David Bradshaw INFO-608 Data Analysis 13 June 2020

The final dataset came out to be a little over half a month worth of journal entries. Initially a longer journal was planned, however, due to protests leading to a citywide curfew the data started to become dictated by those events which broke away from the initial goal of analyzing behaviors during a health pandemic, therefore the data was ended on the first day of the curfew. After reviewing all the data and coding the journal entries the data was placed in a JSON, JavaScript Object Notation, format to evaluate and allow quick programming to find patterns. The data was placed into datasets and loaded into Chart.JS application which allowed for real time graphing of the data. A common pattern the data started to expose was the correlation of getting outside and having an overall happier day.

The study is now leaning toward the benefits of being able to get out of the house and into fresh air and allow a more exploratory feeling of being outside. During a health crisis being outside starts to become a social taboo and by going out you may be seen as having disrespect for other people's health or a lack of concern over the current conditions (Fisher, Sellers, & Wilson, 2020). However, mental health is also critical, and being confined to a small area with little access to fresh air and nature can cause havoc on a person's wellbeing (Harvard Health Publishing, 2018). From the data collected during the pandemic it is clear that days when either exercising outside or just getting out for a long walk, while maintaining as much social distance is possible, had a direct correlation with the perceived happiness of that day. As seen in Figure 1 the data only has a dip on March 21, 2020 when per the journal "The day started off nice. Took dog on long walk down the Hudson River Park which was nice..." but ended in a company action that laid off thousands causing the day to turn bad. While that outside force of layoffs cannot be controlled it does show that the day would have most likely turned out to be a great day if not for that work action.



Figure 1: Happiness to Outside Chart

The final days in Figure 1 also show when the citywide curfew begin. While the looting and fear for property and safety can be a factor the curfew also limits being outside which can lead to depression. The data collected can clearly show the correlation between mood and getting outside. This data can be used to help government resources plan for the next pandemic with therapeutic measures in place to ensure people can still enjoy outdoors while maintaining safe distances from others via large open spaces or opening up streets for pedestrian access which is something the city of New York started toward the later end of the COVID-19 pandemic (Open Streets, 2020).

The data also indicated more days of extreme working, where nearly half of the days logged indicate an "Intense Work Day" and these days are seen as having over 10 hours of active working based off of Apple's Screen Time. This is a larger amount of work than is usually seen when working at an office or during normal days. Some speculation can be that this higher than normal work is a way to keep occupied while other activity options are limited. Some recent studies also indicate it is due to not having a clear boundary of work verse personal life. Not having an office to leave the work at can cause people to keep working into the evenings and weekends without having that clear divider (Vasel, 2020). As seen in Figure 2 in recent weeks the weekly average of longer working days has drastically increased based on the time the work software was being used. Normally this time would be linked to the time spent at the office; usually six to eight hours depending on the day.

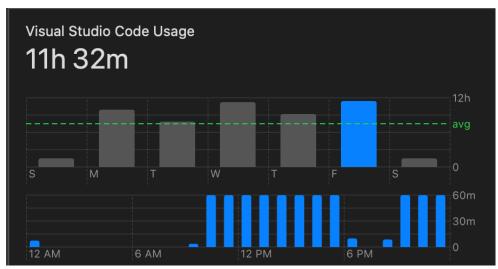


Figure 2: Visual Studio Code Usage

In summary it is clear from the data that getting out of the house is critical for perceived happiness and by learning these trends during the current pandemic the agencies in charge can hopefully plan for the next pandemic by ensuring safety from the health crisis as well as mental health for the people. When it comes to the work and personal life balance there was no pattern indicating working extra hours caused a dip in happiness, but it does lead to a more sediment lifestyle which can cause health problems for those who work on a computer. I do believe that the division of work and home is important and once possible plan to return to normal life at an office which has two benefits of getting out of the house for walking to work and ensuring that we do not burn ourselves out by doing too much work.

## References

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