What, So What, Now What? Statistics Reflection

Timothy Crowley

All my life I have struggled with math courses and dreaded having to take them. When I signed up for this class, as it is a mandatory course for my degree at Longwood University. After about the first two weeks, Dr. Pederson made the class feel comfortable and worthy of passing and continued to reaffirm that the math in the class was not as hard as it sounded. I felt very comfortable with completing the math by the middle of the course and I would say this has made math and statistics much more comforting to me. Throughout this statistics course, I learned an array of topics relating to research data statistics. We developed skills to conduct statistical analyses with the data we received from our study in our Research Evaluation course taught by the same professor and at the same university. While taking this course, all of us students were tasked with creating a statistics manual of step by step by-hand instructions, step by step SPSS instructions and step by step RStudio instructions. The statistics manual was our semester long project.

Creating this binder led to a successful path through the semester, as we gained the knowledge to run a multitude of statistical analyses including ANOVAs, T-Tests, Pearson's Correlation and even Regression. In addition to learning how to conduct these statistical analyses, we also gained the appropriate knowledge to interpret the results. Being able to read and interpret the data with statistical evidence is crucial when conducting research studies and experiments as it is the way to support your argument to your audience. This is a strong skill that I have learned throughout this course that I firmly believe will stick with me through my future endeavors and career goals.

Everything I have learned through this course will help me in a larger context because number one it has given me skills that most people do not have and second it gained me experience with working with a larger real-life study and taught me how to read the data collected to support and reject my research hypothesis. Dr. Pederson had mae a point multiple times throughout the course that she has had students email her stating that they are extremely grateful to have their statistics manual, as it has helped them in the workforce. In fact, I went to a guest speaker at Longwood University, and she actually brought up that she uses both SPSS and RStudio on an everyday basis in her workplace. This was really interesting to me, as I figured that I would never use these skills again, but in reality, it is a useful skill that I will likely use. Given that the guest speaker is in my projected line of work, that put in reality, that it truly is a useful skill to have.

This course also matters in a larger context, as it could help me in my future in not only the workplace I pursue, but also my future academic goals. I have been told by many people that I will be subject to several more statistics courses with much greater difficulty throughout my academic future in order to gain a master's degree. It has been explained to me that this statistics course has provided me with basic statistics knowledge and more. Having the basic skill level and even more will be greatly useful when having to take the higher statistics courses. Not many people have gained the experience of working with the SPSS and RStudio programs and may also not have the knowledge to successfully complete statistical analyses by hand. Having the knowledge already gains me a skillset that most people do not have. Furthermore, these skills will serve as a basis for a path of success throughout my time in academics. Another reason why this course will matter in a larger context is that all the skills that I have learned through this course is a great resume builder and gives me a gain on fellow candidate for future job offers and

interviews. This course gave me valuable ways of critical thinking that I have never used before and will use in the future when talking about data and research studies. Having learned appropriate interpretations of valuable data will help me be able to conduct more experiments and conversate with people on what the data means, rather than just showing a chart of the data.

I feel this course will help me do several things in my future. First, I feel that I can help both professors, students, and faculty members that do not have the ability to read data in the appropriate form. In addition, I feel that in future research experience that I made be put through, I may have the upper hand on how to correctly organize and read data that others may not be able to do. Furthermore, I firmly believe I will use these skills in my line of work when talking about different types of statistics relating to crimes. In conclusion, I will use the skills and experience that I have gained through this course in real life studies, as well as future academic and career endeavors.