**Reflection**

In SOCL346: Statistics for the Social Sciences, I have expanded upon the skills I have learned in SOCL 345: Social Research and Program Evaluation. In SOCL 345, we focused on program evaluation, which has laid the groundwork for SOCL 346. We were analyzing qualitative data in SOCL 345 and now we are analyzing quantitative data in SOCL 346. I have learned more complex skills such as interrupting descriptive statistics and inferential statistics.

In the beginning of the course, the primary focus was on descriptive statistics. We focused specifically on measures of central tendency, measures of variability, Z-scores, and probability. To further our skills, we worked with specific platforms, like R Studio and SPSS, to code and produce this data. We learned how to analyze and most importantly understand what the data was telling us by doing math by hand or computer. Descriptive statistics allow us to summarize data which enables us to then compare the data. This led us to focus on inferential statistics.

We then learned how to predict a population based off our sample of family involvement of Head Start families. The independent sample t-tests, analysis of variance, chi-squared tests, Pearson’s correlation, and OLS regressions. Along the way I kept detailed notes for every sampling and interpretation technique in a manual. This manual has step by step instructions and detailed notes on each statistic chapter so it can be referred to. It also contains interpretations of the mathematical equations/tests and their significance. For each test and equation, there are photocopies and instructions of how to use R Studio and SPSS platforms. While performing these tests and analyzing data, we learned how to properly write our findings and interruptions in APA format. I learned the vocabulary and techniques to write research papers and present findings. This has also taught me to better understand and analyze data.

This course has significantly increased my analytical and mathematical skills. I can better understand societal patterns and trends and make generalizable conclusions. These applications can be applied to my life outside of research. How to use the coding platforms, APA format, analyzing data, and understanding the data can be applied to various situations.