## Behavioral changes as a result of COVID-19

Towards the end of March 2020, the CDC advised people to stay home in an attempt to combat the rapid spread of the coronavirus. States placed mandated stay-at-home orders across the country and a new way of life was established. The purpose of our investigation is to take the data collected between April 10, 2020, and July 8, 2020, from a randomly distributed and optional survey, and construct an analysis of the physical and mental effect that the pandemic restrictions have on the general population. Using metrics provided such as employment, education, physical activity, and location, we will observe trends of these metrics in relation to each other to answer the three guiding questions, as well as any other possibilities that could derive from those questions. To measure the socio-demographic characteristics changing based on the pandemic we will compare the exercise done before and after the pandemic, and group that information based on age to observe any differences in mentality with exercise as a hobby versus exercise for health reasons. Measuring how work-related travel changes will be done by comparing the population density of the reported area or state with the travel time pre and post-pandemic, with a cross-reference to some additional data that will reference the employment and education level of a participant. The mental health component in the third guiding question would be related to our approach to the analysis done for the first question, in that we compare the exercise done with the age, and compare that data with the degree of education as well as employment status to gauge whether or not workload is a large factor. The number of people that a given participant is constantly exposed to based on how many individuals live in the household will also play a vital role in measuring whether or not lack of social interaction has a detrimental effect on mental health.