

## **Reflection:**

### **SOC 346: Statistics of the Social Sciences**

Coming from Sociology 345, the prerequisite to this course, where we learned the very basics of quantitative research, Sociology 346 was a major leap into the field of social research. Last fall we took the baby steps to form an understanding of how research is presented in an academic journal format, and gained some experience with survey design. The area we increased our proficiency in specifically was in our skills of statistical analysis. In the fall we completed univariate and bivariate comparisons of our selected variables, which we now know is of little help when trying to actually make successful empirical observations using our data. After completing this course, we are now proficient in conducting the following methods of statistical analysis: Independent/Dependent samples T test, Analysis of variance (ANOVA), Chi Square Test, Pearson's Correlation, and Regression models.

We learned each method of statistical analysis in three processes: hand written, with SPSS, and in R Studios. Completing the hand written third of this course allowed us a deeper understanding of what we're accomplishing with each method of analysis. While this may not be the practical way to analyze large data sets in today's day and age, the fundamental understanding of each process puts us ahead of our peers. We also learned how to recode variables and run our analysis through SPSS. SPSS is subscription based, and has less bells and whistles than the more common R, however learning SPSS diversifies our skill set. Gaining proficiency in R-Studios was possibly the most important tool we gained from this course. We learned to code and recode variables, and created a database for all of the code for the previously mentioned statistical analysis methods.

In a larger context, we have begun learning how to be social researchers. The ability to obtain survey data is a far less important skill if you cannot then interpret that data and apply your findings to a research question. For data to be worth anyone's time, attention, and money, a researcher must be able to determine the significance of their data, the correlation between their variables, and the variance in their means to name a few examples. It is vitally important to find out if the data you've collected can be used for your intended purpose. A researcher may find out they need to use a different type of sampling, or perhaps a different sample size, in order to uncover data that has answers within it.

As far as careers are concerned, having the skills to conduct statistical analysis in the three methods we learned gives us the foundational understanding we need to eventually be an expert in this field. These skills lend themselves nicely to a graduate school program in social statistics that creates many career avenues in the world of social research. Social research has a tremendous value in the business and political world. Through this course we have learned the basics to how we can predict and define human behavior. Politicians rely on social research in the form of polls that can be analyzed to provide priceless information on different demographics of their constituency. Businesses can rely on social research to better understand their consumer base and have more efficient marketing and advertising. Not until completing this course did I see a clear career path option through my sociology studies.

Completing this course has made me realize I could continue my studies of social research in graduate school, and navigate my career with that developing skill set. Based on what I have gathered from my professor, this course opened many doors for us into the world of social research, however there is much still to learn in order to truly be an expert who has highly marketable skills. I won't try to sell the narrative that this course taught me lessons of patience or

discipline, because while it did to some degree, my main takeaways above all else were the tangible skills I learned in analyzing data for the purpose of social research. This course felt like being an apprentice under a master craftswomen who bestowed upon us a semester's worth of knowledge, effectively removing our social research training wheels. I would like to now ride optimistically into the future with my first feelings of confidence about what sort of career path I may explore.