

## Reflection

In Statistics for the Social Sciences, I learned how to describe and analyze the quantitative and qualitative data that I collected and organized on Head Start families during the fall semester in Social Research and Program Evaluation. Through gaining a better understanding of basic concepts of social statistics, I was able to summarize quantitative data by learning how to calculate descriptive and inferential statistics by hand and by computer programs using R and SPSS. Further, I learned how to properly create tables and graphs to showcase key findings of the various calculations and interpret the data for an outside audience to understand. Lastly, I also learned how to code and recode independent and dependent variables to run different tests including some of the following: a T-test, an analysis of variance, and a Chi-Squared in R and SPSS. These tests helped me gain insight into the relationship between my independent variable, educational attainment, and the dependent variable, family involvement, and whether or not it was significant.

In addition to this, I learned how to complete a Pearson's Correlation. As a psychology minor, I have examined several studies that look at the correlation between different psychological concepts and whether certain variables have a strong, moderate, or weak positive or negative correlation. Although I had prior knowledge of how to interpret correlations, I did not know how to calculate them myself. Therefore, learning about correlations from a statistical perspective allowed me to acquire the skills to complete hand calculations and run correlations through R and SPSS. Further, throughout this process, I have updated and maintained a statistics manual analytic framework to record the process of compiling, computing, and summarizing statistics. This statistics manual has guided me as I had to refer back to previous chapters

numerous times to complete tasks throughout the course. The statistics manual also enhanced my organizational skills because I had to keep it properly updated and make sure it contained detailed notes and steps for R and SPSS for every chapter each week.

In a larger context, the information that I have learned and the statistical skills that I have gained have illuminated the importance of the work that I have done this year in conducting research and collecting and analyzing data. I have participated in a study that addresses the real issue of parental involvement and the success of child development and education. With this, Dr. Pederson has helped me understand the kind of impact the research that we embarked on as a class can have in communities. This research study explains how parent involvement is crucial in helping children develop skills and have better educational success. It also highlights the significance of the Head Start program in helping to address the challenges lower-income families and children face when trying to achieve these educational goals. After providing Head Start families with Family Fun Time Activities and discovering the high involvement rate, we encouraged children and family members to spend time with one another, which helped the children get exposed to and further enhance their educational skill sets. Overall, children, regardless of their socioeconomic status, should receive the opportunity to succeed academically.

Additionally, the statistical skill sets that I have acquired through this course can be used in my future career endeavors. Statistical and analytical skills are valued in numerous career types as many jobs tend to require experience in data management and analysis, especially within federal and state government jobs. As a Criminology and Criminal Justice major statistics play a huge role in my career field, and having gained the ability to accurately apply these skills and the knowledge to use R, SPSS, and Excel can help improve my status as a job candidate.

After I receive my undergraduate degree, I plan to attend law school. These statistical abilities have the potential to improve my performance in law school.

I do not know what my future entails after law school or the type of law I will practice. However, if I decide to become a prosecutor or a defense attorney, I will use the knowledge that I have gained on the importance of family involvement in the educational success of children. I will try to ensure that, when appropriate, my clients will remain in the lives of their children. Although I understand that is not always a guaranteed outcome, I will have a positive impact on the lives of others and children. Further, learning how to analyze qualitative and quantitative data, complete calculations by hand and through R and SPSS, and convey key findings opens opportunities for conducting any research I wish to pursue in the future.