

How TikTok served as a platform for young people to share and cope with lived COVID-19 experiences

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Abstract

The short-video app TikTok saw a large increase in usage during the COVID-19 lockdown because it provided entertainment, distraction, and social interaction based on video content engagement. We present results from an interview study with 28 U.S. TikTok users on how they shared and engaged with lived pandemic experiences on TikTok to cope with and socialize after the U.S. imposed its first lockdown. Participants had already established TikTok as a peer community platform on which sharing lived experiences felt appropriate. Due to COVID-19 restrictions, participants started to look for TikTok videos of shared lived pandemic experiences to interact with others when physical interaction was made impossible. We find that TikTok videos facilitated communication and parasocial interaction based on known audiovisual styles. Participants were able to communicate through video creation based on shared ways of presenting short-video content during COVID-19 physical distancing.

Keywords

TikTok, social media, lived experiences, video creation, parasocial interaction

Social media communication during COVID-19

The lockdowns and physical distancing necessitated by the COVID-19 pandemic resulted in immediate shifts in socialization and communication. Social technology played an increasingly vital role in fostering and maintaining social connections, especially for younger people (Anderson & Vogels, 2020; David & Roberts, 2021). With fewer in-person social obligations and more time spent at home, youth and young adults worldwide have turned to mediated interactions, such as video streaming or online gaming, to relieve boredom (Lemenager et al., 2021) as well as to cope with and/or distract from COVID-19 realities (Kleinman et al., 2021).

From the beginning of the pandemic, social media platforms, providing a means for mass communication through the consumption and interaction with user-generated content (Fuchs, 2021), have allowed young people to stay in touch with friends and peers and to reduce the fear of missing out on social engagement opportunities (Götz et al., 2020), to find new online communities, and even to receive COVID-19 news (Day et al., 2020). Aligning with work showing that increased media use is often used to reduce anxiety and depression (Király et al., 2020), numerous research studies have examined social media use as a common coping mechanism for dealing with mental health issues, anxiety, or loneliness during the COVID-19 pandemic (Pahayahay & Khalili-Mahani, 2020). Additionally, studies have found that teenagers turned to already known social media platforms to connect with friends and peers during physical distancing (Hamilton et al., 2020) and that younger people with high anxiety significantly increased their use of social media platforms to distract themselves from COVID-19 (Drouin et al., 2020). At the same time, some research has shown that turning to social media has not successfully alleviated the loneliness experienced by younger people during the pandemic (Cauberghe et al., 2021).

Numerous studies have investigated specific patterns of social media content creation and sharing during COVID-19. Much of this work has focused on Twitter usage, showing, for example, how young people have used the platform to voice their opinions and to propagate and communicate civic engagement (Mohamad, 2020), as well as to share their fear, frustration, and uncertainty about the pandemic (Damiano & Allen Catellier, 2020; Osakwe et al., 2021). Another common trend, particularly among Gen Z users, is the creation and propagation of humorous content and memes (Glăveanu & de Saint Laurent, 2021) as a way to address or provide commentary on political and social issues or restrictions due to COVID-19 (Bischetti et al., 2021; Cancelas-Ouviña, 2021; Dynel, 2021). Further, studies have found that sharing personal content, such as vacation pictures, has become more disfavored in light of social and travel restrictions, while sharing previously undisclosed personal information, such as personal health, has become more acceptable in the light of public responsibility and safety (Nabity-Grover et al., 2020).

In this article, we focus on the short-video platform TikTok as another social platform that has seen significant upticks in use during the pandemic. We report the findings from an interview study with TikTok users in the U.S. exploring how the COVID-19 pandemic

has influenced their consumption and creation processes, as well as how they used TikTok and short videos as a means to socialize. Our methodological approach is grounded in the uses and gratification (U&G) theory of social media, focusing on understanding what cognitive, emotional, or social benefits TikTok users glean from content consumption and creation, and identifying what affordances for social interaction and engagement TikTok provides. By analyzing users' accounts of their own subjective experiences, we sought to understand users' motivations for utilizing TikTok, in particular, as a platform for communicating and interacting during the COVID-19 lockdown, and what gratifications it offered to users for sharing lived experiences and sentiments around COVID-19. For example, one hypothesis that guided this work is that TikTok as a social video app might be especially effective for creating a feeling of immediacy and connection through viewing the lived experiences of others. More broadly, this work aimed to address the following questions: (1) *How has COVID-19 influenced TikTok users' consumption and creation habits?*; (2) *How have TikTok users used the platform to communicate or express COVID-related knowledge or experiences?*; and (3) *What features or affordances of TikTok have made it particularly appealing for facilitating social bonding during a global pandemic?*

Characteristics of user interaction and communication on TikTok

TikTok has long been popular among teens and young adults (Medina Serrano et al., 2020; Vogels et al., 2022) in large part because it provides a means for creative self-expression in social media contexts using staged, choreographed, or remixed content (Yarosh et al., 2016) related to everyday life events (McRoberts et al., 2017). Videos posted to TikTok are typically 15 seconds to three minutes in length and usually integrate music or sound clips provided in the app (Lu & Lu, 2019), which is why many videos feature users lip syncing (Bresnick, 2019), performing to music (Klug, 2020), or reenacting situations or memes around sounds (Zulli & Zulli, 2020). Users can add stickers, emojis, and text elements to TikTok videos and apply popular visual effects or video filters. In addition, users can caption posts or add hashtags, a practice which is supported by the TikTok's built-in suggestion feature and which is the main vehicle for describing and finding videos on the app (Shutsko, 2020).

TikTok centers on short-video entertainment, and the app's basic social interaction features focus on creating, sharing, redistributing, and remixing audiovisual content. However, TikTok does not provide common social network features (boyd, 2010), such as detailed user profiles, friend lists, or extensive tools for direct communication; for example, TikTok users can only message mutually befriended users. Compared to social networking sites, such as Facebook, TikTok does not provide a profile page or a profile wall to communicate with each other. This means, instead of gathering personal information to support networking, TikTok displays the videos posted by a user, their follower count, and total number of likes across videos. In addition, unlike similar social media platforms, such as Facebook, Snapchat, or Instagram, TikTok is foremost designed for user interaction and

communication with and through user-generated video content rather than through profiles and text-based messaging (Chen et al., 2019). On TikTok, any user can comment on any publicly posted video, and profiles may include the option to ask questions that users can react to with a video post. TikTok furthermore provides in-app features that allow users to react to a video in parallel recording (a practice known as a “duet”) (Anderson, 2020) or to take parts of other videos to montage into one’s own video (“stitch”). These platform characteristics allow and encourage users to remix, reinterpret, and redistribute existing content in addition to or beyond its original context.

While TikTok originally started out as a music-based entertainment app, its content has, over time, evolved and diversified, ranging from popular dance challenges (Klug, 2020), to political content (Medina Serrano et al., 2020), news and information (Vázquez-Herrero et al., 2020), public health content (Basch et al., 2021), or social activism (Bandy & Diakopoulos, 2020; Le Compte & Klug, 2021; Subramanian, 2021), posted by amateur, (semi-)professional, or celebrity creators alike.

On TikTok, video content is by default presented on a user’s individual “for you” page as a potentially endless (Bhandari & Bimo, 2020) and rather hard-to-anticipate (Simpson & Semaan, 2021) flow of auto-looped content to scroll through. The video feed is curated by the TikTok recommendation algorithm and largely based on how a user interacted with previous content, using metrics such as viewing time, comments, likes, and shares (Klug et al., 2021) instead of being generated from content of accounts a user follows. This means that, over time, TikTok users consume a larger number of short videos of increasingly similar content and style. This might influence their perception of popular content and their motivation to participate in creating individual versions of similar content they were shown based on how they interacted with the app and the video content (De Los Santos & Klug, 2021). Compared to related social media platforms, these characteristics of the TikTok algorithm appeared to be exceptionally beneficial to users during the beginning of the COVID-19 pandemic and physical distancing. While users were not able to physically enjoy preferred activities or meet with friends, their TikTok behavior and location would largely result in receiving video content that matched their interests, location, social life, or professional community.

The popularity of TikTok during COVID-19

In general, video-sharing platforms, such as YouTube (Koeze & Popper, 2020), and social media platforms, such as Instagram or Snapchat, were already popular prior to COVID-19 (Statista 2022a, 2022b). However, in the U.S. and also globally, social media platforms saw large spikes in usage, especially among Gen Z, in the beginning of the pandemic (Volkmer, 2021). Among these, the short-video app TikTok recorded the fastest and largest increase among 15–29-year-olds (Auxier & Anderson, 2021), very likely due to young people stay-

ing home and turning to TikTok to find distraction through video entertainment as well as to socialize and stay up to date on friends' activities or COVID-19–related events.

Recent studies on TikTok usage during COVID-19 (Feldkamp, 2021; Hellemans et al., 2021; Kennedy, 2020; Southwick et al., 2021) show that young people turned to TikTok to “binge-scroll” as a distraction (Kendall, 2021) and as a general forum, for example, to share and communicate their experiences and opinions about online learning situations in social distancing (Literat, 2021), or that trending videos during the pandemic largely featured users' humorous or sarcastic commentaries as documented experiences of everyday pandemic life (Unni & Weinstein, 2021).

In particular, Nouwen and Duflos (2021) showed TikTok's potential as affectual digital space for intergenerational solidarity and communication during physical distancing, and Udenze and Uzochukwo (2021) analyzed how young Nigerians utilized TikTok to ensure mental wellbeing during the pandemic. This demonstrates how TikTok functions as the preferred social media content platform for younger people to process the circumstances of the pandemic in the context of self-presentation and participation online.

Uses and gratifications of TikTok during COVID-19

Uses and gratification theory (U&G) provides a useful framework in qualitative approaches to explore the manifold motivations of why people as users consume social media (Papacharissi & Rubin, 2000). From a media studies perspective, the key component in U&G is to understand users as an active audience who follows a focused goal based on clear motivations of using a specific medium to achieve desired gratifications (Flanagin & Metzger, 2001; Swanson, 1987) they may not get from other types of media (Omar & Dequan, 2020).

Specifically, the U&G framework emphasizes identifying specific dimensions of benefit derived from engagement with a platform and identifying the affordances of the platform that provide those benefits (Leung, 2009). Among the most prevalent categories of gratification (Ruggiero, 2000) are: (a) *cognitive* – a change in the way users think about themselves and/or their communities; (b) *affective* – a change in specific emotions inspired by participation (e.g., pride, empowerment, joy, comfort); (c) *social integrative* – a change in social connections and social networks that participants construct; and (d) *tension release* – the degree to which participation on the platform provides individuals with a healthy escape or catharsis.

Prior work taking a U&G approach have identified common gratifications of social media use in general, including social interaction with a wide range of people (Raacke, & Bonds-Raacke, 2008), the ability to pass time and alleviate boredom and to receive information on topics of personal interest, and entertainment (Quan-Haase & Young, 2010; Whiting & Williams, 2013).

Recent studies on TikTok in particular have confirmed its ability to gratify needs such as entertainment-seeking (Bucknell Bossen & Kottasz, 2020), information retrieval, and social interaction with peers (Meng & Leung, 2021). Further research finds that engagement with short-form video content on TikTok provides users with forms of escapism (Omar & Dequan, 2020) and that video creation and sharing caters to users' needs for a creative outlet on social media (Wang et al., 2019), for participating in trends and novel phenomena (Scherr & Wang, 2021), and for enjoying the social rewards of self-presentation and self-expression in the context of recording and communicating everyday life events (Lee et al., 2015). From the beginning of the pandemic, TikTok users reflected the circumstances of COVID-19 in their videos and utilized TikTok videos as commentary on new lockdown realities and experiences (Unni & Weinstein, 2021). In addition, first studies demonstrate that participants turned to social media when the pandemic started to pass newly gained time and especially to help them maintain social relationships during physical distancing (Bowden-Green et al., 2021).

In the present work, we aimed to gain insight about how the affordances of TikTok as a social media app help to create a feeling of immediacy and connection and, in particular, how TikTok may have helped users cope with lived experiences, such as loneliness, sadness, and isolation during the COVID-19 quarantine. Prior work has revealed that humans tend to affiliate with others in the context of stress as a means of coping with and confronting the source of stress. Of particular relevance, this body of work has shown that when stress is experienced by members of a group, affiliating with others can be an effective strategy to reduce the perceived threat (Grieve & Hogg, 1999; Hogg, 2000; von Dawans et al., 2012).

Moreover, as revealed by foundational work on *parasocial relationships*, the benefits of social affiliation can be experienced in mediated, and even imagined, interactions (Horton & Wohl, 1956). A long history of research on parasocial relationships has revealed that the human brain processes simulated or mediated social interactions in ways that are similar to direct, face-to-face interactions (Kanazawa, 2002), and that new media venues, such as social media platforms, that offer an enhanced interactive role increase the vividness and impact of parasocial interactions (Chen, 2016). Thus, one key focus of the present work was understanding how TikTok offered affective, social, and tension-release gratifications to users via both the sharing of their own experiences and the vicarious consumption of others' experiences via video creation and sharing.

Furthermore, previous work has revealed that when confronted with threatening or traumatic experiences or information, an effective defense mechanism is to provide some degree of psychological distance between oneself and the source of threat or stress. The technique of distancing is a common method in clinical and therapeutic contexts. For example, research has shown that imagining or narrating traumatic experiences from a third-person perspective allows individuals to process the meaning of negative events without triggering their accompanying negative emotions (Ayduk & Kross, 2010; Kross

& Ayduk, 2017). Likewise, using performative role-play, in which one enacts real or anticipated life events, has been shown to aid individuals in confronting harsh realities in a safer, yet productive manner (Abel, 2011). The use of humor in response to trauma and tragedy plays a similar role in providing a sense of safety in confronting and communicating lived experiences and, moreover, facilitating coping, social coordination, and meaning-making (McGraw & Williams, 2014). This work guided our focus on the features and patterns in COVID-19–related video content shared by users, as a means to understand how the platform affords mechanisms of distancing for engaging with the traumatic realities of the pandemic.

Data collection and data analysis

We conducted 28 qualitative interviews (Hopf, 2004) with U.S.-based TikTok users in August 2020. We asked participants about general TikTok motivations and routines, and in particular, how their consumption and creation of videos changed due to COVID-19 lockdowns and social restrictions and how they used TikTok as a platform during the lockdown. Participants were aged 18 to 25, and 65 pct. were female; participants had between 300 thousand and 450 thousand followers, had posted between 15 and 425 videos, and had in total received between 10 thousand and 11.5 million likes for their TikTok videos. We recruited participants through location-based and university-related hashtags in TikTok videos (e.g., #philadelphia, #pitt, #upenn) and contacted users who included their Instagram profile on TikTok through Instagram's direct message feature. We messaged 192 users, out of which 28 users participated in the interview study (14.5 pct. participation rate). Interviews were conducted online by two experienced researchers using the Zoom video communication software, and they were transcribed and anonymized using an online transcription service. The average interview duration was 31 minutes.

Our participant pool exhibits a wide variety, ranging from influencers with a large following and output to ordinary users with only few followers and sporadic video creation. This provides a profitable and interesting foundation for studying communicative practices on TikTok during the COVID-19 pandemic. As social and physical restrictions affected all U.S. citizens, it is beneficial to look at how TikTok users with various popularity, output, and community reach used the platform and short videos under pandemic circumstances. At the time of the interviews, the first wave of the COVID-19 pandemic in the U.S. was over, and most states had lifted stay-at-home orders. However, public gatherings were largely limited to ten or less people, and schools, bars, restaurants, and non-essential retail remained closed in almost all states (Wikipedia, 2022). The majority of our participants were college students, and a large number were freshmen, which means they were not able to attend or even start university in person due to COVID-19 restrictions. Most participants experienced serious social and cultural disruptions compared to everyday life before the pandemic, such as: not being able to meet friends or family; not being

able to attend school; being laid off of work or being coerced to work under inappropriate conditions; having to live in confined spaces, alone, or with roommates; not being able to move to a different location; not being able to do activities for personal or mental health care, etc. These circumstances need to be considered regarding the individual contexts of study participants when compared to similar studies with participants of different social, cultural, professional, and geographical status.

In the qualitative analysis, three experienced researchers followed an open coding approach with a high level of agreement based on a codebook as a reference guide to ensure validity of results through mutual agreement (McDonald et al., 2019). The creation of the codebook followed a deductive approach. All researchers first coded the first-conducted interview to generate an initial set of codes (Roulston, 2014). Codes were then merged and grouped by similarity into a system of 175 codes in 33 categories which were used by all researchers to code all interviews in equal parts. Afterwards, codes that were only applied once were reviewed and either merged with existing codes or kept as single-applied codes.

How TikTok users utilized short-form videos for communication during COVID-19 lockdowns

In the following sections, we analyze how TikTok as a social video-entertainment app was used in the U.S. to communicate via popular short-form media during the first phase of the COVID-19 pandemic. From our qualitative interview study with 28 TikTok users, we generally find that participants created TikTok videos to share lived experiences of their pandemic reality, as well as consumed TikTok videos of shared lived pandemic experiences to interact with others when physical communication spaces were made impossible. By the time physical distancing was ordered, most participants had already established TikTok as a major social media source for video-based entertainment and had to some extent made use of short-form videos as communicative means to interact with friends and peers. Almost all participants were college students, and many described how lockdown orders resulted in more available time but less and limited opportunities to spend it by physically meeting and interacting with people.

For participants, the public lockdown and restrictions resulted in a significant increase of TikTok use in general and a major shift towards utilizing the app as a way to compensate for now impossible face-to-face interaction. TikTok videos occasionally served as communicative replacements for social interaction that would usually take different forms if it was not for the pandemic. Few participants pointed out that the altered communication situations made them rethink the way TikTok could be used to connect with others rather than primarily as a space for video creation. For example, one participant described how short-form videos could help circumvent typical communicative norms to get in contact with people on TikTok:

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It's awkward a little bit to just text someone out of the blue, but if you send them TikToks [...], it feels like much more naturally to start a conversation. Like most of my roommates, I text every day and it's mostly TikTok. (P15)

This statement shows that for many participants, the audiovisual nature of TikTok videos provided a unique means of communicating lived experiences with people that was not possible through text-only messaging. Other participants explained how making and sharing TikTok videos helped to establish and even intensify connections based on shared social situations they addressed in their videos, such as connecting with fellow students:

I actually met a lot of friends, cause I made Cornell videos. I have met like a handful of people who reached out to me and were like, Oh, I saw that you go to Cornell on TikTok. I'm going to Cornell next year. Like let's be friends. (P19)

Participants generally continued to use text-messaging apps at the beginning of the pandemic. However, the ability to easily create and share short audiovisual messages with peers distinguished their use of TikTok from other messaging apps and social media platforms. As a result, we can see how especially younger people adapted and utilized TikTok as a source for socializing with peers they share social interests with. While we cannot say if such interactions would have also happened without the pandemic, it demonstrates the way in which TikTok videos served to enhance the app's rather limited networking features to allow users to socialize based on shared lived experiences. We can see how TikTok videos functioned as a means to compensate for established ways of communicating that were made impossible by COVID-19 lockdowns.

Consuming lived experiences through TikTok videos

From our interviews, we generally find that turning to TikTok was a way for participants to witness lived COVID-19 experiences through short-form videos, as one participant explained: "You would just scroll through and watch and see other people going through the same thing as you" (P14). More specifically, some participants explained that watching TikTok videos of their friends was a way to still see what they were up to, to stay in touch, and to initiate communication to compensate for the fact that in-person meetings were not possible. For example: "Cause being on it [TikTok], you still can see like not your friends, but a lot of people that you still watch and stuff. So instead of hanging out with friends, I could still communicate with them on it [TikTok]" (P24).

In some cases, participants mentioned that the ability to retain daily communication with others by watching TikTok videos even helped them deal with COVID-19-related mental health issues. For example, on stress and anxiety: "Not only did my use of the app skyrocket, but my anxiety went down and my stress went down and, like, just my general people-missing went down because I was interacting with all these people" (P02). In this case, increased video consumption initiated interaction with other video creators instead of otherwise simply serving to pass time or offering a distraction from COVID-19 realities.

We also found that consuming TikTok videos and seeing peers going through and sharing similar lived COVID-19 experiences helped participants feel less alone in lockdown situations when physical socializing was not possible:

It honestly helped me out a lot because it was nice knowing, seeing that other people were feeling the way that I felt, which was alone. [...] So it was like honestly kind of comforting to see that other people felt the way that I did. (P12)

P04 explained how they were able to better cope by consuming content of people experiencing the same effects of the pandemic, “especially with going back to college and not having a regular experience. Like I see a lot of people complaining about that, which I relate to”.

One feature of the TikTok algorithm is that users who make videos assume that the audience receiving their videos will likely be similar to them, for example, liking meme-style videos or being a sibling. However, content on one’s “for you” page is not necessarily location-based, so users may see videos from anywhere in the world, particularly if videos are popular or viral. Watching first-hand accounts of others’ pandemic experiences afforded “the ability to step in someone else’s shoes who may not live in the state and may not live in the country and see what they’re experiencing throughout all of this” (P02). Furthermore, participants described the perceived advantages of consuming COVID-19–related content on TikTok as compared to other social media platforms like Twitter. P18 explained how,

on Twitter, people are mostly talking about political things and you know, I was tired of hearing COVID all the time, but on TikTok people were talking about it, but they were, like, making jokes about it and it was more light-hearted.

This shows how participants deliberately turned to TikTok as a social media platform to deal with their own and others’ lived experiences during the pandemic because of the way users addressed these issues and because they felt connected to peers based on how they communicated their lived experiences via TikTok videos.

Creating lived experiences in TikTok videos

Our interviews moreover revealed that increased consumption on TikTok occasionally led to a reliance on the platform as a forum to connect and interact with people when other physical communication spaces were made impossible because of the COVID-19 lockdown. For creating TikTok videos, we generally find that participants mostly got ideas from watching content but also from outside events and situations and experiences in their everyday lives online and offline. In the context of the pandemic and lockdown, many participants described how they were motivated to create TikTok videos other than based on trends or popular sounds, for example, to raise awareness for social issues, to generally socialize with others – such as “to meet more people from the main campus by

making TikToks” (P18) – and in few cases, to communicate with friends and peers, as P08 explained: “I keep coming back to it [TikTok] because it is a very efficient way of communicating”.

Most participants felt that the pandemic became a part of their lives which, over time, they naturally included in some of their videos: “As we all got used to it [the pandemic], you can definitely see it reflected every once in a while in my videos” (P10). While they generally continued to create videos in the same style and frequency, most participants adapted their TikTok content creation to the impacts of COVID-19, for example, by making rather sarcastic or funny videos, such as “jokes about how we would act and things after the coronavirus” (P27) or by participating in lockdown-related video trends like “switching from my day pajamas to my night pajamas” (P26). Only a few participants described significant changes in their video-creation practices, such as reusing old pictures of friends to share memories because they could not meet to make new videos with them (P12).

The most direct method of communicating personal experiences during lockdown was by creating videos to document or comment on events in as close to real time as possible. In one particular example, P19 shared their frustrating experience of being a retail worker during the pandemic, where an older person called them a “sheep overlord and made sheep noises” after P19 had asked the person to put on a mask while inside the store. P19 explained their motivation as “even if people didn’t relate to it, they could see my point of view and be like, ‘Oh wow. It must suck to be a worker right now’”. P19 created this TikTok video in the store’s break room right after the encounter, which helped to immediately communicate and channel the frustration and anger, as the video simply shows P19 recounting this type of lived experience in a believable and realistic way. As a student retail worker, P19 might not feel well positioned to complain about such customer behavior. Creating and sharing a TikTok video functions as a comment or report in the style of a public response as what P19 addressed as their preferred online community, where they know they can speak their mind and are likely to get encouragement from other users with similar lived experiences caused by the social changes of the pandemic and lockdown. This example shows an individual lived experience that other users can relate their own lived experiences to within larger contexts, such as experiencing harassment when enforcing mandatory COVID-19 rules.

Participants also more generally communicated their emotions and opinions about the consequences of the pandemic by making TikTok videos. For example, multiple participants documented their universities’ handling of the lockdown, such as disbelief that tuition was barely being lowered (P18). This shows how users communicated individual opinions and perspectives on shared larger experiences. Because TikTok is a forum where many users might have similar backgrounds, such as being in college, it seems reasonable to utilize the app to communicate personal experiences or to voice opinions about such instances based on short-form video creation as a popular means of social media interac-

tion. In this way, sharing lived experiences communicates and aims at solidarity and may counteract experiences of loneliness and unchanneled frustration, anger, or fear about existential situations and changes during quarantine.

From our examples, we can observe that sharing lived COVID-19–related experiences in TikTok videos aimed at fostering mutual support between TikTok users facing similar circumstances. As a video-based social entertainment app, TikTok provided participants with the ability to experience other users' lockdown reality through watching their videos and subsequently interacting with each other based on the similarity of lived experiences that were documented and shared through TikTok videos. Seeing peers going through similar COVID-19 induced social changes as well served as motivation for some participants to create their own videos, for example, about “a neighbor who was having all these parties while there was a stay-at-home order” (P10), because they anticipated that other viewers would be able to relate: “I did make some videos just ‘cause, like, everyone living in the same situation, like, they’re all in the same boat. So people are like, ‘Oh yeah, I can relate to that’” (P24).

One participant explained how, by seeing TikTok videos about quarantine effects, they were able to relate their own lockdown experiences and were inspired to participate in this kind of video creation: “And because of that, I felt like I had more time and confidence, I feel, to make videos. Cause there was also just, like, almost a shared community of everyone’s going through this” (P26). This shows how participants utilized TikTok videos to initiate interaction around shared experiences and to create a community based on their lived experiences, through TikTok video creation in strong relation to video consumption.

Furthermore, this sense of community is strongly based on the fact that every TikTok user has the same opportunity and the same means to create videos and to communicate their individual experiences. This meant that everyone who is an avid TikTok consumer understood a video’s message and was able to relate to it even though a lot of videos used funny or meme styles characteristic to TikTok to present rather serious COVID-19 subjects. One participant described how humor and sarcasm in TikTok videos still – or particularly – served to communicate the informative message:

I remember seeing a lot of videos that were informing you, but it was also in the form of a joke or a song. [...] The one TikTok that I really liked was a guy and the way that he presented the information was he was pretending to be one of the anti-mask people, but on the Titanic for life vests. And so he was trying to show how silly it is to not do that by comparing it to the Titanic. (P27)

Conclusion

In the present interview study, we analyzed how the altered social and communicative circumstances imposed by the COVID-19 pandemic and lockdown changed younger

TikTok users' consumption and creation patterns. Specifically, we utilized a uses and gratifications (U&G) approach to investigate the key benefits participants derived from engagement with TikTok and what features or norms of the platform supported those benefits. Moreover, we observed that most of our participants could best be described as social media *producers* (Bruns, 2007), meaning they consume and create the same kind of media content within the same social media environment, and we interpret our findings with this dual role in mind. Despite their differences in follower-base and content output, participants pursued similar strategies in utilizing TikTok videos and platform features to consume and create content that dealt with personal lived experiences in the beginning of the COVID-19 pandemic. This suggests that TikTok at first provided equal opportunities and communicative means for users, independently from popularity or reach.

One key theme that emerged in our findings was that participants consistently reported gratifications from the way they and other users shared perspectives and experiences about the COVID-19 pandemic. As *video creators*, participants generally relied on TikTok to post and distribute videos that either directly documented or indirectly commented on their lived experiences during the pandemic and lockdown. As *video consumers*, many participants reported benefiting from TikTok's recommendation algorithm, which generates individual video feeds based on users' engagement with content, because it allowed them to receive short-video content that better matched their preferences or the type of content they were posting themselves. In this way, participants felt that the platform effectively connected them with other users they did not necessarily know or follow based on the similarities of the lived experiences that they communicated. The fact that short-form video constitutes an easy and fast means of communication, particularly in light of the specific audiovisual styles and modes of presentation common on TikTok (such as duets), helped ensure that users' feeds were constantly replenished with new content that aligned with their needs and preferences. We also found that, in some instances, participants also tried to use TikTok as a means to temporarily enjoy some degree of psychological distance from the harsh realities of a global pandemic. Many participants pointed to particular normative features of TikTok videos, such as the prevalence of humor and performative role-play, as a source of entertainment and emotional comfort. In this, future work could more closely consider participants' heterogeneity in follower counts and content output to provide a more nuanced understanding of user types and how they relate to communicative strategies of sharing lived COVID-19 experiences on TikTok.

In sum, our work focused on exploring some of the specific ways that users communicated or engaged with video content on TikTok related to the COVID-19 lockdown and gaining a better understanding of the general benefits TikTok has offered for social connection and affiliation. Our results demonstrate the unique ways in which TikTok allows users to build and sustain a social sphere that satisfies their fundamental need for affiliation and belonging at a time in history when they perhaps needed it the most.

References

- Abel, G. M. (2011). Different stage, different performance: The protective strategy of role play on emotional health in sex work. *Social Science & Medicine*, 72(7), 1177–1184.
<https://doi.org/10.1016/j.socscimed.2011.01.021>
- Anderson, K. E. (2020). Getting acquainted with social networks and apps: It is time to talk about TikTok. *Library Hi Tech News*, 37(4), 7–12. <https://doi.org/10.1108/LHTN-01-2020-0001>
- Anderson, M., & Vogels, E. A. (2020, March 31). *Americans turn to technology during COVID-19 outbreak, say an outage would be a problem*. Pew Research Center.
<https://www.pewresearch.org/fact-tank/2020/03/31/americans-turn-to-technology-during-covid-19-outbreak-say-an-outage-would-be-a-problem>
- Auxier, B., & Anderson, M. (2021, April 7). *Social media use in 2021*. Pew Research Center.
<https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021>
- Ayduk, Ö., & Kross, E. (2010). From a distance: Implications of spontaneous self-distancing for adaptive self-reflection. *Journal of Personality and Social Psychology*, 98(5), 809–829.
<https://doi.org/10.1037/a0019205>
- Bandy, J., & Diakopoulos, N. (2020). #TulsaFlop: A case study of algorithmically-influenced collective action on TikTok. *arXiv preprint arXiv:2012.07716*. <https://doi.org/10.48550/arXiv.2012.07716>
- Basch, C. H., Fera, J., Pierce, I., & Basch, C. E. (2021). Promoting mask use on TikTok: descriptive, cross-sectional study. *JMIR Public Health and Surveillance*, 7(2), e26392. <https://doi.org/10.2196/26392>
- Bhandari, A., & Bimo, S. (2020). TikTok and the “algorithmized self”: A new model of online interaction. *AoIR Selected Papers of Internet Research*. <https://doi.org/10.5210/spir.v2020i0.11172>
- Bischetti, L., Canal, P., & Bambini, V. (2021). Funny but aversive: A large-scale survey of the emotional response to COVID-19 humor in the Italian population during the lockdown. *Lingua*, 249, 102963.
<https://doi.org/10.1016/j.lingua.2020.102963>
- Bowden-Green, T., Hinds, J., & Joinson, A. (2021). Personality and motives for social media use when physically distanced: A uses and gratifications approach. *Frontiers in Psychology*, 12.
<https://doi.org/10.3389/fpsyg.2021.607948>
- boyd, d. (2010). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *A networked self: Identity, community, and culture on social network sites* (pp. 47–66). Routledge. <https://doi.org/10.4324/9780203876527>
- Bresnick, E. (2019). *Intensified play: Cinematic study of TikTok mobile app*. University of Southern California.
- Bruns, A. (2007). Producers. *Proceedings of the 6th ACM SIGCHI Conference on Creativity & Cognition*, 99–106. <https://doi.org/10.1145/1254960.1254975>
- Bucknell Bossen, C., & Kottasz, R. (2020). Uses and gratifications sought by pre-adolescent and adolescent TikTok consumers. *Young Consumers: Insight and Ideas for Responsible Marketers*, 21(4), 463–478.
<https://doi.org/10.1108/YC-07-2020-1186>
- Cancelas-Ouviña, L. P. (2021). Humor in times of COVID-19 in Spain: Viewing coronavirus through memes disseminated via WhatsApp. *Frontiers in Psychology*, 12, 1075.
<https://doi.org/10.3389/fpsyg.2021.611788>
- Caubergh, V., van Wesenbeeck, I., De Jans, S., Hudders, L., & Ponnet, K. (2021). How adolescents use social media to cope with feelings of loneliness and anxiety during COVID-19 lockdown. *Cyberpsychology, Behavior, and Social Networking*, 24(4), 250–257. <https://doi.org/10.1089/cyber.2020.0478>
- Chen, C. P. (2016). Forming digital self and parasocial relationships on YouTube. *Journal of Consumer Culture*, 16(1), 232–254. <https://doi.org/10.1177/1469540514521081>

- Chen, Z., He, Q., Mao, Z., Chung, H. M., & Maharjan, S. (2019). A study on the characteristics of Douyin short videos and implications for edge caching. *Proceedings of the ACM Turing Celebration Conference-China*, 1–6. <https://doi.org/10.1145/3321408.3323082>
- Damiano, A. D., & Allen Catellier, J. R. (2020). A content analysis of coronavirus tweets in the United States just prior to the pandemic declaration. *Cyberpsychology, Behavior, and Social Networking*, 23(12), 889–893. <https://doi.org/10.1089/cyber.2020.0425>
- David, M. E., & Roberts, J. A. (2021). Smartphone use during the COVID-19 pandemic: Social versus physical distancing. *International Journal of Environmental Research and Public Health*, 18(3), 1034. <https://doi.org/10.3390/ijerph18031034>
- Day, L., Percy-Smith, B., Rizzo, S., Erskine, C., Monchuk, L., & Shah, M. (2020). *To lockdown and back: Young people's lived experiences of the COVID-19 pandemic* (Report number: WEL/FR-000022571). Nuffield Foundation.
- De Los Santos, M., & Klug, D. (2021, December). The TikTok tradeoff: Compelling algorithmic content at the expense of personal privacy. In *20th International Conference on Mobile and Ubiquitous Multimedia (MUM 2021)*, 226–229. <https://doi.org/10.1145/3490632.3497864>
- Drouin, M., McDaniel, B. T., Pater, J., & Toscos, T. (2020). How parents and their children used social media and technology at the beginning of the COVID-19 pandemic and associations with anxiety. *Cyberpsychology, Behavior, and Social Networking*, 23(11), 727–736. <https://doi.org/10.1089/cyber.2020.0284>
- Dynel, M. (2021). COVID-19 memes going viral: On the multiple multimodal voices behind face masks. *Discourse & Society*, 32(2), 175–195. <https://doi.org/10.1177/0957926520970385>
- Feldkamp, J. (2021). The rise of TikTok: The evolution of a social media platform during COVID-19. *Digital Responses to Covid-19: Digital Innovation, Transformation, and Entrepreneurship During Pandemic Outbreaks*, 73–85. https://doi.org/10.1007/978-3-030-66611-8_6
- Flanagin, A. J., & Metzger, M. J. (2001). Internet use in the contemporary media environment. *Human communication research*, 27(1), 153–181. <https://doi.org/10.1111/j.1468-2958.2001.tb00779.x>
- Fuchs, C. (2021). *Social media: A critical introduction*. Sage. <https://dx.doi.org/10.4135/9781446270066>
- Glăveanu, V. P., & de Saint Laurent, C. (2021). Social media responses to the pandemic: What makes a coronavirus meme creative. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.569987>
- Götz, M., Mendel, C., Lemish, D., Jennings, N., Hains, R., Abdul, F., ... & Yee, A. Z. H. (2020). Children, COVID-19 and the media: A study on the challenges children are facing in the 2020 coronavirus crisis. *Television*, 33(2020/E), 4–9.
- Grieve, P. G., & Hogg, M. A. (1999). Subjective uncertainty and intergroup discrimination in the minimal group situation. *Personality and Social Psychology Bulletin*, 25(8), 926–940. <https://doi.org/10.1177/01461672992511002>
- Hamilton, J. L., Nesi, J., & Choukas-Bradley, S. (2020). Teens and social media during the COVID-19 pandemic: Staying socially connected while physically distant. *PsyArxiv*. <https://doi.org/10.31234/osf.io/5stx4>
- Hellemans, J., Willems, K., & Brengman, M. (2021). The new adult on the block: Daily active Uuers of TikTok compared to Facebook, Twitter, and Instagram during the COVID-19 crisis in Belgium. In F. J. Martínez-López, & D. López López (Eds.), *Digital Marketing & eCommerce Conference* (pp. 95–103). Springer. https://doi.org/10.1007/978-3-030-76520-0_10
- Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European Review of Social Psychology*, 11(1), 223–255. <https://doi.org/10.1080/14792772043000040>
- Hopf, C. (2004). Qualitative interviews: An overview. In U. Flick, E. von Kardorff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 334–339). SAGE.

- Horton, D., & Wohl, R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry*, 19(3), 215–229. <https://doi.org/10.1080/00332747.1956.11023049>
- Kanazawa, S. (2002). Bowling with our imaginary friends. *Evolution and Human Behavior*, 23, 167–171. [https://doi.org/10.1016/S1090-5138\(01\)00098-8](https://doi.org/10.1016/S1090-5138(01)00098-8)
- Kendall, T. (2021). From binge-watching to binge-scrolling: TikTok and the rhythms of #LockdownLife. *Film Quarterly*, 75(1), 41–46. <https://doi.org/10.1525/fq.2021.75.1.41>
- Kennedy, M. (2020). 'If the rise of the TikTok dance and e-girl aesthetic has taught us anything, it's that teenage girls rule the internet right now': TikTok celebrity, girls and the coronavirus crisis. *European Journal of Cultural Studies*, 23(6), 1069–1076. <https://doi.org/10.1177/1367549420945341>
- Király, O., Potenza, M. N., Stein, D. J., King, D. L., Hodgins, D. C., Saunders, J. B., ... & Demetrovics, Z. (2020). Preventing problematic internet use during the COVID-19 pandemic: Consensus guidance. *Comprehensive Psychiatry*, 100, 152180. <https://doi.org/10.1016/j.comppsy.2020.152180>
- Kleinman, E., Chojnacki, S., & Seif El-Nasr, M. (2021). The gang's all here: How people used games to cope with COVID19 quarantine. *CHI Conference on Human Factors in Computing Systems*, 1–12. <https://doi.org/10.1145/3411764.3445072>
- Klug, D. (2020). "It took me almost 30 minutes to practice this": Performance and Production Practices in Dance Challenge Videos on TikTok. *MedArXiv*. <https://doi.org/10.33767/osf.io/j8u9v>
- Klug, D., Qin, Y., Evans, M., & Kaufman, G. (2021). Trick and please. A mixed-method study on user assumptions about the TikTok algorithm. *13th ACM Web Science Conference 2021*, 84–92. <https://doi.org/10.1145/3447535.3462512>
- Koeze, E., & Popper, N. (2020, April 7). The virus changed the way we internet. *The New York Times*. <https://www.nytimes.com/interactive/2020/04/07/technology/coronavirus-internet-use.html>
- Kross, E., & Ayduk, O. (2017). Self-distancing: Theory, research, and current directions. *Advances in Experimental Social Psychology*, 55, 81–136. <https://doi.org/10.1016/bs.aesp.2016.10.002>
- Le Compte, D., & Klug, D. (2021). "It's viral!" – A study of the behaviors, practices, and motivations of TikTok users and social activism. In *Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing* (pp. 108–111). <https://doi.org/10.1145/3462204.3481741>
- Lee, E., Lee, J. A., Moon, J. H., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. *Cyberpsychology, behavior, and social networking*, 18(9), 552–556. <https://doi.org/10.1089/cyber.2015.0157>
- Lemenager, T., Neissner, M., Koopmann, A., Reinhard, I., Georgiadou, E., Müller, A., ... & Hillemacher, T. (2021). COVID-19 lockdown restrictions and online media consumption in Germany. *International Journal of Environmental Research and Public Health*, 18(1), 14. <https://doi.org/10.3390/ijerph18010014>
- Leung, L. (2009). User-generated content on the internet: An examination of gratifications, civic engagement and psychological empowerment. *New media & society*, 11(8), 1327–1347. <https://doi.org/10.1177/1461444809341264>
- Literat, I. (2021). "Teachers act like we're robots": TikTok as a window into youth experiences of online learning during COVID-19. *AERA Open*, 7, 2332858421995537. <https://doi.org/10.1177/2332858421995537>
- Lu X., & Lu, Z. (2019). Fifteen seconds of fame: A qualitative study of Douyin, a short video sharing mobile application in China. In G. Meiselwitz (Ed.), *Social computing and social media: Design, human behavior and analytics* (pp. 233–244). https://doi.org/10.1007/978-3-030-21902-4_17
- McDonald, N., Schoenebeck, S., & Forte, A. (2019). Reliability and inter-rater reliability in qualitative research: Norms and guidelines for CSCW and HCI practice. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1–23. <https://doi.org/10.1145/3359174>

- McGraw, A. P., Williams, L. E., & Warren, C. (2014). The rise and fall of humor: Psychological distance modulates humorous responses to tragedy. *Social Psychological and Personality Science*, 5(5), 566–572. <https://doi.org/10.1177/1948550613515006>
- McRoberts, S., Ma, H., Hall, A., & Yarosh, S. (2017). Share first, save later: Performance of self through Snapchat stories. *Proceedings of the 2017 CHI conference on human factors in computing systems*, 6902–6911. <https://doi.org/10.1145/3025453.3025771>
- Medina Serrano, J. C., Papakyriakopoulos, O., & Hegelich, S. (2020). Dancing to the partisan beat: A first analysis of political communication on TikTok. *12th ACM Conference on Web Science*, 257–266. <https://doi.org/10.1145/3394231.3397916>
- Meng, K. S., & Leung, L. (2021). Factors influencing TikTok engagement behaviors in China: An examination of gratifications sought, narcissism, and the Big Five personality traits. *Telecommunications Policy*, 45(7), 102172. <https://doi.org/10.1016/j.telpol.2021.102172>
- Mohamad, S. M. (2020). Creative production of ‘COVID-19 social distancing’ narratives on social media. *Tijdschrift voor economische en sociale geografie*, 111(3), 347–359. <https://doi.org/10.1111/tesg.12430>
- Nabity-Grover, T., Cheung, C. M., & Thatcher, J. B. (2020). Inside out and outside in: How the COVID-19 pandemic affects self-disclosure on social media. *International Journal of Information Management*, 55, 102188. <https://doi.org/10.1016/j.ijinfomgt.2020.102188>
- Nouwen, M., & Duflos, M. (2021). TikTok as a data gathering space: the case of grandchildren and grandparents during the COVID-19 pandemic. *Proceedings of Interaction Design and Children*, 498–502. <https://doi.org/10.1145/3459990.3465201>
- Omar, B., & Dequan, W. (2020). Watch, share or create: The influence of personality traits and user motivation on TikTok mobile video usage. *International Journal of Interactive Mobile Technologies (ijIM)*, 14(04), 121–137. <https://doi.org/10.3991/ijim.v14i04.12429>
- Osakwe, Z. T., Ikhapoh, I., Arora, B. K., & Bubu, O. M. (2021). Identifying public concerns and reactions during the COVID-19 pandemic on Twitter: A text-mining analysis. *Public Health Nursing*, 38(2), 145–151. <https://doi.org/10.1111/phn.12843>
- Pahayahay, A., & Khalili-Mahani, N. (2020). What media helps, what media hurts: A mixed methods survey study of coping with COVID-19 using the media repertoire framework and the appraisal theory of stress. *Journal of Medical Internet Research*, 22(8), e20186. <https://doi.org/10.2196/20186>
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of internet use. *Journal of Broadcasting & Electronic Media*, 44(2), 175–196. https://doi.org/10.1207/s15506878jobem4402_2
- Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society*, 30(5), 350–361. <https://doi.org/10.1177/0270467610380009>
- Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior*, 11(2), 169–174. <https://doi.org/10.1089/cpb.2007.0056>
- Roulston, K. (2014). Analysing interviews. In U. Flick (Ed.), *The SAGE handbook of qualitative data analysis* (pp. 297–312). SAGE.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, 3(1), 3–37. https://doi.org/10.1207/S15327825MCS0301_02
- Scherr, S., & Wang, K. (2021). Explaining the success of social media with gratification niches: Motivations behind daytime, nighttime, and active use of TikTok in China. *Computers in Human Behavior*, 106893. <https://doi.org/10.1016/j.chb.2021.106893>
- Shutsko, A. (2020). User-generated short video content in social media: A case study of TikTok. In G. Meiselwitz (Ed.), *Social computing and social media. participation, user experience, consumer experience*

- rience, and applications of social computing. *HCI 2020. Lecture Notes in Computer Science*, 12195. Springer. https://doi.org/10.1007/978-3-030-49576-3_8
- Simpson, E., & Semaan, B. (2021). For you, or for “you”? Everyday LGBTQ+ encounters with TikTok. *Proceedings of the ACM on Human-Computer Interaction*, 4(CSCW3), 1–34. <https://doi.org/10.1145/3432951>
- Statista. (2022a). *Number of daily active Facebook users worldwide as of 2nd quarter 2022*. Retrieved September 19, 2022, from <https://www.statista.com/statistics/346167/facebook-global-dau/>
- Statista. (2022b). *Number of monthly active Instagram users from January 2013 to December 2021*. Retrieved September 19, 2022, from <https://www.statista.com/statistics/253577/number-of-monthly-active-instagram-users/>
- Southwick, L., Guntuku, S. C., Klinger, E. V., Seltzer, E., McCalpin, H. J., & Merchant, R. M. (2021). Characterizing COVID-19 content posted to TikTok: Public sentiment and response during the first phase of the COVID-19 pandemic. *Journal of Adolescent Health*, 69(2), 34–241. <https://doi.org/10.1016/j.jadohealth.2021.05.010>
- Subramanian, S. (2021). Bahujan girls’ anti-caste activism on TikTok. *Feminist Media Studies*, 21(1), 154–156. <https://doi.org/10.1080/14680777.2021.1864875>
- Swanson, D. L. (1987). Gratification seeking, media exposure, and audience interpretations: Some directions for research. *Journal of Broadcasting & Electronic Media*, 31(3), 237–254. <https://doi.org/10.1080/08838158709386662>
- Udenze, S., & Uzochukwu, C. E. (2021). Promoting mental wellbeing: Young adults’ experience on TikTok during the COVID-19 pandemic lockdown in Nigeria. *Interações: Sociedade e as novas modernidades*, (40), 9–28. <https://10.31211/interacoes.n40.2021.a1>
- Unni, Z., & Weinstein, E. (2021). Shelter in place, connect online: Trending TikTok content during the early days of the US COVID-19 pandemic. *Journal of Adolescent Health*, 68(5), 863–868. <https://doi.org/10.1016/j.jadohealth.2021.02.012>
- Vogels, E. A., Gelles-Watnick, R., & Massarat, N. (2022). *Teens, social media and technology 2022*. Pew Research. https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2022/08/PI_2022.08.10_Teens-and-Tech_FINAL.pdf
- Volkmer, I. (2021). Social media and COVID-19: A global study of digital crisis interaction among Gen Z and millennials. *World Health Organization*. https://arts.unimelb.edu.au/__data/assets/pdf_file/0007/3958684/Volkmer-Social-Media-and-COVID.pdf
- von Dawans, B., Fischbacher, U., Kirschbaum, C., Fehr, E., & Heinrichs, M. (2012). The social dimension of stress reactivity: Acute stress increases prosocial behavior in humans. *Psychological Science*, 23(6), 651–660. <https://doi.org/10.1177/0956797611431576>
- Vázquez-Herrero, J., Negreira-Rey, M. C., & López-García, X. (2020). Let’s dance the news! How the news media are adapting to the logic of TikTok. *Journalism*, 1464884920969092. <https://doi.org/10.1177/1464884920969092>
- Wang, Y. H., Gu, T. J., & Wang, S. Y. (2019, May). Causes and characteristics of short video platform internet community taking the TikTok short video application as an example. In *2019 IEEE International Conference on Consumer Electronics-Taiwan (ICCE-TW)*, 1–2. <https://doi.org/10.1109/ICCE-TW46550.2019.8992021>
- Whiting, A., & Williams, D. (2013). Why people use social media: A uses and gratifications approach. *Qualitative Market Research*, 16(4), 362–369. <https://doi.org/10.1108/QMR-06-2013-0041>
- Wikipedia (2022). U.S. state and local government responses to the COVID-19 pandemic. Retrieved September 16, 2022, from https://en.wikipedia.org/wiki/U.S._state_and_local_government_responses_to_the_COVID-19_pandemic

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Yarosh, S., Bonsignore, E., McRoberts, S., & Peyton, T. (2016). YouTube: Youth video authorship on YouTube and Vine. *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*, 1423–1437. <https://doi.org/10.1145/2818048.2819961>

Zulli, D., & Zulli, D. J. (2020). Extending the internet meme: Conceptualizing technological mimesis and imitation publics on the TikTok platform. *New Media & Society*, 1461444820983603. <https://doi.org/10.1177/1461444820983603>