Virtual Camp: LGBTQ Youths’ Collective Coping During the COVID-19 Pandemic

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The COVID-19 pandemic prompted school closures across the United States, removing important social support sources for many LGBTQ youths. The current research examines the collective coping of young LGBTQ people (majority transgender/nonbinary) who participated in the first known virtual camp program for pandemic-affected youths. In Study 1, in-depth, semistructured interviews with 15 youths (aged 14–20) revealed youths used the virtual camp space to develop unique support networks, maintain connections with trusted individuals, dwell where LGBTQ identity is celebrated, find grounding through synchrony, and fill unscheduled time. In Study 2, 41 participants in a second virtual camp session (aged 12–19) were longitudinally surveyed. Findings demonstrated youths experienced reduced depressive symptoms, and new friendships made through virtual camp influenced self-esteem. Results across both studies indicate the importance of tailored virtual spaces in facilitating social connections, providing a sense of safety and belonging, and addressing LGBTQ youths’ mental health during a collective crisis.

Keywords: COVID-19, pandemic, coronavirus, social media, Instagram, virtual, queer, LGBTQ, summer camp, crisis, resilience, public health

In spring 2020, the rapid spread of the COVID-19 virus prompted school closures across the United States, affecting at least 50.8 million public school students (Decker, Peele, & Riser-Kositsky, 2020). For many youths, days spent primarily at school became days spent at home with parents/guardians. While the

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home environment can be a refuge for many youths, for others, it is an unsupportive space. The latter is still the case for many LGBTQ (lesbian, gay, bisexual, transgender, queer, nonbinary, or related identities) youths in the United States today (Witcomb et al., 2019). Though attitudes toward gay and lesbian people have steadily improved among U.S. adults (Poushter & Kent, 2020), views toward transgender people remain mixed (McCarthy, 2021). The pandemic-prompted shift to virtual instruction reduced or removed access to identity-affirming school groups, such as Genders and Sexualities Alliances (GSAs), as well as supportive teachers, counselors, and classmates (Ioverno, Belser, Baiocco, Grossman, & Russell, 2016). This interrupted access to support outside the home could have negative consequences for LGBTQ youths, who experience higher rates of psychological distress, such as depression, than their non-LGBTQ peers (Fish & Pasley, 2015). In this context, many young LGBTQ people sought social connection online.

Historically, online spaces have enabled LGBTQ individuals to interact with similar others, whom they may not have access to in their local, geographically bounded communities (Gross, 2007). Today, LGB individuals (lesbian, gay, bisexual) have higher rates of online engagement than their non-LGB peers (Seidenberg et al., 2017). For LGBTQ youths, accessing online communities of shared interest (McInroy, 2019) and identity-specific resources (Craig & McInroy, 2014) can have positive psychological effects by providing collaborative social support (Homan, Lu, Tu, Lytle, & Silenzio, 2014), an escape from stigma, and a sense of belonging, among other processes (Austin, Craig, Navega, & McInroy, 2020). For youths in general, the number of friends on social networking sites has a small, positive association with positive mental health (i.e., a state of mind characterized by emotional well-being, good behavioral adjustment, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationships and cope with the ordinary demands of life; American Psychological Association [APA], 2021; Meier & Reinecke, 2020). However, evidence that time spent online (e.g., using social media) can negatively affect mental health also exists.

Meta-analytic evidence suggests a small, negative association between social media use and overall mental health for the general U.S. population (Meier & Reinecke, 2020). Kross and colleagues (2020) note that how individuals use social media affects their mental health. Factors contributing to negative outcomes include passive social media use (in contrast with active, communicative use; Stevic, Schmuck, Matthes, & Karsay, 2021), nonconnection-promoting use (in contrast with use promoting meaningful social connections; Clark, Algoe, & Green, 2018), high levels of use (Hou, Xiong, Jiang, Song, & Wang, 2019), and victimization (McConnell, Clifford, Korpak, Phillips, & Birkett, 2017). LGBTQ people may experience victimization online more frequently than heterosexual/cisgender individuals (GLAAD, 2021). Questions remain about the factors promoting positive versus negative mental health outcomes from social media use.

**Virtual Camp**

In the context of pandemic-prompted school closures, the nonprofit organization Brave Trails launched a virtual camp program for LGBTQ youths. Brave Trails was the first known U.S.-based camp organization to translate its youth programming to the virtual space in the wake of the COVID-19 outbreak (Deratt, 2020). The organization launched the first of two virtual camp programs on March 15, 2020, four days after the World Health Organization declared a pandemic and 10 days after a shift to distance learning began for schools in the United States (i.e., Northshore School District in Washington state announced a
move to online learning on March 5, becoming the first district to do so; Decker et al., 2020). Brave Trails launched the program for youths encountering social support challenges during the pandemic. Typically, the organization hosts nonvirtual summer camps in California and Maryland (see Gillig, Miller, & Cox, 2019, for a detailed background).

Brave Trails’ first virtual camp was a two-week program taking place from March 15–29, 2020. The program was free of charge for all participants and was hosted on the social media platform Instagram, with synchronous programming through Instagram Live (the platform’s streaming, interactive video function). Program leaders included the Brave Trails directors and 27 volunteers, most of whom had volunteered at a prior on-site session of Camp Brave Trails. The virtual camp schedule ran for nearly 12 hours per day, from 8:45 a.m. to 8 p.m. Pacific Time, and included activities such as workshops, supportive conversations, photo challenges, and a variety/talent show, which youths could join and leave freely. An example daily schedule is as follows: 8:45 a.m.—Riddle Me This, 9:30 a.m.—Photo Challenge, 12:00 p.m.—Question of the Day, 1:00 p.m.—In-Cabin Chill #Unplug, 3 p.m.—Zine Workshop, 4:30 p.m.—LGBTQ+ Movies, 6 p.m.—Poetry 101, 8 p.m.—Goodnight Brave Trails. Some activities directly addressed and affirmed LGBTQ identity (e.g., LGBTQ+ Movies), whereas others provided entertainment and education in supportive contexts where youths could determine to what extent they wanted to focus on LGBTQ identity (e.g., Poetry 101). Youths were welcome to join whether they identified as LGBTQ or heterosexual/cisgender and whether they had attended Camp Brave Trails before or not. The large majority of youths engaging with Brave Trails online and at camp identify as LGBTQ. Community rules (e.g., treat people with respect) were shared before synchronous events to encourage positive communication. Approximately 100 youths participated in the first virtual camp (Jake Young, personal communication, May 23, 2021).

From June 26 to August 8, 2020, Brave Trails conducted a second virtual camp, which met daily via the online videoconferencing platform Zoom. The 81 campers paid a fee for programming expenses, including a supply kit mailed to their homes. Activities aligned with the first virtual camp; however, Zoom’s functionality allowed participants to meet daily in breakout rooms (i.e., small groups within the larger meeting). Each room represented a “virtual cabin,” assigned based on participant age. Youths could use Zoom’s private chat feature to communicate with peers. Program staff included Brave Trails directors and 30 volunteers.

This two-study project examines the role of the virtual camp sessions in LGBTQ youths’ collective coping during the early emergence of COVID-19. Understanding the effects of community-led initiatives to support LGBTQ youths is critical, as such initiatives may more closely attend to youths’ priorities and aspirations, compared with “top-down” interventions designed by individuals more distant from the community. Thus, this research is conducted with the aim of informing the development of future culturally meaningful programming. In the following, we first discuss the theoretical framing, methodology, and findings of interviews with virtual camp participants (Study 1). Then, we discuss Study 2, a two-wave longitudinal survey of youths who participated in the second virtual camp. We conclude with an overarching discussion of findings and implications.
Study 1

Study 1 seeks to understand youths’ experiences with Brave Trails’ first virtual camp program. Theorizing of collective coping and social identity guides the study’s approach.

Theoretical Background

Crises throw individuals and communities into states of uncertainty and prompt individuals to enact coping strategies, which are “conscious, purposive behaviors or cognitions initiated in response to the experience of a chronically stressful situation or following the occurrence of a stressful life event” (Eckenrode, 1991, p. 1). Individuals may cope on their own (e.g., meditating, using media), which is called individual coping, or in conjunction with others (e.g., initiating conversation, seeking support), which is called collective coping.

Collective coping is a social process through which people experiencing stressors reach out to others for support and to make sense of their experiences (Lyons, Mickelson, Sullivan, & Coyne, 1998; Tandoc & Takahashi, 2017). This coping emerges from a cultural or social group’s collectivist orientation (Kuo, 2013). Functionally, collective coping engages others in culturally congruent ways to improve well-being (Moore & Constantine, 2005).

Multiple theories pertaining to the collective coping process have been proposed. The cultural transactional model of stress and coping (Chun, Moos, & Cronkite, 2006) addresses the links between collectivism-individualism and stress-coping, arguing that culture influences the entire coping process, including how individuals perceive stressful events. Chun and colleagues (2006) view collective coping as a distinct form of responses enacted because of the tendency of collectivist-oriented individuals to seek support from in-group members. Kuo (2013) synthesized the existing theories and research findings to identify four broad categories of collective coping, each prioritizing one of the following: tradition and authority, interpersonal relationships, culturally shaped emotional and cognitive strategies, and religion/spirituality. Each category encapsulates specific strategies (e.g., interpersonal relationships includes the strategy seeking family support).

Online spaces can enable coping during a crisis. Tandoc and Takahashi (2017) examined social media use for collective coping in the wake of Typhoon Haiyan, which occurred in the Philippines in 2013. They found that individuals enacted three collective coping strategies on Facebook: (1) informing family and friends that they survived, (2) socially constructing the collective crisis experience, and (3) managing feelings/memories. These strategies align with Kuo’s (2013) categories of interpersonal relationships and culturally shaped emotional and cognitive strategies. For LGBTQ youths isolating at home during the pandemic, shared experiences may drive collective coping online.

During a crisis, people may choose with whom they cope, and they may tend to seek support from others they perceive to be similar to themselves. Theorizing of social identity highlights how people derive self-worth and affirmation from their social identities (Tajfel & Turner, 1979). If a stressor threatens self-worth, individuals may seek comfort with others whose identities affirm their own. Individuals in one’s own
social group (e.g., LGBTQ) may be perceived as being more attuned to the nuances of the individual-level experience of a crisis, thus better equipped to provide support.

Based on theorizing of collective coping, the importance of online communication during crises and historically for LGBTQ people, and the potential influence of social identity on coping, the following research question is posed:

**RQ1:** How did LGBTQ youths engage in collective coping in an identity-affirming virtual camp space during the COVID-19 pandemic?

**Methods**

**Procedures and Materials**

On May 12, 2020, six weeks after the completion of the first Brave Trails virtual camp program, Brave Trails posted an Instagram announcement about the research opportunity (reposting on May 19). The post summarized the study and directed potential participants to e-mail the lead author or access a website for details. The website screened individuals and collected names and e-mail addresses for eligible youths, whom the lead author e-mailed, sharing consent/assent/parental permission information and a demographics questionnaire, also initiating interview scheduling. Interviews were completed over four weeks via Zoom and lasted 30–60 minutes each. All authors conducted semistructured interviews guided by an interview protocol. The lead author developed the protocol through discussion with Brave Trails about virtual camp goals and processes as well as a review of relevant literature and media coverage. Interview questions were primarily open-ended and included “How did you feel when you heard that your school would be closing?” and “Can you tell me about your experience with Virtual Camp Brave Trails?” See the appendix for the complete protocol. Each participant received a $25 Amazon gift card. Washington State University’s Institutional Review Board (IRB) approved the procedure.

**Participants**

Study 1 participants were 15 LGBTQ youths aged 14–20, average age 16.5 years. The most prevalent gender identities were transgender male (53.3%, n = 8) and nonbinary (33.3%, n = 5). Transgender individuals are those whose gender identities do not align with their sex assigned at birth (APA, 2015a, 2015b). Nonbinary people do not identify as exclusively male or female and experience their gender as existing outside of the traditional conceptualizations of male and female (Abrams, 2019). The most prevalent sexual/romantic orientations were queer (46.6%, n = 7) and gay/lesbian (20.0%, n = 3). Most participants were White (80.0%, n = 12) or multiracial (13.3%, n = 2). See Table 1.
Table 1. Descriptive Statistics for Study 1 (N = 15).

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>16.1 (1.74)</td>
</tr>
<tr>
<td>Gender identity</td>
<td></td>
</tr>
<tr>
<td>Transgender male</td>
<td>53.3% (n = 8)</td>
</tr>
<tr>
<td>Nonbinary</td>
<td>33.3% (n = 5)</td>
</tr>
<tr>
<td>Transgender nonbinary male</td>
<td>6.6% (n = 1)</td>
</tr>
<tr>
<td>Cisgender male</td>
<td>6.6% (n = 1)</td>
</tr>
<tr>
<td>Sexual/romantic orientation</td>
<td></td>
</tr>
<tr>
<td>Queer</td>
<td>46.6% (n = 7)</td>
</tr>
<tr>
<td>Gay/lesbian</td>
<td>20.0% (n = 3)</td>
</tr>
<tr>
<td>Bisexual/pansexual</td>
<td>13.3% (n = 2)</td>
</tr>
<tr>
<td>Unsure/questioning</td>
<td>13.3% (n = 2)</td>
</tr>
<tr>
<td>Straight/heterosexual</td>
<td>6.6% (n = 1)</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>80.0% (n = 12)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>13.3% (n = 2)</td>
</tr>
<tr>
<td>Latinx</td>
<td>6.6% (n = 1)</td>
</tr>
</tbody>
</table>

*Note.* Subgroups may not sum to 15 when data are missing.

**Data Analysis**

Interviews were audio/video recorded and transcribed using Zoom or the online platform Trint.

As literature influenced our interview protocol, we returned to it to guide our analysis. Rather than develop stringent coding protocol, we opted for an open-ended iterative process that, in keeping with constant comparative method (Glaser & Strauss, 1967), used a close reading and interpretation of the data for the inductive development of findings (Williams & Moser, 2019). In reviewing and discussing the relevant literature (Tajfel & Turner, 1979; Tandoc & Takahashi, 2017), the first and third authors’ attention was drawn to the potential for individuals from marginalized groups to cope together in unique ways during a collective crisis. This guided our organic theme development through open coding. We used this approach, rather than applying existing coping categories, because as Schwandt and Gates (2018) argue, meanings are complex and situated in social settings. We did not want prior findings to heavily influence our interpretation.

In the first round of analysis, we used open coding. The first and third authors analyzed the data with the literature in mind. This helped determine sections that were in and out of scope and that merited deeper investigation. We distinguished areas of similarity and difference in the data but did not label them in a detailed way. This follows Lincoln’s and Guba (1985) argument that theme development can employ “classification reasoning plus tacit and intuitive senses to determine which data ‘look alike’ and ‘feel alike’ when grouping them together” (p. 347).

Next, we used axial coding for in-depth analysis. In axial coding, “themes are explicitly stated, examined, and categorized” (Williams & Moser, 2019, p. 52). Independently, the first and third authors
again completed line-by-line analyses of all transcripts, taking descriptive notes to stay accountable to their potential biases (Yin, 2010). Detailed themes began to emerge, which the authors organized in unifying conceptual bins (Tracy, 2013). Finally, the authors collaboratively grouped data into themes. Narratives were developed around the themes and exemplars employed. As noted by Williams and Moser (2019), “Meaning comes from progressive coding: The construction of meaning from collected data is the result of the progressive data coding process” (p. 46). Our data analysis reflects a process of progressive analysis.

**Results**

Five virtual collective coping strategies emerged. The following describes each theme and provides exemplar quotes.

*Developing Unique Social Support Networks*

By prompting closures of schools and other organizations, COVID-19 disrupted supportive communities. Many LGBTQ youths turned to online spaces, including the virtual camp space, for social support. Participants in the current study described how virtual camp provided a means for them to build unique social support networks online. One study participant said that virtual camp “helps me create a resource for myself.” Another participant said, “The queer people, we’ve always supported each other, and even in a time like right now, when we’re separated, we’re still trying to find each other and give each other support.” In this way, virtual camp brought together youths with shared identities and enabled them to forge supportive connections to meet individual and collective needs.

*Maintaining Connections With Trusted Individuals*

Closures prompted youths to engage with known, trusted individuals online. One virtual camp participant explained:

> The only thing we can do right now is stay connected. Stay connected to the people we know, the people we love, the people we care about, and that’s the biggest thing that we can do . . . to talk to others. Talk to the people that you know will help us.

Another study participant reported not typically using social media but accessing it during the pandemic to meet a need to interact with trusted contacts: "I really didn't care about social media much. . . . [Through virtual camp], I was grounding myself with those. . . . those things that are important to me.” Beyond the direct social interaction virtual camp facilitated, youths reported that the space filled a need for a supportive environment more broadly, as described next.

*Dwelling Where LGBTQ Identity Is Celebrated*

Many LGBTQ youths live with family members who do not support their identities. Youths experiencing challenges at home reported that the virtual camp space became a “bubble” of positivity for them. One participant said: "[My parents] are rather supportive, not always. . . . It has been a struggle
hearing my dead name and not my preferred pronouns. . . . [During the pandemic], I haven’t had that escape or the community who’s been super supportive.” Another participant explained how virtual camp provided an affirming alternative to the home environment:

I would describe my experience with Brave Trails as kind of like an alternate reality. In the Brave Trails multiverse, let’s say, you can be whoever you want, use whatever pronouns you want, and just be truthful about your identity regardless of your parents because your parents aren’t there. And you know it’s a place for you to grow regardless of whatever else is happening in your life.

Finding Grounding Through Synchrony

For some youths, spending all day, every day at home caused a feeling of social detachment. Participants described how virtual camp’s live videos helped them regain a sense of connection with the world around them by knowing what others were doing at that moment. One participant appreciated “just feeling connected to other people; just having something to do that you know other people are doing, and you can see what they’re doing.” Two participants cited the synchronous nature of singing the “good-night song” at the end of each virtual camp day as providing comfort. One said:

We can all kind of come together for this one moment. And it was very nice knowing, very peaceful knowing, that all these people were calming down at the same time as I was and all of us are tuning in to see people telling us everything’s gonna be okay, right before bed, you know.

In this way, the virtual programming filled a need for a sense of unity and coordinated action during an isolating time.

Filling Unscheduled Time

While school closures were sometimes initially a welcome break, many youths began to feel adrift without structured days. Some didn’t know what to do with their newfound free time. For example, one study participant said, “I’d rather be at school and not at home all day with nothing to do.” Another echoed: “I’m just trying to stay in contact with friends and keep myself busy, but it’s not the same. . . . It’s really difficult, but I’m doing my best.” Some participants described virtual camp as an enjoyable way to pass time. One said, “There’s not much I’m doing anyways. . . . It’s a fun thing, keeps the time passing by, keeps you connected with the community.” Youths’ psychological outcomes over time during the second iteration of the virtual camp are captured in Study 2.
Study 2

Theoretical Background

Study 2 is guided by scientific literature examining the impact of identity-affirming programming on mental health and the influence of friendships on youth well-being.

In clinical psychology and social work (Crisp & McCave, 2007; Grzanka & Miles, 2016), strategies affirming the relevant identities of a person experiencing identity-based stressors have long been enacted to improve mental health. Across populations, an affirmed identity is associated with lower levels of depressive symptoms (Cruwys, Haslam, Dingle, Haslam, & Jetten 2014), anxiety (Brittian et al., 2013), and stress (Creswell, Dutcher, Klein, Harris, & Levine, 2013) and higher self-esteem (Ghavami, Fingerhut, Peplau, Grant, & Wittig, 2011). Programming prompting identity affirmation may be particularly important for youths, who are developing their sense of self. One such form of programming—summer camp—has been found to increase youths’ self-esteem (Thurber, Scanlin, Scheuler, & Henderson, 2007) and perceived social support (Goodwin, Leiberman, Johnston, & Leo, 2011) and reduce anxiety (Ehrenreich-May & Bilek, 2011) and depressive symptoms (Gillig et al., 2019).

Based on research demonstrating the positive effects of identity-affirming programming on mental health, the following hypotheses are posed:

H1 a–d: During virtual camp, youths will experience increases in (a) self-esteem and (b) perceived social support and decreases in (c) anxiety and (d) depressive symptoms.

Supportive relationships, like friendships, promote positive mental health. The APA (2021) defines friendships as voluntary, relatively long-lasting relationships between two people in which those involved are concerned with meeting the other’s needs as well as satisfying their own desires. Increased quantity of friendships is associated with reduced depressive symptoms for youths in general (Field, Miguel, & Sanders, 2001; Nangle, Erdley, Newman, Mason, & Carpenter, 2003) and for young LGBTQ people in the social media context (Homan et al., 2014). While social media platforms have been criticized for promoting shallow social interactions (Baym, 2015), online communities created intentionally to promote frequent social interactions and ongoing emotional concern can positively influence mental health (Baumeister & Leary, 1995).

Based on the positive relationship between youths’ quantities of friends and mental health, the following hypotheses are posed:

H2 a–d: New friendships made during virtual camp will moderate the pre-post relationships between (a) self-esteem, (b) perceived social support, (c) anxiety, and (d) depressive symptoms, such that the pre-post relationships will be stronger for youths developing fewer new friendships.
Methods

Design

Two waves of survey data collection occurred. The first launched on June 11, 2020, two weeks before the second program. A Brave Trails director e-mailed study information to registered campers through the online camp management system CampSite. Interested participants followed a link to a Qualtrics survey. Consent/assent/parental permission information was shared, and consenting/assenting participants completed the first wave of questions. The first survey closed on June 25, 2020, the day before virtual camp started. The second wave began on August 6, 2020, lasting two weeks. Survey links were shared during final cabin meetings and e-mailed through CampSite. Participants who completed both surveys were included in a raffle for a $100 Amazon gift card. The procedure was approved by Washington State University’s IRB.

Participants

Forty-one youths participated in both waves of data collection (Wave 1: \( N = 54, \ 66.7\% \); Wave 2: \( N = 58, \ 71.6\% \)). The average age was 15.5 years, ranging from 12–19. The most prevalent gender identities were transgender male (33.3%, \( n = 13 \)) and nonbinary (23.1%, \( n = 9 \)). The most prevalent sexual/romantic orientations were bisexual/pansexual (33.3%, \( n = 13 \)) and queer (30.8%, \( n = 12 \)). Most participants were White (89.5%, \( n = 34 \)) or multiracial (7.9%, \( n = 3 \)). See Table 2.
Table 2. Descriptive Statistics for Study 2 (N = 41).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>15.5(2.03)</td>
</tr>
<tr>
<td><strong>Gender identity</strong></td>
<td></td>
</tr>
<tr>
<td>Transgender male</td>
<td>33.3% (n = 13)</td>
</tr>
<tr>
<td>Cisgender female</td>
<td>20.2% (n = 8)</td>
</tr>
<tr>
<td>Nonbinary</td>
<td>23.1% (n = 9)</td>
</tr>
<tr>
<td>Genderfluid</td>
<td>10.3% (n = 4)</td>
</tr>
<tr>
<td>Unsure/questioning</td>
<td>5.1% (n = 2)</td>
</tr>
<tr>
<td>Other</td>
<td>7.7% (n = 3)</td>
</tr>
<tr>
<td><strong>Sexual orientation</strong></td>
<td></td>
</tr>
<tr>
<td>Bisexual/pansexual</td>
<td>33.3% (n = 13)</td>
</tr>
<tr>
<td>Queer</td>
<td>30.8% (n = 12)</td>
</tr>
<tr>
<td>Gay/lesbian</td>
<td>20.5% (n = 8)</td>
</tr>
<tr>
<td>Unsure/questioning</td>
<td>5.1% (n = 2)</td>
</tr>
<tr>
<td>Straight/heterosexual</td>
<td>2.6% (n = 1)</td>
</tr>
<tr>
<td>Other</td>
<td>7.7% (n = 3)</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>89.5% (n = 34)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>7.9% (n = 3)</td>
</tr>
<tr>
<td>Black</td>
<td>2.6% (n = 1)</td>
</tr>
<tr>
<td><strong>Prior Brave Trails attendance</strong></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>36.6% (n = 15)</td>
</tr>
<tr>
<td>One summer</td>
<td>26.8% (n = 11)</td>
</tr>
<tr>
<td>Two summers</td>
<td>24.4% (n = 10)</td>
</tr>
<tr>
<td>Three summers</td>
<td>7.3% (n = 3)</td>
</tr>
<tr>
<td>Four summers</td>
<td>4.9% (n = 2)</td>
</tr>
<tr>
<td>New friendships</td>
<td>2.23(2.44)</td>
</tr>
</tbody>
</table>

**Note.** Subgroups may not sum to 41 when data are missing.

**Measures**

Both pre- and postcamp surveys used validated scales to assess mental-health-related outcomes for which LGBTQ youths experience disparities. Tailored questions assessing camp friendship connections were also posed at both waves of data collection. Demographics were assessed in the first wave.

The Center for Epidemiologic Studies Depression Scale Short Form (CES-D-4; Lewinsohn, Seeley, Roberts, & Allen, 1997; Melchior, Huba, Brown, & Reback, 1993) measured depressive symptoms. The scale has been used in prior research with LGBTQ youths (Gillig, 2020; Rhoades et al., 2018). Participants selected the number of days during the previous week during which they experienced each of four emotions or behaviors, such as sadness. Barlett’s Test of Sphericity, which tests the overall significance of the correlations in the correlation matrix, was significant ($\chi^2 (6) = 93.77, p < .001$), indicating the appropriateness of using a factor analytic model on the data. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy indicated that the strength of the relationships among items was high (KMO = .82); thus, it was
acceptable to proceed with factor analysis. Principal components analysis (PCA) with Varimax rotation showed items loaded on one factor explaining 71.0% of the variance. Reliability was moderate (Cronbach’s $a = .84$). Items were averaged to create one depressive symptoms score for each participant.

Anxiety was assessed using the Generalized Anxiety Disorder subscale of the Youth Anxiety Measure for DSM-5 (YAM-5-I; Muris et al., 2017). Participants indicated how many days during the previous week they experienced each of six psychological or physical states. Items included “I found it hard to stop worrying” and “I didn’t feel well because I worried so much.” Barlett’s Test was significant ($\chi^2 (15) = 221.17$, $p < .001$), and KMO was high (.88). PCA with Varimax rotation showed items loaded on one factor explaining 66.2% of the variance. Reliability was high ($a = .94$) after one item pertaining to school-based worry was removed (original $a = .84$). Items were averaged to create one score per participant.

Self-esteem was assessed using Rosenberg’s self-esteem scale (Rosenberg, 1965). Participants reported on a scale of 1 = Strongly disagree to 7 = Strongly agree the extent to which they experienced various thoughts toward themselves. Items included “I am a person of worth” and “I have much to be proud of.” Barlett’s Test was significant ($\chi^2 (45) = 384.44$, $p < .001$), and the KMO was high (.88). PCA with Varimax rotation showed items loaded on one factor explaining 63.5% of the variance. Reliability was high ($a = .90$). Items were averaged to create one score per participant.

Perceived social support was assessed with the Multidimensional Scale of Perceived Social Support in Youth (Bruwer, Emsley, Kidd, Lochner, & Seedat, 2008). Items assessed adequacy of social support from three sources: family, friends, and a special person (e.g., partner, other trusted person). Twelve item ratings were made on a 7-point Likert scale ranging from 1 = Very strongly disagree to 7 = Very strongly agree. Items included “I get the emotional help and support I need from my family,” “I can count on my friends when things go wrong,” and “I have a special person who is a real source of comfort for me.” Barlett’s Test was significant ($\chi^2 (66) = 647.72$, $p < .001$), and KMO was high (.78). Principal components analysis with Varimax rotation showed items loaded on three factors (family, friends, special person) explaining 83.9% of the variance. Reliability was high ($a = .93$). Items were averaged to create one score.

At both waves of data collection, participants selected names of friends in the program (up to 10) from a list of registered participants. Youths could write in names of participating friends not on the list. If youths did not have existing friendships to report, they could skip this question. Friends named were counted, resulting in one score per participant.

The covariate “Prior Brave Trails attendance” was captured through participants’ reporting of previous summers during which they attended Brave Trails’ on-site camp. The variable was a count of prior summers, ranging from 0 to 4.

**Results**

Of the 54 youths who completed the pretest, 41 completed the posttest. Little’s Test (Little, 1988) assessed the nature of missing posttest depressive symptoms, self-esteem, perceived social support, and
anxiety data. Results were nonsignificant ($\chi^2 = .581, p = .901$), indicating data were missing at random. Listwise deletion was used.

A repeated measures analysis of variance was conducted to assess Hypothesis 1 (H1a–d). The analysis showed no significant main effects of time on self-esteem (H1a; $F(1, 38) = .015, p < .908, \eta^2 < .001$), perceived social support (from the sources family, friends, special other) (H1b; $F(1, 38) = .328, p = .570, \eta^2 = .009$), and anxiety (H1c; $F(1, 38) = 2.831, p = .101, \eta^2 = .069$). A significant main effect of time on depressive symptoms was found (H1d; $F(1, 38) = 4.841, p = .034, \eta^2 = .113$). Depressive symptoms decreased from 2.84 days per week before the program ($SD = 1.56$) to 2.37 days per week at the end of the program ($SD = 1.69$). Time and the covariate prior Brave Trails attendance had no significant interaction effect on outcomes (self-esteem: $F(1, 38) = 1.418, p = .241, \eta^2 = .036$; perceived social support: $F(1, 38) = .968, p = .331, \eta^2 = .025$; anxiety $F(1, 38) = .026, p = .872, \eta^2 = .026$). The observed power for within-subjects analysis was low (.37).

To assess Hypothesis 2 (H2a–d), a series of moderation models were run (Model 1) using the PROCESS macro (v3.4; Hayes, 2013) in SPSS v26. Results showed an interaction between new friends and self-esteem approaching significance at $p < .05$ (H2a; $b = -.085, SE = .043, p = .058, 95\% CI = [-.17, .003]$). The relationship between self-esteem before and after the program was strongest for youths who made the fewest new friends (0 friends; $b = 1.19, SE = .13, p < .001, 95\% CI = [.86, 1.37]$) and weakest for those who made the most new friends (5.44 friends; $b = .66, SE = .18, p = .001, 95\% CI = [.29, 1.02]$). Among youths who made the most friends and had moderate self-esteem before camp, self-esteem tended to increase (see Figure 1). The covariate prior attendance was nonsignificant ($b = .095, SE = .090, p = .29, 95\% CI = [-.09, .28]$). New friends did not moderate the pre-post relationships for perceived social support (H2b; $b = -.029, SE = .053, p = .59, 95\% CI = [-.14, .078]$), anxiety (H2c; $b = -.039, SE = .049, p = .44, 95\% CI = [-.14, .06]$), and depressive symptoms (H2d; $b = -.039, SE = .063, p = .54, 95\% CI = [-.17, .09]$).
New Friends
- .00
- 2.00
- 3.44
--- Interpolation Line

![Figure 1. Moderation model depicting the influence of new friendships made on the relationship between self-esteem at Time 1 and at Time 2.](image)

A posthoc linear regression found changes in self-esteem predicted changes in depressive symptoms (unstandardized residualized change scores) during virtual camp ($b = -.63, SE = .31, p = .050, 95\% CI = [-1.26, .001]$).

**Discussion**

This research aimed to better understand the virtual collective coping experiences of LGBTQ youths during COVID-19. Study 1’s in-depth interviews revealed five themes in youths’ use of virtual spaces for coping: developing unique support networks, maintaining connections with trusted individuals, dwelling where LGBTQ identity is celebrated, finding grounding through synchrony, and filling unscheduled time. These findings elucidate the processes through which LGBTQ youths collectively cope online in the pandemic context, which tend to reflect a focus on interpersonal relationships and culturally based emotional and cognitive strategies (Kuo, 2013). The findings extend the literature examining collective coping in other populations, highlighting how people from marginalized groups may enact strategies that have identity-affirming functions, which may not be central considerations for individuals from dominant social groups. For example, Tandoc and Takahashi (2017) identified strategies pertaining to informing sharing, socially constructing the crisis, and managing memories—strategies that did not reflect individual-level needs for social identity affirmation. Our results bolster prior work that has found synchronicity in computer-mediated
communication can enhance feelings of social presence and support for young people (Petrocchi, Marciano, Annoni, & Camerini, 2020). Findings demonstrate synchronicity as an important social media affordance (e.g., Khazraee & Novak, 2018) for positive mental health in the crisis/social isolation context.

Study 2's longitudinal survey showed that youths participating in virtual camp experienced reduction in depressive symptoms. New friendships formed through virtual camp influenced changes in self-esteem ($p = .058$). Youths with lower self-esteem at pretest who made an above-average number of friends through virtual camp experienced increased self-esteem. For all youths, changes in self-esteem predicted changes in depressive symptoms. The finding that depressive symptoms decreased confirms prior work demonstrating the positive impact of identity-affirming programming and shows the promise for novel virtual programming (i.e., identity-affirming activities modeled on summer camp approaches) to reduce LGBTQ youths’ depressive symptoms. Furthermore, the findings that new friendships influenced self-esteem over time and changes in self-esteem predicted changes in depressive symptoms indicate the positive influence of online friendship formation on LGBTQ youths’ mental health.

This study has practical implications. First, in the crisis context, parents of LGBTQ children should consider their child’s identity-based needs when setting time limits or other boundaries around social media use, recognizing that some online communities may become important sites for LGBTQ children to experience identity-specific support that parents and others within the household may not be equipped to provide. For educators, the closure of affirming school spaces may put LGBTQ youths at special risk for negative mental health outcomes. Incorporating LGBTQ-affirming content into the virtual classroom (e.g., displaying pronouns in Zoom) may bolster LGBTQ students’ feelings of support. For policy makers, when a crisis makes extended school closures necessary, providing emergency funding to organizations that use virtual spaces to meet the needs of LGBTQ youths and other marginalized groups can improve mental health outcomes.

Second, in the everyday (noncrisis) context, parents should consider letting LGBTQ children spend time online in affirming informal communities and organized programming. Such contexts can help meet youths’ identity-related needs. Parents can find information about safe online spaces for LGBTQ youths on the websites of organizations such as the Human Rights Campaign, The Trevor Project, QueerDoc, Lambert House, and the U.S. Centers for Disease Control and Prevention. However, parents should also encourage LGBTQ children to identify nonmediated routes for interacting with supportive others, when possible, given other research findings that suggest in-person, face-to-face communication may be better for mental health over time. Educators and counselors should also stay knowledgeable about supportive virtual spaces to make appropriate recommendations for struggling LGBTQ youths.

The current research provided an in-depth look at LGBTQ youths’ collective coping during the initial COVID-19 shutdowns and a longitudinal evaluation of a novel virtual program; however, some limitations warrant discussion. For Study 1, participants may have completed interviews at home. If parents or others were in proximity, participants may not have spoken completely freely. Postpandemic interviews would benefit from being conducted outside the home. Study participants also needed parental permission, possibly preventing some youths (e.g., those “closeted”) from participating. Thus, the voices of LGBTQ youths in the least supportive home environments may not be represented. Additionally, the sample size ($N$
(n = 15) is relatively small. However, the researchers interviewed all interested, eligible participants, and saturation was reached in thematic analysis. LGBTQ adolescents younger than 18 (the majority of our sample) are considered a hard-to-reach population for research. This is perhaps particularly relevant to interview-based research, which may require parental permission and a private location for a conversation. Accordingly, few recent studies with LGBTQ youths involve interviews. Our sample size aligns with such recent work (e.g., Erhard & Ben-Ami’s, 2016 interviews with 20 LGB youths). Regarding theorizing of collective coping, future interview-based research with LGBTQ youths may benefit from asking more direct questions about various target aspects of youths’ experiences enacting strategies, as our interview protocol used broad, open-ended questions to elicit coping-related responses. Study 2 also represents a small sample size (41 youths participating in two waves of data collection) resulting in low observed power for within-subjects analysis (.37). Because of this, significant changes in youths’ outcomes may not have been statistically significant. For example, with higher power, the main effect of time on anxiety (H1c) may have emerged as significant ($F(1, 38) = 2.831, p = .101, \eta^2 = .069$). A significant finding here would align with prior research demonstrating LGB-affirming therapy can reduce anxiety among young gay and bisexual men (Pachankis, Hatzenbuehler, Rendina, Safren, & Parsons, 2015). Additional limitations are the unavailability of a control group and potentially relevant covariates (e.g., total time spent on social media), no direct measurement of campers’ levels of engagement with the virtual programming (e.g., the number of activities completed), as well as the use of retrospective self-report data for psychological experiences. A promising direction for future research would be capturing youths’ psychological experiences using ecological momentary assessment. Though limitations exist, it is promising that both Study 1’s qualitative findings and Study 2’s quantitative, longitudinal results indicate LGBTQ youths experienced improved well-being and social connectedness in the virtual camp context.

In conclusion, there is an ongoing need for affirming spaces—virtual and otherwise—for LGBTQ youths. As one study participant said in the context of the COVID-19 pandemic, “The only thing we can do right now is stay connected. Stay connected to the people we know, the people we love, the people we care about.” Future research should continue to elucidate the processes through which LGBTQ youths use virtual spaces for collective coping as well as the impacts of such behaviors and interactions on their mental health over time.

References


**Appendix**

**Introductory Protocol**

Thank you for agreeing to participate in this study. To facilitate our note-taking, we would like to record our conversation, as mentioned in the questionnaire you completed. I am the only person who will have access to the recording, which I will eventually destroy.

We have planned this interview to last 30–45 minutes, and we have several questions to ask you. If time starts to run short, it may be necessary for us to ask you to pause so we can move to the next question.

You have been selected to speak with us today because you have participated in Virtual Camp Brave Trails during the COVID-19 pandemic. If you’re ready, let’s begin with questions about your experience during the pandemic, then move into questions specifically about virtual camp.
Questions: Pandemic

First, I'm interested in hearing about your experiences with school this spring.

School

Were you a student this spring semester?

If yes . . .

What grade were you in this spring? For example, ninth grade.
Did your school close due to the COVID situation?

How did you feel when you heard that your school would be closing?

Did school closing affect your living situation? For example, were you living at school and had to move?

Can you describe what a normal day has been like for you during the shelter-in-place orders?

Transition: Now I’d like to ask a few questions about your living situation.

Living Situation

Are you currently living with anyone? If so, who? For example, parents, guardians, friends?

If Cohabiting . . .

Do you identify as LGBTQ?
How do the people you live with feel about your LGBTQ identity?
Have you had any conflicts related to your identity? If so, please explain.

If Living Alone . . .

How has your experience been living alone during the shelter-in-place order?
Do you feel like you’ve been able to get support if or when needed?

Probe: What challenges have you needed support regarding?

Probe: Where have you looked for support, or who have you reached out to?
Transition: I’m interested in hearing about your experiences as an LGBTQ person.

**LGBTQ Identity**

In what location, environment, or space do you feel most supported in your LGBTQ identity?

_Probe:_ What about that space makes you feel supported?

Do you think that your identity as an LGBTQ person affected your ability to cope with, or adjust to, the pandemic?

_Probe:_ How so? Please explain.

What have you heard, if anything, from LGBTQ friends and peers about their experiences with staying at home?

Transition: Next, I’d like to ask about your experience with Brave Trails and summer camp.

**Questions: Virtual Camp**

How did you first hear about Brave Trails?

Have you attended Camp Brave Trails in past summers?

_Probe, if yes:_ How many summers have you attended?

Can you tell me about your experience with Virtual Camp Brave Trails? For example, did you present during virtual camp programming, attend programming, or both?

_Probe:_ What activities did you participate in?

Why did you participate in virtual camp?

What were some memorable parts of participating in it?

What was the most meaningful or important part of virtual camp for you?

Did you meet any new friends through virtual camp?

_Probe:_ How did you connect with them?

Are there other social media spaces, online activities, etc., that have been important to you adjusting to changes related to the pandemic? If so, we’re interested in hearing about them.
Conclusion

That wraps up our interview today. If you felt any distress during any of these questions, please immediately reach out to people at The Trevor Project, who can support you. You can find the phone number and online chat at TheTrevorProject.org.

Within one week, you will receive a $25 Amazon e-gift card from an employee of Washington State University. When you receive your card, please reply to the employee to confirm you got the card. Is your preferred e-mail address for receiving the card the e-mail address we have used to communicate about this study?

Thank you again for your participation!