

R Masters

Aaron Radparvar (aaronradpa8099@g.ucla.edu); Ashlyn Jew (asjew@g.ucla.edu)
Derek Wang (derekwang250622@gmail.com); Hana (Yerin) Lim (hanay317@g.ucla.edu)
Thomas (Jingwei) Liang (jingwei0117@g.ucla.edu)

Anti-Asian Sentiment Amid COVID-19

Datasets: https://github.com/asjew/DataFest2020_RMasters/tree/master/Datasets

It is evident that the coronavirus has undoubtedly disrupted our way of life. Unfortunately, this disruption is reflected in multiple news reports of anti-Asian discrimination and violence. Our team decided to investigate the rate of crime incidents against the Chinese and East Asian population in LA before and after the March 19th stay-at-home order. In addition, we also investigated tweets with the keywords “anti-asian” and “virus” and conducted sentiment analysis on these tweets.

Crime in LA

We tested the hypothesis that the proportion of victims of crimes in LA who are of Asian descent is the same before and after the stay-at-home-order placed on March 19th. Our p-value of 0.4081 is above our significance of 0.05. As a result, we failed to reject the null hypothesis and concluded that there is no significant difference in the proportion of crime victims of Asian descent from before and after the stay-at-home order was placed on March 19th. However, this conclusion only applies to reported crimes, as there may be crimes that are not reported to the LA Police.

Twitter

We used the twitterscraper library in Python to web scrape Twitter data from Jan 24th to May 10th. We harvested 802 tweets that contained the keywords “anti-asian” and “virus” and made a chart to show how many of these tweets were made on a given day. The chart shows that the peak of this tweet activity is on March 18th. We hypothesize that this is the result of online conversation generated by President Trump’s usage of the phrase “Chinese Virus” two days before the peak on March 16th. In addition, we looked at the top five most liked tweets and found that the general sentiment is that the usage of the phrase “Chinese Virus” shows bias against Asian Americans and elevates tension within the Asian American community out of fear of hostility from racists.

We also conducted text and sentiment analysis on the tweets that we scraped using the tidytext and textdata libraries. We found that words such as “chinese”, “racism”, and “coronavirus” were used the most in conjunction with keywords “anti-asian” and “virus”. Excluding words that were neutral or had no sentiment assigned, we also found that negative words accounted for about 87% of all words. This percentage may be skewed as all the tweets had the negative keywords “anti-asian” and “virus”.

In conclusion, we believe that although the rate in physical crime against those of East Asian descent has not changed, the rate of microaggressions against East Asians have indeed increased.