For this final project, I wanted to look into a topic which is not only relevant in today’s society, but one that I found interesting as well. Currently the anti-vax movement has been growing at a faster rate than in previous years. Using the dataset found at Data.gov (2019), I looked at the schools with kindergarten, schools with 6th grade, and schools with neither kindergarten nor 6th grade to determine if there was any statistical difference when it comes to having all vaccinations, having any exemptions, and the different types of exemptions. I broke the dataset into many different subsets to compare the groups in as many ways as possible. Though there were a few mixed results depending on which test was run for what groups, the overall outcome based on most statistical tests was there appeared to be no strong relationship between schools with kindergarten and schools with 6th grade when it comes to having exemptions for vaccinations, although there appears to be a higher chance for a school with kindergarten to have children with all their immunizations. I feel that what was missed was more information or variables could have been available to be used in the analysis. For example, I would have liked to see variables for what state the school was in, the type of area the school was in (rural or city), the economic background for the school, and if the school was private or public. If those variables were there I believe the analysis could have shed more light on the difference between those variables. Though I believe I did not make many assumptions in the analysis, I assumed that there was no significant difference between any of the schools, which may have played a role. The biggest challenge I faced was how to integrate and apply the concepts learned in the course to this particular dataset.

**References**

Data.gov. (2019). All students, kindergarten through 12th grade, immunization data by school, 2016-2017. Retrieved https://catalog.data.gov/dataset/all-students-kindergarten-through-12th-grade-immunization-data-by-school-2016-2017