Final Reflection

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How has your understanding of perception changed from day 1 of class?

Day 1 of class I came in having a brief and theoretical view of perception. Since I have taken a couple courses during my undergraduate degree here at McMaster, I was aware of how perception is understood. But one thing that I did learn what how broad the topic of perception spans. For example, I learned how research is done looking at how music perception influences art perception.

How has your idea of what research is changed from day 1 of class?

My idea of what research is has changed and grown in depth throughout the semester. This class taught me how vigorous the research process was, from developing a good pre-registration and taking all variables in account, to then analyzing the data you collected and seeing how what you hypothesized compares to the data at hand. I learned how a pre-registration helps people make their data analysis and results very honest, as it helps prevent p-hacking, getting rid of data to make data look better, etc. Also, this class gave me a much greater appreciation for the research and thought that have to go into doing your own research. I also learned that people who do research must have to be very resilient and able to persevere as it seems to be a tedious and rigorous process.

What research skills have you most developed during the course? What skills would you most like to develop in the future?

I think the research skills that I learned was how to find research articles online to help guide your own research question. I learned this throughout the process of developing the research question I wanted to address, and what information is there already regarding my topic of interest. I learned that I can use “cites this article” and “cited in the article” to help gain a greater scope of what research has been done, and what is known and unknown. This whole project of doing a preregistration assignment, to the coding, was very daunting to do. But I think it taught me how to efficiently do research.

What aspects of the pre-registration process did you find most difficult? Why? What apects of the pre-registration process do you find most important? Why? Do you think researchers should be required to pre-register their research? Why or why not? (there is no *right* answer here!)

The aspects of the pre-registration process that I found most difficult was the actual process of figuring out what I want to research and how can I create an experiment that answers that question. Starting off, I felt very overwhelmed as there is so many topics that revolve around perception. But what I learned, was that I first started out with a broad search of articles that involve perception, then I was start reading ones that were of interest to me. I eventually landed on animal perception, and what we view as cute or scary. I thought this was interesting, and when I was looking into articles further I found that serial perception was an article cited and so was animal conservation. This process took a very long time to get started with and to finish. But I was very proud and happy with where I ended off with.

The aspects of pre-registration that I find most important is stating what data you are collecting, what you are discarding, and what type of tests are you going to run with the final data. I think this guides the researcher into knowing what is important, and also keeps them honest during the analysis process. I think researchers should always pre-register their work. It makes it clear for them and others what they are researching and why and how they will conduct their research, and again, I think it keeps the research honest. Also, having a preregistration may also help with reproducibility, furthering the research’s reliability.

How does your experience designing and programming an experiment inform how you understand the research articles you read?

My experience with designing and programming an experiment gave me a greater understanding and appreciation for the research articles that I read. This was because knowing about how vigorous the research process is, and how much thinking goes into thinking about what types of tests to run, I was able to much better understand what was going on within the research, and somewhat imagine the process, and it also just helped me have a greater appreciation for the work that went into it. Also, as I said before, it makes me view individuals who pursue research, as very smart, persevering, and also hard working.

Are there any aspects of the course you would recommend the instructors change? How can we make the course better for future students? What aspects of the course should stay the same? Why?

Honestly, I really enjoyed this class. As daunting as the projects and assignments were, I found that a lot of support was available. I found the tutorials very helpful, as Shreshth is very patient and wants to help us students, so it made these projects less stressful and more enjoyable. The only part of the course that I would change is the grading process. The grades not being put on avenue to learn makes it difficult to gauge how you are doing in the course. Also, I think on the perception laboratory homepage, putting more clear due dates would be very helpful.