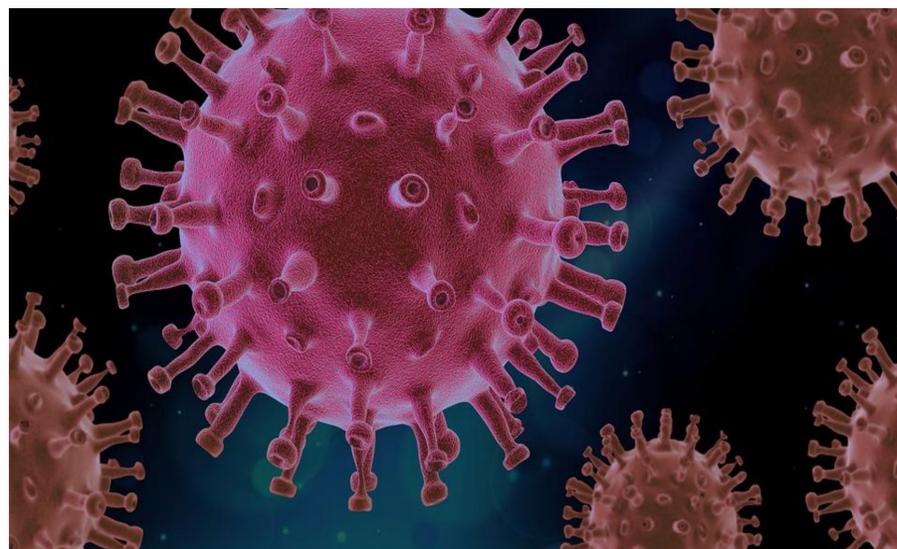


## Abstract

This content analysis examined 196 Twitter tweets to identify contexts in which emotional concerns were raised on social media during the pandemic. Results revealed 7 main ways within which emotional concerns were framed including: COVID-19 Virus, School-Related, Groups/Individuals, Social Institutions, Financial/Work-Related, Mass Media, and Other. Emotional concerns were most often tied to aspects of the virus itself such as fear of contracting the disease, linked to other issues involving schooling, or were raised in relation to use of mass media. Overall, the findings provide insight into how individuals are sharing concerns about their mental health with others via Twitter.



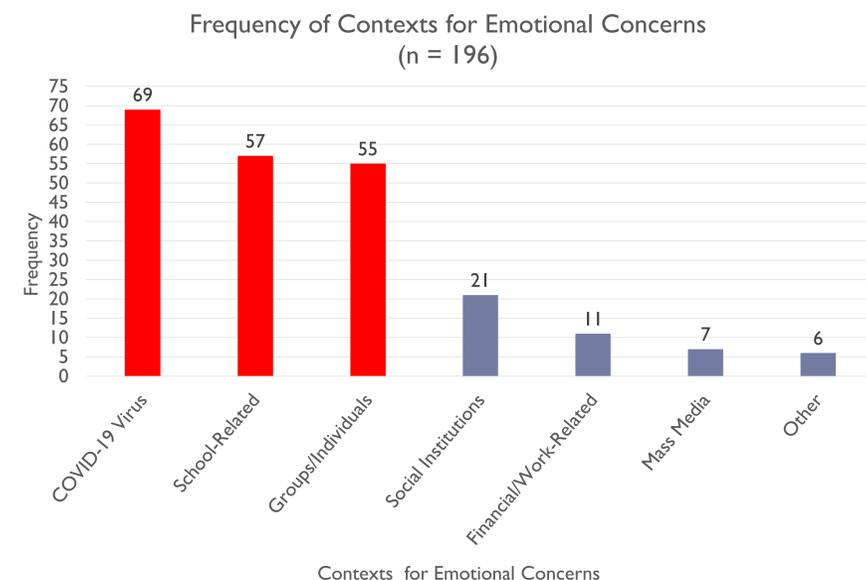
## Introduction

Previous health crises, such as Severe Acute Respiratory Syndrome (SARS), H1N1, and Ebola, produced widespread psychological distress. High psychiatric and posttraumatic morbidities were identified among residents within Singapore clinics during the SARS outbreak (Sim, Chan, Chong, Chua, & Soon, 2010) while high levels of anxiety were identified by Bults et. al (2011) and Jalloh et. al (2018) across the globe during the H1N1 and Ebola outbreaks, respectively. Similarly, COVID-19 has led to high levels of anxiety and psychological distress among those subject to quarantine orders and social isolation, and it has exacerbated pre-existing conditions (Singh et al., 2020). The present study adds to the growing body of literature on COVID-19 by examining how emotional concerns are contextualized following the onset of government-legislated lockdowns and social isolation measures.

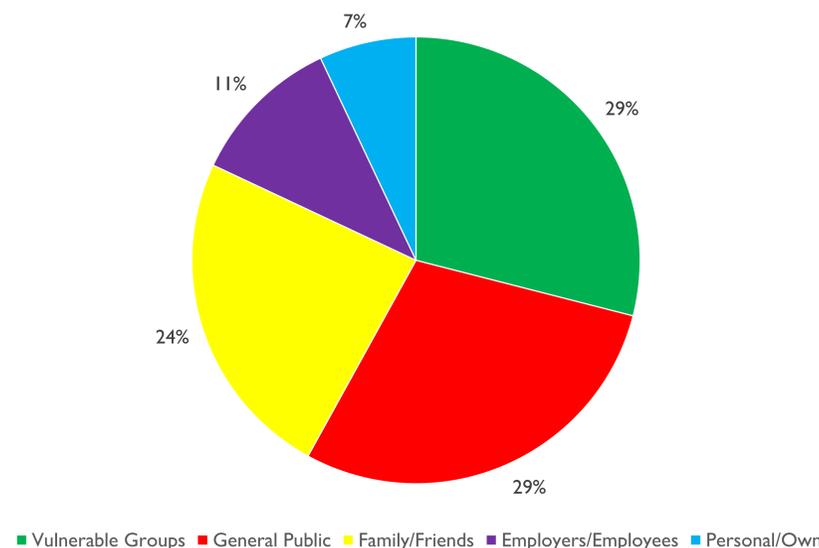
## Methods

The sample consisted of 196 tweets posted from March 13, 2020, through March 13, 2021, identified using the advanced search option and the keywords: "covid," "stress," and "concerns." Any tweet explicitly or implicitly expressing an emotional concern was included in the analysis. An open-coding procedure was utilized as each tweet was individually examined for any salient meanings or keywords. Once initial codes were established, each tweet was re-evaluated to identify contexts in which emotional concerns were framed.

## Results



Percentage of Emotional Concerns Towards Groups/Individuals (n = 55)



Contexts	Tweets
1. COVID-19 Virus	"Stressed and confused about why quarantine ended in NC while COVID cases continue to rise. I'm seeing way too many Instagram stories of people at bars with no concern about it...The world feels so out of control in so many ways currently."
2. School-Related	"Can't stop chuckling at how my adviser asked me for the first time yesterday how I was handling the isolation and stress of dissertation + covid and like .....bro, I don't know what to tell ya, but your concern is some 4 months too late to be useful to me?"
3. Groups/Individuals	"Go to your children. Hug them. Tell them how much you love them. All around me adults are full of worry, concern, stress, and anxiety. Our kids KNOW they might be bottling it up but they can feel it. Go now, and give them a hug."
4. Social Institutions	"While COVID-19 is top of list of concerns, remember, people still have babies, get cancer, have heart attacks, break bones, etc. The health system is stressed!"
5. Financial/Work-Related	"Seriously stressed at work. I just started at a new dental office & multiple staff members have expressed 0 concern for COVID safety. One Dr thinks quarantining & shut downs aren't the answer or that this virus "isn't going away."
6. Mass Media	"Currently muting some friends from my timeline because I found their retweets or likes are toxic for my health. I'm asthmatic and my stamina lately is dropping due to stress and anxiety related to COVID-19 news. I know you have growing concern on our government action & policy."
7. Other	"To staff and management at hospitality venues - the new strain of COVID in the UK is certainly alarming and a cause for concern. However, there's no excuse for taking out your stress, fear, anger, or frustration on clientele that identify as or present as East Asian."

## Discussion

Many mental health concerns were linked directly to the coronavirus including fears of contracting deadly forms of the disease – thus underlining the need for community responses specifically related to infectious disease outbreaks (Sim et al., 2010). School-related concerns were also prevalent. Baloran (2020) notes the mental health of students depletes with the implementation of online modalities and creates high levels of anxiety. Concerns were also raised in relation to mental well-being of groups such as healthcare workers. Du et al. (2020) suggests that healthcare workers should be closely monitored for depression/anxiety, given training on COVID-19 knowledge, stress management, and self-care, provided with adequate protective equipment, and provided with additional psychological interventions to tackle the negative impacts of COVID-19 on mental health. Given the evident contextualized concerns, examining how pandemics and lockdown measures disproportionately exacerbate concerns among hidden social groups, such as LGBTQ2S+ members or children, would be of interest for future studies.

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