

Black Grief Matters: Disenfranchisement, Social Support, and Coping Among
Black College Students Grieving the Deaths of Black Americans by Police Brutality

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Black Grief Matters: Disenfranchisement, Social Support, and Coping Among Black College
Students Grieving the Deaths of Black Americans by Police Brutality

Today, Black Americans are nearly three times more likely than their white American counterparts to be killed by police, accounting for more than 40% of the victims of police killings nationwide (Bor et al., 2018). These murders are receiving considerable media attention as some have been captured on video and shared widely via social media and news platforms. Moreover, the Black Lives Matter movement, which aims to emphasize the precarious state of Black lives, focuses needed attention on these horrific murders by police brutality (Rankine, 2015). The ubiquity of social media and news platforms facilitates widespread viewing and sharing of police brutality against Black Americans, with the viewing of such events potentially more pronounced among college students, as over 84% of 18 to 29 year-olds use at least one social media site (Pew Research Center, 2021). Exposure to this violence is associated with negative mental health outcomes among Black Americans including heightened stress, depression, and grief and loss reactions (Allen & Solomon, 2016; Bor et al., 2018; Tynes et al., 2019). Factors which may contribute to these negative mental health outcomes include disenfranchisement of grief (i.e., the grief not being recognized or acknowledged; Piazza-Bonin et al., 2015), the absence of social support during grieving (Burke et al., 2010; Stroebe et al., 2005), and the ways in which college students cope with these killings and their grief (Andersen et al., 2013; Fox, 2019). The purpose of this study was to examine how grief disenfranchisement, social support and coping style predict stress, depressive symptoms, and prolonged grief among Black college students as they respond to the deaths of Black Americans by police brutality.

The modern social construction of race was refined in early colonial America to justify economic exploitation in the form of the eviction of Native Americans and the enslavement of Africans. Since this refinement, anti-Black racism in the United States has served as a significant contributor to the evolution of legal policing in America (“Historical Foundations of Race,” 2020). Originating in the 18th century American south, slave patrols ensured racial oppression through the violent policing of enslaved Black Americans (Durr, 2015). Following the Civil War, these publicly funded departments evolved, forming federal and state militias and the Ku Klux Klan, enforcing the Reconstruction era black codes while mimicking the organization of early American police departments as a tactic to impersonate legitimacy (Durr, 2015). The Jim Crow laws of the late 19th and early 20th centuries maintained the segregation of Black Americans as they migrated to more northern and urban areas, while simultaneously legalizing continued police violence towards Black Americans (Durr, 2015). In the 21st century United States, the use of terrorism and slavery to systemically oppress Black Americans is legally accommodated through police brutality and mass incarceration (DuVernay, 2016).

While it is crucial to continue to bring public attention to these horrid infringements of human rights, it also is essential to consider the implications of the ongoing discourse around and sharing of the brutalization of Black bodies (Rankine, 2015). Not only are Black Americans surviving in a racially hostile environment, they also are susceptible to frequent witnessing of online content related to police brutality, which is associated with negative psychological outcomes including stress and depressive symptoms (Allen & Solomon, 2016; Tynes et al., 2019). In part due to witnessing high rates of death by homicide, Black Americans are 2.5 times more likely to develop prolonged grief disorder than their white counterparts (Burke et al., 2010;

Laurie & Neimeyer, 2008). The sharing of police murders of Black Americans on social media serves as “a constant reminder of the devaluing of Black lives” (Tynes et al., 2019).

It is likely that many Black college students grieve the deaths of those who are murdered by police, and this grief may be disenfranchised because others may not recognize the feelings associated with the losses of individuals not personally known to the students. Not to mention, eurocentric grief norms are applied to understudied non-white experiences, further disenfranchising Black grief (Moore et al., 2020). Correspondingly, the multidimensional nature of racism in America, pervasive in individual, institutional, and cultural spheres politically, socially, and economically is considerably present within predominantly white institutions (PWIs; Bridges, 2010). Black students attending PWIs are susceptible to the negative implications of exposure to chronic racism and are likely to receive less interpersonal, institutional, and cultural social support than Black students attending historically Black colleges and universities (HBCUs; Bridges, 2010; Greer & Brown, 2011). Furthermore, social support for grieving these losses may not be present given that the deaths may not be perceived as affecting Black Americans who do not know the victims. Limited existing research investigates how Black Americans cope with their grief, and Black Americans likely cope with grief outside of eurocentric norms which govern the majority of grief related research and interventions (Granek & Peleg-Sagy, 2017; Moore et al., 2020).

Theoretical Framework

Multidimensional Model of Racism-Related Stress. The multidimensional model of racism-related stress defines racism as a systemic preservation of power rooted in the historical oppression of a racial or ethnic group deemed inferior by the dominant group (Harrell, 2000). The dominant group utilizes racial group designation as a means of preserving their power across

multiple structures by excluding and oppressing the non-dominant group. The model describes three primary forms of racism: individual, institutional, and cultural racism, which occur in interpersonal, collective, cultural-symbolic, and sociopolitical contexts (Harrell, 2000). Racism-related stress is conceptualized as the interactions between the individual or group and their environment which exceed appraisal resources and are race-related or founded in racism or racist systems. The six types of racism-related stress illustrated in the model include racism-related life events, vicarious experiences of racism, daily micro stressors, chronic-contextual stress, collective experiences of racism, and transgenerational group trauma (Harrell, 2000).

According to the model, systemic racism can influence the availability of social support and coping options and resources (Harrell, 2000). The present study applied the multidimensional model of racism-related stress in its research design by investigating the relationships between different levels of social support and indications of stress, depression, and prolonged grief, and different coping strategies and indications of stress, depression, and prolonged grief. The study also accounted for experiences of race-related stress as a demographic indicator.

Biopsychosocial Model of Perceived Racism. The biopsychosocial model of perceived racism examines the negative mental and physical health implications of perceived racism (Clark et al., 1999). Racist stimuli facilitate negative stress reactions, which are determined by a combination of constitutional, social, demographic, psychological, and behavioral factors, in addition to coping (Clark et al., 1999). Psychological and physiological stress responses are designated by the availability and use of both adaptive and maladaptive coping mechanisms. Adaptive coping responses effectively deter adverse mental and physical health effects of racism, while maladaptive coping responses fail to deter adverse effects (Clark et al., 1999). The present

study incorporated the biopsychosocial model of perceived racism as the theoretical basis of hypothesized correlations between the coping themes and mental health outcomes.

Coping Theory. Defined by Lazarus and Folkman (1984), the cognitive theory of stress and coping describes the interaction between an individual and their environment as transactional, with stress occurring when the transaction exceeds the individual's resources and has the potential to negatively impact the individual's well-being. Cognitive appraisal and coping act as mediators in individual-environment interactions (Folkman et al., 1986). During cognitive appraisal, the individual determines the level of importance of the encounter and evaluates whether action can be taken to protect the individual or facilitate a better outcome. Coping delineates the process through which the individual manages the stressful environment.

Coping may be adaptive or disengaged (Carver, 2014; Folkman et al., 1986). Adaptive or engaged coping styles include problem, emotion, and meaning-focused, which respectively focus on managing the distressing situation, regulating one's emotions, and adjusting one's evaluation of the situation to integrate values (Folkman et al., 1986; Folkman & Moskowitz, 2000; Gan, 2013). Disengaged coping is defined as coping which avoids confrontation of the stressor and thus can be characterized as maladaptive (Carver, 2014). Existing literature suggests that coping strategies vary between Black participants and their white counterparts. Plummer and Slane (1996) found main effects for race and stress type with Black participants utilizing more problem and emotion-focused coping than their white counterparts, potentially due to greater experienced stress due to race and greater engagement with a variety of coping strategies due to more frequent exposure to stress (Plummer & Slane, 1996).

In this study, consistent with the multidimensional model of racism-related stress (Harrell, 2000), biopsychosocial model of perceived racism (Clark et al., 1999), and cognitive

theory of stress and coping (Folkman et al., 1986), grief disenfranchisement, social support and coping mechanisms were examined to account for variance in stress, depressive symptoms, and prolonged grief among Black college students. A literature review of the constructs of interest of the study can be found in Appendix A.

Predictors of Bereavement Related Mental Health Outcomes

Disenfranchised Grief. Grieving is a universal intrapersonal and interpersonal experience through which individuals hold space for their loss (Piazza-Bonin et al., 2015). The intrapersonal bereavement process includes private, internal coping and meaning making while the interpersonal bereavement process manifests between griever and their external environments. Thus, grieving occurs within sociocultural contexts which may invalidate or fail to acknowledge or socially support the loss, causing disenfranchisement. Disenfranchised grief is defined as grief which is not expressed, recognized, or socially supported (Piazza-Bonin et al., 2015). Anti-Black racism and white supremacy inherently disenfranchise Black grief.

The Black American experience cannot be approached unilaterally, yet many Black Americans live with grief residual from chattel slavery, and this grief remains unacknowledged in the eurocentric grief perspectives which govern the majority of psychological literature (Moore et al., 2020). This unsanctioned grief coupled with the intergenerational passing of historically unresolved grief (Brave Heart & DeBruyn, 1988) and the sociocultural hesitancy to acknowledge that individuals can deeply grieve the deaths of individuals who are not personally known to them may contribute to the current disenfranchisement of Black grief in response to deaths by police violence. Furthermore, griever may be marginalized if their grief processes deviate from normative expectations, or if the cause of their loss is horrific or stigmatized (Piazza-Bonin et al., 2015). Concurrently, Black college students also may be grieving less

tangible losses, for example loss of safety in public spaces, loss of trust in social institutions, loss of relationships or confidence of those who did not respond in an anti-racist manner, and loss of peace due to the ceaseless absence of equitable treatment of Black Americans by police in the United States.

Violent losses and subsequent grief disenfranchisement have been shown to be related to psychological distress, depressive symptoms, and prolonged grief. Individuals experiencing a distressing loss are more vulnerable to disenfranchisement and individuals experiencing disenfranchisement are more susceptible to stress outcomes (Piazza-Bonin et al., 2015). Individuals experiencing disenfranchised grief also may experience depressive symptoms for up to two years following the loss (St. Clair, 2013). In a case study on the bereavement experience of an African American mother who lost her son to homicide, disenfranchised grief was predictive of prolonged grief (Piazza-Bonin et al., 2015). The current study investigated the relationships between grief disenfranchisement and stress, depression, and prolonged grief among Black college students grieving deaths of Black Americans by police brutality, specifically hypothesizing that grief disenfranchisement would be predictive of and positively related with perceived stress, depressive symptoms, and prolonged grief.

Social Support. Social support is defined generally as the external aid one receives from their relationships and can be more specifically defined as the support that is received during bereavement (Bailey et al., 2013). Research emphasizes the importance of matching potential supportive relationships with an individual's stressors and coping needs (S. Cohen & Wills, 1985; Stroebe et al., 2005). When grieving, Black American populations frequently rely on social support networks including family, friends, and other community members rather than professional services, which can be partially attributed to cultural mistrust of healthcare

institutions (Laurie & Neimeyer, 2008). Black students who are studying at a PWI may be exposed to negative race-related social interactions, which contribute to negative mental health outcomes (Bridges, 2010; Burke et al., 2010; Greer & Brown, 2011; Piazza-Bonin et al., 2015).

A sample of 48 Black mothers who suffered the loss of a child by gun violence found an inverse correlation between social support and stress levels (Bailey et al., 2013). Additional existing research demonstrated correlations between grief-specific support and reduced depressive symptoms and increased number of available supporters and low levels of prolonged grief (Burke et al., 2010). The literature also described elevated levels of prolonged grief for an African American woman who had lost her son to homicide and whose social interactions were overwhelmingly negative (Piazza-Bonin et al., 2015). The current study examined the relationships between social support and stress, depression, and prolonged grief, hypothesizing that social support would be predictive of and negatively related to perceived stress, depressive symptoms, and prolonged grief among a sample of Black college students at a PWI grieving the murders of Black Americans by police.

Coping. Coping refers to an individual's management of emotional and environmental stressors (Folkman et al., 1986). The study explored coping as operationalized by three measures: the Brief COPE (Carver, 1999), the Meaning-Focused Coping Questionnaire (Gan et al., 2013), and the Africultural Coping Systems Inventory (Utsey, 2000). Coping mechanisms are categorized according to engagement (adaptive/active/engaged or disengaged) and focus (problem, emotion, or meaning-focused) in extant literature (Carver, 2014; Folkman et al., 1986; Folkman & Moskowitz, 2000; Fox, 2019; Gan et al., 2013; Greer & Brown, 2011; Peters et al., 2020; Plummer & Slane, 1996).

Problem-focused coping is centered around action to manage a distressing situation, while emotion-focused coping is centered around the regulation of emotions (Folkman et al., 1986; Folkman & Moskowitz, 2000). Meaning-focused coping describes the process through which individuals adjust their evaluation of the distressing situation to accommodate their values, and disengaged coping is coping characterized by avoidance of the stressor (Carver, 2014; Gan et al., 2013).

For the purposes of this study, it was proposed that the subscales of the three coping measures would be analyzed under four thematic categories if supported by exploratory factor analyses. It was proposed that the active coping and planning subscales of the Brief COPE (Carver, 1999) would be representative of a problem-focused coping thematic category. Similarly, it was proposed that the use of emotional support subscale of the Brief COPE (Carver, 1999) along with the spiritual-centered, collective-centered, and ritual-centered subscales of the Africultural Coping Systems Inventory (Utsey, 2000) would reflect an emotion-focused coping thematic category. It was expected that the subscales of the Meaning-Focused Coping Questionnaire (changes in situational beliefs, changes in global beliefs, long-term prevention strategies, rational use of resources, acceptance, heuristic thinking, and changes in goals; Gan et al., 2013) would delineate a meaning-focused coping thematic category, and it was proposed that the denial, substance use, behavioral disengagement, venting, and self-blame subscales of the Brief COPE (Carver, 1999) and the cognitive-emotional debriefing subscales of the Africultural Coping Systems Inventory (Utsey, 2000) would be representative of a disengaged coping thematic category.

Prior research consisting of semi-structured interviews was conducted with 19 young Black Americans aged 17 to 23 to investigate coping strategies for navigating police contact

(Fox, 2019). Three dominant strategies emerged, including problem-focused avoidance, problem-focused management, and symbolic resistance (Fox, 2019). Utsey et al. (2000) examined an African-centered approach to coping. Culture-specific coping strategies used by African Americans “manifest in the conceptual framework of a worldview that is inherently spirit based; a reality characteristic of people of African descent” (Utsey et al., 2000) and emphasize collective-centered approaches to maintain harmony in stressful environments.

Findings from a study examining coping experiences of Black college students attending HBCUs and PWIs indicated that students attending PWIs utilized problem and spirituality oriented coping strategies at higher frequencies than students attending HBCUs (Greer & Brown, 2011). Peters et al. (2020) examined correlations between coping, stress, and depression in a sample of 189 pregnant African American women. Disengaged coping was strongly positively correlated with perceived stress and depression, while active and social support-based coping subscales were positively correlated with emotional processing, emotional expression, and positive affect (Peters et al., 2020). The coping styles most strongly associated with prolonged grief are acceptance, denial, and self-blame, with acceptance being protective against prolonged grief, and denial and self-blame increasing the presence of prolonged grief (Elvira de la Morena & Cruzado, 2013). The current study examined the associations between coping style and stress, depression, and prolonged grief, among Black American college students grieving the murders of Black Americans by police. In particular, it was hypothesized that problem, emotion, and meaning-focused coping strategies would be predictive of and negatively associated with perceived stress, depressive symptoms, and prolonged grief. In contrast, it was hypothesized that disengaged coping mechanisms would be predictive of and positively related to perceived stress, depressive symptoms, and prolonged grief.

Bereavement Related Mental Health Outcomes

Stress. A stressful event is defined as a situation which appears threatening or exceeds an individual's available coping resources. Stress in turn is the emotional response to the objective event, dependent not only on the event itself but also on personal and contextual factors (S. Cohen et al., 1983). Living in a racially hostile environment incites a constant state of stress. "We live in a country where Americans assimilate corpses in their daily comings and goings. Dead blacks are a part of normal life here" (Rankine, 2015, p. 2). Consequent to persistent racism in America and widespread access to photo and video on smartphones, Black Americans are vulnerable to witnessing online content regarding police violence, which may prompt a loss of feeling of safety and negative psychological outcomes including acute stress (Allen & Solomon, 2016; Tynes et al., 2019). Researchers investigating the relationships between racial discrimination, perceived stress, and psychological distress among a sample of 555 African American young adults found that experiences with race-related discrimination were associated with negative psychological outcomes including stress (Sellers et al., 2003). As noted earlier, variance in grief disenfranchisement, social support and coping styles have been associated with variance in stress outcomes among Black individuals (Bailey et al., 2013; Peters et al., 2020; Piazza-Bonin et al., 2015).

Depression. Common themes of depressive symptomatology include depressed mood, feelings of guilt, worthlessness, helplessness, and hopelessness, deterioration of psychomotor functioning, loss of appetite, and sleep disturbances (Radloff, 1977). If left untreated, depression among Black adolescents can have serious implications including acceleration of additional mental disorders, declined academic performance, violent externalizing behaviors, and suicide (Lu et al., 2017). Findings from a national sample of 302 African American and Latinx

adolescents examining the impact of witnessing traumatic events online indicated an association between frequency of viewing traumatic events online and depressive symptoms (Tynes et al., 2019). As noted previously, variance in disenfranchised grief, social support and coping style were associated with varied occurrences of depressive symptoms among Black American individuals (Burke et al., 2010; Peters et al., 2020; St. Clair, 2013).

Prolonged Grief. Prolonged grief disorder as a result of bereavement is defined as “an attachment disturbance featuring yearning for the deceased, loss of meaning and identity disruption,” with resulting dysfunction negatively impacting psychological well-being (Prigerson et al., 2021). Between 10 and 20% of bereaved individuals develop prolonged grief disorder. Risk factors include a history of prior trauma or loss, history of mood and anxiety disorders, insecure attachment style, having been a caregiver for the deceased individual, a violent cause of death, and lack of social support (Al-Gamal et al., 2019). African Americans are 2.5 times more likely to have prolonged grief disorder than white counterparts (Laurie and Neimeyer, 2008), in part due to witnessing disproportionately high rates of death by homicide. Deaths by homicide are 10 times more likely among African American populations compared to their white counterparts (Piazza-Bonin et al., 2015).

Previous research indicates that the type of loss predicts coping and the presence of prolonged grief symptoms, with “violent deaths producing substantially more complicated grief symptomatology than non-violent deaths, and death by homicide producing the most problematic bereavement outcome of all” (Burke et al., 2010). As described previously, disenfranchised grief, social support and coping were related to prolonged grief in extant literature (Burke et al., 2010; Elvira de la Morena & Cruzado, 2013; Piazza-Bonin et al., 2015).

Summary

Grounded in the multidimensional model of racism-related stress (Harrell, 2000), the biopsychosocial model of perceived racism (Clark et al., 1999), and the cognitive theory of stress and coping (Folkman et al., 1986), this study investigated the contributions of grief disenfranchisement, social support and coping style with regard to deaths due to police violence towards Black Americans to the prediction of stress, depression, and prolonged grief among Black college students attending a PWI. It was hypothesized that grief disenfranchisement, social support, and coping style would account for variance in the prediction of perceived stress, depressive symptomatology, and prolonged grief. Specifically, it was expected that grief disenfranchisement and disengaged coping styles (as represented by the denial, substance use, behavioral disengagement, venting, self-blame, and cognitive-emotional debriefing subscales; Carver, 1999; Utsey, 2000) would be predictive of and positively related to perceived stress, depressive symptomatology, and prolonged grief. Conversely, the presence of social support and use of problem-focused (as reflected in the active coping and planning subscales; Carver, 1999), emotion-focused (as represented by the use of emotional support, spiritual-centered, collective-centered, and ritual-centered subscales; Carver, 1999; Utsey, 2000), and meaning-focused (changes in situational beliefs, changes in global beliefs, long-term prevention strategies, rational use of resources, acceptance, heuristic thinking, and changes in goals subscales; Gan et al., 2013) coping styles were hypothesized to be predictive of and inversely related to perceived stress, depressive symptomatology, and prolonged grief (see Figures 1, 2, and 3).

This study was critically important because Black college students are constantly surrounded by traumatic losses online which are violently fueled by anti-Black racism. Witnessing these losses online may contribute to negative mental health outcomes. This study advanced knowledge regarding how to help Black college students validate, receive support for,

and cope with their grief resulting from police murders of Black Americans. Likewise, this study can be used to inform the development of future interventions to reduce negative mental health outcomes among Black college students responding to racially-incited police violence. This study also serves as a call to counseling psychologists to conduct further research on the mental health outcomes associated with witnessing police brutality towards Black Americans. Ultimately, findings from this study highlighted associations among the variables of interest to emphasize the urgent need for the reform and abolition of the systems which perpetuate violence against Black Americans.

Method

Procedures

After obtaining approval from the University of Maryland Institutional Review Board, participants were recruited through the Psychology SONA subject pool, email listservs and newsletters of campus Black student organizations, a list of students' names generated by the registrar, and personal networks. Students interested in participating in the study were invited to click on a link to an online Qualtrics survey and first completed questions to determine whether they met the inclusion criteria age 18 or older, student at the University of Maryland, College Park, and identify as Black and/or African American or as having Black and/or African; see Appendix B). Those who did not meet inclusion criteria were thanked and notified that they did not meet criteria for participation in the study. Students who met the inclusion criteria proceeded to the consent form, and upon providing informed consent were able to complete the survey.

The survey consisted of measures administered in a counterbalanced way to minimize order effects, with the exception of the Index of Race-Related Stress Brief Version (IRRS-B; Utsey, 1999) and the demographic measure which were administered second to last and last,

respectively. A framing statement was provided for participant context at the start of the survey (see Appendix C). Participation was voluntary, and participants were able to withdraw from the study at any time. Following study completion, mental health and grief coping resources were provided (see Appendix D) and students were invited to click on a link to an external survey so they could enter their names and University ID numbers or email addresses to receive one SONA course credit or a \$10 Amazon gift card. Names, University ID numbers, and email addresses were not connected to survey responses. Two validity check items were embedded in the survey, one at the end of the Witnessing of Disenfranchised Grief measure (St. Clair, 2013; see Appendix E) and the other in the demographic questionnaire (see Appendix N).

Participants

The participants were 194 undergraduate students above age 18 at the University of Maryland, College Park (a PWI) identifying as Black and/or African American or as having Black and/or African American heritage. An *a priori* statistical analysis utilizing G*Power v3 software (Faul et al., 2007) was conducted to determine the number of participants necessary to achieve a statistical power of 0.95, a medium effect size ($f^2 = 0.3$) and an overall $\alpha = 0.05$. Results of the G*Power analysis suggested a sample size of 117 participants for one hierarchical regression analysis.

Initially, 834 respondents accessed the Qualtrics link, however 279 of these responses were deemed fraudulent as a result of two hacks of the online survey. Both hacks occurred on the survey from which participants would be redirected to submit their names and email addresses to receive compensation in the form of a \$10 Amazon gift card. On December 3, 2021, 99 responses were received within a five-hour period, and on December 9, 2021, 180 responses

were received within one minute. The 279 responses received as a result of the hacks were deleted from the sample.

Ultimately, 555 non-fraudulent respondents accessed the Qualtrics link, 452 of which were recruited through a list of students' names generated by the registrar, email listservs and newsletters of campus student organizations, personal contacts, flyers, and in-person recruitment. The remaining 103 respondents were recruited through the Psychology SONA subject pool. Of those who accessed the Qualtrics link, 276 met the inclusion criteria, 264 of whom consented to participate and began the survey. Data from participants who did not complete at least 85% of the survey items were removed, resulting in a sample size of 259. Finally, data from participants who failed to correctly respond to validity check items or completed the survey in under 10 minutes were removed from the sample, resulting in a final sample of 194 students (see Figure 4).

Participants ranged in age from 18 to 30+ years old, with 18 years old being most common (28.4%), followed by 19 (24.7%), 20 (20.1%), 21 (14.9%), and 22 (5.7%) years of age. With regard to gender, the majority of the participants identified as women (72.7%), with 24.2% of participants identifying as men and 3.1% of participants identifying as non-binary. The majority of the participants identified as heterosexual/straight (77.8%), with 10.8% identifying as bisexual, followed by homosexual/gay/lesbian (3.6%), other (3.1%), pansexual (2.6%), and asexual (2.1%). Nearly all (99%) participants identified as Black, African American, or Afro-Caribbean. The 1% of participants who did not identify as such identified as North African and Hispanic or Latinx, in addition to identifying as Black and/or African American or as having Black and/or African American heritage as indicated by their responses to the inclusion criteria (see Table 1 for demographic information). Students were enrolled in a wide variety of college

majors with the top three being Psychology (21.6%), Public Health Science (9.8%), and Information Science (7.7%; see Table 2).

The majority of the students in this sample had not utilized any support/treatment services utilized in the last 14 months (60.8%), while 33% utilized individual counseling and 6.7% utilized religious counseling. Many participants spent between 1 and 2 hours (28.9%), between 3 and 4 hours (29.9%) or more than 4 hours (24.2%) on social media daily. The majority of the participants did not experience a death of someone close to them in the last year (62.4%), and none of the deaths experienced by participants were due to police brutality. Many students were not involved in any Black and/or African American student organizations on campus (42.8%). Of those who were involved, the most common organizations of involvement were the Nyumburu Cultural Center (30.9%), Black Student Union (20.6%), and African Student Association (13.4%; see Table 3).

Participants reported being *somewhat religious/spiritual* ($M = 3.16$, $SD = 1.26$) on a scale of one (*not at all religious/spiritual*) to five (*extremely religious/spiritual*) and feeling *somewhat connected* to the Black community ($M = 3.69$, $SD = 1.03$) on a scale of one (*not at all connected*) to five (*extremely connected*). Participants also indicated that they *occasionally* witness online content of police violence towards Black Americans ($M = 3.58$, $SD = 0.93$) and *occasionally* experience a sense of loss as a results of police violence against Black Americans ($M = 3.49$, $SD = 0.92$) on a scale of one (*never*) to five (*extremely often*).

Finally, participants were asked to indicate losses experienced as a result of police violence against Black Americans (see Table 4). Participants were able to select multiple response options, and 86.1% of participants indicated a loss of trust in police systems, 85.6% of participants indicated a loss of trust in government systems, 79.4% of participants indicated a

loss of feeling of safety/security in public spaces, 78.9% of participants indicated a loss of trust in institutional systems, and 53.6% of participants indicated a loss of optimism.

Measures

Grief Disenfranchisement. The Witnessing of Disenfranchised Grief (WDG; St. Clair, 2013) was used to measure grief disenfranchisement (see Appendix E). The measure was created to assess the extent to which someone grieving a death or loss feels their grief was witnessed. The WDG contains 22 items on a five-point Likert scale from one (*strongly disagree*) to five (*strongly agree*).

The instructions for the WDG measure were revised for this study. The statement, “a witness is someone who lets you know that your loss was real and that you had a right to grieve” was removed and the following phrase was added (“losses related to the killings of Black Americans by the police”) to connect the measure with the focus of this study. Instructions and items were modified with the replacement of “the witness” with “people in my life” and revised from past to present tense given the ongoing nature of police brutality in the United States. Framing expressions such as “losses related to the killings of Black Americans by the police” or “the killings of Black Americans by the police” were used to expand and connect all items with the focus of the study. The wording of items 16 and 18 was revised from “just by” to “based on” and “because of,” respectively. Examples of items revised for the purpose of this study include “people in my life understand the full extent of my losses related to the killings of Black Americans by the police”; “people in my life feel sorry for my losses related to the killings of Black Americans by the police”; “people in my life try to meet my physical needs following the killings of Black Americans by the police”; and “people in my life talk about my losses related to the killings of Black Americans by the police.”

All items were summed, with high scores on the measure indicating that the participant perceived that the loss was acknowledged, and low scores indicating high levels of grief disenfranchisement. With the exception of items 9, 10, and 13, all items were reverse scored so that high scores on the measure indicated high grief disenfranchisement, the variable of interest in this study. The measure was utilized in a study of 226 individuals from a general population and 201 individuals who had experienced a loss by miscarriage. Adequate reliability estimates were demonstrated with Cronbach's alphas of .97 and .91 respectively (St. Clair, 2013). Adequate reliability of the measure also was demonstrated in this study with a Cronbach's alpha of .91. Support for validity was demonstrated with positive correlations among the WDG total score and scores on individual items of the Texas Revised Inventory of Grief and the Center for Epidemiologic Studies Depression Scale (St. Clair, 2013).

Social Support. The Medical Outcomes Study (MOS) Social Support Survey (Sherbourne & Stewart, 1991) was used to measure social support (see Appendix F). The MOS Social Support Survey contains four subscales: emotional/informational support (eight items; e.g., *"someone you can count on to listen to you when you need to talk"*), tangible support (four items; e.g., *"someone to help you if you were confined to bed"*), affective support (three items; e.g., *"someone who shows you love and affection"*), and positive social interaction (four items; e.g., *"someone to de-stress with"*). The 19 items were measured on a five-point Likert scale from one (*none of the time*) to five (*all of the time*). The items on each subscale were summed, with high scores indicating the presence of the corresponding type of support. Tangible support items (items 1, 4, 11, and 14) were qualified in this study as examples of social support one may receive in response to physical or mental health concerns provoked by the witnessing of police brutality towards Black Americans.

Instructions for the measure were revised from past to present tense and edited with the removal of “about how many close friends and close relatives do you have (people you feel at ease with and can talk to about what is on your mind)? Write in number of close friends and close relatives.” Additionally, “as you need it” was revised to “as you grieve the killings of Black Americans by the police.” To remind participants of the scope of the study, framing statements “as you grieve the killings of Black Americans by the police” or “related to the killings of Black Americans by the police” were added at the end of all items. Item 6 was revised from “someone to have a good time with as you grieve the killings of Black Americans by the police” to “someone to de-stress with as you grieve the killings of Black Americans by the police.”

Subscales showed adequate internal consistency with Cronbach’s alphas ranging from .85 to .94 among a sample of 485 Italian undergraduate students. The measure also exhibited adequate reliability in this study, with a Cronbach’s alpha of .97 for the total scale, and alphas of .94, .88, .89, and .91 for the emotional/informational support, tangible support, affectionate support, and positive social interaction subscales, respectively. Support for validity was demonstrated with positive and moderate correlations between subscale scores of the MOS Social Support Survey and Ryff’s Scales of Psychological Well-being, and a negative correlation between the total scores of the MOS Social Support Survey and the Well-Being Beck Depression Inventory-II (Giangrasso & Casale, 2013).

Coping. The Brief COPE (Carver, 1997) was used to measure coping (see Appendix G). The Brief COPE contains 14 subscales of two items each for a total of 28 items. The subscales that were used in this study are as follows: active coping (e.g., “*I’ve been concentrating my effort about doing something about the situation I’m in*”), planning (e.g., “*I’ve been trying to come up with a strategy about what to do*”), use of emotional support (e.g., “*I’ve been getting*

emotional support from others”), denial (e.g., *“I’ve been saying to myself ‘this isn’t real’”*), venting (e.g., *“I’ve been saying things to let my unpleasant feelings escape”*), substance use (e.g., *“I’ve been using alcohol or other drugs to make myself feel better”*), behavioral disengagement (e.g., *“I’ve been giving up trying to deal with it”*), and self-blame (e.g., *“I’ve been criticizing myself”*).

Two of the 14 subscales, positive reframing (including items 12: *“I’ve been trying to see it in a different light, to make it seem more positive”* and 17: *“I’ve been looking for something good in what is happening”*) and humor (including items 18: *“I’ve been making jokes about it”* and 28: *“I’ve been making fun of the situation”*) were not used in this study as they are not applicable and may be offensive to participants. The acceptance subscale (including items 20: *“I’ve been accepting the reality of the fact that it has happened”* and 24 *“I’ve been learning to live with it”*) were omitted from the study due to overlap with items included in the acceptance subscale of the Meaning-Focused Coping Questionnaire (Gan et al., 2013; see Appendix H).

Three additional subscales including self-distraction (including items 1: *“I’ve been turning to work or other activities to take my mind off things”* and 19: *“I’ve been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping”*), use of instrumental support (including items 10: *“I’ve been trying to get advice or help from other people about what to do”* and 23: *“I’ve been trying to get advice or help from other people about what to do”*), and religion (including items 22: *“I’ve been trying to find comfort in my religion or spiritual beliefs”* and 27 *“I’ve been praying or meditating”*) were omitted from the study due to overlap with items included in the cognitive/emotional debriefing, collective-centered coping, and spiritual and ritual-centered coping subscales on the Africultural Coping Systems Inventory (Utsey, 2000; see Appendix I).

The 16 revised items were measured on a four-point response scale from one (*I haven't been doing this at all*) to four (*I've been doing this a lot*). The items on each subscale were summed with high scores indicating strong adoption of the coping mechanism. Instructions for the measure were revised with the addition of “witnessing the killings of Black Americans by the police through videos shared on social media platforms” in place of “you found out you were going to have this operation.” The framing statement “since the deaths of Black Americans by police brutality, or as a result of the deaths...” was added following the instructions and was repeated every 10 items in Qualtrics as a reminder to participants of the focus of the study. Based on the existing literature (Bridges, 2010; Carver, 2014; Greer & Brown 2011; Peters et al., 2020), the Brief COPE subscales utilized in the present study were proposed to be grouped under three of the thematic categories: problem-focused coping (active coping and planning), emotion-focused coping (use of emotional support), and disengaged coping (denial, venting, substance use, behavioral disengagement, and self-blame).

Estimates of the reliability and validity of the instrument were evaluated in a study with a sample of 189 pregnant African American women (Peters et al., 2020). One factor, substance use was removed as it had no variance in the sample. In a meta-analysis of 114 studies, the median alpha estimates of the Brief COPE subscales ranged from .55 to .9, eight of which were below .7 (Kato, 2015). In this study, the instrument displayed adequate global reliability with a Cronbach's alpha of .82. Reliability estimates of the measure's subscales varied in this study, with the active coping, planning, denial, substance use, behavioral disengagement, and use of emotional support subscales demonstrating satisfactory internal consistencies of .73, .70, .63, .89, .63, and .75, respectively. Venting ($\alpha = .50$) and self-blame ($\alpha = .57$) subscales exhibited poor reliability in this study and were omitted from subsequent analyses. Validity was estimated

by correlating the measure's subscale scores with scores on the subscales of the Emotional Approach Coping scale, as well as scores on the Perceived Stress Scale, Positive and Negative Affect Schedule, and Center for Epidemiologic Studies Depression Scale Short Form (Peters et al., 2020). Scores on disengaged coping, active coping, and social support subscales as determined by an acceptable exploratory structural equation model fit were correlated as predicted with scores of positive and negative affect, stress, emotional processing, emotional expression, and depression (Peters et al., 2020).

Meaning-Focused Coping. The Meaning-Focused Coping Questionnaire (MFCQ; Gan et al., 2013) was used to measure meaning-focused coping (see Appendix H). The MFCQ consists of eight subscales including changes in situational beliefs (four items; e.g., *"I tried to consider the event from a broader standpoint"*), meaning making (four items; e.g., *"I considered why the traumatic event happened at that moment"*), changes in global beliefs (four items; e.g., *"I sought help from my faith and beliefs"*), long-term prevention strategies (three items; e.g., *"I adjusted my view on this matter continuously over time"*), rational use of resources (three items; e.g., *"I accepted love and understanding from others"*), acceptance (three items; e.g., *"I have accepted the fact that something had happened and that it could not be changed"*), heuristic thinking (three items; e.g., *"I changed some of my views"*), and changes in goals (three items; e.g., *"I readjusted my goal(s) in life"*). The meaning making subscale (including items 8: *"I considered the reasons why a traumatic event happens"*, 9: *"I considered why the traumatic event happened at that moment"*, 10: *"I considered why the traumatic event happened to me"*, and 11: *"I wondered whether there is some special meaning in the occurrence of this event"*) and item 13 (*"I believed, due to the enrichment of my experience, I could handle a traumatic event"*)

better”) of the long-term prevention strategies subscale were omitted from the study because they were not appropriate in this context.

The 21 items were measured on a five-point Likert scale from zero (*never*) to four (*most of the time*), with items on each subscale summed; high scores indicate strong adoption of the coping mechanism. Instructions for the measure were revised with the addition of “you may have utilized some of the following strategies to cope with the killings of Black Americans by the police.” Framing statement “since the deaths of Black Americans by police brutality, or as a result of the deaths...” was added following the instructions and was repeated every 10 items in Qualtrics as a reminder to participants of the context from which they are responding to the items. In addition, “it”, “the event”, “this event”, “this matter”, and “the issue” were expanded to “the killings of Black Americans by the police” in the instructions and in applicable items. The wording of item 1 was revised with the removal of “during the course of events,” which previously began the item. Minor edits were made to items 2 and 17, with revisions of original “goal(s)” to “goals” and original “accept the event, and it has become” to “accept the killings of Black Americans by the police and that they have become”.

Reliability estimates were adequate in prior studies including a study of 371 Chinese middle school students affected by an earthquake (changes in situational beliefs: $\alpha = .80$; meaning making: $\alpha = .79$; changes in global beliefs: $\alpha = .80$; long-term prevention strategies: $\alpha = .71$; rational use of resources: $\alpha = .63$; acceptance: $\alpha = .66$; heuristic thinking: $\alpha = .60$; changes in goals: $\alpha = .62$; Gan et al., 2013). The measure displayed adequate global reliability in this study with a Cronbach’s alpha of .87. However, reliability estimates of the measure’s subscales varied in this study, with the changes in situational beliefs, changes in global beliefs, rational use of resources, acceptance, and changes in goals subscales exhibiting satisfactory internal

consistencies of .68, .86, .76, .69, and .81, respectively. Long-term prevention strategies ($\alpha = .39$) and heuristic thinking ($\alpha = .59$) subscales exhibited poor reliability in this study and were not included in subsequent analyses. Validity was supported by positive correlations between MFCQ scores and scores on measures of well-being, positive affect, and post-traumatic growth, and negative correlations between MFCQ scores and scores on a measure of depression (Gan et al., 2013).

Africultural Coping. The Africultural Coping Systems Inventory (ACSI; Utsey, 2000) was used to measure coping with cultural considerations (see Appendix I). The ACSI consists of four subscales which include cognitive/emotional debriefing (11 items; e.g., “*tried to forget about the situation*”), spiritual-centered coping (eight items; e.g., “*prayed that things would work themselves out*”), collective-centered coping (eight items; e.g., “*got a group of family or friends together to help with the problem*”), and ritual-centered coping (three items; e.g., “*lit a candle for strength or guidance in dealing with the problem*”). The 30 items were measured on a four-point scale from zero (*did not use*; revised from *does not apply or did not use*) to three (*used a great deal*). Items on each subscale were summed to yield scores for each of the different coping strategies, with high scores on a particular subscale indicating high engagement with the particular coping style. For the purposes of this study, the subscales were proposed to be analyzed as part of the emotion-focused (spiritual, collective, and ritual-centered coping) and disengaged (cognitive/emotional debriefing) coping themes (Carver, 2014; Utsey, 2000).

Instructions were revised and the following sentences were removed: “you will need to think of a specific stressful situation that you have encountered within the past week or so. A ‘stressful situation’ is any situation that you found troubling or otherwise caused you to worry. Such situations might have been related to your family, friends, school, job, romantic

relationship, or other things you consider important in your life. To help us understand the exact nature of the stressful situation you are thinking of when responding to the statements in this questionnaire, please take a moment to write a brief description of the situation in the space provided below. Use this space to describe your stressful situation. Did you remember to describe your stressful situation?” The following statements were also omitted from the instructions for the purpose of the study: “read each statement carefully, then indicate by circling 0, 1, 2, or 3, to what extent you used it in your situation. Key: 0 = Does not apply or did not use 1 = Used a little 2 = Used a lot 3 = Used a great deal Please answer every question.”

In place of the original wording, “recall stress you may have experienced as a result of the killings of Black Americans by the police” was added. In addition, the framing statement “since the deaths of Black Americans by police brutality, or as a result of the deaths, I...” was added following the instructions and will be repeated every 10 items in Qualtrics to remind participants of the context from which they are responding to the items. The phrase “the problem” was expanded to “the stress related to the killings of Black Americans by the police” for items 2 and 28.

Reliability estimates were adequate in a study consisting of 180 African Americans (cognitive/emotional debriefing: $\alpha = .80$; spiritual-centered coping: $\alpha = .79$; collective-centered coping: $\alpha = .71$; ritual-centered coping: $\alpha = .75$; Utsey, 2000). The measure exhibited adequate reliability in this study as well, with a Cronbach’s alpha of .91 for the total scale and alphas of .87, .82, .81, and .82 for the spiritual-centered coping, collective-centered coping, ritual-centered coping, and cognitive/emotional debriefing subscales, respectively. Support for validity was supported by correlations in the expected directions among scores on subscales of the ACSI and the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1988). The scores on the

spiritual and collective centered coping subscales of the ACSI were positively correlated with scores on the WCQ subscales including problem-focused coping, seeking social support, and focusing on the positive (Utsey, 2000).

Stress. The Perceived Stress Scale (PSS-10; S. Cohen et al., 1983) was used to measure stress (see Appendix J). The PSS-10 includes 10 items scored on a five-point Likert scale from zero (*never*) to four (*very often*) with regard to item occurrence in the last month. Example items include “in the last month, how often have you been upset because of something that happened unexpectedly”; “in the last month, how often have you felt that you were unable to control the important things in your life”; and “In the last month, how often have you felt nervous and ‘stressed’?” PSS scores were calculated by reversing responses for the four positively stated items (items 4, 5, 7, and 8) and then summing all items. High scores suggest high current levels of stress. The phrase “by circling” was removed from instructions. Reliability estimates from samples of 862 college students (67% identified as Black African) resulted in a Cronbach’s alpha of .79 (Makhubela, 2020). Adequate reliability of the measure also was demonstrated in this study with a Cronbach’s alpha of .83. Support for validity was demonstrated by a moderate correlation between the total scores on the PSS and a modified version of the College Student Life-Event Scale, and a high correlation between the total scores on the PSS and the Center for Epidemiologic Studies Depression Scale (S. Cohen et al., 1983).

Depressive Symptomatology. The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was to measure symptoms associated with depression (see Appendix K). The CES-D contains 20 items on a four-point scale from *rarely or none of the time (less than 1 day)* to *most or all of the time (5-7 days)* with regard to item occurrence within the past week. Example items include “I was bothered by things that don’t usually bother me”; “I did not feel

like eating; my appetite was poor”; and “I felt that I could not shake off the blues even with help from my family or friends.” CES-D scores were calculated by reversing responses for the four positively stated items (items 4, 8, 12, and 16) and then summing all items. Scale points were coded from zero to three for analyses. High scores correlate with higher occurrences of symptoms related to depression, with scores above 16 indicating elevated levels of depressive symptoms (Lu et al., 2017; Radloff, 1977).

A reliability estimate of .90 was found in a study of 782 Black adolescents (Lu et al., 2017). The instrument also exhibited adequate reliability in this study with a Cronbach’s alpha of .91. Support for validity was demonstrated by a two-factor exploratory structural equation model, with scores for depressed affect (as measured by the CES-D), somatic complaints, and interpersonal relationships correlating with scores of suicidal ideation (Lu et al., 2017).

Prolonged Grief. The Prolonged Grief Disorder (PG-13; Prigerson et al., 2021) instrument was used to measure prolonged grief (see Appendix L). The 13 items were measured as two “yes” or “no” questions, an open response question, and 10 questions on a Likert scale from one (*not at all*) to five (*overwhelmingly*). Example items include “do you have trouble doing the things you normally do because you are thinking so much about the people who died”; “do you avoid reminders that the people who died are really gone”; and “have the symptoms above caused significant impairment in social, occupational, or other important areas of functioning?” Likert response items were summed with high scores indicating considerable severity of symptoms of prolonged grief. A threshold score of 30 as a summation of Likert response items meets the B and C symptom criteria for prolonged grief disorder in the DSM (Prigerson, et al., 2021).

Revisions to the original measure included the removal of questions 1 and 2, “have you lost someone significant to you” and “how many months has it been since your significant other died?” Additionally, the phrase “since the death, or as a result of the deaths” was expanded to “since the deaths of Black Americans by police brutality, or as a result of the deaths.” Word choice also was modified, with substitutions of “people” for original “person” in questions 3, 4, 6, 7, and 11, the removal of “that” from the phrase “feeling like that a part of you has died” from question 5. In addition, “are” was substituted for “is” in questions 6 and 7, and “death” was changed to plural form “deaths” in question 8. Reliability estimates were adequate in samples of 270 students from Yale University, 163 students from Utrecht University, and 239 students from Oxford University with Cronbach’s alpha values of .83, .90, and .93, respectively (Prigerson et al., 2021). The instrument also exhibited adequate reliability in this study with a Cronbach’s alpha of .86. Support for validity was demonstrated in prior studies as PG-13 scores were positively correlated with scores on measures of distress and dysfunction (Prigerson et al., 2021).

Race-Related Stress. The Index of Race-Related Stress Brief Version (IRRS-B; Utsey, 1999) was utilized to measure experiences of race-related stress among Black college students as a result of their exposure to racism (Appendix M). The IRRS-B consists of three subscales: cultural racism (10 items; e.g., “*you notice that crimes committed by white people tend to be romanticized, whereas the same crime committed by a Black person is portrayed as savagery, and the Black person who committed it, as an animal*”), institutional racism (six items; e.g., “*you have been threatened with physical violence by an individual or group of white/non-Blacks*”), and individual racism (six items; e.g., “*salespeople/clerks did not say thank you or show other forms of courtesy and respect (e.g., put your things in a bag) when you shopped at some white/non-Black owned businesses*”). Instructions were revised with the removal of “please circle

the number on the scale (0 to 4) that indicates the reaction you had to the event at the time it happened. Do not leave any items black. If an event has happened more than once, refer to the first time it happened. If an event did not happen circle 0 and go on to the next item” given the online nature of the study.

The 22 items were measured on a five-point Likert scale from zero (*this never happened to me*) to four (*this event happened & I was extremely upset*), regarding the occurrence of the racist incident experienced by oneself or by someone close to the participant. Incidences of racism experienced by others close to the participant are salient in the present study due to the vicarious nature of racism and race-related trauma (Bor et al., 2018; Clark et al., 1999; Harrell, 2000). The items on each subscale were summed with high scores indicating high stress levels as related to incidents of race-based discrimination. All measure items were summed for a global score of race-related stress.

Adequate reliability was demonstrated in a sample of 635 African American adults (Chapman-Hilliard et al., 2020). Estimates yielded Cronbach’s alpha values of .89 for the cultural racism subscale, .73 for the institutional racism subscale, and .81 for the individual racism subscale (Chapman-Hilliard et al., 2020). The measure exhibited adequate reliability in this study as well, with a Cronbach’s alpha of .91 for the total scale and alphas of .87, .71, and .78 for the cultural, institutional, and individual racism subscales, respectively. Support for validity was demonstrated with positive correlations between the Racism and Life Experience Scales-Revised (RaLES-R; Harrell, 1997) and the IRRS-B for subscales and global scores.

Demographics. Participants also responded to items evaluating age, gender identity, racial/ethnic heritage, sexual orientation, college class standing, major/field of study, mental

health support, spirituality, connectedness with the Black community, social media use, witnessing of police brutality online and loss (see Appendix N).

Results

Data were analyzed using SPSS 27. Prior to conducting the primary analyses, it was important to determine the degree to which the subscales and items on the coping measures reflected the proposed thematic categories (problem-focused, emotion-focused, meaning-focused and disengaged coping) which were proposed based on extant research. Two exploratory factor analyses were conducted (first with all coping subscales and second with all coping items) to assess the degree to which the subscales and items were reflective of the four proposed coping categories. The coping themes were not supported by the factor analyses. As a result, the existing subscales of the coping measures were entered in subsequent analyses (see Appendix O for additional information regarding the factor analyses).

Descriptive statistics including means, standard deviations, reliability estimates, and correlations were calculated for all measured variables (see Table 5). On average, participants reported relatively low levels of grief disenfranchisement and received social support *some of the time*. When listed in order of descending item means, the three types of social support most frequently reported among the participants were positive social interaction ($M = 3.40$, $SD = 1.11$), affectionate support ($M = 3.30$, $SD = 1.24$), and emotional/informational support ($M = 3.28$, $SD = 1.10$). On average, participants used coping mechanisms accounted for by the Brief COPE (Carver, 1999) *a little bit*, and when listed in order of descending item means, participants most frequently reported using active coping, emotional support, and planning coping strategies. Participants employed meaning focused coping strategies an average of *sometimes*, and when listed in order of descending items means, participants reported most frequently turning to

acceptance ($M = 2.47$, $SD = 1.00$), rational use of resources ($M = 2.41$, $SD = 0.97$), and changing global beliefs ($M = 2.30$, $SD = 1.04$). On average, participants engaged in Africultural coping strategies *a little*, and when listed in order of descending item means, participants most frequently reported using collective-centered coping ($M = 1.29$, $SD = 0.65$), cognitive/emotional debriefing ($M = 1.19$, $SD = 0.59$), and spiritual-centered coping ($M = 0.85$, $SD = 0.73$).

With regard to mental health outcome variables, participants reported experiencing moderate levels of perceived stress, similar to levels of perceived stress reported in a study evaluating the validity of the PSS-10 among a sample of Black South African university students ($M = 21.54$; Makhubela, 2020; S. Cohen et al., 1983). On average, participants reported elevated levels of depressive symptoms and moderate levels of race-related stress, however, did not meet criteria for prolonged grief disorder.

Correlations

Correlations were calculated among all variables of interest using Pearson's r (J. Cohen, 1988; see Table 5). Significant relationships were reported at the $p < .05$ and $p < .01$ levels. Small negative correlations were found among all social support subscales and perceived stress. Planning, behavioral disengagement, and changes in goals coping subscales demonstrated small positive correlations with perceived stress.

With respect to depressive symptoms, small negative correlations were found among all social support subscales and depressive symptoms, with the exception of the affectionate support subscale, which demonstrated a moderate negative correlation with depressive symptoms. Small positive correlations emerged among planning, denial, substance use, changes in goals, and cognitive/emotional debriefing coping subscales and depressive symptoms. A moderate positive correlation occurred between behavioral disengagement and depression.

Grief disenfranchisement had a small negative correlation with prolonged grief, while active coping, substance use, behavioral disengagement, changes in situational beliefs, changes in global beliefs, rational use of resources, and spiritual-centered coping subscales had small positive correlations with prolonged grief. Moderate positive correlations were found among planning, denial, use of emotional support, changes in goals, collective-centered, ritual-centered, and cognitive/emotional debriefing coping subscales and prolonged grief.

Moreover, a small negative correlation was found between disenfranchised grief and race-related stress. In addition, small positive correlations were found between active coping, denial, behavioral disengagement, use of emotional support, changes in global beliefs, rational use of resources, spiritual-centered, ritual-centered, and cognitive/emotional debriefing coping subscales and race-related stress. Moderate positive correlations were reported between planning, changes in goals, collective-centered coping subscales and race-related stress.

Moderate positive correlations were demonstrated between perceived stress and prolonged grief, depressive symptoms and prolonged grief, perceived stress and race-related stress, depressive symptoms and race-related stress, and prolonged grief and race-related stress. Finally, a strong positive correlation was found between perceived stress and depressive symptoms. No correlations were found among other variables.

Regression Analyses

Prior to conducting the regression analyses, six assumptions were checked. Durbin-Watson statistics of 2.03, 1.77, and 1.98 for regressions predicting perceived stress, depression, and prolonged grief respectively indicated independence of residuals. Reviews of scatterplots confirmed linear relationships between each dependent variable and each of the independent variables. The data also demonstrated homoscedasticity and did not indicate multicollinearity as

VIF scores were below 7 and tolerance scores were above 0.14. The social support subscales were highly correlated as expected since they all measured social support (see Table 5). There were no significant outliers, high leverage points or highly influential points as the Cook's distance values were below 1 for all regressions. Last, residuals were normally distributed as illustrated by P-P plots. Since all assumptions were met, data were analyzed using the multiple regressions.

Next, three hierarchical regression analyses were conducted to predict stress, depressive symptoms, and prolonged grief. Disenfranchised grief was entered into the first step, followed by the four social support subscales in the second step, then the coping subscales in the third step. The variables were entered in this order based on existing research which suggested the temporal ordering of these variables (grief, experiences of social support and then attempts at coping) during the grieving process (Laurie & Neimeyer, 2008). An alpha level of .05 was used to assess significance.

In predicting perceived stress, grief disenfranchisement, social support, and coping variables collectively accounted for 27% of variance in stress scores, with grief disenfranchisement describing 1.1%, social support explaining an additional 7.2%, and coping accounting for an additional 18.7% of the variance (see Table 6). When all variables were entered into the equation, behavioral disengagement, changes in goals, collective-centered, and ritual-centered coping subscales explained variance in perceived stress. Specifically, behavioral disengagement, changes in goals, and collective-centered coping subscales were related positively to perceived stress, and ritual-centered coping was related negatively to perceived stress.

With regard to the prediction of depressive symptoms, grief disenfranchisement, social support, and coping variables collectively accounted for 36.8% of the variance in depressive symptoms, with grief disenfranchisement describing 1.7%, social support explaining an additional 9.6%, and coping accounting for an additional 25.5% of the variance (see Table 7). When all variables were entered into the equation, behavioral disengagement and changes in goals explained variance in depressive symptoms, with both variables relating positively to depressive symptoms.

Finally, with regard to the prediction of prolonged grief, grief disenfranchisement, social support, and coping variables collectively accounted for 48% of the variance in prolonged grief scores, with grief disenfranchisement describing 9%, social support explaining an additional 4.4%, and coping accounting for an additional 34.6% of the variance (see Table 8). When all variables were entered into the equation, disenfranchised grief, emotional/informational support, changes in goals, and collective-centered coping accounted for variance in prolonged grief, with disenfranchised grief and emotional/informational support relating negatively to prolonged grief, and changes in goals and collective-centered coping relating positively to prolonged grief.

Discussion

The purpose of this study was to examine how grief disenfranchisement, social support and coping style predict stress, depressive symptoms, and prolonged grief in Black college students with regard to the deaths of Black Americans by police brutality and thus, advance knowledge regarding effective ways to help Black college students validate, receive support for, and cope with their grief resulting from police murders of Black Americans. Among our sample of students who experienced moderate levels of stress, elevated levels of depressive symptoms, and low levels of prolonged grief, behavioral disengagement, changes in goals, collective-

centered, and ritual-centered coping subscales predicted variance in perceived stress. Additionally, behavioral disengagement and changes in goals explained variance in depressive symptoms. Last, grief disenfranchisement, emotional/informational support, and changes in goals and collective-centered coping subscales accounted for variance in prolonged grief. These findings can be used to develop future interventions to reduce negative mental health outcomes among Black college students responding to racially-incited police violence.

Changes In Goals

Interestingly and contrary to hypothesized outcomes, the changes in goals subscale of the MFCQ (Gan et al., 2013) was predictive of and positively associated with perceived stress, depressive symptoms, and prolonged grief among a sample of Black college students. In this study, changing goals was operationalized as establishing or reassessing new values, readjusting goals in life, and seeking new outlook on life (Gan et al., 2013). The process of reevaluating one's goals may be overwhelming in the context of police violence against Black Americans. For example, in part due to online publicization of police violence against Black Americans, Black college students may feel confronted to seek new outlook or attempt to adjust their goals to account for the fact that on a systemic level, the United States does not value Black lives.

Extant literature supports this notion, explaining that individuals turn to meaning-focused coping strategies to reconcile beliefs and goals when presented with an uncontrollable stressor (Gan et al., 2013). Specifically, individuals might abandon unattainable goals in favor of attainable goals (Gan et al., 2013). For instance, Black college students may attempt to protect themselves from further harm, struggle, or mental anguish by revising more radical or lofty goals in favor of more conservative, achievable, realistic, and safer goals, given the impediments that

come with being Black in America. Moreover, in the process of readjusting their goals, students might mourn previously held goals, even if new goals contribute to protection or growth.

The findings were supported by the biopsychosocial model of perceived stress (Clark et al., 1999), the multidimensional model of racism-related stress (Harrell, 2000), and the cognitive theory of stress and coping (Folkman et al., 1986). Coping with racially-incited violence while surrounded by inherently racist systems and ideology of the United States not only limits coping options and availability (Harrell, 2000; Lazarus & Folkman, 1984), it also magnifies and perpetuates the stressor (Clark et al., 1999, Folkman, 2008), and may contribute to negative mental health outcomes including stress, depression, and prolonged grief. Ultimately, the process of reevaluating goals and outlook within the context which enables these murders (i.e., 400 years of racism in the Americas) which is outside of individual control (Folkman & Moskowitz, 2000), and developing new goals and outlook within a system built on the devaluing of the lives of those who look like you was associated with stress, depression, and prolonged grief, rather than alleviating the aforementioned negative mental health outcomes through meaning-making.

It also is important to acknowledge the randomness of the police murders of Black Americans (a significant amount of racially-incited violence against Black Americans seems to occur simply because a Black American was in the wrong place at the wrong time), the lack of sustained systemic change, and the added challenges that these elements bring to meaning-focused coping.

Behavioral Disengagement

As hypothesized, the behavioral disengagement subscale of the Brief COPE (Carver, 1999) was predictive of and positively associated with perceived stress and depressive symptoms in this study. Although students may attempt to stay informed and active on social media in the

wake of murders of Black Americans by police, prolonged exposure to police brutality against Black Americans may be devastating for mental well-being (Tynes et al., 2016). However, giving up attempts to cope with a stressor and repressing feelings was associated with stress and depression, as supported by extant literature in which behavioral disengagement predicted negative psychological and physiological outcomes including stress, depression, and prolonged grief (Carver, 1999; Carver, 2014; Elvira de la Morena & Cruzado, 2013; Gan et al., 2013; Peters et al., 2020). Furthermore, in the literature examining the assessment of depressive symptoms, behavioral disengagement was related to somatic complaints, interpersonal relations, and depressed affect (Lu et al., 2017; Radloff, 1977).

Behavioral disengagement as a coping mechanism may be contextualized within the multidimensional model of racism-related stress (Harrell, 2000), biopsychosocial model of perceived racism (Clark et al., 1999), and cognitive theory of stress and coping (Lazarus & Folkman, 1984). Systemic racism influences the availability of coping options (Harrell, 2000). As a result, students may have fewer adaptive coping mechanisms available to them, and are left to turn to behavioral disengagement, a maladaptive coping mechanism which fails to confront and deter the adverse effects of stressors (Clark et al., 1999; Lazarus & Folkman, 1984).

Collective-Centered Coping

Antithetical to hypothesized outcomes, the collective-centered coping subscale of the ACSI (Utsey, 2000) predicted and was positively correlated with perceived stress and prolonged grief in our study. Students may find the killings of Black Americans by the police relentlessly overbearing, frequently turning to family and friends in an attempt to relieve the burden of the stressor. However, collective-centered coping may have the opposite effect (Folkman, 2008), providing space for continued discussion regarding the killings and proliferating grief and trauma

among participants. In similar fashion, seeking advice from members of older generations may be distressing because of the lack of intergenerational systemic change. Furthermore, the majority of our sample identified as women (see Table 1), and extant literature suggests that Black women carry a considerable load of the caregiving in their families and communities (Keller, 2020). The Black women college students in our sample may be caring for others in collective coping spaces, rather than receiving support.

It is also important to note that students turning to collective support may be doing so after limited individual appraisal resources have been exhausted (Harrell, 2000; Clark et al., 1999, Lazarus & Folkman, 1984). Collective-centered coping within the Black American narrative also may relate to meaning-focused coping, as African-centered philosophies emphasize the connectedness of the world and valuing of the group over the individual—a sort of collective-consciousness (Utsey, 2000). As delineated above, making meaning of the upset systemic racism perpetuates for the collective Black American community may prolong stress and grieving.

Ritual-Centered Coping

Consistent with hypothesized outcomes, the ritual-centered coping subscale of the ACSI (Utsey, 2000) was predictive of and negatively associated with perceived stress in this study. Ritual-centered coping may be an effective way to reduce stress related to the racially-incited murders of Black Americans by police (Clark et al., 1999; Lazarus & Folkman, 1984). In this study, ritual-centered coping was operationalized as lighting a candle or incense for strength or using a cross or special object for its powers (Utsey, 2000). When facing stressful situations, Black Americans may take metaphysical approaches to coping based on religion or spirituality (Sambol-Tosco, n.d.; Utsey, 2000). Students may employ ritual-centered coping in an effort to

seek strength from a force greater than themselves or as a means of connecting with ancestors for guidance or resilience (Utsey, 2000).

Ritual-centered coping also holds historical significance in Black American culture as an expression of the African worldview in the face of devastating stressors (Utsey, 2000). Enduring 300 years of chattel slavery, enslaved Americans preserved African rituals through cultural expressions including storytelling, art, and music (Sambol-Tosco, n.d.). Today, students may find peace in vigils and candle lightings, which may be employed to collectively cope with the emotions resulting from the murders rather than the murders themselves. Students experiencing severe stress symptoms may find it helpful to turn to other coping skills, perhaps needing greater support than ritual-centered coping can provide (Harrell, 2000; Clark et al., 1999). Thus, findings indicate that students with less severe stress symptoms, such students in our sample, who on average indicated moderate levels of stress, may find ritual-centered coping beneficial.

Emotional/Informational Support

Also in support of hypothesized outcomes, emotional/informational support was predictive of and negatively related to prolonged grief. For the purposes of this study, emotional/informational support was operationalized as having someone who is willing to listen, provide information and advice, or who you can confide in (Sherbourne & Stewart, 1991). The findings are supported by extant literature, which reported correlations among increased support and lower levels of prolonged grief (Burke et al., 2010), and elevated levels of prolonged grief when an individual is met with overwhelmingly negative social interactions (Bridges, 2010; Burke et al., 2010; Greer & Brown, 2011; Piazza-Bonin et al., 2015). Findings may also be interpreted through the multidimensional model of race-related stress (Harrell, 2000), as racism can influence the availability of different social support options, especially at a PWI, where

students are less likely to receive institutional and cultural social support compared to students attending HBCUs (Bridges, 2010; Greer & Brown, 2011). Moreover, racism-related stressors may yield a range of disparate emotional responses, which also may influence the availability of social support (Harrell, 2000).

Disenfranchised Grief

Contrary to our hypotheses, disenfranchised grief was negatively associated with prolonged grief. Existing research literature suggests that grief experiences of Black college students mourning the murders of Black Americans by police may be disenfranchised inherently by white supremacy in America, by the horrific and stigmatized cause of loss, and by the sociocultural hesitancy to acknowledge that individuals can deeply grieve the deaths of individuals who are not personally known to them (Granek & Peleg-Sagy, 2017; Moore et al., 2020; Piazza-Bonin et al., 2015; Sharpe et al., 2014; Tynes et al., 2019). Potential explanations for our findings' incongruence with extant literature may be illuminated by the public discourse surrounding the murders and the composition of the sample. Following the highly publicized police murders of Black Americans in 2020, the resurgence of the Black Lives Matter movement has shone light on the devastation of the police murders of Black Americans. Perhaps the increased public attention coupled with discourse, organizing, and calls to action on social media validated Black college students' grief experiences. However, further investigation and replication are necessary.

Additional Findings

As expected, race-related stress demonstrated moderate positive correlations with perceived stress, depression, and prolonged grief. Variables which did not contribute to the prediction of perceived stress, depressive symptoms, or prolonged grief included tangible,

affective, and positive social interaction social support subscales, and active coping, planning, use of emotional support, changes in situational and global beliefs, rational use of resources, acceptance, spiritual-centered, denial, substance use, and cognitive/emotional debriefing coping subscales. Notably, participants did have access to tangible and affective social support and positive social interaction and utilized the majority of the coping mechanisms operationalized in the study. Participants did not frequently turn to denial or substance use as coping mechanisms (see Table 5), which may explain why they were not predictive of negative mental health outcomes.

Limitations

A fundamental limitation of the study was the nature of the sample, which was comprised of college students, the majority of whom identified as women and as heterosexual (see Table 1). Extant research literature suggests that college women utilize emotion-focused coping strategies more frequently than their male counterparts, and that when faced with instances of racism, Black women turn to emotion-focused religious or spiritual-centered coping compared to their Black male counterparts (Graves et al., 2021; Jacob et al., 2021). Correspondingly, our sample of college students at a competitive, state-funded, public 4-year institution is likely of moderate or higher socioeconomic status, politically liberal, and supported by family members with college degrees (Abrams, 2020; Hanson, 2022). Thus, our results could be sample-specific, and replication among more diverse samples of Black Americans is needed to increase the generalizability of our findings.

Next, the survey itself had a number of limitations, in that it was a self-report survey and in the measurement of variables of interest. Although we did operationalize coping mechanisms using three different measures of coping styles, there are coping skills that Black college students

may have employed which were not measured in this study. For example, students may have turned to creative outlets to process their emotions, focused on taking care of their physical health through cooking and exercising, or spent time in nature to re-ground themselves. Next, low scores on the grief disenfranchisement measure may suggest that the instrument did not comprehensively operationalize the variable for this study. The WDG measure (St. Clair, 2013) focuses primarily on grief witnessing and disenfranchisement on an individual, interpersonal level. Perhaps Black college students would find the measure more salient in addressing the potential disenfranchisement of their grief with the addition of items operationalizing disenfranchisement on institutional and cultural levels and in collective, cultural-symbolic, and sociopolitical contexts, as these are the forms and contexts through which racism manifests, according to the multidimensional model of racism-related stress (Harrell, 2000). Finally, data were collected in the fall of 2021 and we did not control for stress related to the ongoing coronavirus pandemic.

Moreover, it is notable that the most common major among our sample was psychology (21.6%), with many students studying topics in the social sciences (39.2%). During the public mourning of the murders of Black Americans by police, many academic and non-academic university departments made efforts to reach out to grieving students and offer solidarity and support. These efforts were particularly normative among social science departments because of extant discussions around diversity, equity, inclusion, and justice. Hence, it is possible that Black college students who were part of social science departments received additional interpersonal institutional support, which may have validated their grieving experiences.

Furthermore, the survey contained a misnomer during the first two months of data collection. Question 14 of the demographic questionnaire originally asked participants “how

often do you witness online content of police violence towards African Americans.” Researchers intended to reference Black Americans rather than African Americans throughout the study, since it is unclear whether Black Americans victimized by police also identify as African Americans. This inconsistency which existed in the survey during two months of data collection may have caused participants confusion, since Black and African American are not necessarily synonymous. It was intended that Question 14 of the demographic questionnaire ask “how often do you witness online content of police violence towards Black Americans.” This correction was made approximately two-thirds of the way into the data collection window and may have impacted the validity of the responses to demographic question 14 collected before the revision. Finally, future research studies might include a similar question regarding the degree to which participants witnessed online content of police violence against Black Americans in the inclusion criteria of the study.

Ultimately, it is crucial to acknowledge the limitations of the nature of the study. Police violence against and murders of Black Americans is an emotional, sensitive, and politically charged topic. The nature of the topic may have influenced the findings of this study, with regard to who was comfortable with or inclined to participate in the study. Likewise, this study may have facilitated new introspection for students, particularly with regard to processing negative thoughts and feelings with regard to adversity which may be stigmatized in the Black community (White, 2019). Equally important, the data were collected in the fall of 2021, over a year after the major publicization of police violence against Black Americans and the resurgence of the Black Lives Matter movement. Thus, students’ grief experiences, social support surrounding the topic, use of coping skills, and mental health outcomes may be different compared to if we had administered the survey during the summer of 2020 and may also differ if replicated another

point in time in our ever-changing sociopolitical context. Not to mention, we did not target a specific period of loss, and asked Black college students to reflect on their grief experiences in general, rather than asking Black college students to focus on recalling their grieving at a particular point in time. Finally, the study analyzed students' grief experiences with regression analyses, therefore, future research is needed to examine the ordinal progression of the variables of interest.

Recommendations for Future Research

Additional research is necessary to gain more comprehensive insight regarding the grief experiences of Black college students mourning the murders of Black Americans by police brutality. Researchers should investigate the progression of Black Americans' grief experiences and the variables of interest in this study longitudinally, as police murders of Black Americans inevitably continue. It would be beneficial to employ qualitative methods to gain a nuanced understanding of the variables investigated quantitatively in this study, particularly with regard to variables which may inform interventions, such as meaning-focused coping, collective-centered coping, and social support. Meaning-focused changes in goals was predictive of and positively related to negative mental health outcomes, however the study did not examine the specific ways in which students changed their goals. Additional attention should also be paid to which goals are protective against adverse mental health outcomes and which are associated with adverse mental health outcomes, and how new goals manifest in terms of action. For example, to what degree did students become involved in social change as a result of reevaluating their goals? To what degree did students adopt a negative outlook on their future as a Black American citizen?

Further research is also needed to explore the positive relationship between collective-centered coping, perceived stress, and prolonged grief, particularly with regard to effectively validating and supporting grief experiences while avoiding the proliferation of grief or trauma. Additional investigation is needed with regard to social support. Emotional/informational support was predictive of and negatively related to prolonged grief, however other types of social support were not predictive of negative mental health outcomes. How does social support interact with collective-centered coping, which was a positive predictor of perceived stress and prolonged grief? Additional investigations are also needed with regard to race-related stress as a predictor and moderator. Future studies should examine various coping styles as potential mediators of the relationship between race-related stress and mental health outcomes (Greer et al., 2015). Future research should also investigate race-related stress as a potential moderator of the relationship between grief disenfranchisement and perceived stress, depression, and prolonged grief.

In addition to further investigation of the variables of interest in this study, replication of the study is also needed among more diverse samples of Black Americans. Researchers should sample Black Americans living in locations vulnerable to racially-incited police brutality such as dense, overpoliced urban areas with high crime rates, and who are likely of a lower socioeconomic status, and less formally educated than our sample of Black college students. The study should also be replicated among Black Americans with severe symptoms of stress, depression, and prolonged grief to gain understanding regarding their coping processes. Last, it is crucial to recognize that this study sampled Black college students attending a PWI, and thus the study should also be replicated at an HBCU, where grief is likely less disenfranchised, social

support may be a more important predictor, and collective-centered coping would likely look different.

Additional variables to consider in future research related to police brutality against Black Americans include involvement in activism, Black identity salience, sense of connectedness to the United States as an institution, culturally-focused coping, emotional expression, and strengths-based approaches. Black Americans might participate in social action as a means of social support, active coping, meaning-focused coping, or collective coping, and it would be worthwhile to investigate experiences of social activism support or coping mechanism longitudinally. Additionally, researchers should consider Black identity salience and connectedness with the Black community in future examination of responses to racially-incited violence. For example, to what degree would those who hold the Black American identity as salient strongly identify with vicarious trauma or experience severe negative mental health outcomes? To what degree do multiracial Black Americans feel socially supported in their grieving?

Researchers also might investigate Black Americans' sense of connectedness with the United States as an institution and how this may impact feelings of safety, participation in protests, prevalence of symptoms of intergenerational trauma, and engagement in celebrations of the United States. On the other hand, it may be interesting to explore culturally-focused rituals and spiritual practice in group settings as coping mechanisms. Markedly, future research must examine Black Americans' responses to police murders of Black Americans from a strengths-based perspective. Variables of interest may include resistance, resilience, and Black joy.

With regard to developing interventions, future research might examine the effectiveness of a ritual-centered coping intervention for Black college students by administering pre and

posttest measures across control, partial, and intervention groups. Researchers could also investigate the longitudinal effectiveness of multiple repetitions of the intervention. Regardless, future intervention-based research should draw on mixed methods, incorporating qualitative responses or interviews.

Clinical and Educational Implications

Should our findings be replicated, research and intervention must function as one facet of a multi-pronged approach, accompanying reflection, action, and advocacy towards anti-racist change on individual, institutional, and systemic levels so that students encounter fewer systemic stressors. Outreach and intervention efforts should focus on encouraging ritual-centered coping on an individual basis, or perhaps within collective spaces which allow for individual reflection. However, it is notable that despite elevated depressive symptoms, the majority of our sample had not sought professional help (see Table 1), so psychoeducation efforts may be more effective if clinicians focus on reaching Black college students within their existing gathering spaces after first educating clinicians on best practices for working with Black college students grieving the police murders of Black Americans. For example, clinicians might disseminate information encouraging ritual-centered individual coping in meetings of Black student organizations, in introductory psychology classes, or in African American or Black studies departments. Although changes in goals (a form of meaning-making) was predictive of and positively related to stress, depression, and prolonged grief, future research is needed to examine how to effectively address the process of meaning-making with bereaved Black college students.

Additionally, it is important to educate higher education professionals who are connected with Black college students on effective coping mechanisms for students grieving the police murders of Black Americans and utilize extant networks to make the collective community

larger and safer for Black college students in university settings. On an institutional level, departments, colleges, and universities can focus on aligning their practices with anti-racist values so that students are met with fewer systemic stressors requiring them to re-evaluate personal values and goals.

Conclusion

The purpose of this study was to examine the degree to which grief disenfranchisement, social support, and coping style predicted perceived stress, depressive symptoms, and prolonged grief among a sample of Black college students grieving the police murders of Black Americans. Grief disenfranchisement, social support, and coping style accounted for unique and shared variance in the prediction of negative mental health outcomes. Further examination and replication among more diverse samples of Black Americans are needed to increase generalizability and develop effective interventions. It is our hope that this study will increase awareness regarding the understudied grief experiences of Black Americans, serve as a call to action for researchers and clinicians to extend this underrepresented area of research, and emphasize the urgent need for the reform and abolition of the systems which perpetuate violence against Black Americans.

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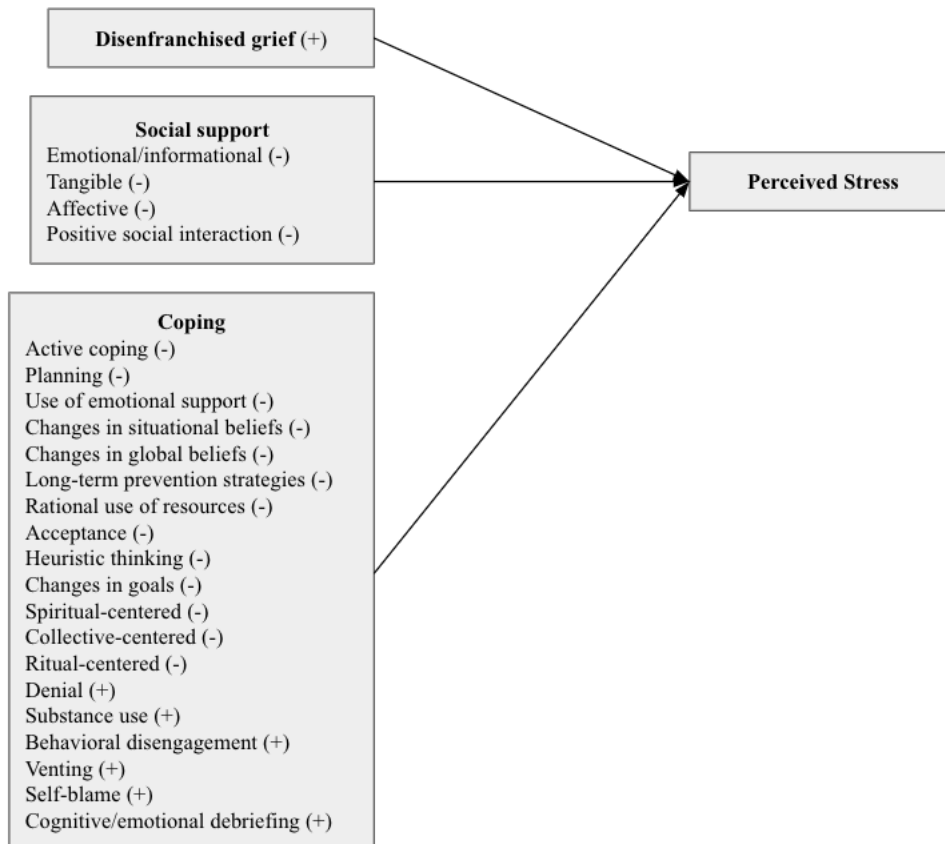
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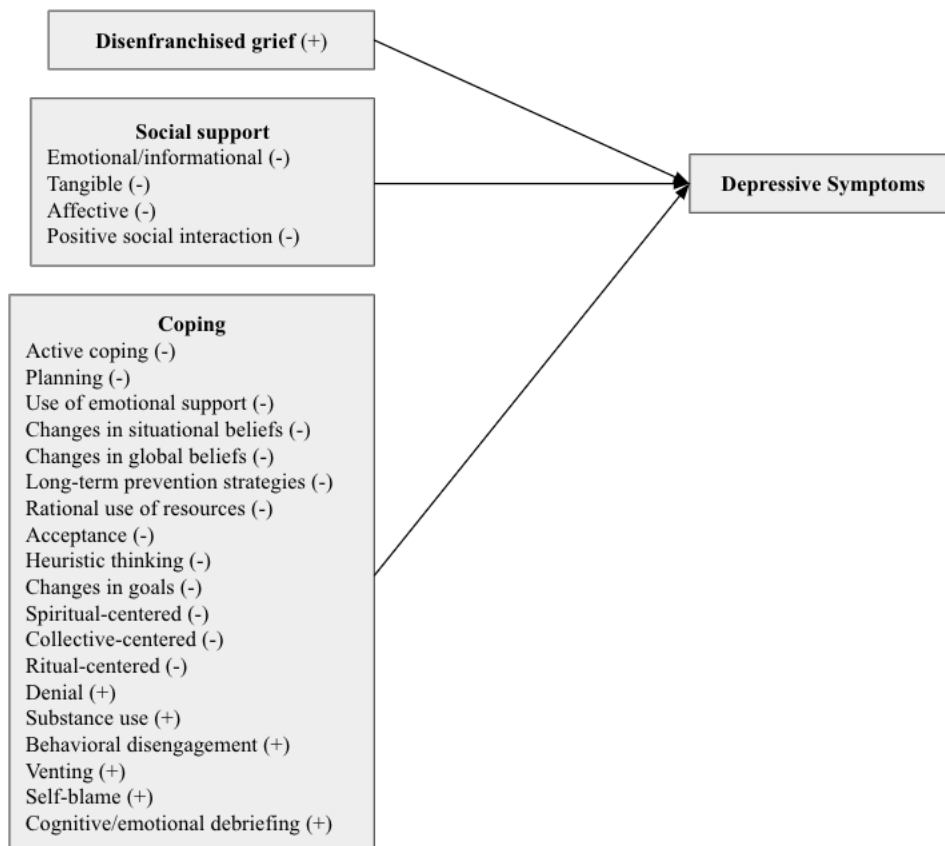
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Figure 1*Hypothesized Model of Regression Analysis Predicting Perceived Stress*

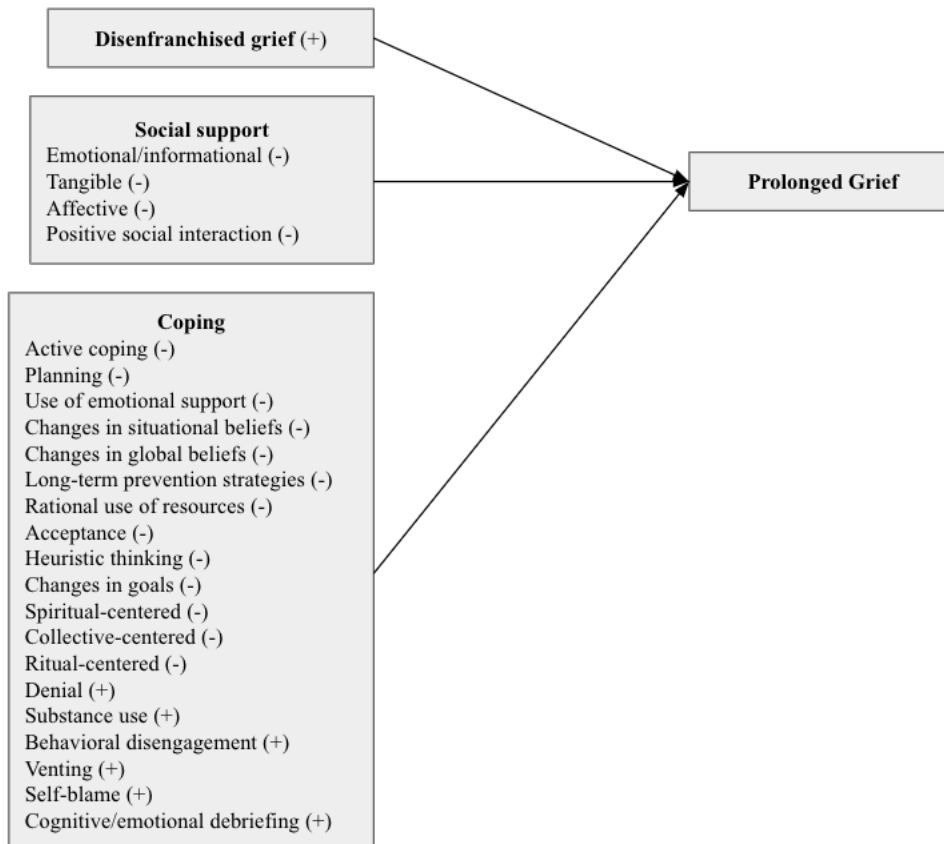
Note. The coping thematic categories (problem-focused, emotion-focused, meaning-focused, and disengaged) were not supported by the exploratory factor analyses. The existing coping subscales listed above were utilized in subsequent analyses and in the discussion of the findings.

Figure 2

Hypothesized Model of Regression Analysis Predicting Depressive Symptomatology



Note. The coping thematic categories (problem-focused, emotion-focused, meaning-focused, and disengaged) were not supported by the exploratory factor analyses. The existing coping subscales listed above were utilized in subsequent analyses and in the discussion of the findings.

Figure 3*Hypothesized Model of Regression Analysis Predicting Prolonged Grief*

Note. The coping thematic categories (problem-focused, emotion-focused, meaning-focused, and disengaged) were not supported by the exploratory factor analyses. The existing coping subscales listed above were utilized in subsequent analyses and in the discussion of the findings.

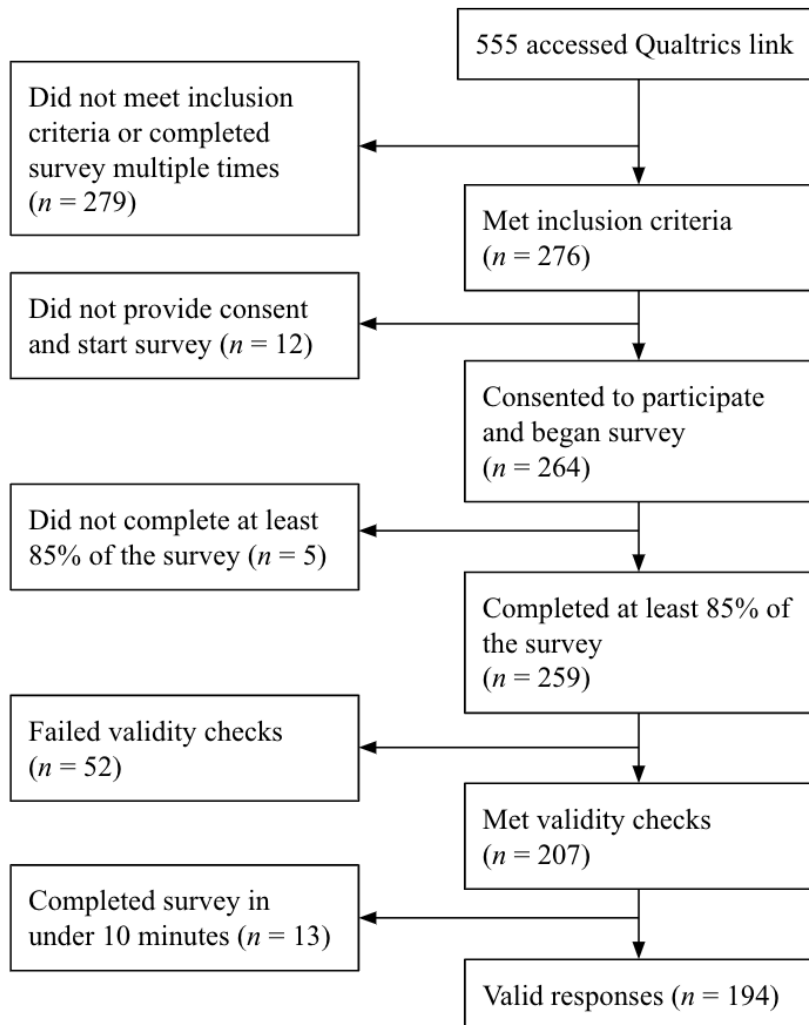
Figure 4*Distribution of Participants*

Table 1*Demographics (n = 194)*

Variable	Total %	n
Gender identity		
Woman	72.7	141
Man	24.2	47
Non-binary	3.1	6
Which of the following best describes your racial/ethnic heritage?		
Select all that apply.*		
Black, African American, of Afro-Caribbean	99.0	192
Non-Hispanic white, European-American	3.6	7
Hispanic or Latinx	2.1	4
Native American	1.0	2
Asian, Pacific Islander, or Desi-American	0.5	1
Other, please list	2.6	5
Caribbean American	0.5	1
European-Italian	0.5	1
Nigerian	0.5	1
North African	0.5	1
Sexual orientation		
Heterosexual/Straight	77.8	151
Bisexual	10.8	21
Homosexual/Gay/Lesbian	3.6	7
Other	3.1	6
Pansexual	2.6	5
Asexual	2.1	4
College class standing		
Sophomore	28.4	55
First year	24.7	48
Junior	24.2	47
Senior	20.6	40
Other	2.1	4
Have you utilized any support/treatment services in the last 14 months? Select all that apply.*		
None	60.8	118
Individual counseling	33.0	64
Religious counseling	6.7	13
Group counseling	2.6	5
Other, please list	1.0	2
Medication (for ADHD) but also therapy for ADHD as well	0.5	1
How much time do you spend on social media daily?		
Between 3 and 4 hours	29.9	58
Between 1 and 2 hours	28.9	56
More than 4 hours	24.2	47

Between 30 minutes and 1 hour	12.4	24
I do not use any social media platforms	3.6	7
Less than 30 minutes	1.0	2
Has someone close to you died in the last year?		
No	62.4	121
Yes	37.6	73
IF “Yes” is selected: Was the death(s) due to police brutality?		
No	100.0	73
Yes	0	0

Note. * Indicates that participants were able to select multiple answers for this question.

Table 2*Major (n = 194)*

Variable	Total %	n
What is your major/field of study? If major is undecided, please provide a potential major/field of interest:*		
Psychology	21.6	42
Public Health Science	9.8	19
Information Science	7.7	15
Criminology and Criminal Justice	7.2	14
Biological Sciences: General Biology	6.7	13
Government and Politics	5.2	10
Architecture	3.1	6
Computer Science	2.6	5
Journalism	2.6	5
Sociology	2.1	4
Biological Sciences: Physiology and Neurobiology	1.5	3
English	1.5	3
Finance	1.5	3
Kinesiology	1.5	3
Marketing	1.5	3
Neuroscience	1.5	3
Operations Management and Business Analytics	1.5	3
Public Policy	1.5	3
Studio Art	1.5	3
African American Studies	1.0	2
Biochemistry	1.0	2
Bioengineering	1.0	2
Cell Biology and Genetics	1.0	2
Civil and Environmental Engineering	1.0	2
Economics	1.0	2
Environmental Science and Policy	1.0	2
Family Science	1.0	2
Hearing and Speech Sciences	1.0	2
Management	1.0	2
Mechanical Engineering	1.0	2
**	0.5	1
***	0	0

Note. * Indicates that participants were able to select multiple answers for this question. ** The following majors were represented in the sample with one student (0.5% prevalence) each: Accounting, Aerospace Engineering, Animal Sciences: Combined Ag/Veterinary Medicine, Chemical and Biomolecular Engineering, Chemistry, Communication, Community Health, Computer Engineering, Early Childhood and Early Childhood Special Education, Elementary Education, Immersive Media Design, Information Systems, International Business, Mathematics: Statistics, Music: Liberal Arts, Music: Professional Program, Nutrition and Food Science:

Dietetics, Philosophy Politics and Economics. *** The following majors were not represented in the sample: Agricultural and Resource Economics, Agricultural and Resource Economics: Agribusiness, Agricultural and Resource Economics: Environmental Resource Economics, Agricultural Science and Technology, Agricultural Science and Technology: Agronomy, Agricultural Science and Technology: Horticulture, American Studies, Animal Services: Animal Care and Management, Animal Sciences: Science/Pre-Professional, Anthropology, Arabic Studies, Art Education, Art History and Archaeology, Astronomy, Atmospheric and Oceanic Science, Biocomputational Engineering, Biological Sciences: Ecology and Evolution, Biological Sciences: Microbiology, Central European Russian and Eurasian Studies, Chinese, Cinema & Media Studies, Classics, Computer Science: Cybersecurity, Computer Science: Data Science, Computer Science: Machine Learning, Dance, Electrical Engineering, Elementary/Middle Special Education, Embedded Systems and Internet of Things, Environmental Science and Technology: Ecological Technology Design, Environmental Science and Technology: Environmental Health, Environmental Science and Technology: Natural Resources Management, Environmental Science and Technology: Soil and Watershed Science, Fire Protection Engineering, French, Geographical Sciences and GIS, Geology, Germanic Studies, History, Human Development, Individual Studies, International Relations, Italian, Japanese, Jewish Studies, Landscape Architecture, Linguistics, Materials Science and Engineering, Mathematics, Mathematics: Applied Math, Mathematics: Education, Middle School Math and Science Education, Music: Education, Nutrition and Food Sciences: Nutritional Science, Nutrition and Food Science: Food Science, Persian Studies, Philosophy, Physics, Plant Sciences: Plant Biology, Plant Sciences: Turf and Golf Course Management, Plant Sciences: Urban Forestry, Religions of the Ancient Middle East, Romance Languages, Russian Language and Literature, Secondary Education: English Area of Concentration, Secondary Education: Mathematics (Terrapin Teachers) Area of Concentration, Secondary Education: Science (Terrapin Teachers) Area of Concentration, Secondary Education: Social Studies Area of Concentration, Secondary Education: World Languages Area of Concentration, Spanish Language, Literature, and Culture, Supply Chain Management, Theatre, Women Gender and Sexuality Studies

Table 3*Involvement in On-Campus Black Student Organizations (n = 194)*

Variable	Total %	n
Are you involved in any Black and/or African American student organizations on campus? Select all that apply.*		
None	42.8	83
Nyumburu Cultural Center	30.9	60
Black Student Union	20.6	40
African Student Association	13.4	26
Office of Multi-ethnic Student Education (OMSE)	11.9	23
Caribbean Student Association	6.2	12
Other, please list	6.2	12
N/A	1.0	2
African Diaspora Reading Group	0.5	1
Black Explosion Newspaper	0.5	1
Black Pre-Law Association	0.5	1
College Success Scholars Program	0.5	1
I attend events	0.5	1
Kappa Lambda Xi Multicultural Sorority	0.5	1
National Association of Black Accountants	0.5	1
Black Engineers Society	5.7	11
NAACP	4.6	9
Ethiopian Eritrean Students Association	4.1	8
Multicultural Involvement and Community Advocacy (MICA)	3.1	6
Student Success Leadership Council	2.6	5
Sisterhood of Unity and Love	2.6	5
The Divine Nine (NPHC) at UMD: Alpha Phi Alpha, Alpha Kappa Alpha, Kappa Alpha Psi, Delta Sigma Theta, Phi Beta Sigma, Alpha Phi Alpha	2.1	4
All Eyez LLC	1.5	3
Black Honors Caucus	1.0	2
Maryland MANE	1.0	2
Phunktions Hip Hop Company	1.0	2
STEPP	1.0	2
Serve Innovate Support Thrive Achieve (S.I.S.T.A.)	0.5	1
U.E.X.C.E.L.	0.5	1
BlackOut	0.5	1
Black Male Initiative	0.5	1
The Maryland Gospel Choir	0.5	1
Afrochique	0.5	1
Star Strutters	0.5	1
Jaiyeroof	0	0
African Student's Progressive Action Committee	0	0
National Council of Negro Women	0	0

Somali Student Association	0	0
Diasporic	0	0
UMD Dynamic	0	0
Prima Dolls	0	0
Riddim Ryderz	0	0

Note. * Indicates that participants were able to select multiple answers for this question.

Table 4*Loss Experiences (n =194)*

Variable	Total %	<i>n</i>
Which of the following losses have you experienced as a result of police violence against Black Americans?*		
Loss of trust in police systems	86.1	167
Loss of trust in government systems	85.6	166
Loss of feeling of safety/security in public spaces	79.4	154
Loss of trust in institutional systems	78.9	153
Loss of optimism	53.6	104
Loss of peace	49.5	96
Loss of comfort in relationship(s) with friends	26.3	51
Loss of relationship(s) with friends	23.2	45
Loss of focus in school	20.1	39
Loss of motivation in school	14.9	29
Loss of productivity in school	14.4	28
Loss of comfort in relationship(s) with family members	9.3	18
Loss of relationship(s) with family members	8.8	17
None	3.6	7
Other, please list	1.5	3
A loss of respect for this country	0.5	1
Most of these I never had to begin with, so I didn't lose them	0.5	1
The inability to date outside my race	0.5	1

Note. * Indicates that participants were able to select multiple answers for this question.

Table 5*Means, Standard Deviations, Ranges, Reliability Estimates, and Correlations Among All Variables (n =194)*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Grief Disenfranchisement	1													
2. Social Support	-.50**	1												
3. Emotional/Informational Support	-.50**	.97**	1											
4. Tangible Support	-.41**	.88**	.78**	1										
5. Affectionate Support	-.47**	.92**	.85**	.78**	1									
6. Positive Social Interaction	-.45**	.93**	.87**	.73**	.84**	1								
7. Brief COPE	-.26**	.13	.15*	.12	.08	.10	1							
8. Active Coping	-.33**	.29**	.30**	.24**	.29**	.23**	.65**	1						
9. Planning	-.33**	.15*	.18*	.11	.13	.11	.64**	.58**	1					
10. Denial	-.09	-.07	-.07	-.02	-.08	-.08	.55**	.16*	.15*	1				
11. Substance Use	.03	-.12	-.13	-.08	-.11	-.13	.44**	.14*	.03	.27**	1			
12. Behavioral Disengagement	.07	-.16*	-.16*	-.12	-.20**	-.14	.50**	.05	.07	.33**	.21**	1		
13. Use of Emotional Support	-.41**	.42**	.43**	.35**	.40**	.35**	.71**	.54**	.47**	.22**	.15*	.12	1	
14. Meaning Focused Coping	-.34**	.29**	.32**	.21**	.24**	.28**	.43**	.43**	.41**	.20**	-.04	.12	.45**	1
15. Changes in Situational Beliefs	-.16*	.20**	.22**	.16*	.16*	.18*	.32**	.32**	.28**	.11	-.04	.11	.35**	.71**
16. Changes in Global Beliefs	-.25**	.18*	.21**	.13	.14	.13	.21**	.24**	.24**	.20**	-.08	.01	.22**	.70**
17. Rational Use of Resources	-.41**	.38**	.38**	.29**	.34**	.35**	.38**	.40**	.36**	.09	-.00	.06	.46**	.70**
18. Acceptance	-.11	.09	.08	.09	.08	.10	.14	.12	.06	.02	-.03	.16*	.17*	.52**
19. Changes in Goals	-.21**	.16*	.19**	.09	.09	.18*	.38**	.37**	.39**	.16*	.07	.08	.31**	.68**
20. Africultural Coping	-.37**	.29**	.30**	.24**	.25**	.24**	.55**	.47**	.45**	.34**	.10	.15*	.53**	.64**
21. Spiritual-Centered Coping	-.23**	.14	.16*	.13	.11	.07	.32**	.28**	.28**	.30**	.02	.06	.26**	.51**
22. Collective-Centered Coping	-.47**	.42**	.45**	.32**	.39**	.35**	.50**	.52**	.47**	.21**	.04	.01	.59**	.60**
23. Ritual-Centered Coping	-.28**	.16*	.15*	.17*	.16*	.13	.44**	.31**	.21**	.37**	.27**	.16*	.36**	.35**
24. Cognitive/Emotional Debriefing	-.21**	.18*	.17*	.13	.15*	.20**	.50**	.35**	.39**	.27**	.10	.23**	.45**	.49**
25. Perceived Stress	.11	-.23**	-.23**	-.18*	-.27**	-.18*	.19**	-.04	.14*	.04	.08	.30**	-.05	.05
26. Depressive Symptoms	.13	-.28**	-.27**	-.19**	-.32**	-.26**	.36**	.10	.19**	.23**	.24**	.35**	.02	.04
27. Prolonged Grief	-.30**	.03	.02	.03	-.02	.05	.51**	.28**	.39**	.33**	.20**	.24**	.32**	.38**
28. Race-Related Stress	-.15*	.04	.08	-.01	-.02	.04	.39**	.29**	.31**	.24**	.08	.27**	.16*	.28**
Mean (SD)	57.45 (14.11)	61.24 (20.39)	26.24 (8.81)	11.50 (4.95)	9.91 (3.72)	13.59 (4.44)	30.21 (7.47)	4.89 (1.65)	4.43 (1.68)	3.07 (1.40)	2.54 (1.26)	3.59 (1.63)	4.52 (1.75)	45.60 (13.60)
Actual Range	24-104	19-95	8-40	4-20	3-15	4-20	16-62	2-8	2-8	2-8	2-8	2-8	2-8	11-84
Possible Range	22-110	19-95	8-40	4-20	3-15	4-20	16-64	2-8	2-8	2-8	2-8	2-8	2-8	0-84
Cronbach's Alpha	.91	.97	.94	.88	.89	.91	.82	.73	.70	.63	.89	.63	.75	.87

Note. ** Correlation is significant at $p < .01$ (two-tailed). * Correlation is significant at $p < .05$ (two-tailed).

Table 5*Means, Standard Deviations, Ranges, Reliability Estimates, and Correlations Among All Variables (n = 194)*

Variable	15	16	17	18	19	20	21	22	23	24	25	26	27	28
15. Changes in Situational Beliefs	1													
16. Changes in Global Beliefs	.31**	1												
17. Rational Use of Resources	.46**	.40**	1											
18. Acceptance	.32**	.23**	.21**	1										
19. Changes in Goals	.29**	.36**	.38**	.22**	1									
20. Africultural Coping	.36**	.50**	.50**	.22**	.49**	1								
21. Spiritual-Centered Coping	.22**	.63**	.34**	.17*	.29**	.79**	1							
22. Collective-Centered Coping	.35**	.42**	.56**	.18*	.45**	.84**	.55**	1						
23. Ritual-Centered Coping	.12	.25**	.27**	.09	.35**	.61**	.43**	.44**	1					
24. Cognitive/Emotional Debriefing	.34**	.22**	.37**	.21**	.45**	.83**	.44**	.58**	.42**	1				
25. Perceived Stress	-.04	-.00	-.05	.02	.19**	.07	.01	.06	-.07	.14	1			
26. Depressive Symptoms	.01	-.08	-.07	-.02	.24**	.17*	.05	.09	.10	.27**	.68**	1		
27. Prolonged Grief	.19**	.22**	.29**	.09	.43**	.51**	.28**	.50**	.32**	.47**	.38**	.47**	1	
28. Race-Related Stress	.05	.23**	.22**	.07	.34**	.30**	.18*	.33**	.21**	.22**	.36**	.39**	.40**	1
Mean (SD)	7.73 (3.43)	9.20 (4.45)	7.22 (2.90)	7.42 (3.01)	6.36 (3.13)	31.28 (15.66)	6.77 (5.84)	10.33 (5.19)	1.09 (2.06)	13.09 (6.54)	22.05 (6.39)	22.59 (11.75)	22.29 (7.60)	45.39 (18.07)
Actual Range	0-16	0-16	0-12	0-12	0-12	4-80	0-23	0-23	0-9	0-33	0-37	0-52	10-47	0-88
Possible Range	0-16	0-16	0-12	0-12	0-12	0-90	0-24	0-24	0-9	0-33	0-40	0-60	10-50	0-88
Cronbach's Alpha	.68	.86	.76	.69	.81	.91	.87	.82	.81	.82	.83	.91	.86	.91

Note. ** Correlation is significant at $p < .01$ (two-tailed). * Correlation is significant at $p < .05$ (two-tailed).

Table 6*Hierarchical Regression Analysis Predicting Perceived Stress (n = 194)*

Variable	<i>B</i> ***	<i>SE</i> <i>B</i> ***	β ***	<i>T</i> ***	<i>df</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>	ΔF
Disenfranchised Grief	.01	.04	.01	.17	1	.11	.01	.01	2.15	2.15
Social Support Subscales					4	.29	.08	.07	3.40**	3.68**
Emotional/Informational Support	-.21	.12	-.29	-1.70						
Tangible Support	.19	.15	.15	1.29						
Affectionate Support	-.39	.25	-.23	-1.54						
Positive Social Interaction	.24	.22	.17	1.09						
Coping Subscales					15	.52	.27	.19	3.20**	2.96**
Brief COPE										
Active Coping	-.46	.35	-.12	-1.33						
Planning	.63	.34	.17	1.87						
Denial	-.41	.35	-.09	-1.17						
Substance Use	.27	.37	.05	.74						
Behavioral Disengagement	1.17	.29	.30	4.02**						
Emotional Support	-.29	.35	-.08	-.82						
MFCQ										
Changes in Situational Beliefs	-.15	.15	-.08	-1.04						
Changes in Global Beliefs	.02	.13	.01	.13						
Rational Use of Resources	-.21	.20	-.10	-1.09						
Acceptance	-.08	.15	-.04	-.51						
Changes in Goals	.42	.17	.21	2.50*						
ACSI										
Spiritual-Centered Coping	-.03	.11	-.02	-.23						
Collective-Centered Coping	.36	.14	.29	2.55*						
Ritual-Centered Coping	-.59	.26	-.19	-2.27*						
Cognitive/Emotional Debriefing	.03	.09	.03	.28						

Note. ***Data are from step three of the coefficient table. ** $p < .01$, * $p < .05$.

Table 7*Hierarchical Regression Analysis Predicting Depressive Symptoms (n = 194)*

Variable	<i>B</i> ***	<i>SE</i> <i>B</i> ***	β ***	<i>T</i> ***	<i>df</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>	ΔF
Disenfranchised Grief	.04	.07	.05	.58	1	.13	.02	.02	3.38	3.38
Social Support Subscales					4	.34	.11	.10	4.78**	5.06**
Emotional/Informational Support	-.14	.21	-.11	-.68						
Tangible Support	.44	.25	.18	1.75						
Affectionate Support	-.81	.43	-.26	-1.89						
Positive Social Interaction	-.14	.38	-.05	-.38						
Coping Subscales					15	.61	.37	.26	5.03**	4.65**
Brief COPE										
Active Coping	.16	.60	.02	.27						
Planning	.84	.58	.12	1.46						
Denial	.52	.60	.06	.86						
Substance Use	1.14	.63	.12	1.80						
Behavioral Disengagement	1.67	.50	.23	3.35**						
Emotional Support	-.72	.60	-.11	-1.20						
MFCQ										
Changes in Situational Beliefs	-.10	.26	-.03	-.38						
Changes in Global Beliefs	-.35	.23	-.13	-1.51						
Rational Use of Resources	-.48	.34	-.12	-1.43						
Acceptance	-.24	.26	-.06	-.93						
Changes in Goals	.82	.29	.22	2.80**						
ACSI										
Spiritual-Centered Coping	-.06	.19	-.03	-.30						
Collective-Centered Coping	.45	.24	.20	1.87						
Ritual-Centered Coping	-.50	.45	-.09	-1.12						
Cognitive/Emotional Debriefing	.29	.16	.16	1.83						

Note. ***Data are from step three of the coefficient table. ** $p < .01$, * $p < .05$.

Table 8*Hierarchical Regression Analysis Predicting Prolonged Grief (n = 194)*

Variable	<i>B</i> ***	<i>SE</i> <i>B</i> ***	β ***	<i>T</i> ***	<i>df</i>	<i>R</i>	<i>R</i> ²	ΔR^2	<i>F</i>	ΔF
Disenfranchised Grief	-.11	.04	-.20	-2.88**	1	.30	.09	.09	19.06**	19.06**
Social Support Subscales					4	.37	.13	.04	5.84**	2.39
Emotional/Informational Support	-.32	.12	-.37	-2.56*						
Tangible Support	.19	.15	.12	1.28						
Affectionate Support	-.41	.25	-.20	-1.60						
Positive Social Interaction	.40	.22	.23	1.77						
Coping Subscales					15	.69	.48	.35	7.99**	7.67**
Brief COPE										
Active Coping	-.41	.35	-.09	-1.17						
Planning	.56	.34	.12	1.66						
Denial	.59	.35	.11	1.68						
Substance Use	.65	.37	.11	1.75						
Behavioral Disengagement	.53	.29	.12	1.83						
Emotional Support	-.10	.35	-.02	-.30						
MFCQ										
Changes in Situational Beliefs	-.01	.15	-.00	-.04						
Changes in Global Beliefs	.05	.14	.03	.35						
Rational Use of Resources	-.10	.20	-.04	-.50						
Acceptance	-.15	.15	-.06	-.96						
Changes in Goals	.46	.17	.19	2.72**						
ACSI										
Spiritual-Centered Coping	-.11	.11	-.09	-1.01						
Collective-Centered Coping	.62	.14	.42	4.39**						
Ritual-Centered Coping	-.13	.26	-.03	-.48						
Cognitive/Emotional Debriefing	.15	.09	.13	1.60						

Note. ***Data are from step three of the coefficient table. ** $p < .01$, * $p < .05$.

Appendix A

Review of Literature

The study investigated predictors of stress, depressive symptoms, and prolonged grief among Black college students in response to the murders of Black Americans by the police. Overviews of police brutality in the United States, the witnessing of traumatic events online, and vicarious racism and trauma are provided. The underlying theories of the study are described. Literature on disenfranchised grief, social support (including Black students' experiences of social support at predominantly white institutions), coping, and mental health outcomes are reviewed and applied to the context of Black college students grieving deaths by police brutality. Research questions and hypotheses for the study also are included.

Overview of Police Brutality in the United States

Historical Context of Anti-Black Racism. Early colonial America facilitated the refinement of the modern social construction of race as a means to justify the eviction of Native Americans and enslavement of African Americans. Since this refinement, anti-Black racism in the United States has served as a significant contributor to the evolution of legal policing in America ("Historical Foundations of Race," 2020). Slave patrols of the 18th century American south sanctioned racial oppression of enslaved Black Americans, employing violent policing as a method of instilling terror and trauma. Following the Civil War, these publicly funded departments evolved, forming federal and state militias and the Ku Klux Klan, enforcing the Reconstruction era black codes while mimicking the organization of early American police departments as a tactic to impersonate legitimacy (Durr, 2015). The Jim Crow laws of the late 19th and early 20th centuries maintained the segregation of Black Americans as they migrated to more northern and urban areas, while simultaneously legalizing continued police violence

towards Black Americans (Durr, 2015). In the 21st century United States, the use of terrorism and slavery to systemically oppress Black Americans is legally accommodated through the means of police brutality and mass incarceration (DuVernay, 2016).

Underlying the unique grief experiences of Black Americans mourning the deaths of Black Americans due to police brutality is a state of perpetual, historically unresolved grief residual from the physical, psychological, and emotional trauma of chattel slavery (Moore et al., 2020). It is critical that psychologists recognize this historical trauma to provide effective grief related counseling and interventions for Black Americans. Laurie and Neimeyer (2008) further describe “bereaved African Americans may also be acutely aware of the ways in which discrimination both denied their loved ones opportunities and contributed to their deaths. In coping with death, African Americans may experience a range of emotions engendered by the racism experienced by the deceased, including anger and resentment” (Laurie & Neimeyer, 2008, p. 187). It also is crucial to acknowledge the vast range of geographical locations, dialects, cultures, religions, and spiritual beliefs with which Black Americans identify. Black grief is not a monolithic experience (Laurie & Neimeyer, 2008).

Examination of the psychological implications of white supremacy in America is integral in the study of violence rooted in anti-Black racism (Aymer, 2016). “Race and racial oppression (historically or contemporary) cannot be divorced from the ethos of White supremacy, which permeates all aspects of human institutions (e.g., social, legal, health, political, and cultural entities) aimed at promoting the welfare of our society” (Aymer, 2016, p. 368). White supremacy remains omnipresent in the United States while race-based violence has simply shifted its mode of presentation over time to remain legally enabled.

Black Lives Matter. The #BlackLivesMatter movement was created in 2013 by organizers Alicia Garza, Patrisse Cullors, and Opal Tometi in response to the acquittal of Florida neighborhood-watch volunteer George Zimmerman, who murdered 17 year-old Trayvon Martin in 2012 (“Herstory,” 2019; Munro, 2021). “Black Lives Matter is an ideological and political intervention in a world where Black lives are systematically and intentionally targeted for demise. It is an affirmation of Black folks’ humanity, our contributions to this society, and our resilience in the face of deadly oppression” (“Herstory,” 2019). The Black Lives Matter movement advocates for all Black lives, particularly highlighting violations of Black trans women.

The Black Lives Matter movement has maintained a central role in 21st century anti-racist organizing. Following the 2014 murder of Mike Brown by Ferguson police officer Darren Wilson, over 600 protesters gathered for the Black Life Matters ride (“Herstory,” 2019). In May and June of 2020, over 4,700 peaceful demonstrations took place across the United States in response to the police murders of George Floyd, Breonna Taylor, and countless others. Amounting to between 15 and 26 million participating protesters in total, the protests constitute the largest social movement in American history (Buchanan et al., 2020). Much of the organizing behind these demonstrations was facilitated via social media, particularly due to the coronavirus pandemic. Organizers collaborated, events were advertised, information was shared, and funds were raised through social media. In addition to its role in organizing via social media, the Black Lives Matter movement focuses needed attention on these horrific deaths by police brutality through grassroots social media campaigns (Rankine, 2015).

Witnessing Traumatic Events Online

Widespread access to video on smartphones makes it easier for more people to witness police violence, and the virtual witnessing of such incidents can foster vicarious or secondary trauma. In addition to the trauma and grief experiences of immediate family members and friends of victims of police brutality, there may be additional mental health consequences for others who do not personally know the victims, as racism and trauma can be experienced vicariously (Bor et al., 2018). When viewing pictures and videos of police violence against Americans, there is a significant loss of feeling of safety among Black Americans particularly because of the assumed trust of uniformed officers (Allen & Solomon 2016).

Secondary witnessing of the killings of unarmed Black Americans by police was associated with negative mental health outcomes among Black American adults in the United States in a quasi-experimental study based on data from the 2013-2015 Behavioral Risk Factor Surveillance System (Bor et al., 2018). The secondary trauma among Black American adults from witnessing police violence accounted for an estimated 1.7 poor mental health days per person per year (Bor et al., 2018). Data were collected from a sample of 302 African American and Latinx adolescents from the United States in a study of the association between viewing race-related traumatic events online (e.g., viral videos of police shootings and immigrant detainment) and mental health outcomes (Tynes et al., 2018). Findings indicated associations between media exposure to traumatic events and negative psychological outcomes including depressive and PTSD symptoms, with those in close proximity to collective trauma showing the most negative psychological outcomes (Tynes et al., 2018).

Vicarious Racism and Trauma

The ramifications of racism can be experienced both personally and vicariously, thus understanding individual vicarious experiences of racism is crucial in recognizing and addressing

the widespread implications of racism in America (Harrell, 2000). Incidents of racism occurring among both family members and strangers can be highly distressing, with potential to facilitate feelings of danger, vulnerability, anger, and sadness, anxiety, and other negative emotional and psychological reactions (Harrell, 2000).

Vicarious trauma is most commonly interpreted within the occupational contexts of professionals working in mental health services, law enforcement, emergency and fire services due to repetitive exposure to trauma, violence, and victims of traumatic or violent events (U.S. Department of Justice Office of Justice Programs, n.d.). Experiences of vicarious trauma may yield negative psychological reactions including depressed mood, feelings of hopelessness, general distress, avoidance and isolation, and decreased ability to self-regulate emotions (U.S. Department of Justice Office of Justice Programs, n.d.). Specifically, the vicarious trauma fostered by the virtual witnessing of police killings of unarmed Black Americans may lead to heightened perceptions of racism, feelings of loss of fairness and trust in social institutions, loss of social status and self-regard, increased fear of one's victimization or mortality or that of those close to them, increased vigilance, anger, reactivation of past traumas, and communal grief and loss reactions (Bor et al., 2018; Smith-Lee & Robinson, 2019).

Theoretical Framework

Multidimensional Model of Racism-Related Stress. The multidimensional model of racism-related stress defines racism as:

A system of dominance, power, and privilege based on racial-group designations; rooted in the historical oppression of a group defined or perceived by dominant-group members as inferior, deviant, or undesirable; and occurring in circumstances where members of the dominant group create or accept their societal privilege by maintaining structures,

ideology, values, and behavior that have the intent or effect of leaving nondominant-group members relatively excluded from power, esteem, status, and/or equal access to societal resources. (Harrell, 2000, p. 43)

Racism is distinct from racial stereotypes, prejudice, and discrimination due to its pervasive nature systemically and historically, enabling the development and preservation of stereotypes, prejudice, and discrimination (Harrell, 2000).

Three primary forms of racism are described as occurring in four contextual manifestations. Individual racism is defined as the belief that a racial or ethnic group is inferior. Institutional racism is characterized by systemic oppression and exploitation, and cultural racism is exemplified by ethnocentrism as a means of maintaining a status quo. All three forms of racism can occur in each of the contextual manifestations of racism, which are designated as interpersonal, collective, cultural-symbolic, and sociopolitical (Harrell, 2000). “The total experience of racism for any individual involves the simultaneous exposure to racism in interpersonal, collective, cultural-symbolic, and sociopolitical contexts” (Harrell, 2000, p. 44).

Racism-related stress is defined as “the race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that are perceived to tax or exceed existing individual and collective resources or threaten well-being” (Harrell, 2000, p. 44). Researchers label six types of racism-related stress which include racism-related life events, vicarious experiences of racism, daily micro stressors, chronic-contextual stress, collective experiences of racism, and transgenerational group trauma. Outcomes of racism-related stress include physical, psychological, social, functional, and spiritual implications. Psychological outcomes related to experiences of racism-related stress encompass trauma

responses, general distress, substance abuse, disordered eating, psychosomatic functioning, and violence (Harrell, 2000).

Researchers suggest that racism can also influence support and coping availability, options, and responses. Different experiences of racism may require the employment of different coping mechanisms, and the systemic imbalances of power in the United States consequential of anti-Black racism may deem some coping strategies unsafe or unwise in specific situations, thus limiting coping options (Harrell, 2000). Moreover, racism-related stressors may yield diverse emotional responses, which may influence the employed coping mechanism, availability of support, and stress experience.

Biopsychosocial Model of Perceived Racism. The basis of the biopsychosocial model of perceived racism is that racist environmental stimuli facilitate negative stress responses. Perception of racist stimuli and subsequent stress responses are determined by a combination of constitutional, social, demographic, psychological, and behavioral factors, in addition to coping (Clark et al., 1999). These stress responses to racism may explain differences in health outcomes among Black Americans compared to their white American counterparts. The model elucidates that stress responses are characterized by the availability and use of coping mechanisms, which can be adaptive or maladaptive (Clark et al., 1999). Both types of coping may impact psychological and physiological stress responses. However, coping responses that do not deter stress may have adverse mental and physical health effects and are thus considered maladaptive. When adaptive coping mechanisms are employed, they have the potential to reduce the negative effects of racism on mental and physical health.

Coping Theory. The cognitive theory of stress and coping as defined by Lazarus and Folkman (1984) describes the process through which individuals employ cognitive or behavioral

mechanisms to manage external demands which exceed their resources (Bridges, 2010; Folkman et al., 1986). The interaction between an individual and their environment is transactional. Stress occurs when the transaction exceeds the individual's resources and has the potential to negatively impact the individual's well-being. Cognitive appraisal and coping act as mediators in individual-environment interactions (Folkman et al., 1986).

Such coping efforts may be positive or negative, active or disengaged, characterized as problem, emotion, or meaning-focused, and can be used in a variety of stressful encounters. Problem-focused coping strategies are aimed at addressing and managing the issue or stressor and include problem-solving and efforts to alter the stressful situation (Folkman et al., 1986). Emotion-focused coping strategies are centered around regulating reactions towards and interpretations of the stressor. Examples of emotion-focused coping include distancing, self-regulating, accepting responsibility, seeking social support, engaging with faith, and positive reappraisal (Bridges, 2010; Folkman et al., 1986; Utsey, 2000). Meaning-focused coping involves changing the evaluation of a situation to integrate beliefs and goals in one's response to the stressful situation (Gan, 2013). Disengaged coping is characterized by avoidance of confrontation of the stressor, and often includes distraction, denial, and wishful thinking (Carver, 2014). While disengaged coping may alleviate feelings of distress in the short term, it is not effective in the long term because it does not directly address the situation at the root of the distress (Carver, 2014). The effectiveness of a utilized coping strategy may influence future attempts at appraisal and coping (Harrell, 2000)

Predictors of Bereavement Related Mental Health Outcomes

Disenfranchised Grief. Disenfranchised grief is defined as grief which cannot be expressed, recognized, or socially supported and is associated with feelings of helplessness,

powerlessness, and inferiority (Piazza-Bonin et al., 2015). Grief experiences and expressions are informed by a number of factors which include culture, ethnicity, and race. However, the diverse grief experiences of Black Americans are largely unaccounted for in bereavement literature (Granek & Peleg-Sagy, 2017). Death by homicide incites different grief responses than deaths of a similarly violent nature because homicide is willful and controlled as opposed to accidental or incontinent, with the act of death contextualizing grief rather than the death itself (Sharpe et al., 2014).

Traumatic losses (i.e., unexpected, sudden, violent, unjust, or witnessed) are associated with complicated grief processes and negative mental health outcomes (Smith-Lee & Robinson, 2019). Associated grief experiences may be further marginalized due to the horrific, stigmatized nature of the loss (Piazza-Bonin et al., 2015). In addition to the violent nature of the police killings of Black Americans, the hesitancy to acknowledge that individuals can deeply grieve the deaths of individuals who are not personally known to them may contribute to grief disenfranchisement. In a study of bereaved college students, African American participants reported more intense levels of distress than that of the white participants over the death of an extended family member, which may be connected to the lower distinctions in African American culture between the nuclear and extended families which serves as an extension and strengthening of family networks as an adaptation to the threats of being Black in America (Laurie & Neimeyer, 2008). Furthermore, the presence of unsanctioned grief, which alludes to the intergenerational passing of historically unresolved grief remnant from chattel slavery, may contribute to disenfranchised grief (Brave Heart & DeBruyn, 1998). Finally, the ubiquity of white supremacy as an American institution itself and the normalization of the brutalization of Black bodies disenfranchises Black grief.

Social Support. Social support is defined generally as the external aid one receives from their relationships, and more specifically as the support that is received during bereavement (Bailey et al., 2013). Literature shows that high levels of social support is correlated with psychological well-being, and mediated stress levels in bereavement of loss due to gun violence (Bailey et al., 2013). In grieving, African American populations frequently rely on social support networks including family, friends, and other community members rather than professional services, which can be partially attributed to cultural mistrust of healthcare institutions. Within a sample of 1,581 bereaved college students including 540 white students and 641 African American students, African American students reported levels of support at a similar rate as their white counterparts despite often not utilizing professional services (Laurie & Neimeyer, 2008).

However, Black students who are studying at a predominantly white university may be exposed to negative social interactions and racism, which contribute to negative mental health outcomes (Bridges, 2010; Burke et al., 2010; Piazza-Bonin et al., 2015). Findings from a study investigating stress and coping among college students attending historically Black colleges and universities (HBCUs) compared to students attending predominantly white institutions suggest that African American students who actively challenge racism on their campuses may be at higher risk for negative mental health outcomes (Greer & Brown, 2011). Furthermore, researchers examined coping within the contexts of ethnic identity and racism through semi-structured interviews with six African American university students at a predominantly white institution (Bridges, 2010). Students reported chronic exposure to racism on individual, institutional, and cultural levels politically, socially, and economically (Bridges, 2010). Previous literature indicates a positive correlation between chronic exposure to racism and increased depression, and feelings of trauma, loss, and helplessness (Bridges, 2010).

Coping. Coping is defined as an individual's management of emotional and environmental stressors (Folkman et al., 1986). Psychotherapeutic intervention was applied in a case study on coping with race-related trauma arising from police brutality towards Black Americans (Aymer, 2016). Narrative therapy, relational factors, and critical consciousness aided in the adoption of active emotion-focused coping strategies, resulting in increased empowerment and decreased feelings of self-blame (Aymer, 2016). Findings from a study of Black college students attending HBCUs and PWIs indicated that students attending PWIs utilized problem and spirituality oriented coping strategies at significantly higher frequencies than students attending HBCUs (Greer & Brown, 2011).

Previous research suggests that Black Americans engage in more problem and emotion-focused coping strategies than their white counterparts, utilizing problem-focused coping more frequently than emotion-focused coping in racially stressful situations (Plummer & Slane, 1996). A study of 376 white and 156 Black participants analyzed differences in coping patterns in racially stressful situations utilizing Folkman and Lazarus' Ways of Coping Questionnaire (Plummer & Slane, 1996). Main effects were found for race and stress type (general or racial), with Black participants utilizing more problem-focused coping than their white counterparts, specifically engaging in confrontive coping techniques in racially stressful situations compared to generally stressful situations. Black participants in the study also engaged more in emotion-focused coping compared to their white counterparts, with racially stressful situations evoking less emotion-focused coping strategies than generally stressful situations (Plummer & Slane, 1996). Black participants' higher engagement in more confrontive and distancing coping strategies than their white counterparts may be due to greater experienced stress due to race and

greater engagement with a variety of coping strategies due to more frequent exposure to stress (Plummer & Slane, 1996).

Semi-structured interviews conducted with 19 Black Americans aged 17 to 23 investigating strategies for navigating police contact found the emergence of three dominant strategies: avoidance, management, and symbolic resistance (Fox, 2019). Problem-focused avoidance strategies are characterized by efforts to distance oneself from police officers, limiting the potential for close encounters and minding one's body through arranging one's outward appearance to limit drawing negative attention to oneself (Fox, 2019). This impression management is analogous of W.E.B. DuBois' double consciousness in describing and responding to racial profiling and the criminalization of blackness.

Problem-focused management strategies are employed during close encounters with officers with an emphasis on deference and assertion of one's rights. The final strategy, symbolic resistance, is an aggregate of problem and emotion-focused coping characterized by gestures of disapproval (e.g., eye rolling, sarcasm, and subtle challenging of authority). Symbolic resistance is an act of preserving dignity in disempowering situations and is less focused on maintaining safety or limiting risk or harm (Fox, 2019, 2019). A particularly widely used culmination of problem and emotion-focused coping is demonstrated by "the talk" which many Black American parents have with their children around avoidance and management of police interactions Fox, 2019).

Bereavement Related Mental Health Outcomes

Perceived Stress. A stressful event is defined as a situation which appears threatening or exceeds an individual's available coping resources. Stress in turn is the emotional response to the objective event, dependent not only on the event itself but also on personal and contextual factors

(S. Cohen et al., 1983). Coupled with persistent racism in America and widespread access to photo and video on smartphones, Black Americans are vulnerable to witnessing police violence virtually, inciting a loss of feeling of safety and negative psychological outcomes including acute stress (Allen & Solomon, 2016; Tynes et al., 2019). A study which sampled 555 African American young adults to investigate the relationships between racial discrimination, perceived stress, and psychological distress found significant associations between experiences with race-related discrimination and negative psychological outcomes including stress (Sellers et al., 2003).

Depression. Common themes of depressive symptomatology include depressed mood, feelings of guilt, worthlessness, helplessness, and hopelessness, deterioration of psychomotor functioning, loss of appetite, and sleep disturbances (Radloff, 1977). If left untreated, depression among Black adolescents can have serious implications including acceleration of additional mental disorders, declined academic performance, violent externalizing behaviors, and suicide (Lu et al., 2017). A national sample of 302 African American and Latinx adolescents was recruited to examine the impact of witnessing traumatic events online. Findings indicated an association between frequency of viewing traumatic events online and depressive symptoms (Tynes et al., 2019).

Prolonged Grief. Prolonged grief disorder as a result of bereavement is defined as “an attachment disturbance featuring yearning for the deceased, loss of meaning and identity disruption,” with resulting dysfunction negatively impacting psychological well-being (Prigerson et al., 2021, p. 96). Between 10% and 20% of bereaved individuals develop prolonged grief disorder. Risk factors include a history of prior trauma or loss, history of mood and anxiety disorders, insecure attachment style, having been a caregiver for the deceased individual, a

violent cause of death, and lack of social support (Al-Gamal et al., 2019). African Americans are 2.5 times more likely to have prolonged grief disorder than white counterparts (Laurie & Neimeyer, 2008). African Americans witness disproportionately high rates of death by homicide, with deaths by homicide 10 times more likely among African American populations compared to their white counterparts (Piazza-Bonin et al., 2015). As previously stated, type of loss predicts coping and the presence of prolonged grief symptoms, with “violent deaths producing substantially more complicated grief symptomatology than non-violent deaths, and death by homicide producing the most problematic bereavement outcome of all” (Burke et al., 2010).

Summary

Black college students are highly vulnerable to witnessing racially-incited police brutality online (Pew Research Center, 2021). Exposure to such violence is correlated with negative psychological outcomes including stress, depression, and prolonged grief (Allen & Solomon, 2016; Bor et al., 2018; Burke et al., 2010). Positive social support and engaged coping strategies may protect against negative bereavement related mental health outcomes (Burke et al., 2010; Stroebe et al., 2005). However, the grief experiences of Black college students mourning the killings of Black American by police are likely disenfranchised due to the pervasiveness of anti-Black racism and white supremacy in America, the violent nature of the deaths, and the students’ lack of proximity to the victims (Brave Heart & DeBruyn, 1988; Laurie & Neimeyer, 2008; Moore et al., 2020; Piazza-Bonin et al., 2015).

The multidimensional model of racism-related stress, biopsychosocial model of perceived racism, and cognitive theory of stress and coping support the hypothesized correlations between predictors of grief related mental health outcomes and perceived stress, depressive symptoms, and prolonged grief by centering the inescapable prevalence of racism in America and the

implications of utilizing different means of coping in response to a stressor (Aymer, 2016; Clark et al., 1999; Folkman et al., 1986; Folkman & Moskowitz, 2000; Harrell, 2000). The study investigated how grief disenfranchisement, social support and coping styles predict stress, depressive symptoms, and prolonged grief in Black college students as they respond to deaths of Black Americans due to police brutality. Consistent with findings in existing literature observing intersections of race, homicidal bereavement, and the witnessing of traumatic events online, we expected to find significant levels of stress, depressive symptoms, and prolonged grief indicators in a sample of Black college students. Findings inform future interventions to reduce negative mental health outcomes among Black college students grieving deaths due to racially-motivated police violence. The study also serves as a call to counseling psychologists to conduct additional research on the impacts of witnessing police brutality and similar racially violent events on mental health.

Research Questions and Hypotheses

To what extent are Black college students experiencing grief disenfranchisement, receiving social support, and utilizing coping strategies as they mourn the deaths of Black Americans by police brutality? To what degree will grief disenfranchisement, social support, and coping predict variance in perceived stress, depressive symptomatology, and prolonged grief?

H1: Grief disenfranchisement, social support and coping style as related to the killings of Black Americans by police would predict variance in perceived stress for a sample of Black college students.

1. Grief disenfranchisement would be positively correlated with perceived stress.
2. Social support would be inversely correlated with perceived stress.

3. The active coping, planning, use of emotional support, changes in situational beliefs, changes in global beliefs, long-term prevention strategies, rational use of resources, acceptance, heuristic thinking, changes in goals, spiritual-centered, collective-centered, and ritual-centered coping subscales would be inversely correlated with perceived stress.
4. The denial, substance use, behavioral disengagement, venting, self-blame, and cognitive-emotional debriefing coping subscales would be positively correlated with perceived stress.

H2: Grief disenfranchisement, social support and coping style as related to the killings of Black Americans by police would predict variance in depressive symptomatology as related to the killings of Black Americans by police for a sample of Black college students.

1. Grief disenfranchisement would be positively correlated with depressive symptomatology.
2. Social support would be inversely correlated with depressive symptomatology.
3. The active coping, planning, use of emotional support, changes in situational beliefs, changes in global beliefs, long-term prevention strategies, rational use of resources, acceptance, heuristic thinking, changes in goals, spiritual-centered, collective-centered, and ritual-centered coping subscales would be inversely correlated with depressive symptomatology.
4. The denial, substance use, behavioral disengagement, venting, self-blame, and cognitive-emotional debriefing coping subscales would be positively correlated with depressive symptomatology.

H3: Grief disenfranchisement, social support and coping style as related to the killings of Black Americans by police would predict variance in prolonged grief for a sample of Black college students.

1. Grief disenfranchisement would be positively correlated with prolonged grief.
2. Social support would be inversely correlated with prolonged grief.
3. The active coping, planning, use of emotional support, changes in situational beliefs, changes in global beliefs, long-term prevention strategies, rational use of resources, acceptance, heuristic thinking, changes in goals, spiritual-centered, collective-centered, and ritual-centered coping subscales would be inversely correlated with prolonged grief.
4. The denial, substance use, behavioral disengagement, venting, self-blame, and cognitive-emotional debriefing coping subscales would be positively correlated with prolonged grief.

Appendix B

Inclusion Questions

1. Are you an undergraduate student at the University of Maryland, College Park?

☐
☐
☐

Yes

No

2. Are you 18 years of age or older?

☐
☐
☐

Yes

No

3. Do you identify as Black and/or African American or as having Black and/or African American heritage?

☐
☐
☐

Yes

No

Appendix C

Framing Statement

This survey will ask you to reflect on your experiences during and following the ongoing deaths of Black Americans by police brutality.

Please take a moment to think about the police killings of Black Americans.

Please answer the following questions from the context of your experiences viewing these events in person or online (including news, social media, photo and video). Please answer each question as truthfully as possible based on what best matches your experiences. There are no correct or incorrect ways to witness and respond to these experiences.

Following completion of the survey, you will be redirected to a separate survey where you will have the opportunity to submit your name and email address so you can receive your \$10 Amazon gift card as a thank you for your participation in the study.

Appendix D

Mental Health Resources

Below are several resources that may be of interest to you if you would like additional information about grief or to speak to someone about grief.

University of Maryland, College Park specific resources:

University of Maryland Counseling Center (301-314-7651; <https://www.counseling.umd.edu/>)

University of Maryland Help Center (301-314-4357; <https://helpcenterumd.org/>)

General resources:

Mental Health America (www.mhanational.org/bereavement-and-grief)

#EveryStoryCounts (www.baltimoresustainability.org/2016/12/everystorycounts-grief-loss/)

Crisis Text Line (www.crisistextline.org)




































SAMHSA National Helpline (1-800-662-4357)































Appendix E





















Witnessing of Disenfranchised Grief (WDG; St. Clair, 2013)

Consider the extent to which you feel you have people in your life who understand your losses related to the killings of Black Americans by the police and answer the following questions regarding that witnessing experience.

	Strongly Disagree (1)	Disagree (2)	Unsure (3)	Agree (4)	Strongly Agree (5)
1. People in my life understand the full extent of my losses related to the killings of Black Americans by the police.					
2. People in my life feel sorry for my losses related to the killings of Black Americans by the police.					
3. People in my life try to meet my physical needs following the killings of Black Americans by the police.					
4. People in my life talk about my losses related to the killings of Black Americans by the police.					
5. People in my life focus on my emotional pain related to the killings of Black Americans by the police.					
6. People in my life see that I have a right to grieve the killings of Black Americans by the police.					

7. I feel free to express grief in the presence of people in my life 6 months after the killings of Black Americans by the police.					
8. People in my life still remember my losses related to the killings of Black Americans by the police.					
9. No one can understand why I still feel the need to talk about my losses related to the killings of Black Americans by the police.					
10. No one remembers my losses related to the killings of Black Americans by the police.					
11. People in my life reach out to me about the killings of Black Americans by the police.					
12. I know that people in my life understand because people in my life have experienced similar losses related to the killings of Black Americans by the police.					
13. The world doesn't want to hear the story of my losses related to the killings of Black Americans by the police.					

14. My losses related to the killings of Black Americans by the police are easier to bear because of the people in my life.					
15. People in my life can testify to the world that I have a right to grieve my losses related to the killings of Black Americans by the police.					
16. I know that people in my life understand my losses related to the killings of Black Americans by the police based on what they say to me.					
17. I find comfort in knowing that people in my life want to listen to the story of my losses related to the killings of Black Americans by the police.					
18. I know that people in my life understand my losses related to the killings of Black Americans by the police because of what they do for me.					
19. I know that the people in my life understand my losses related to the killings of Black Americans by the police when I look into their eyes.					































20. No one is more helpful to me than the people in my life who understand my losses related to the killings of Black Americans by the police.					
21. Knowing that I have people in my life who understand my losses related to the killings of Black Americans by the police is a great comfort to me.					
22. Without the people in my life, I would carry the emotional pain of my losses related to the killings of Black Americans by the police alone.					
23. Please select “strongly agree” for this question.					














































Note: With the exception of items 9, 10, and 13, all items will be reverse coded. Item 23 is the first of two validity checks added for the purposes of this study and is not a part of the measure.





















Appendix F

The MOS Social Support Survey (Sherbourne & Stewart, 1991)

People sometimes look to others for companionship, assistance, or other types of support after losing someone to death. How often are each of the following kinds of support available to you **as you grieve the killings of Black Americans by the police?**

	None of the time (1)	A little of the time (2)	Some of the time (3)	Most of the time (4)	All of the time (5)
1. Someone to help you if you were confined to bed as you grieve the killings of Black Americans by the police.					
2. Someone you can count on to listen to you when you need to talk as you grieve the killings of Black Americans by the police.					
3. Someone to give you good advice about a crisis related to the killings of Black Americans by the police.					
4. Someone to take you to the doctor if you needed it as you grieve the killings of Black Americans by the police.					
5. Someone who shows you love and affection as you grieve the killings of Black Americans by the police.					
6. Someone to de-stress with as you grieve the killings of Black Americans by the police.					

7. Someone to give you information to help you understand a situation related to the killings of Black Americans by the police.					
8. Someone to confide in or talk to about yourself or your problems as you grieve the killings of Black Americans by the police.					
9. Someone who hugs you as you grieve the killings of Black Americans by the police.					
10. Someone to get together with for relaxation as you grieve the killings of Black Americans by the police.					
11. Someone to prepare your meals if you were unable to do it yourself as you grieve the killings of Black Americans by the police.					
12. Someone whose advice you really want as you grieve the killings of Black Americans by the police.					
13. Someone to do things with to help you get your mind off things as you grieve the killings of Black Americans by the police.					
14. Someone to help with daily chores if you were sick as you grieve the killings of Black Americans by the police.					
15. Someone to share your most private worries and fears with as you grieve the					

killings of Black Americans by the police.					
16. Someone to turn to for suggestions about how to deal with a personal problem related to the killings of Black Americans by the police.					
17. Someone to do something enjoyable with as you grieve the killings of Black Americans by the police.					
18. Someone who understands your problems related to the killings of Black Americans by the police.					
19. Someone to love and make you feel wanted as you grieve the killings of Black Americans by the police.					

































Subscales are computed as follows:

































- Emotional/informational support: items 2, 3, 7, 8, 12, 15, 16, and 18
- Tangible support: items 1, 4, 11, and 14
- Affectionate support: items 5, 9, and 19
- Positive social interaction: items 6, 10, 13, and 17

Appendix G

Brief COPE (Carver, 1997)

These items deal with ways you've been coping with the stress in your life **since witnessing the killings of Black Americans by the police through videos shared on social media platforms**. There are many ways to try 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 it. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

Since the deaths of Black Americans by police brutality, or as a result of the deaths...	I haven't been doing this at all (1)	I've been doing this a little bit (2)	I've been doing this a medium amount (3)	I've been doing this a lot (4)
2. I've been concentrating my efforts on doing something about the situation I'm in.				
3. I've been saying to myself "this isn't real."				
4. I've been using alcohol or other drugs to make myself feel better.				
5. I've been getting emotional support from others.				
6. I've been giving up trying to deal with it.				
7. I've been taking action to try to make the situation better.				
8. I've been refusing to believe that it has happened.				
9. I've been saying things to let my unpleasant feelings				

escape.				
11. I've been using alcohol or other drugs to help me get through it.				
13. I've been criticizing myself.				
14. I've been trying to come up with a strategy about what to do.				
15. I've been getting comfort and understanding from someone.				
16. I've been giving up the attempt to cope.				
21. I've been expressing my negative feelings.				
25. I've been thinking hard about what steps to take.				
26. I've been blaming myself for things that happened.				

Subscales are computed as follows:














































- Active coping: items 2 and 7
- Denial: items 3 and 8
- Substance use: items 4 and 11
- Use of emotional support: items 5 and 15
- Behavioral disengagement: items 6 and 16
- Venting: items 9 and 21
- Planning: items 14 and 25
- Self-blame: items 13 and 26





















Appendix H

Meaning-Focused Coping Questionnaire (MFCQ; Gan et al., 2013)

The following items are various coping styles used when people encounter life events or very bad problems. You may have utilized some of the following strategies to cope with the killings of Black Americans by the police. Please read each item carefully and then select an answer that matches your actual situation. There are no good or bad ways to deal with it. Please answer each one.

Since the deaths of Black Americans by police brutality, or as a result of the deaths...	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Most of the time (4)
1. I tried to establish new values.					
2. I readjusted my goals in life.					
3. I tried to seek consolation from my beliefs.					
4. I believed in my faith and beliefs.					
5. I sought help from my faith and beliefs.					
6. I tried to seek consolation from both my faith and beliefs.					
7. I sought a new outlook on life and reassessed my values.					
12. I adjusted my view on the killings of Black Americans by the police continuously over time.					

14. Some time after the killings of Black Americans by the police, I reconsidered my coping style.					
15. I have accepted the fact that something had happened and that it could not be changed.					
16. I have accepted the fact that things have happened.					
17. I learned to accept the killings of Black Americans by the police and that they have become a part of my life.					
18. When I handled other problems that arose after the killings of Black Americans by the police, I could reflect on the matter from more perspectives.					
19. I tried to consider the killings of Black Americans by the police from a broader standpoint.					
20. I looked at the killings of Black Americans by the police from a broader point of view.					
21. I sought the opinions of others on the killings of Black Americans by the police.					
22. The words of my classmates or others gave					

me the inspiration for a new idea.					
23. I forced myself to do something constructive.					
24. I gained strength from the help of others.					
25. I tried to seize opportunities that could get me out of the bad situation.					
26. I accepted love and understanding from others.					

Subscales are computed as follows:

- Changes in situational beliefs: items 18, 19, 20, and 23
- Changes in global beliefs: items 3, 4, 5, and 6
- Long-term prevention strategies: items 12 and 14
- Rational use of resources: items 24, 25, and 26
- Acceptance: items 15, 16, and 17
- Heuristic thinking: items 21 and 22
- Changes in goals: items 1, 2, and 7





















































Appendix I





































Africultural Coping Systems Inventory (ACSI; Utsey, 1999)

The statements below are intended to represent some of the ways people cope with stressful situations in their daily lives. In order to respond to the statements below, recall stress you may have experienced **as a result of the killings of Black Americans by the police.**

Now, keeping this situation in mind, please indicate the extent to which you used each of the strategies described on the following pages to help you cope with the stress you experienced.

Since the deaths of Black Americans by police brutality, or as a result of the deaths, I...	Does not apply or did not use (0)	Used a little (1)	Used a lot (2)	Used a great deal (3)
1. Prayed that things would work themselves out.				
2. Got a group of family or friends together to help with the problem.				
3. Shared my feelings with a friend or family member.				
4. Remembered what a parent (or other relative) once said about dealing with these kinds of situations.				
5. Tried to forget about the situation.				
6. Went to church (or other religious meeting) to get help from the group.				
7. Thought of all the struggles Black people have had to endure and this gave me strength to deal with the situation.				
8. To keep from thinking about the situation I found other things to keep me				

busy.				
9. Sought advice about how to handle the situation from an older person in my family or community.				
10. Read a scripture from the Bible (or similar book) for comfort and/or guidance.				
11. Asked for suggestions on how to deal with the situation during a meeting of my organization or club.				
12. Tried to convince myself that it wasn't that bad.				
13. Asked someone to pray for me.				
14. Spent more time than usual doing group activities.				
15. Hoped that things would get better with time.				
16. Read a passage from a daily meditation book.				
17. Spent more time than usual doing things with friends and family.				
18. Tried to remove myself from the situation.				
19. Sought out people I thought would make me laugh.				
20. Got dressed up in my best clothing.				
21. Asked for blessings from a spiritual or religious person.				

22. Helped others with their problems.				
23. Lit a candle for strength or guidance in dealing with the problem.				
24. Sought emotional support from family and friends.				
25. Burned incense for strength or guidance in dealing with the problem.				
26. Attended a social event (dance, party, movie) to reduce stress caused by the situation.				
27. Sang a song to myself to help reduce the stress.				
28. Used a cross or other object for its special powers in dealing with the problem.				
29. Found myself watching more comedy shows on TV.				
30. Left matters in God's hands.				

Subscales are computed as follows:
















- Cognitive/emotional debriefing: items 5, 8, 12, 14, 15, 17, 18, 19, 20, 26, and 29
- Spiritual-centered coping: items 1, 6, 10, 13, 16, 21, 27, and 30
- Collective-centered coping: items 2, 3, 4, 7, 9, 11, 22, and 24
- Ritual-centered coping: items 23, 25, and 28

Appendix J

The Perceived Stress Scale (PSS; S. Cohen et al., 1983)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way.

	Never (0)	Almost Never (1)	Sometimes (2)	Fairly Often (3)	Very Often (4)
1. In the last month, how often have you been upset because of something that happened unexpectedly?					
2. In the last month, how often have you felt that you were unable to control the important things in your life?					
3. In the last month, how often have you felt nervous and “stressed”?					
4. In the last month, how often have you felt confident about your ability to handle personal problems?					
5. In the last month, how often have you felt that things were going your way?					
6. In the last month, how often have you found that you could not cope with all the things you had to do?					
7. In the last month, how often have you been able to control irritations in your life?					

















































8. In the last month, how often have you felt that you were on top of things?					
9. In the last month, how often have you been angered because of things that were outside of your control?					
10. In the last month, how often have you felt difficulties piling up so high that you could not overcome them?					

































Note: Items 4, 5, 7, and 8 are reverse coded.

Appendix K

The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977)

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

During the past week:	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that don't usually bother me.				
2. I did not feel like eating; my appetite was poor.				
3. I felt that I could not shake off the blues even with help from my family or friends.				
4. I felt that I was just as good as other people.				
5. I had trouble keeping my mind on what I was doing.				
6. I felt depressed.				
7. I felt that everything I did was an effort.				
8. I felt hopeful about the future.				
9. I thought my life had been a failure.				
10. I felt fearful.				
11. My sleep was restless.				
12. I was happy.				

13. I talked less than usual.				
14. I felt lonely.				
15. People were unfriendly.				
16. I enjoyed life.				
17. I had crying spells.				
18. I felt sad.				
19. I felt that people dislike me.				
20. I could not get “going.”				

Note: Items 4, 8, 12, and 16 are reverse coded. Scale points were coded from zero to three for analyses.

Appendix L

Prolonged Grief Disorder (PG-13; Prigerson et al., 2009)

For each item below, please indicate how you currently feel?

Since the deaths of Black Americans by police brutality, or as a result of the deaths...	Not at all (1)	Slightly (2)	Somewhat (3)	Quite a bit (4)	Overwhelmingly (5)
Q3: Do you feel yourself longing or yearning for the people who died?					
Q4: Do you have trouble doing the things you normally do because you are thinking so much about the people who died?					
Q5: Do you feel confused about your role in life or feel like you don't know who you are anymore (i.e., feeling like a part of you has died)?					
Q6: Do you have trouble believing that the people who died are really gone?					
Q7: Do you avoid reminders that the people who died are really gone?					
Q8: Do you feel emotional pain (e.g., anger, bitterness, sorrow) related to the deaths?					
Q9: Do you feel that you have trouble re-engaging in life (e.g., problems engaging with friends, pursuing interests,					

planning for the future)?					
Q10: Do you feel emotionally numb or detached from others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q11: Do you feel that life is meaningless without the people who died?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q12: Do you feel alone or lonely without the deceased?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>




































Q13: Have the symptoms above caused significant impairment in social, occupational, or other important areas of functioning? ☐ Yes / ☐ No































Appendix M


























Index of Race-Related Stress Brief Version (IRRS-B; Utsey, 1999)

This survey questionnaire is intended to sample some of the experiences that Black people have in this country because of their “blackness.” There are many experiences that a Black person can have in this country because of their race. Some events happen just once, some more often, while others may happen frequently. Below you will find listed some of these experiences, for which you are to indicate those that have happened to you or someone very close to you (i.e., a family member or loved one). It is important to note that a person can be affected by those events that happen to people close to them; this is why you are asked to consider such events as applying to your experiences when you complete this questionnaire.

	This never happened to me (0)	This event happened, but did not bother me (1)	This event happened & I was slightly upset (2)	This event happened & I was upset (3)	This event happened & I was extremely upset (4)
1. You notice that crimes committed by white people tend to be romanticized, whereas the same crime committed by a Black person is portrayed as savagery, and the Black person who committed it, as an animal.					
2. Salespeople/clerks did not say thank you or show other forms of courtesy and respect (e.g., put your things in a bag) when you shopped at some white/non-Black owned businesses.					
3. You notice that when Black people are killed by the police, the media informs the public of the victims criminal record or negative information in their background, suggesting they got what they deserved.					
4. You have been threatened					

with physical violence by an individual or group of white/non-Blacks.					
5. You have observed that white kids who commit violent crimes are portrayed as “boys will be boys,” while Black kids who commit similar crimes are wild animals.					
6. You seldom hear or read anything positive about Black people on radio, TV, in newspapers, or history books.					
7. While shopping at a store the sales clerk assumed you couldn’t afford certain items (e.g., you were directed toward the items on sale).					
8. You were the victim of a crime and the police treated you as if you should just accept it as part of being Black.					
9. You were treated with less respect and courtesy than whites and other non-Blacks while in a store, restaurant, or other business establishment.					
10. You were passed over for an important project although you were more qualified and competent than the white/non-Black person given the task.					
11. Whites/non-Blacks have stared at you as if you didn’t belong in the same place					

with them; whether it was a restaurant, theater, or other place of business.					
12. You have observed the police treat white/non-Blacks with more respect and dignity than they do Blacks.					
13. You have been subjected to racist jokes by whites/non-Blacks in positions of authority and you did not protest for fear they might have held it against you.					
14. While shopping at a store, or when attempting to make a purchase, you were ignored as if you were not a serious customer or didn't have any money.					
15. You have observed situations where other Blacks were treated harshly or unfairly by whites/non-Blacks due to their race.					
16. You have heard reports of white/non-Blacks who have committed crimes, and in an effort to cover up their deeds falsely reported that a Black man was responsible for the crime.					
17. You notice that the media plays up those stories that cast Blacks in negative ways (child abusers, rapists, muggers, etc.), usually accompanied by a large picture of a Black person looking angry or disturbed.					

18. You have heard racist remarks or comments about Black people spoken with impunity by white public officials or other influential white people.					
19. You have been given more work, or the most undesirable jobs at your place of employment while the white/non-Black of equal or less seniority and credentials is given less work, and more desirable tasks.					
20. You have heard or seen other Black people express a desire to be white or to have white physical characteristics because they disliked being Black or thought it was ugly.					
21. White people or other non-Blacks have treated you as if you were unintelligent and needed things explained to you slowly or numerous times.					
22. You were refused an apartment or other housing; you suspect it was because you're Black.					

Subscales are computed as follows:

- Cultural racism: items 1, 3, 5, 6, 12, 15, 16, 17, 19, and 20
- Institutional racism: items 4, 9, 10, 13, 18, and 22
- Individual racism: items 2, 7, 8, 11, 14, and 21

Appendix N

Demographic Questionnaire

1. What is your age? [drop down]
 - a. 18
 - b. 19
 - c. 20
 - d. 21
 - e. 22
 - f. 23
 - g. 24
 - h. 25
 - i. 26
 - j. 27
 - k. 28
 - l. 29
 - m. 30+
2. What is your gender identity?
 - a. Female
 - b. Male
 - c. Non-binary
 - d. Other
3. Which of the following best describes your racial/ethnic heritage? Select all that apply.
 - a. Black, African American, or Afro-Caribbean
 - b. Non-Hispanic white, European-American
 - c. Hispanic or Latinx
 - d. Native American
 - e. Asian, Pacific Islander, or Desi-American
 - f. Other, please list: _____
4. Which of the following best describes your sexual orientation?
 - a. Heterosexual/Straight
 - b. Homosexual/Gay/Lesbian
 - c. Bisexual
 - d. Pansexual
 - e. Asexual
 - f. Other
5. What is your college class standing?
 - a. First year
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Other

6. What is your major/field of study? If major is undecided, please provide a potential major/field of interest:
- a. Accounting
 - b. Aerospace Engineering
 - c. African American Studies
 - d. Agricultural and Resource Economics
 - e. Agricultural and Resource Economics: Agribusiness
 - f. Agricultural and Resource Economics: Environmental Resource Economics
 - g. Agricultural Science and Technology: Agricultural Education
 - h. Agricultural Science and Technology: Agronomy
 - i. Agricultural Science and Technology: Environmental Horticulture
 - j. American Studies
 - k. Animal Sciences: Animal Care and Management
 - l. Animal Sciences: Combined Ag/Veterinary Medicine
 - m. Animal Sciences: Science/Pre-Professional
 - n. Anthropology
 - o. Arabic Studies
 - p. Architecture
 - q. Art Education
 - r. Art History and Archaeology
 - s. Astronomy
 - t. Atmospheric and Oceanic Science
 - u. Biochemistry
 - v. Biocomputational Engineering
 - w. Bioengineering
 - x. Biological Sciences: Cell Biology and Genetics
 - y. Biological Sciences: Ecology and Evolution
 - z. Biological Sciences: General Biology
 - aa. Biological Sciences: Microbiology
 - bb. Biological Sciences: Physiology and Neurobiology
 - cc. Central European, Russian and Eurasian Studies
 - dd. Chemical and Biomolecular Engineering
 - ee. Chemistry
 - ff. Chinese
 - gg. Cinema & Media Studies
 - hh. Civil and Environmental Engineering
 - ii. Classics
 - jj. Communication
 - kk. Community Health
 - ll. Computer Engineering
 - mm. Computer Science
 - nn. Computer Science: Cybersecurity
 - oo. Computer Science: Data Science
 - pp. Computer Science: Machine Learning
 - qq. Criminology and Criminal Justice
 - rr. Dance

ss. Early Childhood and Early Childhood Special Education
 tt. Economics
 uu. Electrical Engineering
 vv. Elementary Education
 ww. Elementary/Middle Special Education
 xx. Embedded Systems and Internet of Things
 yy. English
 zz. Environmental Science and Policy
 aaa. Environmental Science and Technology: Ecological Technology Design
 bbb. Environmental Science and Technology: Environmental Health
 ccc. Environmental Science and Technology: Natural Resources Management
 ddd. Environmental Science and Technology: Soil and Watershed Science
 eee. Family Science
 fff. Finance
 ggg. Fire Protection Engineering
 hhh. French
 iii. Geographical Sciences and GIS
 jjj. Geology
 kkk. Germanic Studies
 lll. Government and Politics
 mmm. Hearing and Speech Sciences
 nnn. History
 ooo. Human Development
 ppp. Immersive Media Design
 qq. Individual Studies Program
 rrr. Information Science
 sss. Information Systems
 ttt. International Business
 uuu. International Relations
 vvv. Italian Studies
 www. Japanese
 xxx. Jewish Studies
 yyy. Journalism
 zzz. Kinesiology
 aaaa. Landscape Architecture
 bbbb. Linguistics
 cccc. Management
 dddd. Marketing
 eeee. Materials Science and Engineering
 ffff. Mathematics
 gggg. Mathematics: Applied Math
 hhhh. Mathematics: Education
 iiii. Mathematics: Statistics
 jjjj. Mechanical Engineering
 kkkk. Middle School Math and Science Education
 llll. Music: Education

- mmmm. Music: Liberal Arts Program
- nnnn. Music: Professional Program
- oooo. Neuroscience
- pppp. Nutrition and Food Sciences: Nutritional Science
- qqqq. Nutrition and Food Science: Dietetics
- rrrr. Nutrition and Food Science: Food Science
- ssss. Operations Management and Business Analytics
- tttt. Persian Studies
- uuuu. Philosophy
- vvvv. Philosophy, Politics and Economics
- www. Physics
- xxxx. Plant Sciences: Plant Biology
- yyyy. Plant Sciences: Turf and Golf Course Management
- zzzz. Plant Sciences: Urban Forestry
- aaaa. Psychology
- bbbb. Public Health Science
- cccc. Public Policy
- dddd. Religions of the Ancient Middle East
- eeee. Romance Languages
- ffff. Russian Language and Literature
- gggg. Secondary Education: English Area of Concentration
- hhhh. Secondary Education: Mathematics (Terrapin Teachers) Area of Concentration
- iiii. Secondary Education: Science (Terrapin Teachers) Area of Concentration
- jjjj. Secondary Education: Social Studies Area of Concentration
- kkkk. Secondary Education: World Languages Area of Concentration
- llll. Sociology
- mmmm. Spanish Language, Literature and Cultures
- nnnn. Studio Art
- oooo. Supply Chain Management
- pppp. Theatre
- qqqq. Women, Gender, and Sexuality Studies

7. Have you utilized any support/treatment services in the last 14 months? Select all that apply.
- a. Individual counseling
 - b. Group counseling
 - c. Religious counseling
 - d. Other, please list: _____
 - e. None

8. Please select “strongly disagree” for this question.

Strongly disagree	Disagree	Unsure	Agree	Strongly agree
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9. Which of the following best describes your religious/spiritual engagement?

Not at all religious/ spiritual (0)	Slightly religious/ spiritual (1)	Somewhat religious/ spiritual (2)	Moderately religious/ spiritual (3)	Extremely religious/ spiritual (4)

10. Has someone close to you died in the last year? Yes / No

a. If yes, was the death(s) due to police brutality? Yes / No

11. How connected do you feel with the Black community?

Not at all connected (0)	Slightly connected (1)	Somewhat connected (2)	Moderately connected (3)	Extremely connected (4)

12. Are you involved in any Black and/or African American student organizations on campus? Select all that apply.






- a. Nyumburu Cultural Center
- b. Multicultural Involvement and Community Advocacy (MICA)
- c. Office of Multi-ethnic Student Education (OMSE)
- d. Black Engineers Society
- e. Black Honors Caucus
- f. Serve Innovate Support Thrive Achieve (S.I.S.T.A.)
- g. Jaiyeroof
- h. NAACP
- i. Student Success Leadership Council
- j. U.E.X.C.E.L.
- k. African Student Association
- l. African Student's Progressive Action Committee
- m. BlackOut
- n. Black Male Initiative
- o. Caribbean Student Association
- p. Ethiopian Eritrean Students Association
- q. Maryland MANE
- r. National Council of Negro Women
- s. Sisterhood of Unity and Love
- t. Somali Student Association

- u. The Maryland Gospel Choir
- v. Afrochique
- w. Diazporic
- x. UMD Dynamic
- y. Phunktions Hip Hop Company
- z. Prima Dolls
- aa. Riddim Ryderz
- bb. Star Strutters
- cc. STEPP
- dd. All Eyez LLC
- ee. Black Student Union
- ff. The Divine Nine (NPHC) at UMD: Alpha Phi Alpha, Alpha Kappa Alpha, Kappa Alpha Psi, Delta Sigma Theta, Phi Beta Sigma, Alpha Phi Alpha
- gg. Other, please list: _____






13. How much time do you spend on social media daily?

- a. I do not use any social media platforms
- b. Less than 30 minutes
- c. Between 30 minutes and 1 hour
- d. Between 1 and 2 hours
- e. Between 3 and 4 hours
- f. More than 4 hours

14. How often do you witness online content of police violence towards Black Americans?

Never (0)	Rarely (1)	Occasionally (2)	Moderately often (3)	Extremely often (4)
				

15. How often do you experience a sense of loss as a result of police violence against Black Americans?

Never (0)	Rarely (1)	Occasionally (2)	Moderately often (3)	Extremely often (4)
				

16. Which of the following losses have you experienced as a result of police violence against Black Americans?

- a. Loss of feeling of safety/security in public spaces
- b. Loss of relationship(s) with family members
- c. Loss of relationship(s) with friends
- d. Loss of comfort in relationship(s) with family members
- e. Loss of comfort in relationship(s) with friends
- f. Loss of optimism

- g. Loss of trust in police systems
- h. Loss of trust in government systems
- i. Loss of trust in institutional systems
- j. Loss of productivity in school
- k. Loss of focus in school
- l. Loss of motivation in school
- m. Loss of peace
- n. Other, please list: _____

17. Is there anything else you would like to share with the researchers?

Note: Question 8 is a validity check.

Appendix O

Factor Analyses Results

Two exploratory factor analyses were conducted (first with all coping subscales which evidenced adequate reliability in our sample and second with all coping items) to assess the degree to which the subscales and items were reflective of the four proposed coping categories.

Factor Analyses with Coping Subscales

When all coping subscales were entered, the Kaiser-Meyer-Olkin value of .84 and the Bartlett's test of sphericity approximate $X^2(105) = 969.16, p < .001$ suggested that the data were factorable. Theoretical consistency, interpretability, and parallel analysis were considered to determine the number of factors to retain and interpret (Fabrigar et al., 1999; Ganginis Del Pino et al., 2013). The initial analysis identified four factors for possible retention based on having eigen values greater than 1. We sought to include coping subscales which had loadings of $\lambda = .30$ on one factor and eliminated coping subscales with loadings of $\lambda = .30$ on multiple factors (Kahn, 2006). The resulting four-factor solution was problematic (e.g., the behavioral disengagement subscale loaded on multiple factors and changes in goals, cognitive/emotional debriefing, and acceptance subscales failed to load at the .30 level) and did not support the thematic groupings of the coping subscales as hypothesized. Thus, we proceeded to conduct exploratory factor analyses entering all coping items.

Factor Analyses with Coping Items

When all coping items were entered, the Kaiser-Meyer-Olkin value of .83 and the Bartlett's test of sphericity approximate $X^2(2211) = 7126.98, p < .001$ suggested that the data were factorable. Theoretical consistency, interpretability, and parallel analysis were considered to determine the number of factors to retain and interpret (Fabrigar et al., 1999; Ganginis Del

Pino et al., 2013). Although the initial analyses identified eighteen factors for possible retention based on having eigen values greater than 1, solutions ranging from two to ten factors were analyzed to examine the factor structures. We sought to include coping subscales which had loadings of $\lambda = .30$ on one factor and eliminated coping subscales with loadings of $\lambda = .30$ on multiple factors (Kahn, 2006). The two-, three-, four-, five-, six-, seven-, eight-, nine-, and ten-factor solutions were problematic, with numerous items failing to load at the .30 cutoff and having factors comprised of one or two items.

Ultimately, we decided to utilize the existing subscales which evidenced adequate reliability in our sample for our analyses due to problematic factor structures when entering coping subscales and items in exploratory factor analyses. Utilizing existing subscales in analyses also provided us with more nuanced information regarding which specific coping strategies predict negative mental health outcomes.

Factor Analyses Method Outline

Two exploratory factor analyses were conducted (first with all coping subscales which evidenced adequate reliability in our sample and second with all coping items) to assess the degree to which the subscales and items were reflective of the four proposed coping categories.

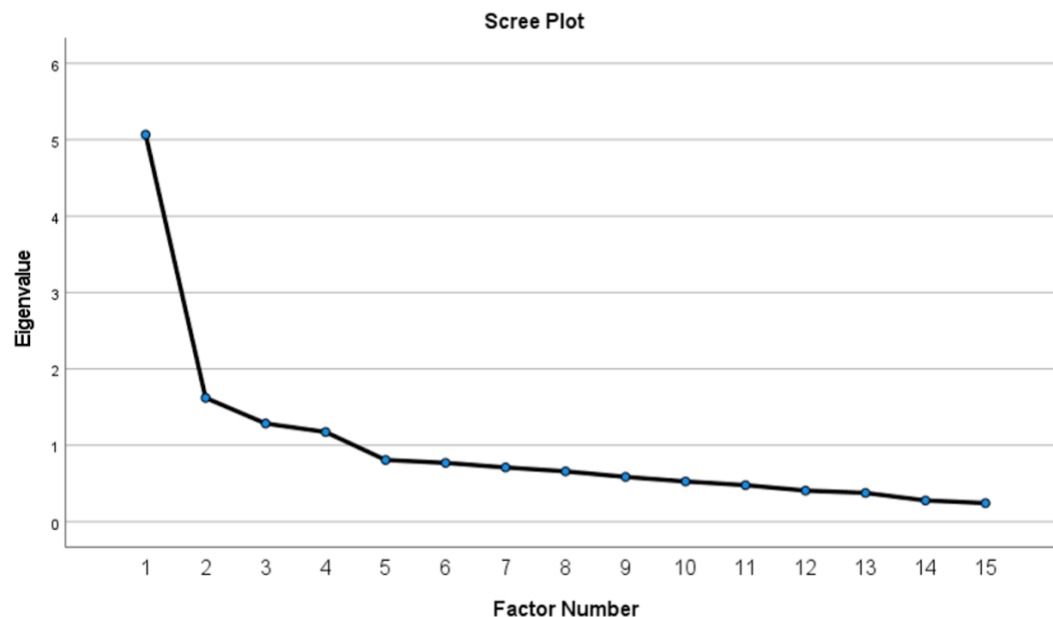
Factor Analyses with Coping Subscales

- The following criteria (Kahn, 2006) were used to eliminate subscales one at a time using the following criteria:
 - Subscales must load at least .3 on one factor
 - Eliminate subscales loading greater than .3 on multiple factors
 - Factors should have load with more than one subscale

```

FACTOR
/VARIABLES BCOPEACT BCOPEPLAN BCOPEDEN BCOPESUB BCOPEBEHAVDIS BCOPEEMOSUP MFCQSIT MFCQGLOB
MFCORESOUR MFCQACCEPT MFCQGOALS ACSISPIR ACSICOLL ACSIRIT ACSICEDEB
/MISSING LISTWISE
/ANALYSIS BCOPEACT BCOPEPLAN BCOPEDEN BCOPESUB BCOPEBEHAVDIS BCOPEEMOSUP MFCQSIT MFCQGLOB
MFCORESOUR MFCQACCEPT MFCQGOALS ACSISPIR ACSICOLL ACSIRIT ACSICEDEB
/PRINT INITIAL KMO ROTATION
/FORMAT SORT
/PLOT EIGEN
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PAF
/CRITERIA ITERATE(25)
/ROTATION PROMAX(4)
/METHOD=CORRELATION.

```



Factor Matrix^a

a. 4 factors
extracted. 17
iterations
required.

- Re-run 1: Removed BCOPEBEHAVDIS loaded on multiple factors
- Re-run 2: Removed MFCQGOALS and ACSICEDEB did not load
- Re-run 3: removed MFCQACCEPT did not load

Pattern Matrix^a

	Factor		
	1	2	3
BCOPEEMOSUP	.772	-.143	.144
BCOPEACT	.765	-.137	.092
BCOPEPLAN	.683	-.057	-.015
MFCQRESOUR	.604	.212	-.169
ACSICOLL	.595	.274	.060
MFCQSIT	.494	.139	-.191
ACSISPIR	-.077	.839	.150
MFCQGLOB	.036	.775	-.123
BCOPESUB	-.024	-.216	.585
ACSIRIT	.073	.225	.541
BCOPEDEN	-.070	.170	.507

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

- The above factor analyses did not support the thematic groupings of the coping subscales as hypothesized. The hypothesized groupings of the coping subscales under coping themes were as follows:
 - Problem-focused coping: BCOPEACT, BCOPEPLAN
 - Emotion-focused coping: BCOPEEMOSUP, ACSISPIR, ACSICOLL, ACSIRIT
 - Meaning-focused coping: MFCQSIT, MFCQGLOB, MFCQRESOUR, MFCQACCEPT, MFCQGOALS
 - Disengaged coping: BCOPEDEEN, BCOPEDEEN, BCOPEDEEN, BCOPEBEHAVDIS, ACSICEDEB

Factor Analyses with Coping Subscales

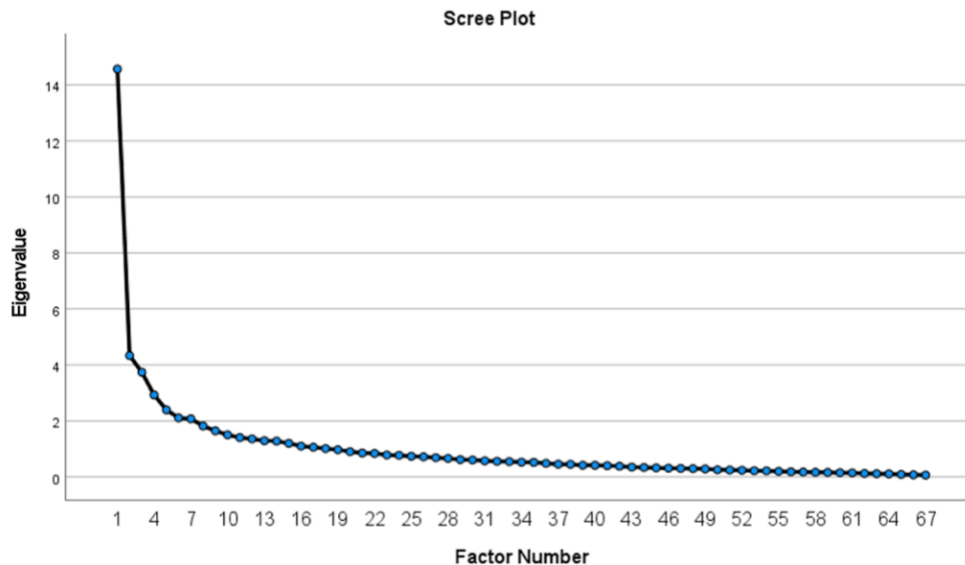
- The following criteria (Kahn, 2006) were used to eliminate items one at a time using the following criteria:
 - Items must load at least .3 on one factor
 - Eliminate items loading greater than .3 on multiple factors
 - Factors should have load with more than one item

FACTOR

```

/VARIABLES bcope_1 bcope_2 bcope_3 bcope_4 bcope_5 bcope_6 bcope_7 bcope_8 bcope_9 bcope_10
bcope_11 bcope_12 bcope_13 bcope_14 bcope_15 bcope_16 mfcq_1 mfcq_2 mfcq_3 mfcq_4 mfcq_5 mfcq_6
mfcq_7 mfcq_8 mfcq_9 mfcq_10 mfcq_11 mfcq_12 mfcq_13 mfcq_14 mfcq_15 mfcq_16 mfcq_17 mfcq_18
mfcq_19 mfcq_20 mfcq_21 acsi_1 acsi_2 acsi_3 acsi_4 acsi_5 acsi_6 acsi_7 acsi_8 acsi_9 acsi_10
acsi_11 acsi_12 acsi_13 acsi_14 acsi_15 acsi_16 acsi_17 acsi_18 acsi_19 acsi_20 acsi_21 acsi_22
acsi_23 acsi_24 acsi_25 acsi_26 acsi_27 acsi_28 acsi_29 acsi_30
/MISSING LISTWISE
/ANALYSIS bcope_1 bcope_2 bcope_3 bcope_4 bcope_5 bcope_6 bcope_7 bcope_8 bcope_9 bcope_10
bcope_11 bcope_12 bcope_13 bcope_14 bcope_15 bcope_16 mfcq_1 mfcq_2 mfcq_3 mfcq_4 mfcq_5 mfcq_6
mfcq_7 mfcq_8 mfcq_9 mfcq_10 mfcq_11 mfcq_12 mfcq_13 mfcq_14 mfcq_15 mfcq_16 mfcq_17 mfcq_18
mfcq_19 mfcq_20 mfcq_21 acsi_1 acsi_2 acsi_3 acsi_4 acsi_5 acsi_6 acsi_7 acsi_8 acsi_9 acsi_10
acsi_11 acsi_12 acsi_13 acsi_14 acsi_15 acsi_16 acsi_17 acsi_18 acsi_19 acsi_20 acsi_21 acsi_22
acsi_23 acsi_24 acsi_25 acsi_26 acsi_27 acsi_28 acsi_29 acsi_30
/PRINT INITIAL KMO ROTATION
/FORMAT SORT
/PLOT EIGEN
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PAF
/CRITERIA ITERATE(25)
/ROTATION PROMAX(4)
/METHOD=CORRELATION.

```

**Factor Matrix^a**

a. Attempted to extract 18 factors. More than 25 iterations required. (Convergence = .001). Extraction was terminated.

- The scree and eigen values suggest that the coping items fall out in between 2 and 10 factors
- SPSS attempted to extract 18 factors, however some factors loaded with only one item

Entering Coping Items with Two Factors

- Did not load or loaded on more than one factor: mfcq_13, mfcq_16, acsi_7, bcope_2, acsi_15, bcope_7, bcope_5, acsi_5, mfcq_8, mfcq_4, acsi_9, mfcq_21, mfcq_10, mfcq_14, mfcq_12, mfcq_15

Entering Coping Items with Three Factors

- Did not load or loaded on more than one factor: mfcq_3, acsi_14, acsi_27, mfcq_14, mfcq_8, mfcq_10, mfcq_12, mfcq_15, acsi_28, acsi_20, acsi_5
- Possible themes
 - Factor 1: emotion, meaning, and problem-focused
 - Factor 2: spirituality
 - Factor 3: disengaged

Entering Coping Items with Four Factors

- Did not load or loaded on more than one factor: acsi_3, acsi_4, mfcq_13, acsi_14, mfcq_3, acsi_25, acsi_11, acsi_5, mfcq_8
- Possible themes
 - Factor 1: emotion and problem-focused coping
 - Factor 2: spirituality/meaning-focused
 - Factor 3: disengaged
 - Factor 4: meaning-focused/acceptance, changes in beliefs

Entering Coping Items with Five Factors

- Did not load or loaded on more than one factor: acsi_3, mfcq_3, mfcq_13, acsi_17, acsi_11, acsi_16, acsi_25, acsi_19, acsi_8, acsi_12, acsi_20, mfcq_8
- Possible themes
 - Factor 1: Emotion-focused and meaning-focused resources, goals, situational beliefs
 - Factor 2: Spirituality
 - Factor 3: disengaged (substances, criticism)
 - Factor 4: disengaged (avoidance, distraction)
 - Factor 5: meaning-focused acceptance

Entering Coping Items with Six Factors

- Did not load or loaded on more than one factor: acsi_3, bcope_14, acsi_17, acsi_26, acsi_16, acsi_27, acsi_11, mfcq_18, acsi_23, acsi_5, acsi_19, acsi_8, acsi_12, acsi_20, mfcq_13
- Possible themes
 - Factor 1: Emotion-focused, active, collective
 - Factor 2: Spirituality
 - Factor 3: disengaged (substances, denial, criticism)
 - Factor 4: meaning-focused changes in values
 - Factor 5: disengaged (avoidance, distraction)
 - Factor 6: meaning-focused acceptance

Entering Coping Items with Seven Factors

- Did not load or loaded on more than one factor: bcope_14, acsi_2, mfcq_13, mfcq_18, acsi_10, mfcq_3, acsi_6, acsi_21, acsi_9, acsi_13, acsi_25, acsi_29, acsi_17, bcope_5, bcope_16, acsi_18, acsi_19, mfcq_11

Entering Coping Items with Eight Factors

- Did not load or loaded on more than one factor: bcope_15, bcope_14, mfcq_18, mfcq_13, mfcq_3, acsi_26, acsi_27, bcope_5, bcope_3, bcope_9, acsi_28, acsi_16, acsi_19

Entering Coping Items with Nine Factors

- Did not load or loaded on more than one factor: acsi_21, mfcq_3, bcope_15, bcope_14, bcope_4, acsi_22, acsi_3, bcope_9, acsi_26, acsi_9, acsi_4, bcope_5, bcope_3, acsi_14, mfcq_13

Entering Coping Items with 10 Factors

- Did not load or loaded on more than one factor: bcope_14, bcope_4, mfcq_13, acsi_22, acsi_6, acsi_10, acsi_14, bcope_5, bcope_3, bcope_10, bcope_16, bcope_9

We decided to proceed with factor analyses from six factors, which was the highest number of factors that made theoretical sense in terms of potential themes.

Entering Coping Items with Six Factors

- Removing items which did not load at least .3 on at least one factor
 - Re-run 1: Removed acsi_26, acsi_27, acsi_11, acsi_23, acsi_20
 - Re-run 2: Removed acsi_25 mfcq_17, mfcq_8, mfcq_10
 - Re-run 3: Removed mfcq_12
- Removing items loading greater than .3 on more than one factor
 - Re-run 4: removed acsi_9, acsi_19, acsi_14, acsi_12, mfcq_13, mfcq_18, mfcq_6, mfcq_3

Only two items were left on factor six, resulting in problematic factor structure, so we proceeded running the factor analyses with five factors.

Entering Coping Items with Five Factors

- Removing items which did not load at least .3 on at least one factor
 - Re-run 1: removed acsi_11, acsi_25, acsi_20, mfcq_8
 - Re-run 2: acsi_23
- Removing items loading greater than .3 on more than one factor
 - Re-run 3: acsi_3, acsi_27, acsi_12, acsi_5, acsi_8, acsi_19, acsi_14, acsi_29, mfcq_13 bcope_14
 - Re-run 4: acsi_15, acsi_18, mfcq_6, mfcq_2

Factor analyses with five factors also resulted in problematic factor structure, so we proceeded with the analyses using four factors.

Entering Coping Items with Four Factors

- Removing items which did not load at least .3 on at least one factor
 - Removed acsi_20, mfcq_8
- Removing items loading greater than .3 on more than one factor
 - Removed acsi_3, acsi_4, acsi_14, acsi_11, acsi_25, acsi_5, mfcq_13, mfcq_3
 - Removed acsi_27, acsi_18
 - Removed acsi_9

We arrived at four coping factors:

1. Active coping: acsi_24, mfcq_2, bcope_11, acsi_17, mfcq_19, bcope_12, bcope_4, mfcq_18, bcope_6, acsi_19, bcope_1, mfcq_21, mfcq_7, acsi_29, bcope_15, mfcq_1,

- mfcq_20, acsi_22, acsi_26, acsi_7, mfcq_17, acsi_2, bcope_14, mfcq_16, acsi_15, mfcq_9, acsi_23, acsi_8
2. Spiritual and faith-based coping: acsi_10, acsi_30, acsi_1, mfcq_5, mfcq_6, acsi_6, mfcq_4, acsi_21, acsi_13, acsi_16, acsi_28
 3. Disengaged coping: bcope_9, bcope_7, bcope_5, bcope_3, bcope_16, bcope_10, bcope_2, bcope_8, bcope_13, acsi_12
 4. Global acceptance: mfcq_14, mfcq_15, mfcq_11, mfcq_12, mfcq_10

Ultimately, we decided to utilize the existing subscales which evidenced adequate reliability in our sample for our analyses due to problematic factor structures when entering coping subscales and items in exploratory factor analyses. Utilizing existing subscales in analyses also provided us with more nuanced information regarding which specific coping strategies predict negative mental health outcomes.