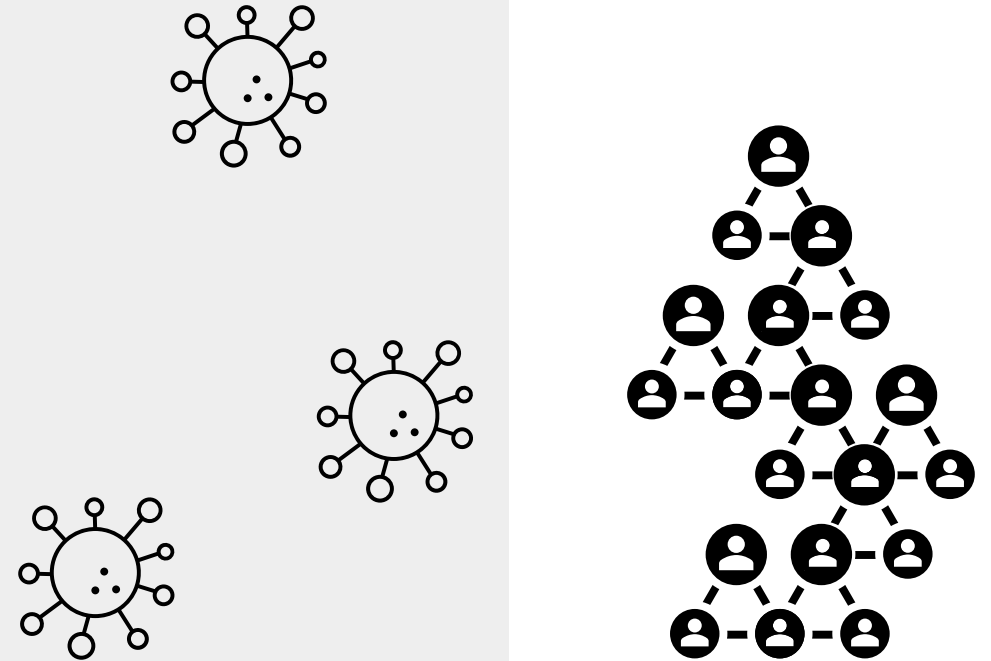


SHIFT OF USER ATTITUDES ABOUT ANTI-ASIAN HATE ON REDDIT BEFORE AND DURING COVID-19

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BACKGROUND & MOTIVATION

- Race-related discrimination has severe long-term negative impact on the mental health and well-being.
- COVID-19 outbreak has led to a surge of racist and xenophobic violence towards Asian communities.
- Physical and social isolation during the pandemic stimulated a larger social media presence of individuals and thereby increased engagement in online communities.
- Existing work focused on investigating hate speech towards Asians or considering tweets to study related aspects of racism.

RESEARCH QUESTION

How did the user attitudes about anti-Asian hate shift over the years, and specifically during the COVID-19 pandemic?



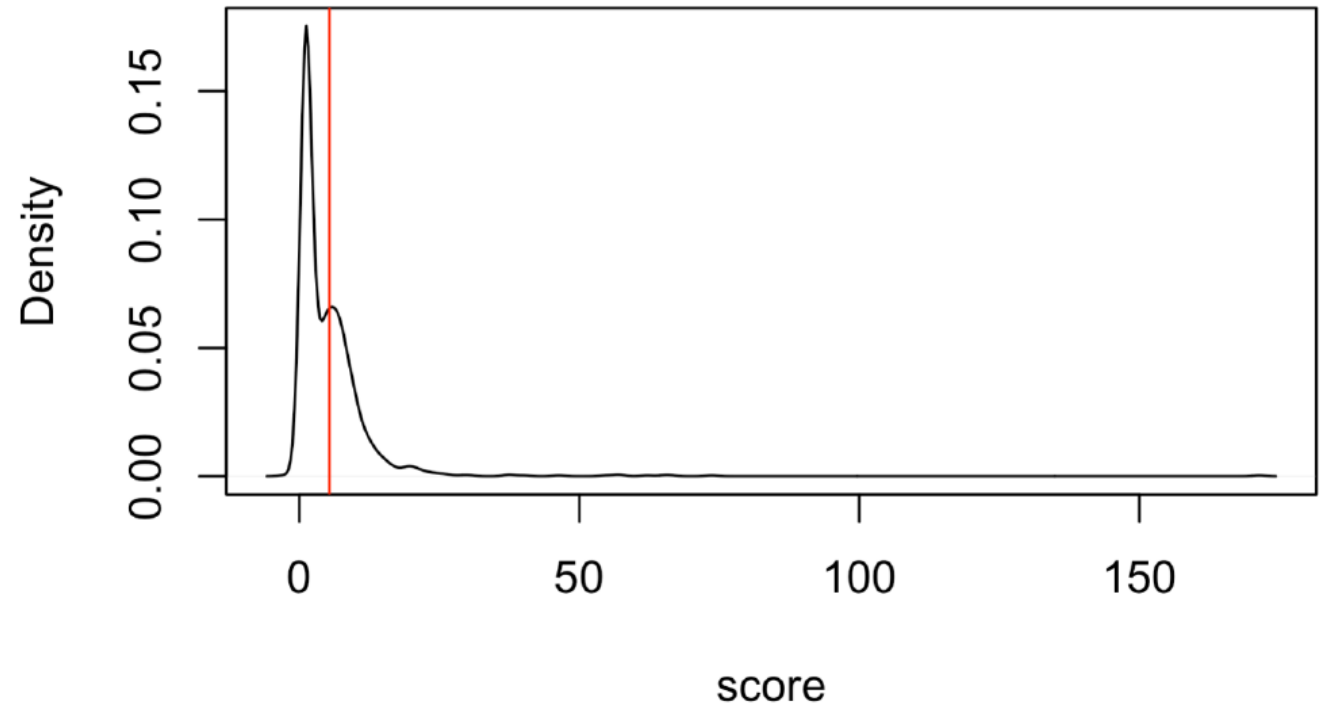
DATA & PREPROCESSING

- Reddit – from January 2018 until December 2021 containing keyword ‘anti Asian hate’
- Splitting date: **March 11th, 2020**
- Timeline consists not only COVID-19 but also, milestones regarding geopolitical relationships between China and the United States
- Posts in our dataset are included from the different subreddits shown here:

Before COVID-19			During COVID-19		
	word	%		word	%
1	aznidentity	14%	1	aznidentity	12%
2	hapas	4%	2	publicfreakout	3%
3	worldnews	3%	3	news	3%
4	politics	2%	4	worldnews	3%
5	askreddit	2%	5	politics	2%
6	asianamerican	2%	6	asianmasculinity	2%
7	unpopularopinion	2%	7	asianamerican	2%
8	asianmasculinity	1%	8	nyc	1%
9	the_donald	1%	9	askreddit	1%
10	news	1%	10	neoliberal	1%

SCORE RECEIVED VS EMOTIONS (THROUGH LIWC)

- Score of a post is an aggregated difference between the total number of upvotes and downvotes received by a given post
- Score may suggest the community agreement w.r.t several features of a given post
- Scores are heavily right tailed



Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
-2.800	1.120	3.516	5.369	7.331	171.381

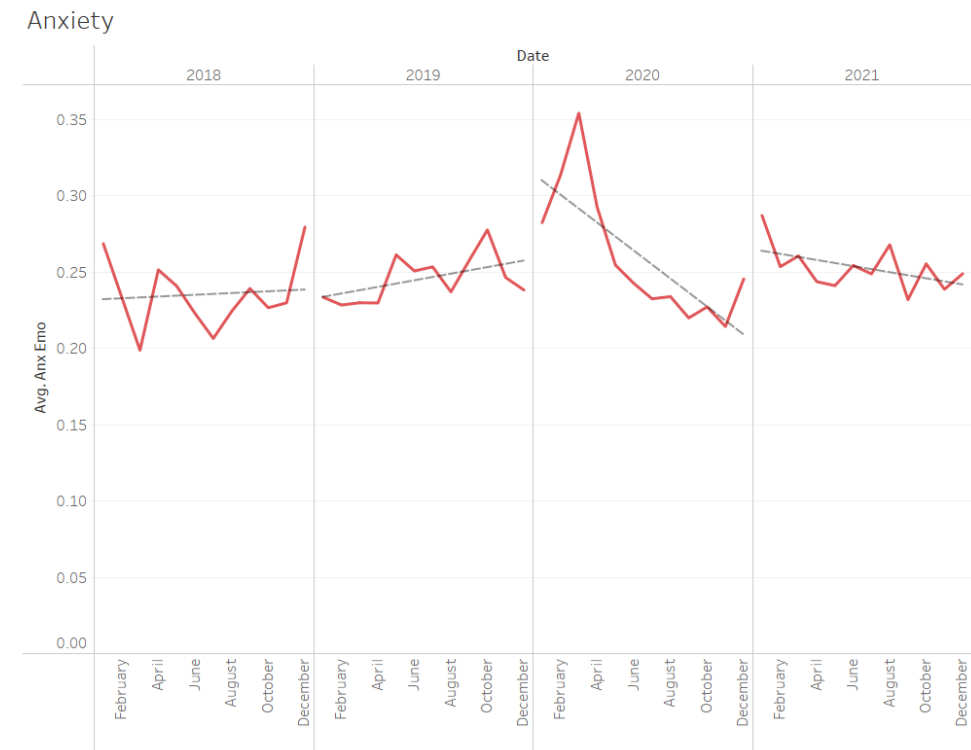
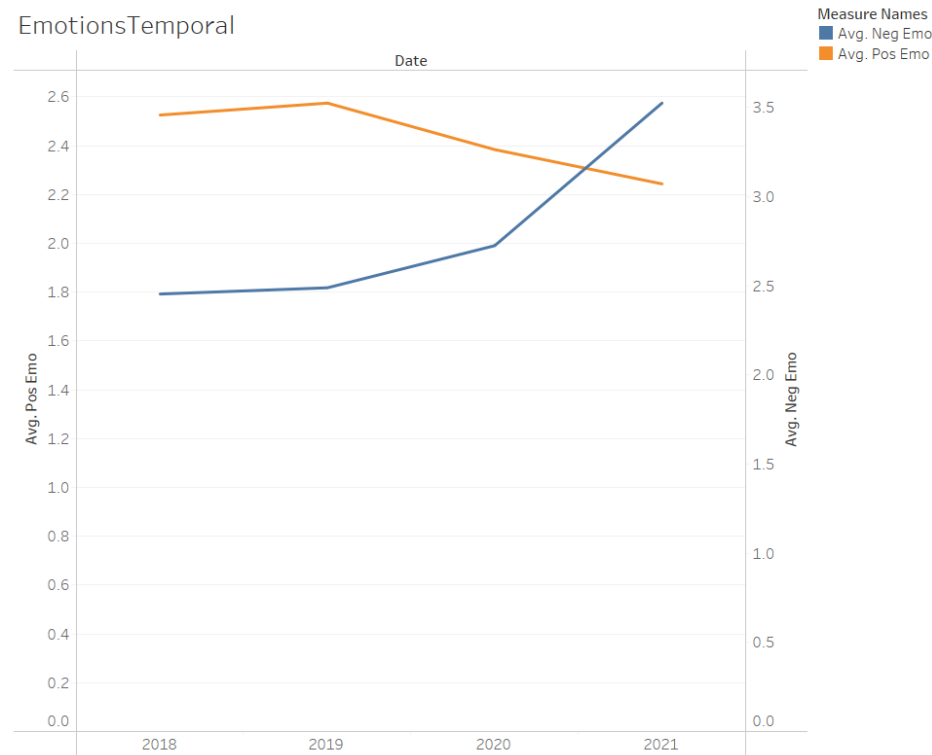
SCORE RECEIVED VS EMOTIONS (THROUGH LIWC)

- We focus on how the inclusion of psycholinguistic emotions can help predict the score of a post
- Modeled this as a classification problem and used random forests to find the top features to predict score of a post
- Presence of social distancing-related emotions during the pandemic

Before COVID-19		During COVID-19	
	word		word
1	analytic	1	home
2	WPS	2	informal
3	achieve	3	work
4	male	4	body
5	verb	5	friend
6	swear	6	female
7	body	7	swear
8	space	8	ppron
9	tone	9	male
10	number	10	differ
11	health	11	quant
12	negemo	12	anx
13	WC	13	family
14	they	14	death
15	drives	15	Dic

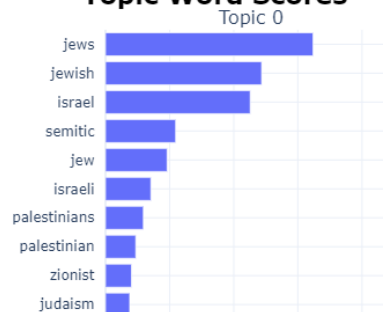
TEMPORALITY VS EMOTIONS AND ONLINE SUPPORT

- Temporal analysis focused on 3 main emotions – positive, negative and anxiety

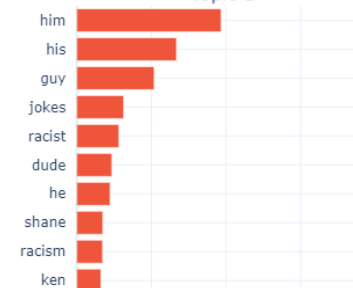


BEFORE COVID-19

Topic Word Scores



Topic 1



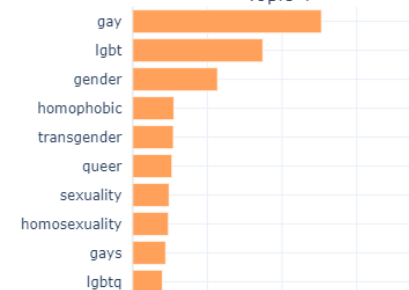
Topic 2



Topic 3



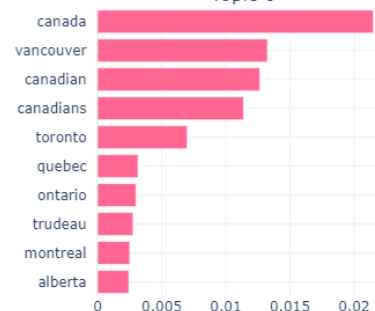
Topic 4



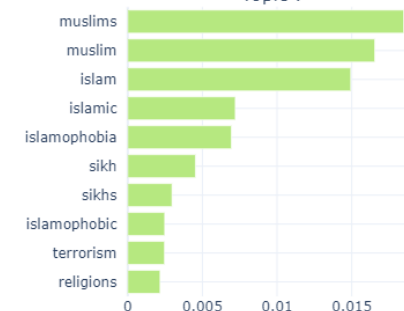
Topic 5



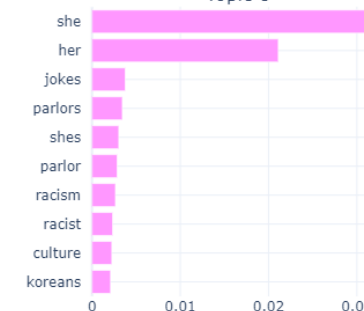
Topic 6



Topic 7

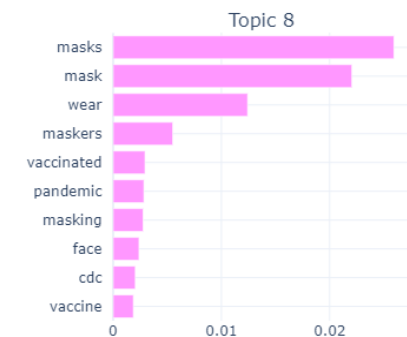
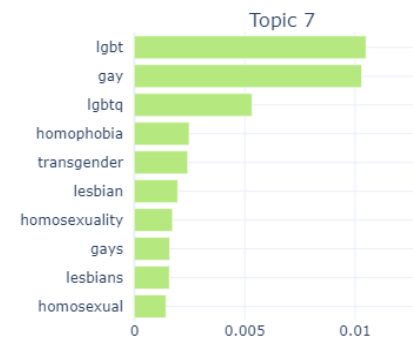
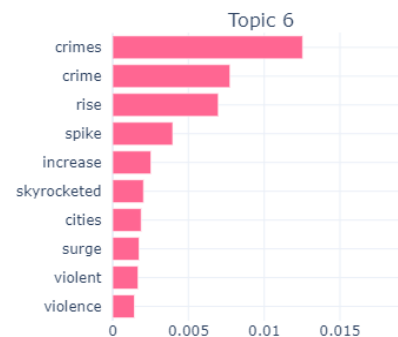
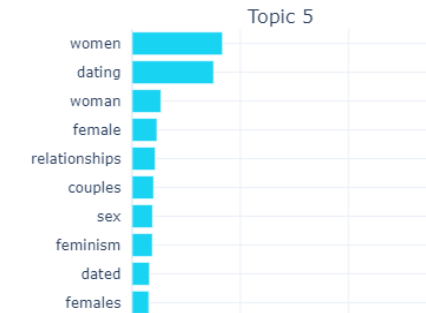
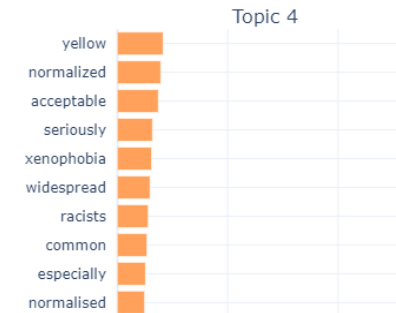
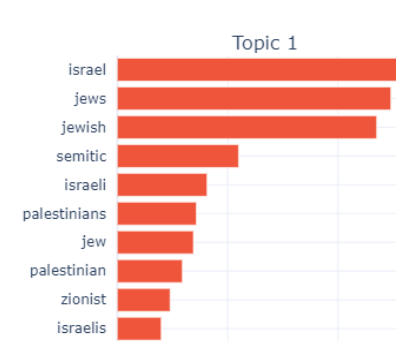
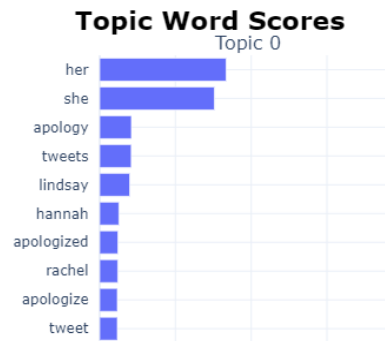


Topic 8



AFTER COVID-19

2022



MAIN TAKEAWAYS

SURGE OF POSTS DIVERSITY

users are posting on social media during the pandemic more than before to share their personal experiences

NEGATIVITY

an increase in using vocabulary for negative emotions since 2019

ONLINE SUPPORT

support measured through "score" received by the posts has been increasing since the beginning of 2020

ANXIETY

has been decreasing since mid-2020, which might be due to the declining COVID-19 cases and deaths

PERSONAL EXPERIENCES

during the pandemic, posts were more personal, and discussions were shifted towards anti-Asian hate crimes in different cities

THANK YOU! QUESTIONS?

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