how I actually feel. In high school, I had a hard time keeping up with school, FBLA, PACE, art classes, and piano. I realized that after playing since I was six, I may need to give it up. I couldn't keep up to where I should and I knew it. Students play hours a day to practice for recitals, auditions, and competitions. I didn't have the time nor was I extremely passionate about it. Nevertheless, it was extremely hard for me to leave the piano solely because I had played it for so long.

Cognitive confirmation bias may have an impact on my ability to collaborate with people who see the world differently than me. The reason for this is because, like bias, critique, and conflict, it clouds judgment. It is harmful to not be able to see other points of view or perspectives and opinions. This is why it is important that the reading points out these biases so that my group can work effectively but not necessarily agree with each other on everything. If we have different points of view, it can add to our project because we can present a more holistic view and let the research, data, and analysis speak for itself. This way, others may also form an opinion. Another point that the article made that I agree with, would be that we should chunk our research and data. Sometimes looking at it as a whole is good to see the overall picture and trends but by breaking it down, we may learn information that we didn't realize was there. Another bias that has an effect on our work is bias about framing. This was especially important to consider when making our survey and interview questions. We want to make sure that we don't lead the interviewees or survey subjects. By framing our questions in a neutral way, we are able to mitigate as much bias as possible and received quality data. When the author talks about the illusion of transparency, the non-verbal cues should be taken into account when interviewing. If we pay attention to them, we can add to or correct the knowledge that we gain from the interviewee.