

The Impacts of Social Media on Changing Mass Attitudes Towards Asian Hate in the U.S. During the COVID-19 Outbreak in the U.S.

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Abstract: In this study, our primary research focus was on analyzing the changes in anti-Asian sentiment within the United States during the mid-to-late stages of the outbreak. The authors conducted a critical examination of the context surrounding the 2019 outbreak to explore its correlation with the escalation of anti-Asian sentiment in the United States. First, it is found that historical perceptions, such as the Native American concept of "yellow peril" stemming from the Opium War and the notion of "white privilege" within the mindset of white individuals, could have contributed to the emergence of the anti-Asian phenomenon. Furthermore, the discourse that unfolded on the Internet in response to the COVID-19 pandemic resulted in changes in native Americans' perceptions of Asian hate. Our research identified a noticeable surge in racially motivated hate crimes during the pandemic, as indicated by publicly available data. These incidents were predominantly characterized by instances of physical violence and harassment. Asian hatred has seriously disrupted the daily lives of Asian residents in the U.S. This phenomenon may have arisen from the general belief among most Americans that the pandemic originated in Asia, coupled with long-standing tendencies to view Asians as outsiders irrespective of their duration of residence in the U.S. To address these issues, our study aims to compare trends in anti-Asian sentiment before and after the epidemic by analyzing Twitter data from both periods. The authors also conducted a comparative analysis of relevant literature and books to formulate hypotheses explaining the variations in Americans' attitudes toward anti-Asian sentiments across the two timeframes. Ultimately, our goal is to advocate for the cessation of such unequal behavior and the establishment of equality for all.

Keywords: Asian hate, American, COVID-19, Twitter, Attitude

1. Introduction

The global spread of COVID-19, a catastrophic virus, has not only disrupted people's daily routines but also triggered a worldwide economic downturn. Originating in Wuhan, China, the coronavirus pandemic has reverberated globally, leading to a surge in anti-Asian sentiments, particularly in the United States and other nations. This negative sentiment stems from the misguided association of Asians with the virus. Stakeholders have proposed that the increasing public anxiety and fear during

the COVID-19 pandemic in the United States, coupled with negative rhetoric about Asians propagated by influential politicians and public figures, have triggered the recent rise of Asian hate.

A particular concern is the significant escalation of anti-China sentiment in the United States, which has manifested as a notable increase in explicit violence and hostility targeted at Asian American individuals. Following the onset of COVID-19 in the United States, then-President Trump and the Republican Party embarked on a concerted campaign to attribute blame to China for the virus. Throughout this period, political and media figures have employed terms like "Chinese virus" and "kung fu flu" to represent the coronavirus. The American media focused on the hygiene and wildlife trade within Wuhan's seafood markets as potential sources of the virus's emergence. Additionally, there were discussions about bats and China as potential sources of the virus, leading to an inundation of memes and jokes across social media platforms, including posts shared by our peers.

Our team collected and analyzed relevant comments from Twitter. Subsequently, the data was converted into TXT format and then processed into a histogram using R studio. By conducting a comparative analysis of the two histograms and aligning our findings with existing literature, the authors formulated reasonable hypotheses to elucidate the differing attitudes of Americans toward the topic of anti-Asian sentiment during the two distinct stages of the process. Our analysis started by investigating the temporal correlation between the COVID-19 pandemic and prevailing anti-Asian attitudes. Anticipating an increase in searches associating COVID-19 with China amidst the pandemic, it is recognized that searches like "Chinese virus" might not unveil the underlying attitudes of searchers. In contrast, expressions such as "China owns us" are more indicative of anti-Asian attitudes, as they lack a direct connection to the pandemic. Rooted in psychological theories of attribution, it is posited that the country of origin not only receives direct blame for the epidemic but also inadvertently incites collective blame targeting other groups erroneously linked to being Chinese.

In our idea, improving ways to report hate incidents, increasing public education, and identifying ways to increase the community's sense of safety and unity within and across racial and ethnic groups, emphasizing on the concept of equality for all is more conducive to the development of the international community.

2. Literature Review

Several theories have emerged to explain the phenomenon of Asian Hate. Some researchers attribute it to ethnic differences, while others focus on instances of online racial discrimination. Additionally, the majority of prior research underscores the exacerbation of Asian hate during the COVID-19 pandemic.

This study's context is rooted in the alarming surge of anti-Asian racism during the COVID-19 pandemic. Literature suggests that anti-Asian racism finds its origins in the deeply ingrained perception among people in the United States of "the long and bloody history of dehumanizing Asian Americans". The pandemic catalyzed the racialized "Yellow Peril", denigrating Asians as "an existential threat to the West, to free human rights, to the market economy, to the 'rules-based' order, to American primacy". Consequently, hate crimes, verbal abuse, and even physical harassment against Asians have become a global phenomenon. This study exemplifies the manifestations of these local and global factors in Canada, examining the failure to contain the "contagion" of anti-Asian racism within the framework of intercultural communication. This failure can be attributed to three structural factors [1]:

- 1) On a global scale, Western countries collectively ignore the history and ongoing repercussions of immigrant colonialism.
- 2) At the local level, the Canadian government has turned a blind eye to the deficiencies within its multiculturalism policy.

3) Both national and international media platforms tend to adopt a problematic insider-outsider dichotomy in their coverage of the pandemic.

In short, the existing literature strongly indicates that people from all over the world associate the outbreak with Wuhan, China. Mr. Donald Trump openly used the term "Chinese virus" in various tweets throughout 2020. This rhetoric appears to have significantly contributed to increased discrimination against Asians by the white community, perpetuating the perception of yellow people as the "yellow peril" [2].

Secondly, in the literature, the authors Hannah Tesslerdelves, Meera Choi, and Grace Kao into the crisis faced by American businesses during the epidemic and the elevated crime rate in the United States, using these factors to explore the surge in Asian hate. The article demonstrates a recurring historical theme in the United States: regardless of how long outsiders have lived there, they often remain foreign in the eyes of the populace. The pandemic merely unveiled the negative perceptions towards Asians. Throughout history, Americans have consistently regarded Asians as the "yellow peril". Furthermore, the article introduces the concept of "white privilege" and highlights that even the high incidence of the Black Death, which predates the pandemic, was erroneously defined as a disease exclusive to Asians [3].

Both studies primarily revolve around the COVID-19 pandemic to investigate the shifts in Asian hate during this period. They rely on empirical research methodologies, such as statistical data on anti-Asian hate crimes. However, it's worth noting that a substantial portion of the existing literature fails to explore the realm of social media. In a digitally advanced society, online posts laden with subjective viewpoints have a significant impact on individuals.

Therefore, some researchers have introduced the concept of an "echo chamber" and "filter bubble". The definition of "echo chamber" is in news media and social media, an echo chamber is an environment or ecosystem in which participants encounter beliefs that amplify or reinforce their preexisting beliefs by communication and repetition inside a closed system and insulated from rebuttal [4]. An echo chamber circulates existing views without encountering opposing views, potentially resulting in confirmation bias. Echo chambers may increase social and political polarization and extremism [5]. Besides, the definition of "filter bubble" is a state of intellectual isolation that can result from personalized searches. Personalized searches utilize website algorithms to selectively curate search results based on information about the user, such as their location, past click behavior, and search history [6].

It has been suggested in the literature that "filter bubbles" are similar to the use of various modal systems that cater to individual users, customizing search results to create a "personalized information world" for each user. Consequently, these personalized information flows may have limited overlap with those of others, contributing to social fragmentation [7].

Therefore, it is crucial to investigate the combined impact of two factors: the utilization of big data in customizing content pushed to users on the internet, particularly social media, and the origins of the epidemic, of Asian hate. Additionally, a large number of the existing research is firmly grounded in the present. Our team found that most of the research on the topic of #stopasianhate has focused on analyzing anti-Asian events, such as the Atlanta shootings during the COVID-19 outbreak in the U.S., as well as contextualizing Asian bias. Few researchers have examined social media in relation to Asian discrimination. Our team believes that social media plays a very important role in influencing human thoughts and perceptions in the current era of the Internet. So, our team decided the research direction is the impact of social media on American people's attitude towards anti-Asian during the COVID-19 outbreak.

3. Method

First, our group conducted research on Twitter using specific keywords, such as COVID-19, COVID-19&Asian, etc. Our group then chose 25 posts with relevant keywords that had been posted between March and August 2021 and showed a high level of engagement. The authors then filtered the comments under these 25 posts to ensure they met the following criteria: they were posted between March and August 2021, the commenter's specific location was in the United States, and the comments themselves were deemed valid.

The second step was to identify two-time points based on the references: the early stage and the late stage of the COVID-19 outbreak in the U.S. Following this. We partitioned the relevant comment data collected from Twitter between March 2021 and August 2021 into two distinct sets—representing the early and late stages of the COVID-19 outbreak in the United States—based on the posting dates. This segmentation facilitated a comparative analysis of stage-specific shifts.

In the third step, our group thematically modeled the attitudes of the U.S. public on Twitter about comments made on the hashtag #StopAsianHateMovement that we collected during the pre-phase and post-phase of the COVID-19 outbreak in the United States. Our team used R studio to change the comment data of both parts into TXT format files and then imported them into R studio to produce histograms with "word clouds".

In the fourth step, our group analyzed the changes in each word cloud by comparing the two histograms from the first and the second part of the study. Because the total amount of data in the two sections differs, our group used the number of data converted to a percentage of the total for comparison.

Finally, our group considered the relevant literature to rationalize the different reasons that led to the different attitudes towards anti-Asians in the United States before and after the COVID-19 outbreak. The authors also thought about reasonable solutions to the problem.

4. Results

In the above section, the authors have derived two histograms. The most significant change is that at the beginning of the epidemic, the public held nearly the same proportion of positive and negative sentiments towards the topic #asian hate. It is reasonable to assume that people did not become more supportive of Asian hate at the beginning of the epidemic because of the epidemic. However, in the later stages of the epidemic, the histograms show that positive attitudes toward #asian hate far outweigh negative attitudes.

First of all, Figure 1 and Figure 2 shows the two histograms of the pre-epidemic number of comments for 48 while the epidemic in the latter part of the number of comments for 177, the two parts of the total number of comments is different, so our group percentage to compare, and then our group very intuitively compared to the public in the pre-epidemic to the latter part of the stage of the epidemic for the topic of #asian hate this topic of "ager The proportion of "anger" in the total number of comments decreases from 39.5 percent in the early stage to 14.1 percent in the late stage of the epidemic; the attitude of "participate" decreases slightly from 31.3 percent to 30.5 percent; the attitude of "disgust" decreases slightly from 31.3 percent to 30.5 percent; the attitude of "hate" decreases slightly from 39.5 percent in the early stage to 14.1 percent in the late stage of the epidemic. The percentage of comments with the attitude "disgust" decreased from 27.1 percent to 16.9 percent; the percentage of comments with the attitude "fear" decreased significantly from 37.5 percent to 19.2 percent; the percentage of comments with the attitude "joy" decreased significantly from 37.5 percent to 19.2 percent; and the percentage of comments with the attitude "enjoy" decreased significantly from 39.5 percent to 14.1 percent. Surprise" comments went from 14.5 percent to 14.8 percent, a

steady and almost unchanged trend; and finally, comments with the attitude of "trust" went from 39.6 percent to 42.4 percent.

Once again, we would like to suggest that this presentation of results is in line with our group's expectations for the results of the study. First of all, the topic of our study is #asian hate, so positive attitudes do not represent positive attitudes toward #stop Asian hate but rather negative attitudes toward #stop Asian hate, and negative attitudes do not indicate negative emotions, but rather negative attitudes toward #stop Asian hate. In summary, the conclusion that the emergence of the epidemic has enhanced #asian hate is validated.

Through literature, our group learned that #asian hate originated from the Chinese smuggling into the United States during the Opium Wars and the introduction of opium. Also, during this time, the Chinese were working hard and taking resources from the Native Americans, so # Asian hate was already in existence. Some Americans consider yellow people to be the "yellow peril" [2].

Of course, there is also the possibility that some Americans have a "white privilege" viewpoint, believing that all other races are inferior to the white race, which we believe could also be a cause of #asian hate. These reasons led Americans to attribute the origins of the epidemic to China, recalling the previous Black Death, and the "yellow peril" that occurred during the Black Death was reintroduced once again, as well as the echo chamber and filter bubble that characterize social media. [5], a mode of promotion that has led to the spread of public opinion in the United States. American people who have been following similar events are often promoted by social media with videos like expert analysis or journalists' reports, resulting in American people who previously supported #stopasianhate being infected and assimilated by the propagation of public opinion. I believe that this situation was dramatically exacerbated in the early to late stages of the epidemic, as Native Americans, who were already carrying the concept of "white privilege" [8], and the influence of historical events, were guided and catalyzed by social media to become positive and supportive of the idea of #stopasianhate. This led to our group's findings.

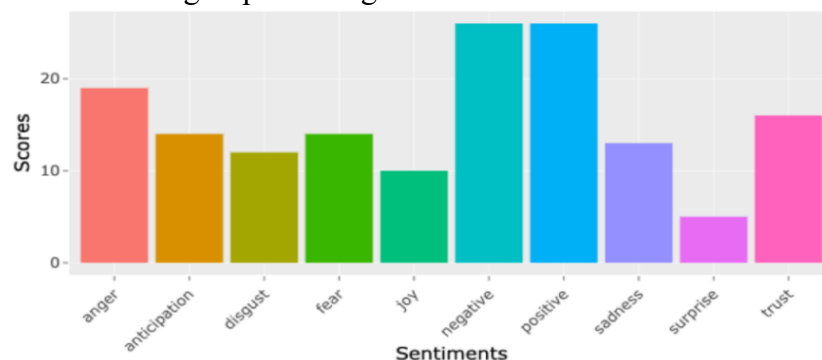


Figure 1: Above is a histogram of data from the early days of the COVID-19

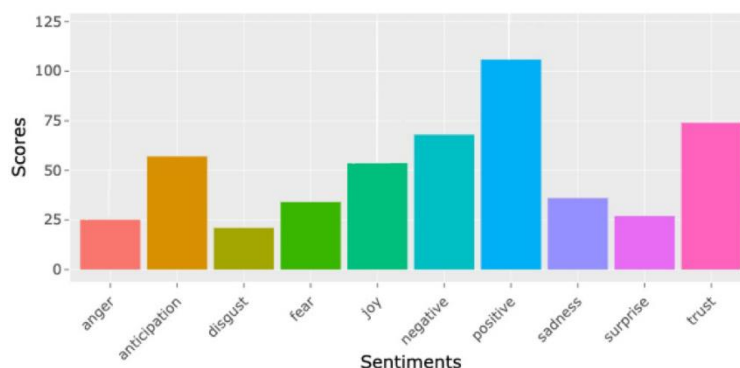


Figure 2: Above is a histogram of data from the later stages of the COVID-19

5. Discussion

This experiment has some design limitations. Firstly, the study is constrained by data limitations. The dataset we gathered, while extensive, may not encompass the entirety of comments tweeted by Americans pertaining to the topic of anti-Asian sentiment. Additionally, we lacked access to the backend of the software, precluding us from obtaining a comprehensive dataset. This constitutes a significant limitation in our experimental design.

Secondly, our analysis of causality is primarily based on data drawn from books and related literature. The inability to conduct offline data collection and interviews due to real-world constraints further compounds this limitation. Our team acknowledges this as a potential loophole in our experiment.

The third vulnerability in our team's conduct of this research was our team's inability to confirm whether account holders whose Twitter location was shown as the United States were permanently residing there.

6. Conclusion

The spread of COVID-19 has sparked hate and racism towards Chinese and wider Asian communities around the world, especially within the United States. According to the study, social media can act as echo chambers and filter bubbles to reinforce non-Asian racists' established opinions based on misinformation. This study examines the timeline of these anti-Asian sentiments during the pandemic, using Twitter as a gauge for public sphere and opinion. Our data revealed a disturbing rise in negative attitudes towards Asians at the pandemic's onset, influenced by historical biases, political discourse, and social media's reinforcing circles. Yet, a positive shift emerged later, as more tweets countered anti-Asian bias.

This study not only focuses on racial dynamics during a global upheaval but also celebrates the strength of communities, activists, and supporters challenging these biases. However, given the vast number of posts and users on Twitter, it is probable that our study did not capture every perspective related to this topic.

The spread of the COVID-19 pandemic has accelerated hateful behaviours and the circulation of racist information online. As such, social media companies and operators should take responsibility and implement steps to remove racially hateful messages and prevent their spread. Consequently, we emphasize the need for sustained public awareness about racial biases and misinformation's risks.

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