Online Appendix

Contents

1 Additional information on social media data

The gender distribution in the analytical data is 1,930,698 unique self-reported female users and 808,418 self-reported male users. We report the the user-reported location distribution here in the Figure OA.1. The category of "Others" (373,713 unique users) which refers to no information on province is removed in the presentation here.
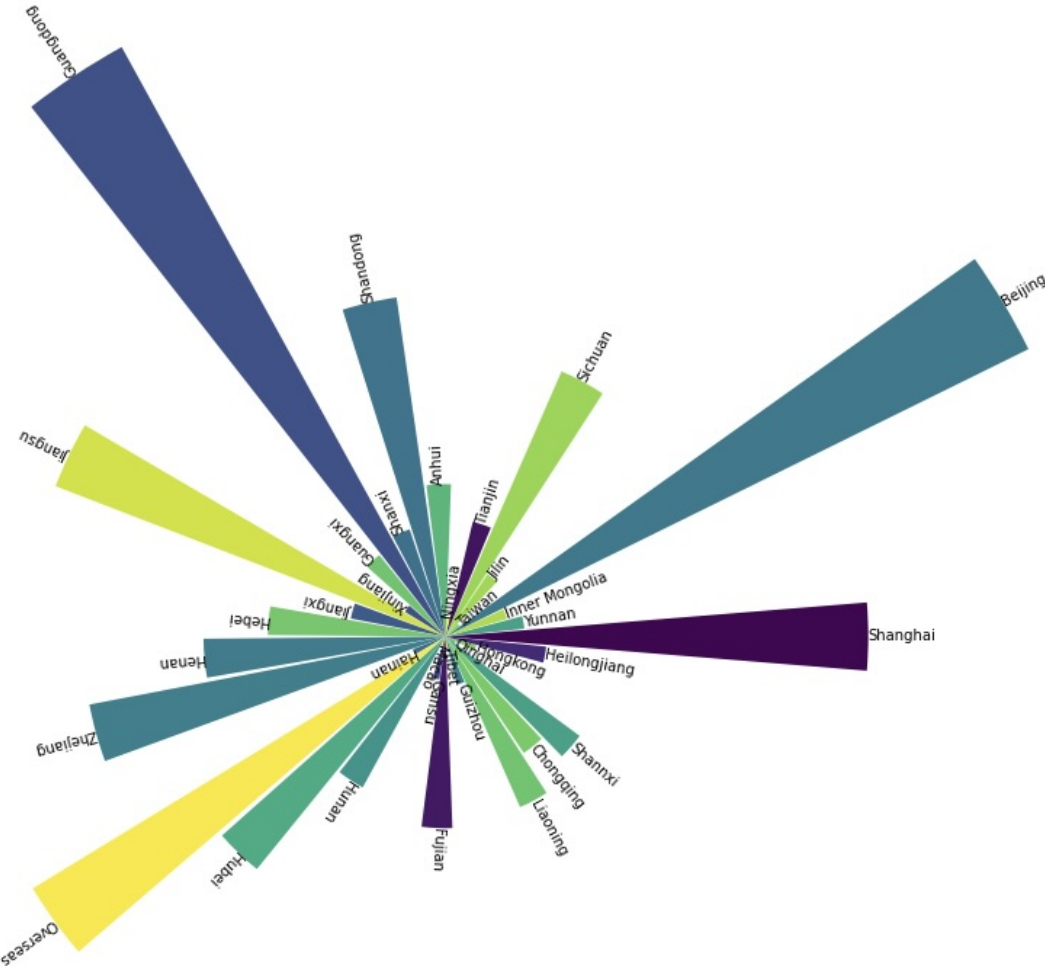

Figure OA. 1: User provine information

2 Validations of machine learning

Table OA.1: Coding rules for training set

Variables	Target	Value	Coding rules
Mainland Pandemic Related	Single out the posts that are not of research interest and delete the post identified as 0	1	• If the post contains topics relates to the outbreak, development of COVID-19 in mainland China • If the post describes the impact of the outbreak
		0	• If the post contains no COVID-19 specific content • If the post only contains a COVID-19 related keyword or hashtag without other COVID-19 related content • If the post is an advertisement • If the post contains COVID-19 content mainly relates to regions outside mainland China
Fellow Citizens Related/ Scapegoating	Identify the posts that are of key research interest and gather the post identified as 1 for further analysis	1	• If the post contains evaluation of an identifiable individual and related behaviours • If the post contains evaluations/comments of an identifiable social group and related behaviours • If the post contains evaluation of an identifiable government official and related behaviours • If the post contains evaluation of an identifiable expert and related behaviours • If the post contains evaluation/comments of peer Chinese as a whole
		0	Otherwise

Table OA.2: Inter coders reliability

	Kappa Score
Pandemic (relates to mainland China)	0.867
Fellow Citizens	0.868

Table OA.3: Classification report of three classifiers

	Precision	Recall	F1 Score	Support
Pandemic (relates to mainland China)				
Naive Bayes				
0	0.81	0.79	0.80	412
1	0.86	0.87	0.86	588
Accuracy			0.84	1000
SVM				
0	0.79	0.74	0.76	412
1	0.83	0.86	0.84	588
Accuracy			0.81	1000
NLP				
0	0.90	0.82	0.86	412
1	0.88	0.93	0.91	588
Accuracy			0.89	1000
Fellow Citizens				
Naive Bayes				
0	0.91	0.86	0.89	754
1	0.64	0.75	0.69	246
Accuracy			0.83	1000
SVM				
0	0.88	0.94	0.91	754
1	0.78	0.62	0.69	246
Accuracy			0.86	1000
NLP				
0	0.91	0.94	0.93	754
1	0.80	0.71	0.75	246
Accuracy			0.89	1000

Note: We use 2000 hand-coded posts as the training set, the remaining 1000 as the validation set.

3 Supplementary materials of qualitative evidence

3.1 Additional evidence and discussions of Beijing Xicheng Grandpa case

Peak tunes on 21st and 23rd were mainly driven by the response from the Beijing Xicheng Grandpa and reports that praise the responsible citizen.

> #Beijing Xicheng Grandpa responded to be called Grandpa# The title is just for fun. #How is Beijing Xicheng Grandpa now# The first identified case of this wave of COVID-19—Beijing Xicheng Grandpa, Mr T received considerable attention since the first report on him. Doctor says Mr. T's situation is fairly steady and better now. About being called Grandpa at the age of 52, he responded that this title is for fun and returned the public's attention with a short selfie video. [video] (J7NbIqm3i, 2020-06-21)

Retweets of this post were mainly good wishes for him, for instance *"Really knows the principle and cares for the big picture, good heart and obeying the rules, kudos for the Xicheng Boy!" (J7Icmkaii, 2020-06-21)*.

The report that sparkled the wave of praise for Mr. T is from the People's Daily:

> [Short Video— Don't be afraid Beijing] When the pandemic is here, #don't be afraid Beijing#, because we have responsible 'Xicheng Grandpa', we have medical workers and social workers who are holding their positions around the clock, we have normal citizens who are actively participating in the battle against the pandemic; don't be afraid Beijing, because we have trumped storms that were much stronger, now we have solid suits and armour in everyone's heart. Normalising the battle of pandemic, paying attention but do not be panic. Repost the video below and respect to every #lovely soldier on the battlefield#! (J7V99BW7X, 2020-06-23)

3.2 Additional evidence and discussions of Chengdu Girl case

Another wave of contest on Dec 11th is sparkled by the girl' new video online saying she is all fine, thanks for caring, and the hashtag *"Chengdu COVID-case the girl sent a video saying she is fine"* was trending. Highly contested discussions and debates of the video and her act. Although many are wishing her the best, there are some criticisms. For instance, one retweet commented:

> sounds like she is honoured, (having) wasted such resources, just keep low key and get cured, leave the hospital, who (the fuck) cares if she is fine or not. Posting a video saying she is alright and thanks for caring, disgusting, as if it's some video of front-line workers in hospital. (JxSrrthCr, 2020-12-11)

Some additional posts are rather satirical:

> I smoke, drink, have tattoos, have close contact with 72, became infectious, affect a whole city, this still can't stop me being a good girl who loves life, please cheer up for me!! . . . . A call girl in the club is white-washed somehow. (JxSlmryDc, 2020-12-11)

> I wish the 4000 people who were identified as close contacts with her are safe, no death and less virus. How many people in Chengdu would lose their jobs, be quarantined, having their business hurt, anxious, busy with testing, being distanced with their family, how many people who are here for traveling or business trips cannot go home? If the girl is gonna do live streaming or get an opportunity for commercial advertisement later on (due to the publicity brought by the whole public attention), that's really outrageous. What is the media trying to promote? glorious the virus spreader? (JxSnkdk84, 2020-12-11)

Voices that support the girl identify that the criticisms are scapegoating and stigmatizing

the patient. For instance:

> One the one hand, we are arguing that the virus thing wasn't China's fault, on the other, scolding the girl harshly"; "Here it's like a live show of Sontag's 'Illness as Metaphor': COVID-19 with the girl, like ADIS, cancer, should simply be a disease on the body, yet it gradually transformed into a moral judgement, and finally turn to a social repression. (JxVX4cH4Y, 2020-12-11)