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Caitlin M. Mercier

Dena M. Abbott

Michael S. Ternes

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Coping Matters: An Examination of Coping among Black Americans during COVID-19

Caitlin M. Mercier,[1] Dena M. Abbott,[2] and Michael S. Ternes[1]

1. Department of Psychology and Behavioral Sciences, Louisiana Tech University, Ruston, Louisiana, USA
2. Department of Educational Psychology, University of Nebraska–Lincoln, Lincoln, Nebraska, USA

Corresponding author – Caitlin M. Mercier, Department of Psychology and Behavioral Sciences, Louisiana Tech University, 600 Mayfield, Ruston, LA 71270, USA, email mmm106@latech.edu

ORCID
Caitlin M. Mercier https://orcid.org/0000-0002-5666-0185
Dena Abbott https://orcid.org/0000-0002-0295-1796
Michael S. Ternes https://orcid.org/0000-0003-1117-7795

Abstract

Using a critical race theory framework and a convergent mixed-method design, this study examined the relationship between coping with stress and psychological distress among Black U.S. Americans (N = 155) during the COVID-19 pandemic in the context of race-based stressors (e.g., anti-Black racism). Path analysis revealed mixed support for hypotheses; avoidant coping was positively related to all measured facets of psychological distress, whereas socially supported coping was associated with none. Self-sufficient coping was negatively associated with only depressive symptoms. Qualitative analysis revealed four salient themes: (a) Race and the COVID-19 Pandemic, (b) Complex Pandemic Related Changes to Life, (c) Emotional Responses to the Pandemic, and (d) Coping with the COVID Pandemic. These themes suggested the pandemic disrupted participants' ability to engage in, or effectively use, typically adaptive coping strategies and distress was exacerbated by fears for the safety of other Black U.S. Americans. Implications for training, practice, research, and advocacy are discussed.

Keywords: coping behavior, African American, depression, stress, trauma

Significance of the Scholarship to the Public
In the context of the collective traumas of institutional anti-Black-racism and the resulting disproportionate impact of COVID-19 on Black U.S. Americans' health, this group appears to experience difficult emotions and engage in self-distraction and remote forms of social connection (e.g., videoconference) to cope. Self-sufficient coping appeared most effective, whereas avoidant coping was associated with increased depressive, anxious, and stress symptoms.

Coping Matters: An Examination of Black Americans' Coping With the COVID-19 Pandemic

Coronavirus disease 2019 (COVID-19), caused by severe acute respiratory coronavirus 2 (SARS-CoV-2), was declared a global pandemic in January 2020 (World Health Organization, 2020) and represents a collective trauma experience impacting humans across the globe. Structural inequities in the United States heightened exposure to, and limited treatment for, SARS-CoV-2 and COVID-19 within Communities of Color (Kantamneni, 2020), resulting in higher rates of infection and death for Black U.S. Americans as compared to their White counterparts (Hamidianjahromi, 2020). Little is known about coping strategies and psychological distress among Black U.S. Americans during pandemics (Novacek et al., 2020), as most related studies have not centered Black U.S. Americans or considered the compounded trauma of systemic racism and health crises. Critical race theory (CRT) acknowledges the centrality of race and racism within power structures that center and maintain Whiteness, resulting in marginalizing effects for non-White communities. CRT also contends that the ordinary nature of systemic racism results in high exposure to racial discrimination and trauma in the daily lives of Black U.S. Americans (Crenshaw et al., 1995; Taylor, 1998), that is individual, intergenerational, and collective in nature (Comas-Díaz et al., 2019). Therefore, we used a CRT framework (Bell, 1995; Crenshaw et al., 1995; Kubota, 2013) and convergent mixed-methods design, in which qualitative and quantitative data were collected concurrently, analyzed independently, and then integrated. In this study, we sought to contribute to an emerging body of psychological literature specific to the COVID-19 pandemic by (a) examining the relationship between coping styles and psychological distress, if any, among Black U.S. Americans and (b) exploring what, if any, specific and/or unique emotions and coping strategies emerge at the intersection of pandemic-related stress and anti-Black racism.

Minority Stress and Collective Trauma

Collective trauma refers to a psychological reaction among a group of people to a traumatic event with a transformative impact on society (Somasundaram, 2014) and potential for negative psychological consequences. Given widespread social and economic consequences, the COVID-19 pandemic can be best understood as an enduring form of collective trauma (Masiero et al., 2020). Likewise, historically and concurrently with the pandemic, Black U.S. Americans have experienced collective trauma and adverse psychological consequences attributable to systemic racism (Comas-Díaz et al., 2019; Pieterse et al., 2012).

Thus, Black U.S. Americans experience *minority stress*, or distress occurring due to stigmatization rooted in conflict between dominant and minoritized group values (Meyer, 1995), and racial health disparities with specific regard to SARS-CoV-2 and COVID-19 represent a novel manifestation of racism-related social stress.

Black U.S. communities are at greater risk for adverse health consequences associated with SARS-CoV-2 and COVID-19 (Boyraz and Legros, 2020) due to pervasive systemic racism, particularly in healthcare. For example, fewer hospital beds and physicians in predominantly Black counties leave preexisting medical conditions untreated (Reed, 2020). Compared to their White counterparts, COVID-19 infection and mortality rates among Black U.S. Americans are higher (Pirtle, 2020; Raifman & Raifman, 2020) due to structural inequities, existing health disparities (Khunti et al., 2020), and overrepresentation in essential worker status (Rogers et al., 2020). The confluence of the COVID-19 pandemic and other collective traumas, without identifiable endpoints, that disproportionately impact minoritized communities (e.g., anti-Black racism, police violence, natural disasters associated with climate change; Silver et al., 2020) may exacerbate minority stress and, therefore, uniquely impact the psychological distress of Black individuals in the United States (Watson et al., 2020).

Psychological Distress and the COVID-19 Pandemic

Early in the COVID-19 pandemic, preliminary research documented heightened posttraumatic stress (Sun et al., 2020), anxious, and depressive (Robinson & Daly, 2020) symptoms in the United States and abroad. In Spring 2020, during the first wave of COVID-19 infection in the United States, U.S. Americans were three times more likely to screen positive for anxiety and depressive disorders compared to the same time frame in 2019 (Twenge & Joiner, 2020) and rates of psychological distress by state increased as COVID-19 cases increased (Holingue et al., 2020). Fear of COVID-19, in particular, may facilitate anxious and depressive symptoms, especially in geographic locations where COVID-19 infection rates are higher (Fitzpatrick et al., 2020) or perhaps among groups at higher risk of infection and death.

Collective trauma in the form of a public health crises presents considerable and disproportionate mental health challenges to Black U.S. Americans (Feist-Price & Wright, 2003; Whitehead et al., 2014). In addition to higher rates of infection and poorer outcomes (Fitzpatrick et al., 2004), Black U.S. Americans living with HIV/AIDS, for example, reported greater depressive and anxious symptoms than their non-Black counterparts (Felker-Kantor et al., 2019; Kong et al., 2012). With regard to the COVID-19 pandemic, though, on average, initial rates of psychological distress appeared to peak in March 2020 and return to baseline by June 2020, Daly & Robinson (2021) found Black participants did not evidence the same increase and/or decline in distress. In June 2020, Black U.S. Americans were more likely to think about their mental health often and seek counseling in response to the COVID-19 pandemic as compared to White participants (Newall & Machi, 2020). Perhaps a catalyst for this awareness and help-seeking, Cobb et al. (2021) found the health threat of COVID-19 in tandem with the expectation of racial discrimination in medical settings compounded psychological distress among Black adults. Although emerging scholarship suggests differential psychological outcomes among Black and White U.S.

Americans with regard to the COVID-19 pandemic, data is limited, results are mixed, and few studies have exclusively included Black participants or attended to the concurrent role of minority stress and coping with such stress.

Coping With Pandemic-Related Psychological Distress

Coping refers to strategies individuals employ to manage stressors within their environment (Lazarus & Folkman, 1984). Although individual coping strategies are related to psychological distress (Montero-Marin et al., 2014; Park et al., 2010), they are rarely used in isolation from other methods. Thus, individual adaptive and maladaptive coping strategies may be better understood when organized into conceptualizations of an approach coping style, implementing direct action to eliminate a stressor, and an avoidant coping style, taking direct action to avoid a stressor such as denial and substance use (Eisenberg et al., 2012; Taylor & Stanton, 2007). From this point of the manuscript, coping, coping strategies, and coping styles will be used interchangeably. Approach coping may be further organized into self-sufficient coping (individual efforts to cope with stressors such as planning or problem solving) and socially supported coping (collective efforts to cope with stressors such as seeking advice from others; see Litman, 2006). Although generally related to negative outcomes, including more stress (Chao, 2011), avoidant coping may offer short-term gains in mental health in some limited situations (Allman et al., 2009; Taylor & Stanton, 2007). Although mixed, findings on socially supported coping suggest positive associations with approach motivation and positive traits (Litman, 2006; Taylor & Stanton, 2007). Further, social support buffers the negative association between stress and well-being, whereas self-sufficient coping maintains the association (Chao, 2011).

Eurocentric conceptualizations of coping emphasize the individual and the environment. This often results in colorblind examinations of coping amongst Black U.S. Americans and little examination of culturally relevant coping, or coping informed by cultural context, which miss cultural preferences for collective coping (Kuo, 2011; Utsey et al., 2007). Coping studies conducted with Black U.S. Americans documented a cultural preference for collective coping (i.e., group-centered activities and social support; Utsey et al., 2007) and the use of religion or spirituality (Utsey et al., 2007; Ward et al., 2013). Black U.S. Americans also employ an array of context-dependent coping strategies. For example, although Black U.S. Americans may employ socially supported coping in response to general stressors and trauma (Ward et al., 2013), a mixture of self-sufficient and avoidant coping may be utilized in response to minority stress (Pearson et al., 2014). Of note, Black U.S. Americans may employ social support as a means of coping, specifically in response to human disasters (Ali et al., 2017; Lincoln et al., 2005).

Some studies of coping with minority stress among Black U.S. Americans found self-sufficient coping may portend increased levels of anxiety (Greer & Cavalhieri, 2019) and depression (Matthews et al., 2013). However, specific expressions of self-sufficient coping, such as problem-solving strategies (West et al., 2010) and persistent effort targeting mastery (Matthews et al., 2013), were associated with lower levels of depressive symptoms. Importantly, collective coping (Utsey et al., 2007) and coping that emphasized interconnectedness (Greer & Cavalhieri, 2019) was associated with a higher quality of life. In response to gendered racism among Black women, avoidant coping was found to be

associated with psychological distress (Szymanski & Lewis, 2016). Qualitatively, specific expressions of self-sufficient coping, such as positive health behaviors, socially supported coping, and spiritual and/ or religious practices, provided greater relief from stress related to racial discrimination and structural racism than negative health behaviors (i.e., smoking and alcohol use) among Black men (Hudson et al., 2016).

With regard to the COVID-19 pandemic, in Spain, avoiding the news, following a routine, spending time outdoors, and a healthy diet were associated with lower anxiety and depressive symptoms (Fullana et al., 2020). In the United States, Garfin (2020) suggested mindful technology use may be a helpful means of coping with the COVID-19 pandemic. Relatedly, Outley et al. (2020) suggested Black U.S. American participants used humor, often on social media platforms like Twitter, in response to stress and uncertainty associated with COVID-19. Notably, access to collective forms of religious coping, strategies commonly used in response to anti-Black racism, was limited in many places during the COVID-19 pandemic as local restrictions on large gatherings reduced physical access to churches (DeSouza et al., 2021). Generally, coping styles implemented in the United States and specifically by Black U.S. Americans, as well as the interconnection of those styles with pandemic-related psychological distress, remain understudied.

The Present Study

Using CRT (Bell, 1995; Crenshaw et al., 1995) as a lens, the present study examined the utility of coping styles for Black U.S. Americans' experience of pandemic-related collective trauma (Silver et al., 2020) and psychological distress, emphasizing resources and strengths in the context of associated exponentially higher risk and rates of COVID-19 infection and fatalities as compared to White U.S. Americans (Anyane-Yeboa et al., 2020; Laurencin & McClinton, 2020). Acknowledging the manner by which racial oppression shapes psychological distress (Volpe et al., 2019), qualitative inquiry was employed in the interest of challenging dominant narratives through counterstorytelling and embracing subjective perspectives (DeCuir-Gunby, 2020). Although quantitative data can provide breadth and elucidate the relationships, if any, between these variables, it cannot capture depth, the nuances of these relationships, specifics of how coping strategies are enacted, sources of pandemic-related psychological distress, or the connection between minority stress (e.g., COVID-19 pandemic, racism) and these variables. Driven by the broad research question, "How, if at all, are Black U.S. Americans coping with the COVID-19 pandemic?," we employed a parallel mixed-methods approach such that qualitative data could help tell a more complete story and enhance the accuracy of our interpretations of quantitative findings (Creswell & Plano Clark, 2017). The integration of CRT and mixed methodology is a particularly cogent approach given the complexity of studying race-related inequity, as it provides the opportunity to gather and analyze multiple sources of data (DeCuir-Gunby, 2020). With regard to our study, it was hypothesized that (a) self-sufficient coping would be negatively associated with psychological distress (anxiety, depression, and stress), (b) socially supported coping styles would be negatively associated with psychological distress, and (c) avoidant coping would be positively associated with psychological distress for Black U.S. American participants.

Method

We utilized a parallel, convergent mixed-methods design in which quantitative and qualitative data were collected concurrently, analyzed independently, and later merged (Creswell & Plano Clark, 2017). The design was informed by an acknowledgment of the complex nature of structural power that creates minority stress (Meyer, 1995) and the related benefit of qualitative data to help illustrate our quantitative findings. Additionally, the convergent design allowed us to gather multiple forms of data from the same participants and collect data quickly, as it was important to the validity of our data to receive responses within a limited time frame (Creswell & Plano Clark, 2017) given the rapidly changing local and national policies, trends, and risks of infection during the COVID-19 pandemic.

Participants

A total of 198 Black U.S. Americans were recruited through snowball sampling via social media (i.e., online groups and discussion boards with primarily Black U.S. American members or participants) between May and October 2020. Participants who discontinued participation during or after completing the demographics questionnaire were excluded from the study, resulting in a final sample of 155 individuals (Mage = 39.84, SD = 11.63). Participants identified as women (85.8%), men (11.6%), trans man (0.6%), and trans woman (0.6%), and two participants (1.3%) declined to disclose their gender identity. The majority of participants reported a single racial and ethnic identification: Black (44.5%), African American (12.9%), or Afro-Caribbean (3.2%), while biracial or multiracial identification (39.4%) represented identities including White, Latinx, Samoan, or as both Black and African American. Few participants (3.9%) reported having been diagnosed with COVID-19. A more detailed review of the sample's sociodemographic profile is available in Table 1.

Table 1. Participant's Sociodemographic Characteristics

Characteristic	*n*	%
Gender Identity		
Woman	133	85.8
Man	18	11.6
Trans Woman	1	0.6
Trans Man	1	0.6
Not Disclosed	2	1.3
Impairment		
No Impairment	133	85.8
Mental Health	7	4.5
Mobility/Sensory	5	3.2
Learning	4	2.6
Other	6	3.9
Education		
High School/GED	1	0.6
Some College	8	5.2
Bachelor's Degree	17	11.0
Some Graduate Training	12	7.7
Graduate Degree	117	75.5

Table 1, continued next page

Table 1. *Continued*

Characteristic	*n*	%
Belief and Non-Belief		
Christianity	122	78.7
Islam	3	1.9
Atheism	2	1.3
Agnosticism	1	0.6
No Religion	18	11.6
Other	5	3.2
Not Disclosed	4	2.6
COVID-19 Diagnosis		
No	149	96.1
Yes	6	3.9
Race and Ethnicity		
Black	69	44.5
African American	20	12.9
Afro-Caribbean	5	3.2
Black and African American	49	31.6
Biracial	8	5.2
Multiracial	4	2.6
Sexual Orientation		
Heterosexual	134	86.5
Gay/lesbian	5	3.2
Bisexual	11	7.1
Pansexual	1	0.6
Asexual	2	1.3
Not disclosed	2	1.3
Annual Income		
Dependent	4	2.6
19,000 and below	4	2.6
20,000–32,000	17	11.0
33,000–100,000	97	62.6
101,000 and above	32	20.6
Not disclosed	1	0.6
U.S. Region		
South	109	70.3
Midwest	18	11.6
West	17	11.0
Northeast	10	6.5
U.S. Territory	1	0.6

Data Collection

Quantitative Data Collection

Participants accessed a hyperlink that directed them to an online survey platform (i.e., Qualtrics). Participants who identified as Black and/or African American adults currently residing in the United States were invited to complete a demographics survey followed by two randomized measures, the Brief COPE Inventory (B-COPE; Carver, 1997) and the Depressive Anxiety Stress Scale (DASS; Lovibond and Lovibond, 1995).

Coping

Coping was assessed through the B-COPE (Carver, 1997). The 28-item self-report scale assesses the frequency with which participants engaged in efforts meant to minimize distress. Items include: "I've been concentrating my efforts on doing something about the situation I'm in," "I've been getting emotional support from others," and "I'm saying to myself 'this isn't real.'" Participants' responses were connected to the COVID-19 pandemic, with the following language excerpted from the administration instructions: "These items deal with ways you have been coping with the stress in your life since the COVID-19 pandemic. There are many ways to deal with problems. These items ask what you've been doing to cope with this one. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with the COVID-19 pandemic." Items were rated on a 4-point Likert-type scale from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*).

In two samples of trauma-exposed women, Wang et al. (2018) found support for a three-factor structure of the B-COPE with reported fit statistics including: $\chi^2(62) = 91.80$, CFI = .99, RMSEA = .052, SRMR = .067. The three factors were conceptualized as self-sufficient coping (active coping, positive reframing, planning, humor, acceptance; α = .89 and .91), socially supported coping (emotional support, instrumental support, venting, religion; α = .81 and .86), and avoidant coping (self-distraction, denial, behavior disengagement, self-blame; α = .69 and .69) styles. A similar three-factor structure was found by Peters et al. (2020) in a sample of African American women, with internal consistency estimates ranging from .74 to .89. Pursuant to this conceptualization, the researchers created subscale total scores by summing the dimensionally associated ways of coping. In this sample, estimates of subscale internal reliability and descriptive statistics were avoidant coping (α = .65, M = 14.11, SD = 3.58), self-sufficient coping (α = .78, M = 27.07, SD = 5.57), and socially supported coping (α = .78, M = 19.76, SD = 5.08).

Psychological Distress.

Psychological distress was conceptualized as depressive, anxiety, and stress symptoms and assessed via the DASS-21 (Lovibond & Lovibond, 1995). The DASS-21 contains 21 self-report items (7-items per subscale), including: "I couldn't seem to experience any positive feelings at all" (depression), "I experienced trembling (e.g., in the hands)" (anxiety), and "I tended to overreact to situations" (stress). Participants indicated the frequency with which they experience each statement, with ratings ranging from 0 (did not apply to me at all) to 3 (applied to me very much, or much of the time). High scores on the measure suggest greater frequency of depressive, anxiety, and stress symptoms, whereas low scores suggest lower frequency of these symptoms. In this sample, the following internal reliability coefficients and descriptive statistics were observed: depression (α = .82, M= 3.80, SD = 3.60), anxiety (α = .79, M= 3.08, SD = 3.55), and stress (α = .83, M = 5.86, SD = 4.07).

Qualitative Data Collection

Accessed at the end of the same survey that collected quantitative survey responses, participants were invited to respond to three overlapping questions designed to qualitatively explore the constructs about which they were surveyed (i.e., psychological distress,

coping): "During the COVID-19 pandemic, how has your daily life changed?," "How do you feel about the impact of COVID-19 in Black communities?," and "During the COVID-19 pandemic, what strategies have you used and found helpful in managing any difficulties you have faced?" Questions were designed with our variables of interest (psychological distress [i.e., anxiety, stress, and depression] and coping styles) and the CRT framework in mind, such that they were open-ended, allowing for broad and descriptive responses, and prompted discussion of the structural powers that inform lived experience (Guenther, 2019). Participants' responses were not restricted with regard to word count and all responses were retained in the interest of allowing for rich and layered answers. Of the 155 sample participants, 154 responded to the first free response question, 151 to the second, and 150 to the third question. Other data sources included field notes by the authors during initial reading of the transcripts and dialogue between Caitlin M. Mercier and Dena M. Abbott during later stages of data analysis and interpretation.

Data Analysis

Quantitative Data Analysis

The data were evaluated for multivariate and univariate normality. Bivariate correlations were generated for all variables using pairwise deletion to account for missing data and to provide some exploration of the potential for multicollinearity. Hypotheses were tested via path analysis using the statistical platform R (R Core Team, 2020). Initial scale and data evaluation incorporated the MVN (Korkmaz et al., 2014), psych (Revelle, 2020), pastecs (Grosjean & Ibanez, 2018), and boot (Canty & Ripley, 2020) packages. Data estimation and model analyses were conducted using the lavaan package (Rosseel, 2012). Michael S. Ternes was primarily responsible for the analysis of quantitative data and identifies as a White, cisgender man, counseling psychologist, and pretenure university faculty member.

Qualitative Data Analysis

As racism, including anti-Black racism, is endemic in the United States and White supremacy disadvantages non-White racial groups (Kubota, 2013), it is impossible to seek knowledge related to Black U.S. Americans' experiences of the COVID-19 pandemic without acknowledgment of the profound ways in which systemic oppression intersects with health and health care to create disparities by race (Pirtle, 2020). Further, we sought to centralize race via the often absent voices and stories of Black U.S. Americans (Donnor & Ladson-Billings, 2018) in the discussion of coping and psychological distress related to the pandemic in the interest of eliciting counter-storytelling with implications for systemic change (Kubota, 2013; Taylor, 1998).

Although the use of a questionnaire variant of the convergent design, in which open-ended questions were included as a component of a self-report survey, resulted in a less context-based dataset than traditional qualitative methodology (Creswell & Plano Clark, 2017), consistent with CRT, the researchers employed a critical phenomenological approach that sought to honor the historical and social structures that shaped participants' experiences (Crenshaw et al., 1995; Guenther, 2019). C. M. Mercier and D. M. Abbott were responsible for the analysis of qualitative data. C. M. Mercier is a Black-identified

cisgender woman and doctoral candidate in counseling psychology; D. M. Abbott is a White-identified cisgender woman, counseling psychologist, and pretenure university faculty member. Both authors previously conducted qualitative studies using a critical phenomenological framework to center experiences of historically marginalized groups, including People of Color. They engaged in memoing, journaling, and regular discussions throughout the process of data analysis to reflect on the manner by which their experiences, particularly those that were racialized, might influence interpretation.

Qualitative responses to each of the three questions were coded using NVivo vol. 12, a qualitative data analysis software. D. M. Abbott engaged in a thorough initial reading of all responses, engaging in "deep listening," attending specifically to the ways in which personal stories may have impeded their ability to hear the participant, and returning to a second-person perspective, as necessary (Churchill, 2018). D. M. Abbott then coded all responses by units of meaning, after which only those units of meaning relevant to the research question were retained. C. M. Mercier served as independent verifier of D. M. Abbott's determinations. When discrepancies between authors' coding arose, the authors collaboratively modified the codebook until they were in agreement. C. M. Mercier and D. M. Abbott then identified redundant units of meaning and clustered similar units of meaning within themes as appropriate and using the number of times a unit was coded across participants to guide the process (Hycner, 1985). A peer debriefer, not associated with the project but familiar with the area of study, then reviewed participant responses and the authors' themes (Morrow, 2005) and agreed with the authors' interpretation of the data.

Integration Phase

Following these independent analyses, D. M. Abbott engaged in an integration, or merging, phase, in the interest of expanding interpretation of the strength and nature of the relationships explored (Fetters et al., 2013). Specifically, she identified topics represented in both sets of results, mapping themes onto the final quantitative model and synthesizing findings. In addition to areas of convergence, particular attention was paid to divergence in the results (Hanson et al., 2005; Hesse-Biber, 2010) and opportunities for the qualitative responses to offer potential explanations for relationships observed in our quantitative model.

Results

Quantitative Results

Participants missing 20% or more of survey data were excluded from quantitative analysis, reducing the sample to 141 participants. Prior to the primary analysis, variables were evaluated for multivariate and univariate normality. Mardia skewness (180.21, $p < .001$) and Mardia kurtosis (4.40, $p < .001$) suggested that the data were non-normal. Shapiro-Wilk tests evaluated the univariate normality of each and indicated that avoidant coping ($W = .95$, $p < .001$), stress ($W = .95$, $p < .001$), depression ($W = .86$, $p < .001$), and anxiety ($W = .81$, $p < .001$) were non-normal, while self-sufficient coping ($W = .99$, $p > .05$) and socially supported coping ($W = .99$, $p > .05$) evidenced normality. Bivariate relationships were examined with

pairwise exclusion implemented for missing data. Accounting for non-normality, correlations were bootstrapped and presented with 95% bias corrected and accelerated confidence intervals. These figures, along with ranges, means, and standard deviations are presented in Table 2.

Table 2. Bootstrapped Correlations with Confidence Intervals, Ranges, Means, and Standard Deviations

Measure	1	2	3	4	5	6
1. Avoidance	—					
2. Self-Sufficient	.32* [.15, .46]	—				
3. Social Support	.30* [.10, .45]	.55* [.40, .67]	—			
4. Stress	.55* [.42, .65]	.11 [–.07, .28]	.26* [.08, .42]	—		
5. Depression	.61* [.48, .71]	–.05 [–.21, .09]	.08 [–.10, .27]	.72* [.60, .79]	—	
6. Anxiety	.48* [.34, .60]	.17 [–.01, .33]	.20* [.02, .36]	.72* [.63, .79]	.66* [.52, .76]	—
Possible range	8–32	10–40	8–32	0–21	0–21	0–21
M	14.11	27.07	19.76	5.86	3.80	3.08
SD	3.58	5.57	5.08	4.07	3.60	3.55

Note: Confidence intervals are 95% bias-corrected and accelerated intervals; Avoidance, Self-Sufficient, and Social Support are the subscales of the Brief COPE; Stress, Depression, and Anxiety are the subscales of the Depressive Anxiety Stress Scale.
*$p < .05$

Little's test of missing completely at random revealed eight patterns of missingness, with percentages of missingness ranging from 1.4% to 3.5% and an overall missingness of 2.2%. Little's test indicated that patterns of missingness were consistent with MCAR data ($\chi^2(29) = 40.917$, $p > .05$). For the primary analysis, a saturated model was created to simultaneously explore the hypothesized relationships between the three coping styles identified by Wang et al. (2018) and psychological distress (i.e., stress, anxiety, and depression). Covariances among coping styles and among psychological distress were also modeled. To account for missing data, full-information maximum likelihood (FIML) was used for case-wise estimation (Schlomer et al., 2010). To correct for any impact of the observed non-normality, robust maximum likelihood estimation was implemented (Curran et al., 1996).

As the initial model was just-identified, fit statistics were not interpreted. Modeled predictors of depression, self-sufficient coping ($\beta = –.275$, $p < .001$) and avoidant coping ($\beta = .695$, $p < .001$), were significantly associated. Contrary to expectations, socially supported coping ($\beta = .058$, $p > .05$) was not significantly associated with depression. Evaluation of the predictors of anxiety indicated a significant association with avoidant coping ($\beta = .445$, $p < .001$). Contrary to expectations, non-significant associations with self-sufficient coping ($\beta = –.018$, $p > .05$) and socially supported coping ($\beta = .080$, $p > .05$) were observed. Finally, predictors of stress, socially supported coping ($\beta = .196$, $p < .05$), and avoidant coping ($\beta = .538$, $p = .001$)

were significantly associated. Contrary to expectations, self-sufficient coping (β = –.151, $p > .05$) was not significantly associated with stress.

A more parsimonious, over-identified model ($df = 4$) was then created (see Figure 1). To accomplish this, only statistically significant relationships from the first model were retained. As with the first model analysis, FIMLwas used to address missing data, while robust maximum likelihood estimation was implemented to address concerns of non-normality. Robust estimates for indices of comparative fit (Compartive Fit Index (CFI)) and model parsimony (Root-Mean-Square Error of Approximation (RMSEA)), as well as an alternative index of absolute fit (Standardized Root-Mean-Square Residual (SRMR)), were calculated and reported in an attempt to verify the findings of the Chi-square test, which can be biased by limited sample size. Good fit cutoff values for these fitmetrics were: CFI > .950, RMSEA < .06, and SRMR< .08 (Hu&Bentler, 1999). This final model evidenced excellent fit, $\chi^2(4) = 4.610$, $p = .330$, CFI = .998, RMSEA = .033 [.000, .128], SRMR = .023.

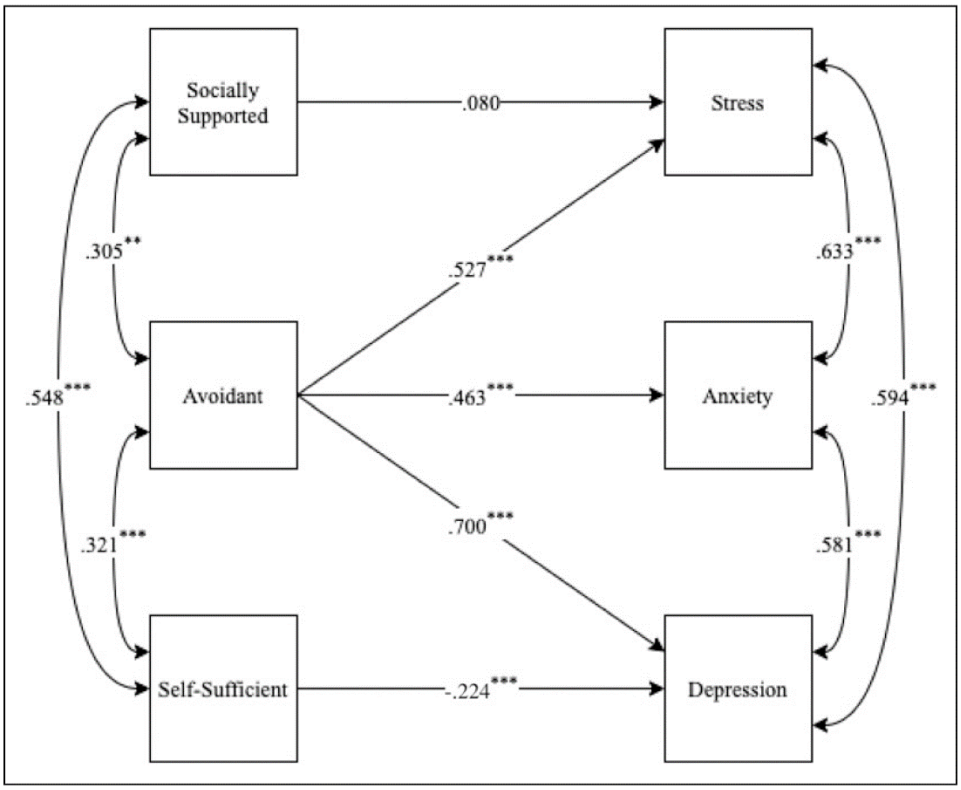

Figure 1. Final over-identified path model.

Note: $n = 141$. This figure displays standardized regression coefficients. Avoidant, Self-Sufficient, and Socially Supported as measured by the Brief COPE. Stress, Anxiety, and Depression as measured by the DASS-21. $\chi^2(4) = 4.610$, $p = .330$, CFI = .998, RMSEA = .033 [.000, .128], CFit = .515, SRMR = .023. *$p < .05$. **$p < .01$. ***$p < .001$.

Fully supporting hypothesis three, the final model displayed significant, moderate to strong positive associations between avoidant coping and all markers of mental health, such that higher levels of avoidant coping were related to higher levels of stress ($\beta = .527$, $p < .001$), anxiety ($\beta = .463$, $p < .001$), and depression ($\beta = .700$, $p < .001$). Partially supporting hypothesis one, the retained association between self-sufficient coping and depression evidenced a significant, small, negative relationship. Higher levels of self-sufficient coping were associated with lower levels of depression ($\beta = -.224$, $p < .001$). Failing to support hypothesis two, the retained association between socially supported coping and stress evidenced a nonsignificant relationship. The level of socially supported coping was not related to the level of stress ($\beta = .080$, $p > .05$).

Qualitative Results

Several broad themes related to the experience of our participants during the COVID-19 pandemic emerged from the data and are presented in the following order: (a) Race and the COVID-19 Pandemic, (b) Complex Pandemic-Related Changes to Life, (c) Emotional Responses to the Pandemic, and (d) Coping with the COVID-19 Pandemic. The total number of responses or codes are reported, rather than the number of participants.

Race and the COVID-19 Pandemic

Many responses ($n = 91$) described knowledge of existing health disparities for Black Americans compared to White Americans. Several participants discussed how the COVID-19 pandemic "disproportionately affected" Black U.S. Americans and "exacerbated" existing health disparities. Perceived reasons for the occurrence of such disparities included employment ($n = 5$) and structural inequalities ($n = 24$), such as "lack of testing" and "living conditions." One participant noted that Black U.S.Americans could "not afford to stay home" and that their jobs were "essential." Another noted "institutional racism, lower socioeconomic status, and poorer health access" as variables that heightened infection rates among Black U.S. Americans. Thus, participants were keenly aware of the ways in which the COVID-19 pandemic mirrored other public health crises and was negatively influenced by racist policies.

Multiple responses ($n = 21$) indicated participants were, therefore, "not surprised" by the disparities in COVID-19–related health outcomes for Black Americans. One participant expressed that "it seem[ed] most health issues hit the Black community harder." Some responses ($n = 14$) identified pandemic-related trauma and discussed its relationship to other forms of racial trauma and implications for mental health with which Black U.S. Americans must cope. Specifically, one participant noted that "given the racial tensions rising across the country I see a hugely compounded issue surrounding mental health in the Black community." Additionally, there were explicit references ($n = 2$) to "police brutality" as a growing stressor among the Black community that is compounded by the pandemic. Another participant referenced the pandemic as "one more daily battle that we didn't need to have as Black people in this country." Other participants noted that pandemic-related trauma heightened their personal concerns about the health and safety of the Black community and expressed concern about the "plight of our [Black] people." Thus, per our participants, health disparities and stress associated with the COVID-19 pandemic were not unexpected

but contributed nonetheless to cumulative stress and trauma experienced by Black U.S. Americans.

Complex Pandemic-Related Changes to Life

Participants described many changes to daily life, some positive or neutral, but most of which were difficult. Some individuals (n = 48) reported benefits of the pandemic, including more "time" and "rest," as well as increased productivity and greater focus on their responsibilities and businesses. Other participants described engagement in healthier behaviors, with one participant calling the pandemic an "advantage" that provided the "opportunity to slow down." Other participants (n = 15) described a focus on cooking and eating healthy foods, which provided benefits to "finances and . . . health." A few participants (n = 11) discussed increased flexibility as a benefit to the pandemic; for example, one participant stated that the pandemic "offered a time to readjust my eating, lifestyle, and work habits." More often, responses described relatively neutral changes to life, including increased online activity via "social media," "Facetime," and "Zoom" (n = 48), as well as other online activities such as remote work (n = 71). A handful of answers described "drastic" changes (n = 12) associated with the pandemic, with one participant stating that "COVID-19 changed the way [they] work[ed], interacted with people, and how [they] viewed life."

The most frequent changes due to the pandemic represented challenges (n = 187). A substantial number of responses (n = 44) identified reduced social connection as a challenge to the pandemic, with participants endorsing "no social life" and "less social engagement." One participant reported, "I have a daughter who is a recent college graduate who is away from us. I haven't seen her in person since Thanksgiving 2019 and I miss her a lot." Stories also often described work-related challenges (n = 43) associated with the pandemic, including changes to the nature of their work, with increased workload and hours (n =15). One participant reported, "I went from a 40-hour work week to 60-plus." A handful of responses (n = 6) identified respondents' work as "essential," incompatible with work from home, and acknowledged that the "majority of essential workers are minorities." Another work-related challenge was lower income (28 responses) due to "not working" or reduced hours resulting in "decreased income" and "financial strain."

Other responses (n = 35) described the COVID-19 pandemic as an inconvenience associated with "less outdoor activity," "not going to church," and the closure of frequented establishments. Parents described related increased responsibilities and childcare at home (24 responses). Some disclosed health consequences (n = 22), with many describing physical health concerns, such as "eating too much," "blood pressure," "even more limited physical activity," "irregular sleep," and "more frequent headaches." Thus, the changes to daily life due to the COVID-19 pandemic were many and varied, representing both challenges to navigate and benefits.

Emotional Responses to the Pandemic

Responses described a range of emotions related to the COVID-19 pandemic, most of which (n = 192) were difficult in nature. For example, some participants noted that their "mental health [had] suffered" referring specifically to feeling "depressed" or sad (90

responses); others identified related feelings, including grief (8 responses) and loneliness (21 responses). These feelings were in response to the pandemic, generally, but also to the disproportionate impact of the pandemic on Black U.S. Americans. One participant identified grief related to the "number of deaths" due to COVID-19 in the Black community and the "inability to grieve in the ways we [Black people] used to." Several participants noted the combined stress of death of loved ones and the danger of, and associated restrictions on, gathering for a traditional funeral service. Others described themselves as "helpless," "disheartened" with the pandemic's "toll on their community," or "disappointed in [the] government's response" to the needs of Black communities during the pandemic. Feelings of anger and frustration (n = 35) too, were primarily related to perceived indifference to the impact of COVID-19 on Black U.S. Americans by Black peers, non-Black U.S. Americans, and people in positions of power and authority. A notable stressor contributing to these difficult feelings was the reduced opportunity to engage with other Black people. One participant summarized:

> I believe all communities were unprepared for the effects of COVID-19, however, I believe as Black people, we tend to be more social around our family and family events and the limited . . . ability to participate in these events has created sadness, surprise, and frustration.

Thus, the potential for participation in Black U.S. Americans' preferred methods of obtaining social support appeared limited among this sample and related to difficult emotions like anger and depressive symptoms.

The other predominant group of emotions identified by participants were related to "anxiety" and "fear" (n = 67). Some descriptions of fear included being "afraid to leave home," "scared of the virus," and "afraid to send [their] kids to school." These fears were related to changes in behavior (e.g., working remotely, staying at home) as well as some behaviors more explicitly hypervigilant in nature (n = 18), although this increased awareness of one's environment was appropriate to the nature of the pandemic's threat. One participant noted they "slathered [themself] in hand sanitizer and change[d] clothes and shower[ed] when [they] return[ed] home." Another participant described "disinfect[ing] everything that entered [their] house" for a few months. Therefore, these fears about contracting the virus and associated changes to daily life were generally proportionate to the threat but nonetheless intrusive and pervasive among participants. Anxiety was also related to "concern about the [health] disparities faced by Black communities" and, specifically, "COVID killing Black families." Participants described "worry" and "stress" related to their own, their family members', and the Black community's vulnerability to the virus. One participant said they were "petrified that [they would] transmit the virus to [their family] or be incapacitated . . . and be a burden to [their family] if [they were] sick or in the hospital" or dead. Participants, therefore, described fear and anxiety related to COVID-19 that seemed to be exacerbated by their own and their loved one's susceptibility and increased risk of death.

Coping with the COVID-19 Pandemic

Participants reported engaging in a broad range of coping strategies that were predominantly modified versions of their preferred prepandemic coping or chosen for their suitability to living with COVID-19 restrictions in daily life. The most frequently endorsed coping strategy was social connection (n = 75), although more often facilitated through phone calls and virtually through videoconferencing than prior to the pandemic. In some cases, a sense of connectedness was sought within the home or close relationships. For example, one participant said, "Right now, our family unit has become the top priority and we all work hard to stay connected and present with each other." More often, participants described intentional efforts to engage with family members and friends outside of their homes, as they were "craving intimacy." In lieu of social engagement, another commonly endorsed method of coping was engaging in other activities that served as a distraction from the pandemic (47 responses). Many participants reported using cooking, reading, listening to music, and gardening to cope with the pandemic. Another 54 responses identified increased exercise, particularly physical activity that took place outdoors, as a predominant coping strategy. Therefore, participants appeared to be engaged in measures to attempt to ameliorate, or perhaps avoid, distress associated with the COVID-19 pandemic and associated changes to daily life.

Participants also identified coping by protecting themselves and, in particular, others from the virus. Responses identified a variety of methods by which they took precautions against contracting or spreading COVID-19, the most common of which were limiting their interactions (n = 41) and "staying in the house" (n = 38). One participant noted they planned their "outings to meet the fewest amount of people and [made their] trips quick and targeted." In 35 responses, participants explicitly referenced their responsibility to keep others safe, particularly older and potentially vulnerable family members. For example, one participant moved home "to be closer to [their] mother" during the pandemic, another "increased phone conversations with [their] grandma who live[d] alone," and another helped "other family financially that had lost their jobs." In the context of these steps to keep others safe, 35 responses expressed acknowledgment of and frustration with participants' perception of others' "not taking [the pandemic] seriously and jeopardizing others." Some participants directed this frustration toward the absence of a national "coordinated effort to provide more support to people in vulnerable communities" and one noted that White people began to perceive the virus as "Black people's virus . . . and really stopped caring." Thus, in the context of a history of racial health disparities, insufficient support for Black communities with regard to national health crises, and current COVID-19 infection and fatality rates among Black U.S. Americans, one important source of coping appears to be caring for and protecting oneself and other members of the Black community.

Responses (n = 43) also endorsed personal religious or spiritual practices as a form of coping. Many participants identified independent prayer and meditation as coping strategies. Less common, some described social aspects of their religious practice, such as "streaming mass" or "connecting (virtually) to a church community." Although not directly tied to belief in a deity or spiritual beliefs, 35 responses alluded to similar independent endeavors that facilitated personal growth, including "journaling," "reflection," and engaging regularly in psychotherapy. Nine responses specifically identified their Black

identity and/or resources provided by Black peers as coping mechanisms. For example, participants described reading Black authors' works, "implement[ing] positive changes" in the Black community, and "listening to podcasts of people like [them]." One participant noted that the challenge of the pandemic "improved pride in [their] ethnicity and boldness in speaking up." Although varied in method, participants engaged in growth-fostering behaviors, some existing and some catalyzed by the COVID-19 pandemic.

Integration Stage

Qualitatively, participants described a variety of emotional responses to the pandemic, the most common of which were associated with psychological distress. Although average stress scores among participants were higher than depression and anxiety scores via the survey measure, depressive (n =127) and anxious (n = 85) symptoms were the most frequently endorsed emotions in free responses, followed by anger (n = 63). Notably, relatively few positive emotions (e.g., "peaceful," "calm," "curious") were reported, although some participants did refer to a generally more positive outlook about life resulting from the experience of the pandemic. Consistent with prior studies of coping among Black U.S. Americans, this sample described religion and spirituality, one form of socially supported coping, as strategies they employed; however, given the manner by which COVID-19 guidelines and restrictions on gatherings reduced engagement with faith communities (e.g., church attendance, prayer groups), they did so in a much more individual manner.

Relatedly, there was no significant relationship between socially supported coping and depression in our analyses. However, in qualitative responses, participants associated loss of social connection with their depressive symptoms. Notably, higher use of socially supported coping, generally considered adaptive, was associated with higher reported anxious symptoms. Given the fears participants described related to infection of self and others, perhaps engagement in socially supported coping was in-person and they, in turn, felt more anxious about potential risk of COVID-19 transmission. Alternatively, engagement with others, even when remote in nature, might have exposed participants to stories of others' COVID-19 diagnoses and/or other pandemic-related challenges, thus increasing participants' anxiety.

Use of self-sufficient coping was related to lower depressive symptoms, although not anxiety or stress, in our model. However, again, qualitatively, very few participants described coping that might be categorized as self-sufficient. The most notable examples (15 responses) were of restructuring schedules and daily routines to create variation in the day or "keep it simple" and reduce "expectations"; in other words, some participants reported planning. The strongest relationships demonstrated in our model were between avoidant coping and all three dimensions of psychological distress. In response to open-ended questions, participants endorsed "escap[ing] reality" and other means of avoidance in five responses. An additional five responses explicitly stated they were using no coping strategies at all. But, more often, many responses described coping strategies that could be categorized as self-distraction (e.g., gardening, listening to music, exercise). Thus, some participants may have engaged in coping strategies that would not typically be considered maladaptive but nonetheless were associated with distress as they facilitated avoidance.

Discussion

Using CRT framework, the present study examined the associations between coping styles and psychological distress among Black U.S. Americans during the COVID-19 pandemic in the context of minority stress and collective trauma. Consistent with expectations, avoidant coping was associated with higher levels of depressive, anxious, and stress symptoms, and self-sufficient coping was related to lower levels of depressive symptoms. Unexpectedly, self-sufficient coping was not related to anxious or stress symptoms, and socially supported coping was not related to any measure of psychological distress. Participants described reactions to the complex manifestations of racism and collective trauma during the COVID-19 pandemic, noting their awareness and fear of the disproportionate impact of COVID-19 on Black U.S. Americans. They described associated sadness, as well as grief, for personal and collective losses of life and described coping with changes to their daily lives and these difficult emotions using distraction, measures to protect themselves and others from infection, activities aimed at personal growth, and alternative means of social connection as compared to prior to the onset of the pandemic.

Integration with Previous Research

Although prior research suggested both the importance and usefulness of socially supported coping for Black U.S. Americans in response to minority stress (Greer & Cavalhieri, 2019; Utsey et al., 2007; Ward et al., 2013), as well as human disasters and trauma (Ali et al., 2017; Lincoln et al., 2005), the absence of a relationship between socially supported coping and psychological distress in the present study may be related to the unique circumstances of the COVID-19 pandemic (e.g., limited social contact and connection due to physical distancing guidelines, closure of buildings of worship). Participants simultaneously reported markedly reduced social connection as well as increased attempts at facilitating connection with others via the internet. Thus, these few, online social interactions in which participants engaged may be more difficult to obtain or less useful than the social support that occurs organically in group-centered, collective coping activities that are generally preferred among Black U.S. Americans (Utsey et al., 2007). Our findings extend the broad findings around online social interactions, such that these may be less helpful than offline interactions (Trepte et al., 2015; Utz & Breuer, 2017).

Some coping strategies endorsed by participants in this study may offer perceived relief in the short-term (e.g., cooking, reading, listening to music), but could, long-term, facilitate distraction from overcoming the difficulties of the pandemic directly; thus, representing an avoidant coping style and generating associated outcomes consistent with that coping style (Allman et al., 2009; Taylor & Stanton, 2007). These findings extend previous findings around the implementation of avoidant coping styles (Chao, 2011; Main et al., 2011; Taylor & Stanton, 2007), particularly amongst Black U.S. Americans and in the context of minority stress. Although it may exacerbate psychological distress, avoidant coping may be adaptive among Black U.S. Americans to manage effects of circumstances unable to be directly addressed (e.g., systemic racism; Szymanski & Lewis, 2016; West et al., 2010). Thus, another interpretation of our findings may be that avoidant coping and distress are related

such that participants were employing the best or most accessible strategies (e.g., distraction) in response to structural problems associated with racial injustice.

Somewhat consistent with previous literature, self-sufficient coping was related to lower levels of depressive symptoms (Allman et al., 2009). In this study, participants engaged in sanitation practices, scheduling, limiting social engagements, and a heightened awareness of the possibilities for contracting and transmitting illness, all of which could be consistent with active coping and planning associated with self-sufficient coping (Litman, 2006). Self-sufficient coping may be reflective of underlying personal control and mastery over a given circumstance, which has been shown to relate to more positive mental and physical health (Taylor & Stanton, 2007). Contrary to previous literature, self-sufficient coping was not significantly associated with symptoms of anxiety or stress; however, in combination with the lack of significant associations between socially supported coping and psychological distress, this could be consistent with previous speculation that approach-oriented coping is most effective when implemented in situations that are amenable to change (Taylor & Stanton, 2007), a dynamic inconsistent with that of COVID-19 and the systemic racism driving inequities in Black U.S. Americans' rates of infection and death. An interpretation of this finding may be how systemic racism within the COVID-19 pandemic limits access to collective coping strategies for Black U.S. Americans, resulting in employment of accessible and individualist coping strategies to protect themselves from the effects of systemic racism. Although these coping strategies are accessible and provide some protection, they promote conformity to and reinforce individualism, a value consistent with Whiteness and White Supremacy amongst Black U.S. Americans.

Limitations

The manner by which we asked open-ended questions and our inability to follow up with participants regarding their responses influenced the qualitative responses we received. For example, although we asked participants to tell us about the ways in which they were coping with the pandemic, we did not specifically ask them to identify less adaptive strategies. Participants may have been less inclined to share the unhealthy behaviors (e.g., substance use, self-blame) they were utilizing. Further, we acknowledge the sociopolitical climate and context may have influenced the qualitative and quantitative responses we received. Concurrent to our data collection, participants may have been influenced by their personal and the nationwide response to the murder of George Floyd by a police officer and continued violence against Black bodies. We did not specifically ask them to identify how such events impacted their coping and psychological distress. Additionally, our sample was highly educated, potentially indicating higher income levels, and primarily comprised of Black women; therefore, findings may not be generalizable to individuals with fewer resources (Brantley et al., 2002) or Black people of other genders (Ward et al., 2013). Future exploration should attempt to gather more representation from other gender identities to further elucidate employed coping strategies. Furthermore, the social dynamics created by COVID-19 represent significant alterations to daily life, as detailed by this study's participants. The lack of coping research in this climate makes it hard to fully understand how these findings may be representative of deviations and consistencies with past literature, as well as predictive of coping and outcomes in a post-COVID-19 future.

Implications for Practice, Advocacy, and Education/Training

Based on the study's findings and recommendations from scholars, we encourage trainers to include community-level interventions for collective traumas within training. Specifically, training programs should include community-level interventions (e.g., outreach and collaboration) to promote well-being and resilience within communities (Bowman & Roysircar, 2011; Inman et al., 2019). Given the aforementioned impact of collective trauma, community-level interventions could focus on psychoeducation to facilitate understanding of the various forms of coping with collective trauma within the community (Somasundaram, 2014). Further, community-level interventions could include psychological treatment interventions (i.e., psychological first aid) to increase community resources (Mukhtar, 2020). It is imperative that mental health professionals cultivate an awareness of the manner in which anti-Black racism influences Black clients' experiences of the COVID-19 pandemic and, potentially, other collective traumas. Critically, clinicians must intentionally incorporate race-conscious interventions that foster healing from ongoing anti-Black individuals and collective traumas, attend to the unique needs of Black clients, and identify individual and collective coping strategies (Mosley et al., 2021; Novacek et al., 2020). For distress related to the pandemic, it may be most effective to assist Black clients in reducing the use of avoidant coping strategies. Self-sufficient strategies including humor, acceptance, and planning, particularly plans to keep self and others safe, may be useful when pandemic-related depressive symptoms are predominant.

Future Directions

Future studies should consider exploring coping strategies rather than styles to better understand how some behaviors may be benefiting Black U.S. Americans whereas other behaviors may be less helpful, despite being associated with the same coping style. Such endeavors would increase the available information regarding coping by Black U.S. Americans during COVID-19 and provide a broader base of reference for research conducted in a post-COVID-19 future. Additionally, COVID-19 has persisted on the global stage for over one-year. As the disease has persisted, it has had various spikes in its impact. As such, individuals' responses and strategies for coping may have shifted or differed dependent upon the state of the pandemic at the time of participation. Future studies should attempt to explore longitudinal data that examines the nature of coping implemented and its outcomes throughout the pandemic with a set cohort of participants. Finally, as with any study involving correlations, causality cannot be determined due to ambiguous temporal precedence. Perhaps additional studies could be prescriptive regarding the types of coping strategies and style implemented in an attempt to understand the impact rather than the association of various coping strategies on mental health during the COVID-19 pandemic.

Conclusion

The present study suggests Black U.S. Americans experienced difficult emotions (i.e., stress, anxiety, and depression) associated with changes to life during the COVID-19 pandemic and related complex manifestations of minority stress. Black U.S. Americans employed coping strategies that distracted them from the pandemic (avoidant coping),

protected themselves and others from susceptibility to the virus (self-sufficient coping), and used social connection (socially supported coping), although differently than prior to the pandemic. The mixed-methods approach to this study uniquely elucidates the connections between emotional experiences and coping strategies associated with a large-scale health crisis, the COVID-19 pandemic, among Black U.S. Americans. Future research is needed to examine the effectiveness of coping styles among Black U.S. Americans during the COVID-19 pandemic, large-scale health crises, and collective traumas.

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Author Biographies

Caitlin M. Mercier, BS, is a 5th-year doctoral candidate in the APA-accredited counseling psychology program at Louisiana Tech University and doctoral intern at Texas Tech University Student Counseling Center. Her research interests include the well-being of Black women and veg*ns in the context of intersectional oppression and mixed method and qualitative methodologies.

Dena M. Abbott, PhD, is an assistant professor in the APA-accredited counseling psychology training program at University of Nebraska–Lincoln. Her research interests include the psychological strengths and well-being of nonreligious people in the United States in the context of antiatheist discrimination, concealable stigmatized identities, and qualitative methodologies. She is also a sex educator and advocates for sex-positive, human sexuality competence among health service psychologists.

Michael S. Ternes, PhD, is an assistant professor in the APA-accredited counseling psychology program at Louisiana Tech University. He completed his doctoral training at the University of Kansas and his internship at the Colmery-O'Neil VA Medical Center. His research interests center on characteristic and environmental factors that influence persistence in goal pursuit across academic, vocational, and health behavior domains.