

#Alonetogether: An Exploratory Study of Social Media Use at the Beginning of the COVID-19 Pandemic

J. Mitchell Vaterlaus^{1*}, Emily V. Patten², and Lori A. Spruance³

¹Department of Health and Human Development, Montana State University, Bozeman, MT, 59717

²Department of Nutrition, Dietetics, and Food Science, Brigham Young University, Provo, UT, 84602

³Department of Public Health, Brigham Young University, Provo, UT, 84602

*Corresponding Author: j.vaterlaus@montana.edu, (406) 994-3229, @MitchVaterlaus

The purpose of this study was to explore adults' lived experiences with social media during the early weeks of the COVID-19 pandemic in the United States. Participants ($n = 564$) completed an online survey with open-ended items between March 21-31, 2020. Data were analyzed using a phenomenological qualitative approach and four themes emerged. During the COVID-19 pandemic, participants experienced social media as (a) providing connection in a safe way, (b) a medium that amplified emotional

intensity, (c) a key source for COVID-19 updates, and (d) as a needed time filler. Participants indicated that social media can be a helpful tool for maintaining social support and keeping up with important pandemic related updates during a global pandemic.

Keywords: social media, social networking sites, health, COVID-19, qualitative

In December 2019, the novel coronavirus (COVID-19) was detected in Wuhan, China (Centers for Disease Control and Prevention [CDC], 2020b; World Health Organization [WHO], 2020) and the COVID-19 pandemic was declared a national health emergency on March 13, 2020 (The White House, 2020b). The pandemic shifted expectations for work and social interaction as public health interventions were issued as presidential guidelines (The White House, 2020a) and as state governments implemented clearer direction on social distancing expectations. By March 23, 2020, 43 states issued state-wide (or parts of their states) stay-at-home orders (Mervosh et al., 2020).

As the COVID-19 pandemic and associated public health interventions were implemented, concerns about the dissemination of misinformation on social media emerged (Atlani-Duault et al., 2020; Rosenberg et al., 2020), but recommendations to use

#Alonetogether: An Exploratory Study of Social Media Use at the Beginning of the COVID-19 Pandemic

social media to promote connection during social distancing were also made (Kar et al., 2020; Rosenberg et al., 2020). Current research on social media during health crises has focused on analyzing existing social media posts/videos and has largely focused on the accuracy/usefulness of the information shared on social media rather than on the actual experience of social media users (e.g., Chew & Eysenbach, 2010; Pandey et al., 2010; Sharma et al., 2017). There is a need for research that captures the broader lived experience with social media during public health crises and their affiliated public health interventions. The current study employed qualitative data to understand the experience of social media during the early weeks of the COVID-19 pandemic.

LITERATURE REVIEW

Social Media Use

Adults of all ages in the United States report using social media (i.e., 90% ages 18-29, 82% ages 30-49, 69% ages 50-64, and 40% ages 60+; Pew Research Center, 2019) an average of 45 minutes daily (The Nielsen Company, 2019). Social media has become ubiquitous as evidenced by high levels of users across a variety of demographic characteristics including gender (i.e., 78% women, 65% men), race (i.e., 72% White, 70% Latino/Hispanic, 69% Black), educational level (i.e., 64% high school graduate or less, 74% some college, 79% college graduate), and urbanicity (i.e., 76% urban, 72% suburban, 66% rural; Pew Research Center, 2019). Among adults in the United States, YouTube (72%), Facebook (69%), Instagram (37%), Pinterest (28%), Snapchat (24%) and Twitter (22%) are among the most used social media platforms and most of the users report accessing the platforms daily or weekly (Perrin & Anderson, 2019; Pew Research Center, 2019).

Adults have reported that staying in touch with friends (67%), family (64%), and reconnecting with friends they have lost touch with (50%) are major reasons they use social media (Smith, 2011). Apart from social reasons, some adults now use social media for informational purposes. As of 2018, most adults in the United States still get their news from TV (49%), news websites (33%), or radio (26%), but now 20% report getting their news from social media (Shearer, 2018).

Social Media and Public Health Crises

Research on social media and public health crises is emerging, which has included investigations related to the Zika virus (Sharma et al., 2017), Ebola virus (Roy et al.,

2020), H1N1 (swine flu; Chew & Eysenbach, 2010; Klemm et al., 2016; Pandey et al., 2010; Signorini, et al., 2011), and H7N9 (variant of bird flu; Vos & Buckner, 2016). Most of these studies have relied on analyzing social media posts or videos related to the specific crisis on one social media platform (Chew & Eysenbach, 2010; Pandey et al., 2010; Sharma et al., 2017; Vos & Buckner, 2016). Further, the majority of these studies focus on the accuracy of the information disseminated on social media platforms during the health crisis, and most have concluded that the majority of information shared via social media is useful, accurate, or from reputable sources (Chew & Eysenbach, 2010; Pandey et al., 2010; Sharma et al., 2017).

As the COVID-19 pandemic is ongoing, there have been some editorial or opinion pieces (Atlani-Duault et al., 2020; Depoux et al., 2020; Rosenberg et al., 2020; Van Bavel et al., 2020) and some research articles (Gao et al., 2020; Li, Wang, et al., 2020; Li, Zhang et al., 2020; Pulido et al., 2020) published related to social media. The majority of current published research has emerged from China and has focused Weibo (i.e., a Chinese microblogging social media platform similar to Twitter; Gao et al., 2020; Li, Wang, et al., 2020; Li, Zhang et al., 2020) use during the COVID-19 pandemic. This research with Weibo users has indicated that posts about COVID-19 have commonly focused on providing advice or notifications, sharing measures that have been taken, disseminating donation related (e.g., money, services) information, giving emotional support, asking for help, doubt casting, and posts refuting rumors (Li, Zhang, et al., 2020). Weibo posts were also used to track the emotional experiences of users. After the declaration of the pandemic, Weibo users' posts increased in negative emotions and decreased in the inclusion of positive emotions (Li, Wang, et al., 2020).

In addition to measuring the emotional experience of the COVID-19 pandemic using social media posts, some have hypothesized that exposure to COVID-19 related content on social media could have deleterious effects on mental well-being (Gao et al., 2020; Kar et al., 2020). Gao et al. (2020) reported that higher self-reported frequency of exposure to COVID-19 related social media content was positively associated with mental health problems among Chinese adults. To protect mental health, some professionals have recommended limiting exposure to COVID-19 related content on social media (Kar et al., 2020).

Limiting exposure may be challenging because the public now increasingly relies on the convenience of social media to get immediate information during large-scale disasters (Faustino et al., 2012). Social media may be a source of information that could enhance people's ability to follow public health recommendations and increase trust in their efficacy (Depoux et al., 2020). However, social media now allows the public to play "... a larger role in all stages of knowledge translation, including information generation, filtering, and amplification" (Chew & Eysenbach, 2010, p. 1). This leads to one of the largest concerns about social media during the COVID-19 pandemic—the proliferation and access to fake news or misinformation (Atlani-Duault et al., 2020; Depoux et al., 2020; Kar et al., 2020; Rosenberg et al., 2020; Van Bavel et al., 2020) because "Many citizens believe that anything online in digital format is true and that the information is accurate and reliable" (Martinez-Rojas et al., 2018, p. 204). Some emerging evidence related to Tweets posted during the pandemic indicated that "false information was more likely to be tweeted but less likely to be retweeted than science-based evidence or fact-checking tweets" (Pulido et al., 2020, p. 12).

Despite the concerns about social media, the social connectivity afforded by social media has been proposed as a way to stay connected during the COVID-19 pandemic (Kar et al., 2020; Rosenberg et al., 2020; Van Bavel et al., 2020). The last time social distancing was widely used as a public health intervention in the United States was during the 1918-1919 influenza pandemic (Markel et al., 2007). Social distancing as an intervention can have side effects for well-being because long time periods of social separation may increase "loneliness and emotional detachment" (Gostin, 2006, p. 1702). Social media may be a tool to promote connection during times of social distancing, but research supporting this proposition is needed.

Purpose of the Current Study

Current research on social media use and public health crises has largely relied on analyzing posts/videos on specific social media sites and focused on the information disseminated on social media platforms about the public health crisis (Chew & Eysenbach, 2010; Pandey et al., 2010; Pulido et al., 2020; Sharma et al., 2017). Although this is important research, this approach does not account for the context of the posts and the actual user experience with social media as they adapt to a specific public health crisis.

Furthermore, most COVID-19 and social media research has been focused in China (Li, Wang, et al., 2020, Li, Zhang, et al., 2020; Gao et al., 2020) and research in other countries is needed. During the early weeks of the COVID-19 pandemic the social distancing expectations were stricter in the United States than at other times during the pandemic and data from this time period is important because people were largely restricted to their homes (Mervosh et al., 2020), which may suggest there was less social support or emotional connection available in person (Gostin, 2006). The current study was designed to understand the lived experience of social media use during the early weeks of the COVID-19 pandemic in the United States and was guided by the following research question:

What are adults' lived experiences with social media during the early weeks of the COVID-19 pandemic?

METHODS

Sample

The sample included 564 adults ($n = 216$ male, $n = 347$ female, $n = 1$ gender not reported; $m_{age} = 38.79$; $sd = 13.97$) living in 46 states within the United States (Rhode Island, Alaska, West Virginia, Vermont not represented). The majority of the sample identified as white (80.82%), with the remaining identifying as African American (8.54%), Asian American and Pacific Islander (5.16%), Latinx (2.67%), American Indian (1.78%), or other (1.03%). Participants stated that they were married or cohabitating (70.39%) or single (29.61%). Educational attainment was reported as follows: high school completion or less (9.12%), some college or vocational school (25.40%), earned bachelor's degree (35.60%) or had earned a graduate or professional degree (29.87%). The greater part of the sample reported they were employed full-time (49.02%) or part-time (18.47%).

Procedures

A university Institutional Review Board approved the study procedures. An online survey, developed on *Qualtrics* (see www.qualtrics.com), was distributed to adult participants between March 21 and March 31, 2020. Participants were recruited in two different ways. First, a snowball sampling method was used by sharing the survey link on various social media sites with an incentive to be entered into a raffle for one of five \$20 gift cards. One limitation of social media recruitment can be a lack of diversity within

participants. To address this limitation participants were also recruited through *Prime Panels* (see www.cloudresearch.com) because it has been documented as a way of reaching more diverse community samples (Chandler et al., 2019; Litman et al., 2017). Prime Panels is similar to *Amazon Mechanical Turk* in that it is an online participant-sourcing platform, but with Prime Panels over 50 million potential quality research participants there is an opportunity to recruit more diverse samples. Prime Panels participants were compensated in accordance with the platform with which they accessed the survey (Cloud Research, 2019).

The survey took participants approximately 25 minutes to complete. This study is part of a larger study of well-being during the COVID-19 pandemic (see Vaterlaus et al., 2021). Initially, there were 600 usable participant survey responses. To be included in the current social media focused study participants had to report using at least one social media platform. In total, 36 ($n = 31$ men, $n = 4$ women; $m_{age} = 57$, $sd = 17.28$) reported they did not use social media and were not included in this study. Common reported reasons for not using social media were a lack of interest and privacy concerns.

Measurement

This study focused on understanding the lived experience with social media during the early weeks of the COVID-19 pandemic. After reviewing current literature on public health crises and social media, four open-ended items were developed and piloted with 20 adults: “Have you used social media the same or differently during the Coronavirus (COVID-19) Pandemic? Please explain”; “What, if any, have been the benefits of using social media during the Coronavirus (COVID-19) Pandemic? Please explain”; “What, if any, have been the challenges of using social media during the Coronavirus (COVID-19) Pandemic? Please explain”; and “How do you think social media has influenced peoples’ experience with the Coronavirus (COVID-19) Pandemic?” Participants were also to report which social media platforms they used and to consider how much daily time they spent with social media during the last week. Collecting qualitative data via online surveys is an appropriate method as previous research indicates that there is similar quality in the qualitative data collected via telephone, mail, and online surveys (Coderre et al., 2004).

Analysis

A phenomenological approach was selected to analyze the qualitative data as the approach focuses on capturing the lived experience of people who are experiencing the same relatively new phenomenon (van Manen, 1984, 1990). Consistent with the analytic approach, two researchers independently immersed themselves in the data, highlighting phrases, words, and statements that were essential in understanding the participants' experience with the phenomenon. The two researchers then met together to discuss the commonalities that were identified, and four themes emerged that represented the participants' experiences. The researchers then independently coded 60 participants' complete responses to establish substantial (Viera & Garrett, 2005) inter-rater agreement (*Cohen's K* = .72). One researcher then coded the complete data set, and the second researcher reviewed the complete data set. Disagreements were resolved through discussion. To further ensure the trustworthiness of the results, member checking was implemented (Creswell, 2013). At the end of the survey, participants were invited to provide their email addresses if they would be willing to participate in member checking. Ten email addresses were selected, and the complete qualitative results were emailed to these participants. Participants were asked to evaluate the results in terms of accuracy with their own experience, the experience of their peers, and then, to provide any suggestions that would enhance the accuracy. The participants indicated that the results were representative of their own and their peers' experiences.

RESULTS

Participants reported they used YouTube (85.59%), Facebook (94.13%), Instagram (70.94%), Snapchat (41.10%), Pinterest (54.19%), and Twitter (40.14%). Participants also reported spending 4 or less hours (28.90%), 4.5 to 8 hours (22.52%), 8.5-12.5 hours (24.65%), or over 12.5 hours (23.94%) with social media daily within the last week. Four themes regarding adults' experiences with social media during the pandemic emerged through qualitative analysis. During the COVID-19 pandemic, participants experienced social media as (a) providing connection in a safe way, (b) a medium that amplified emotional intensity, (c) a key source for COVID-19 updates, and (d) as a needed time filler. The themes are presented in order of prevalence and participant gender and age are

presented with direct quotes to provide context. Participants' responses, at times, contribute to more than one theme.

Connection in a Safe Way

Participants ($n = 410$) used words liked “keep connected,” “stay in touch,” “helps us communicate,” and “checking in” as they discussed how social media influenced their experience during the COVID-19 pandemic. Some were clear that they were using social media for the same social reasons they did before the pandemic, but they had continued to seek connection or “stay in contact with family and friends” during the pandemic. While some participants indicated they were using social media more for connection—“I'm using it a lot more to keep tabs on my family. Messaging my adult children more than usual. Chatting with my siblings a lot more than usual” (female, 45). Specifically, participants mentioned the practice of social distancing and how social media makes the intervention less challenging— “Social media has made the social distancing practice not as bad as people are still able to interact with each other” (male, 18).

Participants indicated that social distancing could lead to feelings of “isolation” or not feeling like a person had community, but social media promoted connection and community. Participants also shared that social media helped them through receiving ideas from their friends and families on how they can help themselves, was a place they could reach out for support, and also, provided knowledge on how they could help others (e.g., “service opportunities”) in their social circle. Summarizing the general sentiment, two participants shared, “To some it has brought people closer together (e.g., #AloneTogether), and to others it's a way of reaching out for support” (male, 50), and “I believe [social media] is making us aware that we're not alone & we do need each other for support & ideas as to how to cope with the situation. Knowledge that other people are there to help each other” (female, 78).

Amplified Emotional Intensity

While participants explained several positive contributions of social media during the pandemic, they also indicated that social media had “amplified the intensity of emotion felt.” Participants ($n = 397$) used words like “anxiety,” “fear,” “frightened,” “depression,” “panic,” “frustration,” “negativity,” and “scared” as they described their

experience of using social media during the COVID-19 pandemic. Collectively, participants indicated that because social media became "...alllllll about the virus" they felt "overwhelmed" by the available content which negatively impacted their well-being. Specific components of social media COVID-19 content that led to amplified emotional reactions related to "people not taking [COVID-19] seriously" (e.g., "COVID-19 memes"), "racism," "people expressing thoughts of the virus being a hoax," extreme partisanship, non-experts giving advice, "alarmist" and "doom and gloom" perspectives, and people "doing dumb things for attention related to the pandemic" (e.g., trends like "licking toilet seats," "licking doorknobs," and "Coronavirus block parties"). Some participants felt like they should correct misinformation, but then felt more negative emotions because they "were attacked." Further, some participants felt like "... everyone is quick to bash [on social media] those currently putting into place plans to mitigate the threat of the virus without offering any solutions or understanding how difficult it is to make any real progress under the current circumstances" (female, 23).

Participants explained they believed the outcomes of the pandemic would have been different if social media was not available because the content and interactions have led to panic. "I think [social media] has made the pandemic what it is. It has made the information too accessible. I don't think there would be the issues with supplies, especially toilet paper if people were not on social media so much" (female, 36). Some participants indicated they recognized their elevated anxiety and depression from being on social media during the pandemic and had reduced, eliminated, or set timers for their use, while others were making plans to decrease use. A participant lamented:

I am much more disappointed with social media and its role in over-exaggerating the issues around COVID-19. I will most likely limit my future use of social media because of this unfortunate reality that has been brought to my attention! (female, 61)

COVID-19 Updates

Participants ($n = 382$) reported that social media is where they could "quickly" get the most "immediate," "real time," "up-to-date," and "latest news on the COVID-19 pandemic." Some indicated that seeking updates had become a more primary purpose of social media for them during the pandemic— "I am using [social media] less for general

#Alonetogether: An Exploratory Study of Social Media Use at the Beginning of the COVID-19 Pandemic

entertainment and more for keeping up to date on the developments of the pandemic” (male, 23). Social media was used to access information from news sources (i.e., local, national), government communications (i.e., county, state, and federal), and health organizations (i.e., CDC updates, WHO, local health departments) to stay abreast of what was happening with the pandemic and to learn appropriate precautions to take. A participant explained:

Social media has informed us about the ongoing condition of the state, country as well as of the world. It has also informed us about the precautions we should take in that case. All the circumstances are brought to us in a very informative way. We are also aware of the measures that are being taken to prevent this pandemic. (male, 40)

Participants also felt like the high level of awareness about the virus created by social media helped themselves have a better “understanding of the virus” from reputable sources and also motivated people to not “start slacking off on their social responsibility of social distancing and taking this issue seriously, even as days and weeks start to pass” (female, 21).

While the majority saw accessing news through social media as positive, they expressed concern about their own and the general public’s ability to determine the reputability of information. Words like “fake news,” “misinformation,” “false news,” “disinformation,” “extremely biased,” and “unreliable” were used to describe the presence of inaccurate information that was mixed in with reliable information. This requires people to “have to sift through and determine truths from misinformation” (female, 27), but not all people do, which can cause the continued spread of inaccurate information. A participant concluded:

I have found real good information about COVID-19 on Facebook, and I have seen some pretty outrageous stuff also. I have learned to never trust social media.

Although, some people think if you see it on social media, it is true. (female, 57)

A Needed Time Filler

With the COVID-19 pandemic, participants ($n = 306$) highlighted that they have “more time on my hands since I have not gone out of the house,” and that they “get bored a lot now.” This has led to participants spending “more time [on social media] now than

before” the pandemic. Participants disclosed, “I use it much more than before [the pandemic], my screen time went up almost 40%” (male, 21) and:

I have used [social media] FAR more since being home during this Pandemic. There were times [before the pandemic] I would go a week or two without checking Facebook, and this last week, I have spent several hours a day on it. (female, 43)

Participants explained that they were using social media for “entertainment,” “distraction,” and “escape” while they were experiencing more boredom and social distancing. Social media allowed for people to share content not related to the pandemic (e.g., “On Snapchat and we post silly things not related to news/politics” [male, 35]), find “comic relief” (“I feel [social media] has allowed humor to help some cope [memes, gifs, etc.]” [female, 40]), learn something (e.g., guitar lessons, recipes, how to paint), find resources (e.g., teachers sharing resources while moving classes to remote learning, parents finding resources for homeschooling), and find uplifting content (“I have been able to see uplifting messages/videos” [female, 30]). Some explained that since the pandemic people have been generous in sharing their talents, which has increased entertainment opportunities on social media. For example, “A lot of entertainers are using [social media] to share their talents to help us forget about the things happening in the world” (male, 23) and:

I think there have been many positive things [on social media]. People have come together to use their skills to benefit others. I’ve seen so many examples of this; from zoos sharing animals, to musicians sharing concerts, to artists teaching others how to draw. The list goes on and on. So many people have come together to inspire others. (female, 33)

DISCUSSION

The current study aimed to understand the lived experience of using social media during adults’ adaption to the early weeks of the COVID-19 pandemic. Adults in the sample were engaged with social media sites that have previously been reported most used by adults (Perrin & Anderson, 2019), with well over half reporting that they used YouTube, Facebook, Instagram, Pinterest, and just under half reporting use of Snapchat and Twitter. The average adult in the U.S. spends 45 minutes daily with social media (The

Nielson Company, 2019), and over 71% of the current sample reported spending four or more hours daily. Based on qualitative results, this vast difference may be because of the boredom associated with social distancing. Participants reported they used social media for entertainment and as a way to “kill time” because they were bored and they also acknowledged that entertainers, artists, comedians, and others made meaningful content available on social media that they appreciated.

Participants also reported they spent more time on social media to stay updated with information about the COVID-19 pandemic. Shearer (2020) reported that people now get 20% of their news from social media platforms and Faustino et al. (2012) indicated that social media is used during disasters as a convenient way to get immediate updates. Similarly, participants in this study indicated that during the COVID-19 pandemic they used social media to get immediate updates from news sources. Also, in line with Depoux et al.’s (2020) proposition, adults reported getting accurate and helpful information about how to personally respond to the pandemic.

One concern with the agency of content creation and dissemination on social media during the pandemic has been the proliferation of misinformation about COVID-19 (Atlani-Duault et al., 2020; Depoux et al., 2020; Kar et al., 2020; Rosenberg et al., 2020; Van Bavel et al., 2020). Similar to conclusions drawn in social media studies conducted during previous health crises (Chew & Eysenbach, 2010; Pandey et al., 2010; Sharma et al., 2017), participants perceived that there was ample accurate information available on COVID-19 and that they did seek out social media pages/content from reputable organizations (e.g., CDC, WHO). However, like Martinez-Rojas et al. (2018) conclusions, participants worried that with the overwhelming quantity of COVID-19 related information, people would believe the misinformation that did exist on social media platforms, which seems warranted, with over 40% of traffic to fake news sites coming from social media (Allcott & Gentzkow, 2017). Although social media has the potential to provide helpful information and support the efficacy of public health interventions (Depoux et al., 2020), participants were particularly triggered by social media trends or posts that made light of the seriousness of COVID-19 or glorified risky health behaviors. Some argued that social media was to blame for the panic that ensued around the virus (e.g., panic buying).

In line with motivations for using social media in non-pandemic times (Smith, 2011), participants reported using social media to connect with family and friends during the COVID-19 pandemic and its affiliated social distancing, but participants reported they were connecting more via social media than during typical times. Participants echoed previously stated concerns about social distancing (Gostin, 2006), including feelings of isolation and disconnection. In China, Weibo has been used to make posts to both give support and receive support during the global pandemic (Li, Zhang, et al., 2020) and participants in this study also reported that they used social media for these purposes. Lueng and Lee (2005) stated that, “people with strong social support, such as affirmation, aid, encouragement, and affect, available to them when they need them either from the online or offline world reported higher quality of life” (p. 174). They also reported that online activities such as “sociability, fun seeking, and information seeking were positively related to various dimensions of social support” (p. 174). Participants reported that connecting via social media, while physical connection was not possible because of the pandemic, facilitated social support, created a needed sense of community, and made it possible to be “#AloneTogether”. To further understand the role of social media and social distancing, quantitative research with standardized measures of social support and social media should be conducted during public health crises.

Research on social media use and mental health outcomes during non-pandemic times has been mixed (Pantic, 2014), with some reporting connections between social media use and mental health (Vannucci et al., 2017), and others reporting no relationship (Berryman et al., 2018; van der Velden et al., 2019). Participants in the current study perceived that engaging with social media content about COVID-19 increased their anxiety or fear. Li, Wang, et al. (2020) identified more Weibo posts reflected negative emotion compared to posts before the pandemic. Future quantitative longitudinal research should consider using established measures of mental health outcomes (i.e., anxiety, stress, and depression) in investigating social media use during public health crises.

To manage the potentially adverse aspects (e.g., elevated emotions, misinformation) of social media use during the COVID-19 pandemic, some have recommended interventions, such as limiting time with social media during the pandemic to promote personal well-being (Kar et al., 2020). Some participants in this study indicated that they

had, or they were going to limit their social media use because they noticed they were spending too much time on social media, were feeling more anxious or fearful, or became frustrated with misinformation or other content they perceived to be problematic during the pandemic. Emerging research on unplugging or taking breaks (e.g., stopping social media altogether, setting timers, making personal rules) from different technology suggests that those who do perceive improvements in their psychological and emotional well-being (Morris & Cravens Pickens, 2017). This appears to be an area for continued research (e.g., comparing outcomes of those who unplug and those who do not) that could potentially provide more support for recommendations to promote well-being during public health crises.

Conclusions

While a convenience sampling procedure and cross-sectional design were appropriate in methods for research early in the pandemic (Nelson et al., 2020), they may limit the representativeness of the results. Additional longitudinal research using nationally representative samples would be an important next step. The study also had several strengths including representing the experiences of people from across the United States (not just one state or city) during the early weeks of the pandemic when strict public health interventions were in place. Many perspective pieces on social media use during the pandemic have been published (Atlani-Duault et al., 2020; Depoux et al., 2020; Rosenberg et al., 2020; Van Bavel et al., 2020), but empirical studies representing the lived experiences with social media during the pandemic have not. Further, the current study contributed to the larger body of literature on social media use during public health crises by moving past the interpretation of social media artifacts (not just relying on analysis of existing social media posts) and exploring the experiences of social media users. This is important as not all social media users are content contributors and the intentionality/purpose behind social media posts could be misinterpreted.

Participants in this study believed that the agency afforded by social media and messages disseminated on these platforms actually “made the pandemic what it is” (e.g., panic buying, trends, information/misinformation, compliance/non-compliance with public health interventions). They believed that the pandemic would have been quite different without access to social media. This study was conducted during the early weeks of the

COVID-19 pandemic. It may be that there is more balance in the perceived positive and negative aspects of social media use after experiencing the pandemic for over a year and as some restrictions have been lifted. Continued research on experiences related to social media use during different time periods within the pandemic is warranted. Further, it is important to note that social media is not the only available communication technology and other communication technologies such as phone calls, FaceTime, and video conferencing platforms (e.g., Zoom) should be examined in relation to user experiences during the COVID-19 pandemic.

The COVID-19 pandemic is on-going, and cases are rising in the United States (CDC, 2020a). The increase of cases may result in stricter public health interventions, such as stay-at-home orders. Participants reported that social media can be helpful tool for maintaining social support and perceived that amount of time spent on social media and proliferation of misinformation had deleterious effects on their well-being. To combat these challenges affiliated with social media use during the pandemic, users should consider being intentional social media users—setting specific time limits, following reputable information sources, identifying relationships that benefit from social media contact, and reflecting on how their social media use is influencing their online and in-person relational interactions.

References

- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, *31*, 211-36. doi: 10.1257/jep.31.2.211
- Atlani-Duault, L., Ward, J. K., Roy, M., Morin, C., & Wilson, A. (2020). Tracking online heroisation and blame in epidemics. *The Lancet Public Health*, *5*, e137-e138. doi: 10.1016/S2468-2667(20)30033-5
- Berryman, C., Ferguson, C. J., & Negy, C. (2018). Social media use and mental health among young adults. *Psychiatric Quarterly*, *89*, 307-314. doi: 10.1007/s11126-017-9535-6
- Centers for Disease Control and Prevention (2020a). CDC COVID data tracker. https://covid.cdc.gov/covid-data-tracker/#cases_casesinlast7days
- Centers for Disease Control and Prevention (2020b). Frequently asked questions. <https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Coronavirus-Disease-2019-Basics>
- Chew, C., & Eysenbach, G. (2010). Pandemics in the age of Twitter: Content analysis of tweets during the 2009 H1N1 outbreak. *PloS ONE*, *5*, e14118. doi: 10.1371/journal.pone.0014118.

- Chandler, J., Rosenzweig, C., Moss, A. J., Robinson, J., & Litman, L. (2019). Online panels in social science research: Expanding sampling methods beyond Mechanical Turk. *Behavior Research Methods, 51*, 2022-2038. doi: 10.3758/s13428-019-01273-7
- Cloud Research (2019). How are participants on prime panels compensated? <https://go.cloudresearch.com/knowledge/how-are-participants-on-prime-panels-compensated>
- Coderre, F., Mathieu, A., & St-Laurent, N. (2004). Comparison of the quality of qualitative data obtained through telephone, postal and email surveys. *International Journal of Market Research, 46*, 349-357. doi: 10.1177/027566880404600303
- Creswell, J. W. (2013). *Qualitative inquiry and research design*. Los Angeles, CA: Sage.
- Depoux, A., Martin, S., Karafillakis, E., Preet, R., Wilder-Smith, A., & Larson, H. (2020). The pandemic of social media panic travels faster than the COVID-19 outbreak. *Journal of Travel Medicine, 27*, 1-2. doi: 10.1093/jtm/taaa031
- Faustino, J. D., Liu, B. F., & Jin, Y. (2012). Social media use during disasters: A review of the knowledge base and gaps. College Park, MD: U.S. Department of Homeland Security. http://www.start.umd.edu/start/publications/START_SocialMediaUse_duringDisasters_LitReview.pdf
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Mao, Y., Chen, S., Wany, Y., Fu, H., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PloS ONE, 15*, e0231924. doi: 10.1371/journal.pone.0231924
- Gostin, L. (2006). Public health strategies for pandemic influenza: Ethics and the law. *Journal of the American Medical Association, 295*, 1700-1704. doi: 10.1001/jama.295.14.1700
- Kar, S. K., Yasir Arafat, S. M., Kabir, R., Sharma, P., & Saxena, S. K. (2020) Coping with mental health challenges during COVID-19. In S. Saxena S. (ed), *Coronavirus Disease 2019 (COVID-19). Medical Virology: From pathogenesis to disease control*. (p. 199-213) Springer, Singapore
- Klemm, C., Das, E., & Hartmann, T. (2016). Swine flu and hype: A systematic review of media dramatization of the H1N1 influenza pandemic. *Journal of Risk Research, 19*, 1-20. doi: 10.1080/13669877.2014.923029
- Leung, L., & Lee, P. S. (2005). Multiple determinants of life quality: The roles of Internet activities, use of new media, social support, and leisure activities. *Telematics and Informatics, 22*, 161-180. doi: 10.1016/j.tele.2004.04.003
- Li, S., Wang, Y., Xue, J., Zhao, N., & Zhu, T. (2020). The impact of COVID-19 epidemic declaration on psychological consequences: A study on active Weibo users. *International Journal of Environmental Research and Public Health, 17*, 2032. doi: 10.3390/ijerph17062032
- Li, L., Zhang, Q., Wang, X., Zhang, J., Wang, T., Gao, T. L., Duan, W., Tsoi, K.K., & Wang, F. Y. (2020). Characterizing the propagation of situational information in social media during COVID-19 epidemic: A case study on Weibo. *IEEE Transactions on Computational Social Systems, 7*, 556-562.
- Litman, L., Robinson, J., & Abberbock, T. (2017). TurkPrime.com: A versatile crowdsourcing data acquisition platform for the behavioral sciences. *Behavior Research Methods, 49*, 433-442. doi: 10.3758/s13428-016-0727-z
- Markel, H., Lipman, H. B., Navarro, J. A., Sloan, A., Michalsen, J. R., Stern, A. M., & Cetron, M. S. (2007). Nonpharmaceutical interventions implemented by US cities

- during the 1918-1919 influenza pandemic. *Journal of the American Medical Association*, 298, 644-654. doi: 10.1001/jama.298.6.644
- Martinez-Rojas, M., del Carmen Pardo-Ferreira, M., & Rubio-Romero, J. C. (2018). Twitter as a tool for the management and analysis of emergency situations: A systematic literature review. *International Journal of Information Management*, 43, 196-208. doi: 10.1016/j.ijinfomgt.2018.07.008
- Mervosh, S., Lu, D., & Swales, V. (2020, April). See which states and cities have told residents to stay at home. *New York Times*.
<https://www.nytimes.com/interactive/2020/us/coronavirus-stay-at-home-order.html>
- Morris, N., & Cravens Pickens, J. D. (2017). "I'm not a gadget": A grounded theory on unplugging. *The American Journal of Family Therapy*, 45, 264-282. doi: 10.1080/01926187.2017.1365665
- Nelson, L. M., Simard, J. F., Oluyomi, A., Nava, V., Rosas, L. G., Bondy, M., & Linos, E. (2020). US public concerns about the COVID-19 Pandemic from results of a survey given via social media. *JAMA Internal Medicine*. doi: 10.1001/jamainternmed.2020.1369
- Pandey, A., Patni, N., Singh, M., Sood, A., & Singh, G. (2010). YouTube as a source of information on the H1N1 influenza pandemic. *American Journal of Preventive Medicine*, 38, e1-e3. doi: 10.1016/j.amepre.2009.11.007
- Pantic, I. (2014). Online social networking and mental health. *Cyberpsychology, Behavior, and Social Networking*, 17, 652-657. doi: 10.1089/cyber.2014.0070
- Perrin, A., & Anderson, M. (2019). Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018. <https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/>
- Pew Research Center. (2019). Social media fact sheet.
<https://www.pewresearch.org/internet/fact-sheet/social-media/>
- Pulido, C. M., Villarejo-Carballido, B., Redondo-Sama, G., & Gómez, A. (2020). COVID-19 infodemic: More retweets for science-based information on coronavirus than for false information. *International Sociology*. doi: 10.1177/2F0268580920914755
- Rosenberg, H., Syed, S., & Rezaie, S. (2020). The Twitter pandemic: The critical role of Twitter in the dissemination of medical information and misinformation during the COVID-19 pandemic. *Canadian Journal of Emergency Medicine*, 1-7. doi: 10.1017%2Fcem.2020.361
- Roy, M., Moreau, N., Rousseau, C., Mercier, A., Wilson, A., & Atlani-Duault, L. (2020). Ebola and localized blame on social media: Analysis of Twitter and Facebook conversations during the 2014-2015 Ebola epidemic. *Culture, Medicine, and Psychiatry*, 44, 56-79. doi: 10.1007/s11013-019-09635-8
- Sharma, M., Yadav, K., Yadav, N., & Ferdinand, K. C. (2017). Zika virus pandemic—analysis of Facebook as a social media health information platform. *American Journal of Infection Control*, 45, 301-302. doi: 10.1016/j.ajic.2016.08.022
- Shearer, E. (2018). Social media outpaces print newspapers in the U.S. as a news source. <https://www.pewresearch.org/fact-tank/2018/12/10/social-media-outpaces-print-newspapers-in-the-u-s-as-a-news-source/>
- Signorini, A., Segre, A. M., & Polgreen, P. M. (2011). The use of Twitter to track levels of

#Alonetogether: An Exploratory Study of Social Media Use at the Beginning of the COVID-19 Pandemic

- disease activity and public concern in the US during the influenza A H1N1 pandemic. *PloS ONE*, 6, e19467. doi: 10.1371/journal.pone.0019467
- Smith, A. (2011). Why Americans use social media. <https://www.pewresearch.org/internet/2011/11/15/why-americans-use-social-media/>
- The Nielsen Company. (2019). The Nielsen total audience report Q3 2018. <https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/q3-2018-total-audience-report.pdf>
- The White House. (2020a). 30 days to slow the spread. https://www.whitehouse.gov/wp-content/uploads/2020/03/03.16.20_coronavirus-guidance_8.5x11_315PM.pdf
- The White House. (2020b). Proclamation on declaring a national emergency concerning the novel coronavirus disease (COVID-19) outbreak. <https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>
- Van Bavel, J. J., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., ... & Drury, J. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, 4, 460-471. doi: 10.1038/s41562-020-0884-z
- van der Velden, P. G., Setti, I., van der Meulen, E., & Das, M. (2019). Does social networking sites use predict mental health and sleep problems when prior problems and loneliness are taken into account? A population-based prospective study. *Computers in Human Behavior*, 93, 200-209. doi: 10.1016/j.chb.2018.11.047
- van Manen, M. (1984). Doing phenomenological research and writing: An introduction (Monograph No. 7). Edmonton, AB, Canada: Department of Secondary Education, Faculty of Education, University of Alberta.
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany: State University of New York Press.
- Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, 207, 163-166. doi: 10.1016/j.jad.2016.08.040
- Vaterlaus, J. M., Spruance, L. A., & Patten, E. V. (2021). COVID-19 pandemic and social distancing in the United States: A mixed-methods study on lived experiences and well-being. *The Social Science Journal*. doi: 10.1080/03623319.2020.1852856
- Viera, A. J., & Garrett, J. M. (2005). Understanding interobserver agreement: The Kappa statistic. *Family Medicine*, 37, 360-363.
- Vos, S. C., & Buckner, M. M. (2016). Social media messages in an emerging health crisis: tweeting bird flu. *Journal of Health Communication*, 21, 301-308. doi: 10.1080/10810730.2015.1064495
- World Health Organization (2020). Q&A on Coronaviruses (COVID-19). <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

Funding and Acknowledgements

The authors declare no funding sources or conflicts of interest.

Online Connections

To follow these authors in social media:
J. Mitchell Vaterlaus: @MitchVaterlaus
Emily V. Patten: @EmilyPattenRDN
Lori A. Spruance: @LoriSpruancePHD