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COVID-19: Social Support Among the Bereaved

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COVID-19: Social Support Among the Bereaved

by

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DISSERTATION APPROVAL SHEET

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Statement of Original Work

I declare the following:

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Fernande Nanda Mamane

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ABSTRACT

Bereavement is a universal experience. Presently, there have been over 1,024,611 deaths in the United States alone related to the COVID-19 virus and this number is growing (Centers for Disease Control and Prevention, 2022). With the significant rise in deaths, as well as subsequent societal health and safety measures due to the pandemic, social support for the bereaved is expected to be severely impacted. Limited access to social spheres, as well as adjustments to typical funeral practices, may impact the perception of support by those grieving. The purpose the study was to gain a better understanding of bereaved individual's experiences of grief when traditional mourning rituals are interrupted during a life-threatening pandemic. This study aimed to examine how COVID-19 impacted perceived social support while grieving and the association between social support and grief symptomatology during the COVID-19 pandemic. Participants who experienced the death of a loved one since January 2020 (N =152) were recruited from various social media pages, including online support pages and non-profit organizations dedicated to providing grief support, and completed an anonymous online survey. The survey consisted of measures for grief symptomatology (Prigerson et al., 2021), perceived social support while grieving (Hogan & Schmidt, 2016), and questions created for this study related to social support, mourning ritual modifications, and perceived COVID-19 impact. The study showed there was a significant negative association between perceived impact of the COVID-19 pandemic and satisfaction with social support during mourning rituals. However, results showed no significant association between perceived COVID-19 impact and perceived social support while grieving. The study found perceived social support while grieving and satisfaction with social support during mourning rituals were significantly negatively associated with grief symptomatology over and above age, gender, race/ethnicity, death related factors (i.e., cause of death and time since death), emotional closeness, and total number of ritual modifications made by the bereaved. These findings suggest that social support is essential to bereavement outcomes during a life-threatening pandemic. This has the potential to improve clinical directions and encourage interventions focused on building social support networks for the bereaved. This study's findings and their implications are discussed.

Keywords: Grief, social support, ritual modifications, COVID-19

COVID-19: SOCIAL SUPPORT AMONG THE BEREAVED

Chapter I: Statement of Problem

Grief is a universal experience. Clinically, patients will most likely have experienced or will experience death-related grief in their lives. For example, the US Census Bureau found that in a panel of Income and Program Participation respondents comprising individuals aged 45 to 49 years, 26% had lost their mother and 45% had lost their father (Scherer et al., 2014). The survey revealed 70% of those aged 60 to 64 years had a deceased mother and 87% had a deceased father. Even more relevant is the impact of the COVID-19 pandemic on the universal death rate. Per the Centers for Disease Control and Prevention (CDC, 2022), present in the United States alone, there have been over 1,024,611 deaths related to the COVID-19 virus. Kokou-Kpolou et al. (2020) argue the COVID-19 pandemic may lead to bereavement overload. This overload may interfere with the capacity to cope, as the excessive and collective accumulation of deaths likely contribute to the disenfranchisement of individual mourning. Subsequently, bereavement overload may further interfere with individuals' and communities' abilities to provide adequate social support to the bereaved.

Conceptually, social support is defined as the ability to develop and draw on connections to others (Wortman & Pearlman, 2016). Social support comprises the perception of available social support and satisfaction with the social support that is perceived to be available or that has been received (Sarason & Sarason, 2009). The perceived availability of social support includes the number of social support people an individual may know, excluding themselves, whom they can count on to help or support

them when needed. Ultimately, perceptions of support influence how individuals manage and cope with stress (Sarason & Sarason, 2009).

Given the unpredictable quality of the COVID-19 pandemic and the consequent societal restrictions, one could predict a decline in the dimensions that make up social support (Breen, 2021). Spheres of social support are physically diminished, whether that is by imposed lockdowns, compulsory isolation, or strained resources (Mortazavi et al., 2021; Wallace et al., 2020). As described by Mortazavi and colleagues (2021), for several months following the initial start of the COVID-19 pandemic, people engaged in social distancing and several national governments mandated lockdowns. Health and safety initiatives prevented people from engaging in physical demonstrations of love and care customary to their everyday lives. Further, in the initial months of the COVID-19 pandemic, given the uncertainty surrounding transmission, the landscape for treatment of the ill and dying, as well as the grieving, dramatically shifted. The CDC (2020) continues to emphasize the importance of social distancing even during traditional mourning rituals or funeral practices. Specifically, the CDC recommendations advise funeral attendees stay at least six feet apart, wear a face covering, and only provide physical comfort to those living in the same household. Subsequently, mourners are turning toward modified rituals, including virtual funerals and gatherings (Enari & Rangiwai, 2021; Jones, 2004; Kakar & Oberoi, 2016).

Bearing in mind how important it is to address the functional aspects of people in vulnerable situations, the purpose of the present study is to provide a scientific framework for an empirical study aimed at better understanding bereaved individuals' experiences when traditional mourning rituals are interrupted. The following review of

the literature delineated how perception of and satisfaction with social support appear to be essential to improved bereavement outcomes.

Chapter II: Review of the Literature

Presently, few empirical studies have examined the effects of a worldwide pandemic on the grief process. Given the continuing nature of the COVID-19 pandemic and the dramatic societal changes unfolding as a result, it is an infallible opportunity to gain an in-depth understanding of the bereavement experience in the 21st century. The following review will detail the distinctive qualities that comprise prolonged grief, delineate the role of perceived social support in modern mourning, and describe the COVID-19 pandemic's potential impact on the grief experience.

Prolonged Grief

Elisabeth Kübler-Ross (1970) identified five stages of grief: Denial, anger, bargaining, depression, and acceptance. Although these five stages were intended to describe the grief experience, it should be acknowledged that each person may go through these stages at their own pace. Today, a sixth stage has been proposed by Kessler (2019): Meaning. Modern grief theory by Kessler proclaims meaning helps make sense of grief, adding that meaning can be found in a variety of ways including commemorating and honoring loved ones and feeling grateful for the time they had with the deceased. Literature has detailed that meaning making by honoring and commemorating the deceased may be fulfilled through mourning rituals (Hockey et al., 2001; Kessler, 2019; Mortazavi et al., 2021). Mourning rituals are defined as symbolic actions that provide meaningful experiences for the grieving (Hockey et al., 2001; Mortazavi et al., 2021). Kessler contends individuals may become "stuck" in the five stages delineated by Kubler-Ross, and unfortunately feel unable to move to the sixth stage of meaning.

Current conceptualization of grief has shifted from a stepwise, universal experience to recognizing grief as a unique, individualized experience with varied biopsychosocial symptomatology (Currier et al., 2015; Kakar & Oberoi, 2016). Existing empirical research of prolonged grief has enabled scholars and clinicians to identify stable symptoms observed in general populations, some of which are debilitating and potentially life threatening. For example, male widowers with prolonged grief symptomatology have a higher mortality rate than female widows with prolonged grief (Stroebe & Schut, 2001). Prolonged grief is distinct from normative grief as individuals with maladaptive grief responses may suffer from intense sorrow, longing, and difficulty accepting death a year following the loss (American Psychiatric Association, [APA], 2022). Although a vast majority of individuals develop resiliency and adequately cope with grief, a portion of the population does not and subsequently develop clinical symptoms. Kersting et al. (2011) found the prevalence of developing maladaptive grief was 3.7% within a representative general sample of clinical and nonclinical individuals, noting important risk factors for higher prevalence including female widows (13.7%), individuals with low income (13%), and those who had lost a child (23.6%). Similarly, female widows have higher depression levels than male widowers (Stroebe & Schut, 2001). Further, Rings (2010) found closeness felt by the bereaved toward the deceased was associated with prolonged grief severity. Awareness of factors linked to prolonged grief may help clinicians identify clients who may be at a greater risk for negative grief outcomes (Currier et al., 2015). Across the bereavement literature, a variety of terms are used interchangeably to describe maladaptive grief reactions including “complicated,” “traumatic,” “complex,” “persistent,” “prolonged,” “grief,” and “bereavement” which

unfortunately has clouded understanding regarding the disorder. Interestingly, initially proposed by Prigerson et al. (2009), Maciejewski et al. (2016) established prolonged grief disorder (PGD), which is described in the World Health Organization's (WHO; 2019) International Statistical Classification of Diseases and Related Health Problems (11th ed.; ICD-11), and persistent complex bereavement disorder (PCBD) described in the American Psychiatric Association's (2013) Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5) as the same. However, Maciejewski et al. clarified PCBD and PGD are distinct from complicated grief (CG). Complicated grief proponents argue that conceptually pathology is attributed to factors other than grief, such as bereavement-related depression or trauma, that interfere with otherwise normal grief processes (Maciejewski, 2016; Shear et al., 2011). Maciejewski et al. assessed pairwise agreement tests using kappa statistics, diagnostic sensitivity and specificity, and predictive validity for each symptom diagnostic test. Specifically, the Inventory of Complicated Grief - Revised (ICG-R; Prigerson & Jacobs, 2001), a proposed PCBD symptom-diagnostic test, PGD symptom-diagnostic test (Prigerson et al., 2009), and an "ICD-11 version" of the PGD symptom-diagnostic test were used to assess CG, PCBD, PGD, and "ICD-11" PGD, respectively. Findings showed the CG test had only moderate agreement with PGD, PCBD, and proposed ICD-11 tests, and a higher estimated rate of the disorder (approximately 30%) in a community sample compared to the low estimates (approximately 10%) of the PGD, PCBD, and ICD-11 tests. Maciejewski et al. further emphasized CG has poorer diagnostic specificity and no predictive validity, adding there is a distinction between CG and PCBD and PGD, while only a semantic difference between PCBD and PGD. Since its inclusion as a condition for further study in the DSM-

5 (APA, 2013), there has been an increase in the number of published research studies on this topic and in the development of treatments for persistent complex bereavement disorder (PCBD), both individualized and as a family unit. PCBD is distinguishable from major depression (MDD), post-traumatic stress disorder (PTSD), and alternative DSM-5 diagnoses close in nature (Maciejewski et al., 2016). PCBD in the DSM-5 includes a cluster of symptoms ranging from extreme yearning for the deceased, lack of acceptance of death, and suicidal ideation (APA, 2013). Given the empirical evidence of the distinctive qualities of maladaptive grief (i.e., yearning for the deceased, loss of meaning, and identity disruption) and inclusion in the ICD-11, the APA Assembly voted on including prolonged grief disorder (PGD) in the new DSM-5-TR (Prigerson et al., 2021). (Please see Appendix A for DSM-5-TR criteria for PGD).

Consistent with PCBD, the new PGD diagnosis (APA, 2022) requires symptoms to persist at least 12 months since the death in adults (6 months in children and adolescents). This contrasts with the 6 months required to meet criteria in the ICD-11 (WHO, 2019). Differences in diagnostic criteria exist between PCBD and the newly included PGD diagnosis. As outlined by Prigerson et al. (2021), PGD acknowledges the possibility of delayed onset of symptoms, requires only three of eight C criteria be met (six of 12 in PCBD), and focuses more on yearning and preoccupation with the deceased rather than on the circumstances of the death. Further, PGD allows fewer combinations of symptoms to meet criteria. Noting that empirical analysis has not yet examined the performance of the new PGD criteria outlined in the DSM-5-TR, Prigerson et al. introduced and validated a scale (i.e., PG-13-R) in line with the new PGD diagnosis. Specifically, they assessed the validity of the new PGD criteria in classifying individuals

with maladaptive grief responses. Although the findings were promising (i.e., minimal overlap with PTSD, MDD, and generalized anxiety disorder; excellent external validity), Prigerson et al. identified the need for further psychometric analysis in more ethnically diverse samples, noting the three independent samples used in the analysis comprised primarily White, non-Hispanic people.

Recent research has aimed to recognize the role of culture, ethnicity, religion, and social support in both the development and prevention of maladaptive grief responses (e.g., Aoun et al., 2018; Bottomley et al., 2017). Walter (2010) asserts important distinctions between religion, culture, and ethnicity in grief. In the development of a grief and culture checklist for use by practitioners, Walter emphasizes the importance of recognizing the variations of mourning rituals and beliefs that exist across and within religions, ethnicities, and cultures. Cross-cultural understanding of grief is essential for care, especially considering how interruptions to these practices, for example those caused by COVID-19 restrictions (e.g., social-distancing, limited gatherings; CDC, 2020), may be associated with bereavement outcomes, as well as changes in perception of social support. Eisma and Boelen (2021) reference two recently conducted studies that used a sample of Dutch bereaved adults to examine grief severity in death caused by COVID-19 compared to other causes before the onset of the COVID-19 pandemic. Contradicting expectations previously expressed in the literature (Mortazavi et al., 2021; Wallace et al., 2020), findings from Eisma and Boelen (2021) show grief severity was not significantly different between people who were recently bereaved before the pandemic and people bereaved during the pandemic.

Per the CDC (2022), as of August 1, 2022, over 761,603 COVID-19 deaths occurred in the United States within the age group of those 65 years and older. In contrast, 259,591 deaths occurred in the age group of 0-64 years involving COVID-19. Grief and palliative care researchers have raised concerns regarding the surplus of death and subsequent disenfranchisement of individual mourning experiences (Breen, 2021; Kokou-Kpolou et al., 2020; Wallace et al., 2020). Concerns related to stigma, social norms, and disruptions in meaning making were raised. Essentially, because of individuals and communities feeling overburdened by the regularity of death, they potentially cannot provide sufficient support to the grieving.

Social Support

Social support has long been associated with a variety of important outcomes, including the ability to withstand stressors. As noted by Sarason and Sarason (2009), social support should be viewed from a bidirectional perspective integrating what people bring to situations with what situations do to those people. Across the literature, social support is often defined as help or comfort provided by others, typically to help cope with life stressors. Breen (2021) asserts despite the potential of social support for the bereaved, little is known about how it may be harnessed to aid in positive outcomes. As noted by Breen, a systematic review by Logan et al. (2018) identified 42 separate variables related to determinants of social support behaviors. Support determinants were identified and categorized as qualities belonging either to the deceased, the bereaved, or to the respondents of the study (i.e., the supporters of the bereaved). Gender was identified as a specific support determinant found as highly studied across the three identified categories. The authors note that of the 12 studies that examined gender as a bereaved-

related determinant, 10 reported an effect. Logan et al. highlighted specific findings showing that men were offered fewer opportunities to talk following the death of a loved one. Further, Logan et al. noted that in the nine of the 12 studies reviewed, interaction effects were observed between gender of the bereaved and cause of death, intensity of grief, anticipation of death, and time since death. By contrast, of the four studies that examined gender of the deceased as a deceased-related determinant, only one significant finding showed an interaction effect (Logan et al., 2018). Specifically, participants (who reported providing support to the bereaved) felt more relaxed around the bereaved family when the deceased was the same gender as them. Logan et al. noted no effect was observed of the gender of the deceased on the psychological disturbance of the bereaved or duration of sadness. Although gender was noted as being the most studied respondent-related determinant, Logan et al. detailed mixed findings, including some studies highlighting gender differences in support behavior (e.g., unhelpful behaviors toward the bereaved) and other studies reporting no effect of gender of the respondent (e.g., no effect of gender of the respondent on behavioral intentions toward the bereaved). Notably, men expected the bereaved to experience less distress and shorter recovery time following the death of a loved one compared to women. Men were less likely to expect friends to help, offered less sympathy, and endorsed more inappropriate and unhelpful behaviors toward the bereaved.

Cognitive stress theories argue critical life events, such as bereavement, are stressful as they require readjustment (Stroebe et al., 2005). The intensity of the stress experienced because of the death of a loved one varies based on the perceived demands of the situation outweighing an individual's coping resources. Available social support is

often provided by an individual's social network and may be emotional or instrumental/tangible support, which may aid in fulfilling these coping deficits (Burke et al., 2010). Emotional support is defined as a perceived and actual connection expressed through caring, compassion, trust, and mutuality (Cacciatore et al., 2021). In contrast, instrumental/tangible support is defined as help with everyday tasks such as providing transportation and homemaking (Bottomley et al., 2017; Cacciatore et al., 2021). Although social support is acknowledged as a protective factor in bereavement outcomes, the mechanisms underlying how social support functions as a protective factor for individuals in mourning has yet to be completely understood in the psychological community. Perhaps social support may compensate for deficits in coping resources, especially if the perception of support is favorable.

Although social support may shield survivors from negative grief outcomes, an individual's perception of support available may moderate the effect (Bottomley et al., 2017; Burke et al., 2010; Lobb et al., 2010). Findings from Bottomley et al. (2017) show larger numbers of available support was associated with lower levels of prolonged grief. Similarly, Villacieros et al.'s (2014) study of bereaved adults in Madrid found that among those who are still grieving, having a greater number of people who support them is associated with greater satisfaction with support received than those who have fewer people who support them. However, Burke et al. (2010) noted an absence of an association between perceived general support and prolonged grief in their cross-sectional study of 53 African American individuals bereaved by homicide. Importantly, the availability and perception of support are two separate constructs. Findings from Burke et al. (2010) emphasized size of the support network as not significantly related to

grief-specific support, despite being negatively related to prolonged grief. Further, Lobb et al. (2010) assert poor perceived social support after death as a predictor of prolonged grief. In a systematic review of literature by Mason et al. (2020), a longitudinal study by Allen et al. (2013) was identified that found less satisfaction with social support as a risk factor for prolonged grief. Further, a unique cross-sectional study on Saudi Arabian college students showed an association between PGD scores and perceived social support (Al-Gamal et al., 2019). Specifically, the findings showed higher PGD scores were associated with lower perceived support.

Social support plays an important role in people's lives during especially stressful events, given its effect on emotion, cognition, and behavior among individuals. Social support is expectedly associated with lower grief symptomology and more psychological acclimatization (Aoun et al., 2018; Bottomley et al., 2017). Perceptions of support influence how individuals manage stress, including having the freedom to attend to the realities of the situation, explore alternative approaches, and ultimately deal with the issue at hand (Sarason & Sarason, 2009). Presently, research provides some evidence on how support is delivered and reasons such support may be perceived as helpful during grief. In a population based cross-sectional investigation by Aoun et al. (2018), social support perceived as most valued included emotional bonds, practical help, and perceived sense of belonging following the death of a loved one. Often, when one thinks of social support, they immediately think of close relationships such as family and friends. However, it is important to note the importance of social support from the community an individual is a part of. Sarason and Sarason (2009) note the importance of community support, especially for individuals with limited interpersonal worlds in relation to general

well-being. Given this and the role of perception of social support, researchers have explored the importance of emotional versus tangible support for a person in mourning and their association with satisfaction with social support. Asserting that how grieving individuals interpret and define social support is not well understood in grief literature, Cacciatore et al. (2021) examined grievers' satisfaction with professional, familial, and community support in a cross-sectional qualitative study. Findings showed grievers as dissatisfied with professional, familial, and community support, emphasizing desire for emotional support following traumatic loss. To address past challenges in research related to capturing bereaved individuals' perception of social support, Hogan and Schmidt (2016) developed the Inventory of Social Support (ISS) to measure perceived social support among people who are grieving. The ISS essentially operationalizes social support as experienced by the bereaved and aims to uncover the role social support plays in coping with death. The scale developer wrote

> Conceptually the ISS items represent the degree to which the bereft perceives that there is at least *one person* who will take the time to listen *nonjudgmentally* to them while they *openly and honestly* express their thoughts and feelings about grief. (p. 100)

Hogan and Schmidt (2002) contend social support is essential for bereaved individuals as they work their grief, with emphasis on social support's role in personal growth development (i.e., the bereft is transformed by the grief experience resulting in a new identity and worldview). Further, Hogan and Schmidt (2016) emphasize that the grief to personal growth theory proposed by Hogan and Schmidt (2002) scientifically

explains the important role social support plays in the bereavement process and provides guidance to clinicians who work with the bereaved.

In some respects, social support may be beneficial for promoting personal growth among the bereaved (Hogan & Schmidt, 2016). However, in other aspects, social support may cause negative outcomes when the support provided is not deemed satisfactory. Social support offered by a griever's community may be recognized but deemed insufficient depending on the actual need of the individual (Bottomley et al., 2017; Mancini et al., 2015). Practical help may be perceived as more helpful and thus considerably more valuable than emotional support when demands for daily life are burdensome. This is especially the case in disadvantaged communities. For example, as noted in previous research, many ethnic groups rely on social support from their families, religious organizations, and communities in times of crises (Bottomley et al., 2017; Hardy-Bougere, 2008). However, among African Americans bereaved by homicide, tangible support is perceived as more valuable than emotional support (Bottomley et al., 2017). Bottomley et al. (2017) proposed that perhaps this is because of African Americans naturally turning to their community and family for support in times of crisis, fulfilling the demand for emotional support, leaving a need for practical support.

Burke et al. (2010) assert inadequate and/or negative social support that is perceived as unhelpful, thoughtless, cold, and combative, may be the foundation for the development and maintenance of prolonged grief. Interestingly, Aoun and colleagues (2018) found professional services were perceived as least helpful and were the least used source of social support. Palliative care services were not perceived to be helpful, despite being involved in end-of-life care. Aoun and colleagues emphasized that although

guidance was ranked last in types of social support perceived as helpful, this preference may be due to bereaved individuals preferring guidance from health professionals rather than from informal sources.

Burrell and Selman (2020) noted that in previous qualitative research, funeral attendance is perceived by mourners as evidence of social support. Pang and Lam's study (as cited in Burrell & Selman, 2020), found low funeral attendance is viewed as a lack of support, whereas high funeral attendance is viewed as supportive and helpful. The benefits of after-death rituals, including funerals, highly depend on the bereaved individual's perception of their own participation and sense of surrounding social support (Burrell & Selmon, 2020). Rather than the perfunctory attendance at a funeral, it is the sense of meaning felt by those grieving that is associated with mental health and bereavement outcomes. Interestingly, a systematic review of fifteen empirical studies found conflicting evidence for an association between prolonged grief risk or severity and social support (Scott et al., 2020). However, Scott et al. (2020) adds that social support after sudden or violent bereavement is associated with improved psychological wellbeing. Similarly, Eisma and Tamminga's (2020) study on bereaved Dutch adults found satisfaction with social support did not differ between those dealing with grief related to COVID-19 and those dealing with grief prior to the pandemic. Eisma and Tamminga proposed perhaps social support is not associated with grief outcomes. The findings indicated recency of loss during the COVID-19 pandemic was associated with higher grief levels than people who experienced a recent loss before the pandemic. However, the study measured satisfaction using a single-item on a 5-point scale. Eisma

and Tamminga suggest the unexpected nature of death related to COVID-19 illness as a contributing factor to the development of higher grief levels.

COVID-19: Mourning Rituals

In a recent systematic literature review, Mayland et al. (2020) show a significant gap in literature surrounding empirical evidence related to grief during a pandemic. At the time of the review, no study specifically focused on bereaved people and the impact that a death associated with a pandemic had on their consequent grief. In response, Eisma et al. (2021) are amongst researchers starting empirical research investigating this focus. Specifically, Eisma and colleagues investigated acute grief reactions in a sample of Dutch adults bereaved because of the COVID-19 virus compared to grief experienced following unnatural (e.g., homicide, suicide, accidents) and natural (e.g., illness) loss unrelated to the COVID-19 virus, during the pandemic. The investigators referenced Boelen and Lenferink's (2020) longitudinal study, showing acute grief is among the strongest predictors of the development of PCBD. Findings showed people who experienced COVID-19 related bereavement reported more severe grief than those who experienced natural losses. Interestingly, the findings suggested people who experienced COVID-19 related bereavement reported comparable acute grief levels as those who experienced unnatural losses. Given the restrictions imposed following natural disasters, especially the most recent COVID-19 pandemic, it is necessary to explore the impact on coping and resiliency in bereaved individuals.

Burrell and Selmon (2020) address the cultural, ethnic, and religious implications resulting from COVID-19. For example, they specifically noted washing the body of the deceased, an important ritual in Judaism and Islam, was restricted in countries such as the

U.S. as part of their public health response to COVID-19 (CDC, 2020). In addition, prolonged disruptions impact meaningful mourning rituals including traditions such as the Jewish ritual of shiva (i.e., seven days of intense mourning in which the community supports the bereaved through meals, prayers, and comfort), as well as the ceremonial practice of Tangihanga customary to Māori people (i.e., typically three days of speechmaking, singing, and chanting, during which the body of the deceased lies at a marae, a building where Māori rituals occur, followed by the burial or cremation and a feast known as hakari; Enari & Rangiwai, 2021). Enari and Rangiwa (2021) contend that physical presence is essential in Māori society especially for the healing process post loss. These are merely a few cultural examples of the drastic implications to the grieving process caused by health and safety restrictions because of COVID-19.

As noted by Burrell and Selman (2020), five observational studies and six qualitative studies dating from 1983 to 2019 have provided support for positive mental health and bereavement outcomes following post-death rituals. Specifically, viewing the body was associated with fewer depressive symptoms and less intense grief. Given the COVID-19 pandemic and the subsequent health measures put in place, viewing the body may not be possible. As a response to the start of the COVID-19 pandemic, the CDC (2020) provided funeral guidelines for individuals and families. The CDC suggested continued practice of social distancing, using technology to connect virtually, considering modified funeral arrangements, wearing face coverings while around others, and considering modifications to funeral rites and rituals (i.e., avoiding touching the deceased person's body or other ceremonial objects). The treatment of bodies during mourning rituals per health and safety guidelines may create a greater disruption to the grief process

by preventing mourners from respecting the wishes of the deceased or completing subjectively necessary and meaningful traditions for the healing process.

In a unique phenomenological study of grief during the COVID-19 pandemic, researchers established several themes present in the experience of grieving relatives, including feelings of ambiguity and desperation, loneliness, and conflict between fear of and need for others (Mortazavi et al., 2021). The study asserts loneliness as a prominent feature of the grief experience because of the impossibility of completing traditional mourning rituals and lack of social support immediately following the death and throughout the grieving process because of COVID-19 restrictions. Similarly, a unique study on Sunni Muslims of Kashmir identified challenges imposed by health and safety regulations as perceived by bereaved individuals (Hamid & Jahangir, 2020). Specifically, participants endorsed several themes including COVID-19 restrictions altering how they mourn (i.e., isolation in mourning, lack of support, stigma associated with COVID-19 illness, and feelings of being overburdened). However, in a recent mixed methods review of the literature, Burrell and Selman (2020) found that the effect of funeral participation on mental health or bereavement outcomes was inconclusive. The review found that of 17 relevant studies that examined funeral participation and bereavement outcomes, only 11 (five observational and six qualitative), could draw measurable positive associations. The remaining six studies found no association between funeral participation and bereavement. Further, most of the relevant studies were based on American, White Christian populations. The lack of diversity in the literature is not the only limitation in bereavement research. Most studies relevant to disruption of mourning rituals on mental health and bereavement outcomes are outdated, with a significant number of publications

dating prior to 2000. Given the incredible technological and societal changes experienced since 2000, it is necessary to examine modern mourning rituals, especially amid the COVID-19 pandemic.

Technology: Bridging the Gap

Technological connectedness is suggested as a protective factor in bereavement (Bravo, 2017; Vanderwerker & Prigerson, 2004). A study by Vanderwerker and Prigerson (2004) examining the role of Internet use, email, and cellphone use in bereaved individuals suggests technological connectedness is associated with a better quality of life. Literature has established technology use as a positive tool to help those mourn when being physically present is not possible, whether that is because of seeking political asylum, being undocumented, having economic barriers, or experiencing health barriers (Bravo, 2017; Nesteruk, 2018; Vanderwerker & Prigerson, 2004). A silent, and often forgotten, underrepresented group are undocumented migrants. Bravo's (2017) qualitative study sought to explore Latin American undocumented migrant experiences of grief and coping, finding that many turned to technology to remain attached to their home country despite their inability to return home. Unable to return home to fulfill traditional mourning rituals or seek social support from family, undocumented migrants are at risk for maladaptive grief symptoms. In prolonged grief, the availability of communication technologies allows bereaved adults to stay connected to loved ones, despite limitations preventing them from physically taking part in mourning rituals or traditions. However, as noted by Burrell and Selman (2020), the role of alternative modalities of funeral practices and bereavement support, specifically virtual attendance, has yet to be explored

empirically. Burrell and Selman make note that in a previous study by Nesteruk (2018), one participant's virtual attendance was described positively.

Corpuz (2021) details the impact of pandemic safety measures on the grief experience, specifically noting self-isolation, prohibition of mass-gatherings, and quarantine protocols complicate the process of grief. As such, Corpuz asserts that to cope, people have turned to creative ways of expressing their grief. Creative ways of expression may include considering new mourning rituals or seeking support/expressing grief through various social media platforms. Further, across various cultures, creative means of remaining connected have been observed. Enari and Rangiwai (2021) assert that despite the restrictions on physical gathering, Maori and Somoan people have remained connected via the internet and have either passively or actively took part in funerals. The authors argue that technology has provided a means of remaining interconnected. In a unique pilot study identified by Mason et al.'s (2020) systematic literature review, Knowles et al. (2017) examined the feasibility of a virtual reality support group for older, widowed people to improve psychosocial outcomes. Findings showed significantly improved maladaptive grief symptoms, including improvement in depression following participation in the virtual reality support group. As showed by the innovations of Maori and Samoan funerals described by Enari and Rangiwai (2021) as well as the innovative design of virtual reality support groups described by Knowles et al. (2017; as referenced by Mason et al., 2020), when traditional mechanisms of social support are impossible to provide or receive, technology might overcome the barrier created by physical distance.

In a recent study that explored the mediatization of mourning, Wagner (2018) explored the use of social media and the norms that exist in the online realm. Wagner's

review highlighted the various norms that exist in mourning-related situations on social media, as well as the evolving nature of these norms. Social media technology provides a unique opportunity to continue interacting with the deceased, reminiscing on the past, and receiving and providing support. This happens not only within close relational circles of the deceased but across expanded relational circles with those who might not otherwise be able to take part because of geographical or other barriers that exist. Given that this study predates the COVID-19 pandemic, further exploration into the societal norms that permeate the mourning experience through technology is necessary. Presently, the CDC (2020) provides guidance for coping with a loss during COVID-19, including hosting conference calls with family and friends, hosting virtual events and planning in-person events for a later date, and creating virtual dedication books/webpages.

As noted by Wagner (2018), empirical research addressing norms for social media mourning practices is scant. An area of exploration needed in a COVID-19 world is the use of social media to share the mourning experience. Literature has asserted that grieving online is increasingly becoming a behavioral pattern of the modern human being (Jones, 2004; Kakar & Oberoi, 2016; Wagner, 2018). For example, grieving individuals may use social media to maintain a sense of connection to the deceased, honor the deceased, express grief, and memorialize the deceased (Jones, 2004; Kakar & Oberoi, 2016). As noted by Kakar and Oberoi (2016), it remains unclear what it is about expressing grief through the internet that helps with grieving.

Walter et al. (2011) assert in their literature review that social networking sites bring death back into daily life, specifically referencing sites like Facebook. The authors state websites like Facebook allow grief to be more communal and allows grief to be

shared among the deceased person's social networks. Further, Walter et al. note modern communication technologies have expanded the presence of the dead within society, specifically referencing a case in which a young girl's mother died just before she was two years old, yet at 12 or 13 years old she referred to and included a photograph of her deceased mother on her social media page. Considering the diverse realms of technology that may facilitate positive bereavement outcomes, a recent thematic analysis suggested psychologists may fulfill unique psychosocial needs during the COVID-19 pandemic simply via follow-up phone calls to grievers (Menichetti Delor et al., 2021). The phone calls may provide an early intervention for bereavement, perhaps identifying those in need of higher level of care as well as facilitating management of early loss reactions. As noted in the study, a limitation of this research is the subjective nature of the data collected as it was reported by the psychologists involved rather than through self-report by the families themselves. The follow-up telephone calls analyzed were conducted within the first 2-3 days of the loss, thereby limiting the analysis of needs to only the very early stages of grief. Further exploration into the continuing experience of grief is necessary for a deeper understanding of social support as perceived by the bereaved.

Conceptual Framework

Consistent with the dual-process model of coping with bereavement (DPM) proposed by Stroebe and Schut (1999), severity of grief has been suggested to result from the bereaved person's needs being unmet when adapting to the death of a loved one. Stroebe and Schut propose as bereaved individuals adapt to the death of a loved one, they are met with stressors related to the death. Specifically, these bereavement-related stressors comprise loss orientated (LO) needs and restoration orientated (RO) needs. LO

needs consist of coping with the death (e.g., finding meaning in the loss, working through their grief) and experiencing painful emotions (e.g., yearning and loneliness) resulting from the death. RO needs consist of coping with secondary stressors that are a consequence of the death (e.g., life changes, shifts in identity, new responsibilities, changes in interpersonal relationships, financial changes). The DPM model emphasizes an oscillating relationship between LO and RO needs through the course of bereavement.

In conjunction with developmental models of grief proposed by Neimeyer and Cacciatore (2016), bereaved individuals transition through three successive crises: 1) early grief, 2) middle grief, and 3) later grief. During these three crises, the bereaved experience reacting, reconstructing, and reorienting, respectively. Neimeyer and Cacciatore note that given the highly individualistic nature of grief, there is no set time or expectation of movement forward in a predetermined pattern. Rather, Niemeyer and Cacciatore suggest each period melds into the next, gradually and as a developmental trajectory, and are facilitated by psychosocial support. Each period serves as a critical time for mourners, where various psychosocial needs arise and grief processes may be shaped by several epigenetic factors, including dyadic-relational factors such as social support and social connectivity. Niemeyer and Cacciatore propose during early grief, or reacting, mourners should be met with empathic listening and identification by supporters, to aid in their crisis of connection versus isolation (i.e., feeling the unique pain they are experiencing following the loss has "isolated" them from the "normal" relationships they once shared with others) and promote self-acceptance and self-awareness that their "pain is understandable, legitimate, and mirrored in the lives of others who have suffered similar loss" (p. 6). With resolution of the crisis of connection

versus isolation, mourners move through middle grief, or reconstructing, which is described as a crisis of security versus insecurity. During the crisis of security versus insecurity, the bereaved attempt to reconstruct the attachment bond with the deceased. Supporters should meet mourners with validation and understanding of the importance of maintaining and reimagining a bond with the deceased. Mourners are confronted with the crisis of meaning versus meaninglessness in later grief, or reorienting, during with they face questions of who they are now, following the death. Mourners should be met with support and permission to change as they reinvent themselves and reason with whom they were before the loss, who they are now, and who they will become.

Through early grief, middle grief, and later grief, a balance or outweighing of coping to needs must be maintained. If interrupted, these unmet needs and factors may impede succession through the sequence, contributing to the development of prolonged grief. Although many factors may contribute to the severity of grief, social support affects both LO and RO needs. Given the imposed restrictions and lifestyle changes resulting from COVID-19, it is expected that elements of social support often provided to the bereaved were continuously modified and/or interrupted. Subsequently, this may prolong the bereaved person's unmet needs and impede their ability to transition through the developmental trajectory of bereavement as proposed by Niemeyer and Cacciatore (2016). Health and safety modifications suggested by the CDC (2020) have yet to be evaluated in their effect on the grief experience, or the sense of support or satisfaction with support received during modifications.

The Present Study

The following empirical study aimed to better understand bereaved individuals' experiences when traditional mourning rituals are interrupted during a life-threatening pandemic. The associations between perceived social support and the experience of prolonged grief symptomatology were also examined. This study addresses whether restrictions imposed because of a life-threatening pandemic, the severity of grief symptomatology, and the perception of social support are associated with each other.

Hypotheses

In consideration of the assertion that health and safety restrictions imposed due to the COVID-19 pandemic may have limited spheres of social support (Mortazavi et al., 2021) and challenged traditional mourning (Hamid & Jahanjir, 2020), it is hypothesized that perceived negative impact of the COVID-19 pandemic while grieving will be associated with lower perceived social support while grieving (Breen, 2021) and lower satisfaction with support during mourning rituals (Hamid & Jahangir, 2020; Mortazavi et al., 2021). Based on previous research showing social support's association with bereavement outcomes (Bottomley et al., 2017; Burke et al., 2010; Hogan & Schmidt, 2002; Lobb et al., 2010; Villacieros et al., 2014), it is hypothesized that higher levels of perceived social support while grieving will be associated with lower levels of grief symptomatology. Similarly, it is hypothesized that higher levels of satisfaction with social support during mourning rituals will be associated with lower levels of grief symptomatology (Burrell & Selmon, 2020). This is expected to be the case even when controlling for qualities of the death (e.g., cause of death and time since death; Bottomley et al., 2017; Boelen & Lenferink, 2020; Eisma et al., 2021), emotional closeness to the

deceased (Eisma et al., 2021; Schaal et a., 2014), number of ritual modifications recommended by the CDC and used by mourners (Hamid & Jahanjir, 2020; Mortazavi et al., 2021) and demographic variables (e.g., gender [Boelen & Lenferink, 2020; Kersting et al., 2011; Stroebe & Schut, 2001], race/ethnicity [Currier et al., 2008; Goldsmith et al., 2008; Enari & Rangiwa, 2021; Hardy-Bougere, 2008; Walter, 2010], and age [Goveas & Shear, 2020; Perng & Renz, 2017]).

Chapter III: Method

Participants

Participants were recruited from various social media pages, including online support pages and non-profit organizations dedicated to providing grief support. To take part in the study participants needed to be recently bereaved (i.e., since January 2020). A total of 290 respondents clicked on the survey link and 245 of them consented to take part in the study. Of these respondents, 89 were excluded from analyses because they did not complete the survey. Another four were excluded because they indicated they had not experienced the death of a loved one since January 2020. All decisions regarding participant exclusion took place before any data analyses were conducted.

The final sample comprised data from 152 participants. As shown in Table 1, 127 participants identified as women (84%) and 25 identified as men (16%). A majority of participants identified as White/European (n = 124; 82%); the remaining participants identified as Hispanic/Latinx (n = 12; 8%), Asian (n = 6; 4%), biracial/multiracial (n = 4; 3%), African American/Black (n = 2; 1%), American Indian/Alaska Native (n = 2; 1%), or another race/ethnicity (n =1; 1%). Participants ranged in age from 18 to 82 years (M = 39.86; SD = 12.99).

Approximately 56% of participants (n = 85) identified the cause of death of their loved one as a natural cause unrelated to COVID-19 illness (e.g., cancer and heart failure), 24% (n = 37) as the COVID-19 illness, and 20% (n = 30) as unnatural causes (e.g., murder and natural disaster). The average time since the most significant death experienced by the participants was approximately 10.77 months (SD = 7.58, range= 0-26). Participants reported they experienced a range of as a few as one to as many as eight

Table 1

Participant Demographics and Death-Related Factors

	n	%
Gender Identity		
Woman	127	84
Man	25	16
Race/Ethnicity		
White or European	124	82
Hispanic or Latinx	12	8
Non-White/Non-Hispanic or Latinx		
Asian	6	4
Multiracial or Biracial	4	3
American Indian or Alaska Native	2	1
African American or Black	2	1
Middle Eastern or North African	1	1
A race/ethnicity not listed here	1	1
Cause of Death		
Natural	85	56
COVID-19 Illness	37	24
Unnatural	30	20
Relationship to the Deceased		
Spouse	83	55
Parent	30	20
Grandparent	14	9
Aunt/Uncle	4	3
Sibling	4	3
Child	3	2
Friend	2	1
Cousin	1	1
Other	11	7
	M	*SD*
Time Since Death in Months	10.78	7.58
Number of Deaths Experienced Since January 2020	1.78	1.36

deaths since January 2020 (M = 1.78, SD = 1.36). Most of the sample indicated they experienced only one death (n = 92; 61%), whereas 25 participants (16%) indicated they experienced over three deaths since January 2020. Over half of the participants, approximately 57% (n = 83), indicated they were the spouse of the deceased; the remaining participants indicated the deceased was their parent (n = 30; 20%), grandparent (n = 14; 9%), sibling (n = 4; 3%), aunt/uncle (n = 4; 3%), child (n = 3; 2%), friend (n = 2;

1%), or cousin (n = 1; 1%). Eleven participants (7%) indicated "other" when reporting their relationship to the deceased.

Measures

Grief Symptomatology

Grief symptomatology was measured using Prigerson et al.'s (2021) Prolonged Grief Disorder-Revised Scale (PG-13-R). According to Prigerson et al., the measure represents a unidimensional construct of prolonged grief symptoms, with high internal consistency. Specifically, the measure shows a Cronbach's alpha of .83 in a representative study from Yale University (N = 270), .90 from a Utretcht University sample (N = 163), and .93 from an Oxford sample (N = 239). The questionnaire comprises 13 items, including three gatekeeper items exploring whether the respondent had lost a significant other (Q1), how long ago the death occurred (Q2), and impairment associated with the symptoms (Q13). Items (questions Q3 through Q12 in the PG-13-R; for example, "Do you feel yourself longing or yearning for the person who died?") are rated using a 5-point scale ranging from 1 (*not at all*) to 5 (*overwhelmingly*). Higher scores indicate greater grief symptoms. In the current study, the scale demonstrated good internal consistency (Cronbach's alpha = .89). Prigerson et al. demonstrated the scale has a temporal stability with diagnosis of DSM PGD of r = .86, p < .001, with a time lag of 7.4±2.0 after T1 in the study conducted at Yale (N = 48). Prigerson et al. stated the Kappa agreement between the PG-13-R threshold symptom summary score of 30 and the DSM-5-TR symptom criterion for PGD was 0.70-0.89 across the datasets from the Yale, Utretcht, and Oxford samples. A score of 30 is considered the diagnostic cut-off point for the PG-13-R.

Social Support

Perception of social support was measured with the Inventory of Social Support (ISS; Hogan & Schmidt, 2016). The scale comprises five items that tap into the attributes of social support as experienced by the bereaved. The ISS is a brief, unidimensional measure comprising content related to (a) others taking time to listen, (b) the opportunity to express feelings openly and honestly, (c) a nonjudgmental stance from others, (d) the availability of at least one person, and (e) getting help for grieving. Participants responded to each item using a 5-point Likert type scale. The measure is scored by adding the response values for each item and dividing this value by the number of items in the scale. Higher scores indicate greater perceptions of social support. The scale shows sound psychometric qualities. Specifically, the scale has a Cronbach's alpha internal consistency of .76 and correlation between responses over a 14-day period of .86. In the current study, the scale showed adequate internal consistency (Cronbach's alpha = .79).

Mourning Rituals

Participants were invited to select from a checklist of ten mourning ritual modifications, with the option to write in additional modifications they used, as well as indicate if they did not use any modifications (Appendix B). Each item within the checklist was developed by the researcher with consideration of CDC (2020) guidelines related to mourning practices. Participants were provided a definition for mourning rituals as symbolic actions that provide meaningful experiences for the grieving. This checklist was included based on previous literature emphasizing the individualistic nature of the bereavement process, especially regarding mourning rituals, including the cultural, racial, religious, and ethnic differences that may differentiate each person's experience

(Aoun et al., 2018; Enari & Rangiwai, 2021; Walter, 2010). This checklist was included based on recent literature's suggestion individuals engage in modern, modified mourning rituals to remain connected to the deceased (and each other) and receive social support (Enari & Rangiwai, 2021). The number of mourning ritual modifications selected by participants were totaled to generate a numerical value representing mourning ritual modifications.

Satisfaction With Support Received During Mourning Rituals

Participants were asked one question related to their satisfaction with support received during the mourning rituals they took part in. Specifically, participants were asked how satisfied they are with the support they received during the mourning rituals. This question was developed for this study and is broadly based on previous, similar research showing the association between mourning rituals and bereavement outcomes (e.g., Hamid & Jahanjir, 2020). Participants were able to answer using a 5-point scale ranging from 1 (*very unsatisfied*) to 5 (*very satisfied*).

Perceived Impact of COVID-19

To assess the bereaved person's perception of the impact of the COVID-19 pandemic on their grief experience, participants were asked to respond to two questions developed for this study. These questions were included based on previous literature's assertion the health and safety restrictions imposed because of the COVID-19 pandemic limited spheres of social support (Mortazavi et al., 2021) and challenged traditional mourning (Hamid & Jahanjir, 2020). The specific questions were: 1) To what extent do you feel the COVID-19 pandemic has impacted your grief experience following the death of your loved one and 2) To what extent do you feel the COVID-19 pandemic impacted

the support you received following the death of your loved one? Participants responded to the items on a 5-point scale (1= *very negatively*, 2=*negatively*, 3=*neither negatively nor positively*, 4= *positively*, 5=*very positively*). The responses were then reverse coded so that higher scores indicate more negative perceived impact. These two items were significantly positively correlated, $r(150) = .61$, $p < .001$, and so were aggregated by averaging these two items to serve as an index of perceived COVID-19 impact.

Emotional Closeness to the Deceased

To assess how emotionally close the participant felt to the deceased, they completed a modified version of the Inclusion of Other in the Self (IOS) Scale by Aron et al. (1992). In a comprehensive evaluation of the IOS (Gächter et al., 2015), the scale was found to be highly correlated with alternative, lengthier scales of relational closeness, including the Index of Relationship Closeness. Overall, Gächter et al. (2015) recommended use of the IOS to measure perceived relationship closeness without the need of administering detailed inventories. Respondents chose a pair of circles from seven options with different degrees of overlap (see Appendix C). One circle in each pair is labeled "self" and the second circle is labeled "other." Respondents chose one of the seven pairs to answer the question, "Which picture best describes your relationship with the deceased?" Scores coincide with the level of overlap in the circle selected by the participant (1 = no overlap; 2 = little overlap; 3 = some overlap; 4 = equal overlap; 5 = strong overlap; 6 = very strong overlap; 7 = most overlap).

Factors Related to the Death

Factors related to the death of the loved one (e.g., cause of death [that is, natural death, unnatural death, and COVID-19 illness related death], relation to the deceased, and

time since death) were assessed. Participants were also asked how many total deaths of loved ones they have experienced since January 2020. Participants were provided the following guidance: “While completing the survey please answer with the death which has been the most significant to you in mind.” See Appendix D for a complete list of questions.

Demographics

Demographic variables (i.e., age, gender, race/ethnicity) were assessed. These demographic variables were included to gauge whether gender differences exist in reactions toward bereavement, whether age is associated with greater symptoms of prolonged grief, and whether racial differences exist in reactions toward bereavement. Similarly, these demographic variables are included to examine whether gender, age, and race/ethnicity are associated with differences in perception of social support by the bereaved. See Appendix E for a complete list of questions.

Procedure

Participants completed the survey online on their computer or mobile phone between January 2022 and June 2022. The survey was hosted on the Qualtrics™ platform. To recruit participants, the study was advertised on various social media platforms, including Reddit, Instagram, Twitter, and Facebook, as well as through direct share via nonprofit organizations dedicated to grief. Local organizations, such as New Hope for Kids, were provided the survey link given their dedication to providing free grief care to the community and agreement to help with recruitment. On the first page of the online survey, participants were provided an explanation regarding who is conducting the research, the purpose of the study, and how to respond.

Confidentiality and adequate data protection were guaranteed as well as an explanation of usage, which was limited to research. Participants were provided with a feedback sheet at the end of the survey that highlighted the purpose of the study, appreciation for participation, and useful resources related to grief and bereavement. Specifically, the feedback sheet provided national and local information for grief support, as well as contact information for the researchers of the study. Please see Appendix F for complete details provided on the feedback sheet. Prior to data collection, all study procedures were approved by the Institutional Review Board of Nova Southeastern University.

Statistical Analysis

All statistical tests were conducted using IBM-SPSS 28.0 (IBM Corp., 2020). Descriptive analysis was used to describe the research sample. Bivariate correlations were used to examine the associations between pairs of variables. One-way analyses of variance (ANOVA) were used to compare variable means across race/ethnicity groups (categorized as White, Hispanic, and Non-White/Non-Hispanic) and cause of death groups (categorized as natural, COVID-19 illness, and unnatural). Independent samples *t*-tests were conducted to determine whether the variable means differed by participant gender. The level of significance was set at $a = .05$ for each statistical test. The variables were examined to see whether they were related to the predictors and outcomes of interest and were included in the regression given prior support in existing literature.

Three hierarchical multiple regression analyses were conducted to examine the associations between (1) perceived COVID-19 impact and perceived social support while grieving, (2) perceived COVID-19 impact and satisfaction with social support during mourning rituals, and (3) perceived social support while grieving, satisfaction with social

support during mourning rituals, and grief symptomatology. Prior to conducting any hierarchical multiple regression analyses, the relevant assumptions of this statistical test were evaluated. To contrast groups based on race/ethnicity as variables in the regression analyses, White/European participants were set as the reference group, and two dummy codes were created, Hispanic or Latinx and Non-White/Non-Hispanic or Latinx. Similarly, to contrast groups by cause of death of the deceased, two dummy codes were created, Unnatural and Natural, to contrast the reference group, COVID-19 illness related deaths.

To test the hypothesis examining the association between perceived COVID-19 impact and perceived social support while grieving, a three-stage hierarchical multiple regression analysis was conducted. Age, gender, and race/ethnicity were entered at stage one of the regression, death-related factors (i.e., cause of death and time since death) were entered at stage two, and perceived COVID-19 impact was entered at stage three. Similarly, this three-stage hierarchical regression was used to examine the association between satisfaction with social support during mourning rituals and perceived COVID-19 impact. These analyses examined whether perceived COVID-19 impact was associated with perceived social support while grieving and satisfaction with support received during mourning rituals when controlling for demographics, death-related variables, and other relevant variables.

To test the hypothesis examining the association between perceived social support while grieving, satisfaction with social support during mourning rituals, and grief symptomatology, a five-stage hierarchical multiple regression analysis was conducted with grief symptomatology as the dependent variable. Age, gender, and race/ethnicity

were entered at stage one of the regression. Death-related factors (i.e., cause of death and time since death) were entered at stage two, emotional closeness to the deceased was entered at stage three, number of ritual modifications was entered at stage four, and perceived social support while grieving and satisfaction with support received during mourning rituals were entered at stage five. The analysis examined whether perceived social support while grieving and satisfaction with support received during mourning rituals are associated with grief symptomatology when controlling for demographics, death-related variables, and other relevant variables.

Chapter IV: Results

Preliminary Analyses

Descriptive statistics and correlations between the measures are provided in Table 2. Overall, grief symptomatology scores were elevated, considering that 78% of participants (n = 119) scored above the PG13R threshold of 30 (Prigerson et al., 2021). Of the 152 participants, 110 (72%) indicated they felt the COVID-19 pandemic negatively impacted their grief experience; only 3 (2%) reported they felt the COVID-19 pandemic positively impacted their grief experience. Of the 152 participants, 86% (n = 130) engaged in at least one ritual modification. The most common modifications endorsed by participants were wearing cloth face coverings while around others and outside of their home (n = 83, 55%) and using technology to connect virtually with family and friends during the grieving process (n = 65, 43%; see Table 3). Only 15% of participants (n = 23) indicated they did not use any ritual modifications.

Table 2

Descriptive Statistics and Correlations between the Variables (N = 152)

	M (*SD*)	1	2	3	4	5	6
1. Grief Symptomatology	35.64 (8.53)	--					
2. Perceived Social Support while Grieving	3.18 (0.89)	-.28***	--				
3. Satisfaction with Support during Mourning Rituals	2.97 (1.26)	-.20*	.37***	--			
4. Perceived COVID-19 Impact	3.95 (0.79)	-.11	-.13	-.23**	--		
5. Emotional Closeness	4.03 (0.89)	.42***	-.08	.08	-11	--	
6. Ritual Modifications	2.74 (2.19)	-.20*	.06	.05	.23**	.04	--

Note. *p < .05. **p < .01. ***p < .001.

Table 3

Summary of Mourning Ritual Modifications Recommended by the CDC and Used by the Bereaved

	N	%
Type of Ritual Modification Used		
Face Coverings	83	55
Connected Virtually	65	43
Limiting Attendance	49	32
Social Distancing	47	31
Avoided Travel	41	27
Did not attend in person	37	24
Additional Services	31	20
Protective Equipment	24	16
Negative COVID-19 Test	19	13
Avoided Touching	7	5
Other	15	10
No modifications	23	15

Note. A full description of each mourning ritual modification is provided in Appendix B.

Grief symptomatology was significantly negatively correlated with perceived social support while grieving, satisfaction with social support during mourning rituals, the total number of ritual modifications. Grief symptomatology was significantly positively correlated with emotional closeness. Perceived social support while grieving was significantly positively correlated with satisfaction with social support during mourning rituals. Perceived COVID-19 impact was significantly negatively correlated with satisfaction with social support during mourning rituals and significantly positively correlated with number of ritual modifications.

To compare variable means across race/ethnicity groups (categorized as White/European, Hispanic/Latinx, and Non-White/Non-Hispanic), one-way ANOVAs were performed. Specifically, one-way ANOVAs were conducted to examine the effect of race/ethnicity on grief symptomatology scores, perceived social support, satisfaction with social support during mourning rituals, and perceived COVID-19 impact. Results revealed that there were no statistically significant differences between the race/ethnicity

groups on grief symptomatology, $F(2,149) = 0.66$, $p = .519$, $R^2 = .009$, perceived social support, $F(2, 149) = 1.67$, $p = .191$, $R^2 = .022$, satisfaction with support during mourning rituals, $F(2, 149) = 0.69$, $p = .502$, $R^2 = .009$, and perceived COVID-19 impact, $F(2, 149) = 0.28$, $p = .753$, $R^2 = .004$. Participant race/ethnicity was included as a variable in regression analyses based on existing literature identifying race/ethnicity differences in grief and social support (Goldsmith et al., 2008).

One-way ANOVAS were also conducted to compare variable means across groups based on cause of death (categorized as natural, COVID-19 illness, and unnatural). Results revealed a significant effect of cause of death on perceived COVID-19 impact, $F(2, 149) = 3.76$, $p = .026$. Post hoc analyses were conducted using Tukey-Kramer's HSD post-hoc test. Participants who experienced the death of a loved one as a result of COVID-19 ($M = 4.26$, $SD = 0.76$) reported that COVID-19 more negatively impacted them than participants who experienced a natural death ($M = 3.87$, $SD = 0.76$), $t(149) = 2.52$, $p = .034$, $d = 0.50$, indicating a medium significant effect size. Participants who experienced the death of a loved one as a result of an unnatural death ($M = 3.82$, $SD = 0.80$) reported similar COVID-19 impact as participants who experienced a COVID-19 death, $t(149) = -2.30$, $p = .058$, $d = 0.57$, and natural death, $t(149) = -0.33$, $p = .943$, $d = 0.07$. No significant differences based on cause of death were observed for grief symptomatology, $F(2, 149) = 1.89$, $p = .155$, perceived social support, $F(2, 149) = 0.89$, $p = .411$, and satisfaction with social support during mourning rituals, $F(2, 149) = 1.05$, $p = .353$. Cause of death was included as a variable in the grief regression analysis based on research demonstrating differences in grief and social support based on cause of death (Boelen & Lenferink, 2020; Eisma et al., 2021).

Independent samples *t*-tests were conducted to determine whether the variable means differed by participant gender. The analysis revealed a significant effect of gender on perceived COVID-19 impact, $t(150) = 2.05$, $p =. 047$, $d = 0.48$. Specifically, women ($M = 4.01$, $SD = 0.81$) reported that COVID-19 impacted them more negatively than men ($M = 3.66$, $SD = 0.64$). There was no significant effect of gender on grief symptomatology, $t(150) = 0.59$, $p =. 973$, $d = 0.13$, perceived social support, $t(150) = -0.39$, $p =. 422$, $d = 0.09$ or satisfaction with social support received during mourning rituals, $t(150) = -1.19$, $p =.93$, $d = 0.26$. Gender was included as a variable in the grief regression analysis based on research demonstrating gender differences in grief and social support (Boelen & Lenferink, 2020; Logan et al., 2018).

Age was not significantly correlated with perceived COVID-19 impact, $r(150) = -.05$, $p = .563$, perceived social support, $r(150) = -.12$, $p = .143$, satisfaction with social support during mourning rituals, $r(150) = -.04$, $p = .640$, or grief symptomatology, $r(150) = -.13$, $p = .118$. Age was included as a variable in the COVID-19 impact regression analyses and grief regression analysis based on existing literature (Goveas & Shear, 2020; Perng & Renz, 2017).

Time since death was significantly negatively correlated with grief symptomatology and significantly positively correlated with perceived COVID-19 impact, all $r(150)$s $> |.22|$, ps $< .006$. Time since death was entered as a variable in the COVID-19 impact regression analyses as well as the grief regression analysis based on research demonstrating time since death differences in grief and social support (Boelen & Lenferink, 2020; Eisma et al., 2020).

Primary Analyses

Perceived Impact of COVID-19

To examine the perceived impact of the COVID-19 pandemic on perceived social support and satisfaction with social support during mourning rituals, two hierarchical linear regression analyses were conducted. The first hierarchical regression analysis specified perceived social support as the dependent variable and entered the predictors in said order: 1) demographic factors (i.e., gender, age, race/ethnicity), 2) death-related factors (i.e., time since death and cause of death), and 3) perceived COVID-19 impact. The full model was not statistically significant, F (8, 143) = 1.27, p = .266, R^2 = 0.07, indicating that the complete set of eight predictors did not account for significant variance in the outcome, perceived social support (see Table 4).

The incremental variance associated with the addition of each predictor block is as follows: 1) the demographic predictors (i.e., gender, age, and race/ethnicity) did not account for significant incremental variance in perceived social support, F(4, 147) = 1.40, p = .236, R^2 = .04; 2) the death related factors (i.e., time since death and cause of death) did not account for significant incremental variance in perceived social support over demographic predictors, ΔF(3, 144) = 0.60, p =.614, ΔR^2 = .01; 3) perceived COVID-19 impact did not account for significant incremental variance in perceived social support over the demographic variables and death related factors, ΔF(1, 143) = 2.67, p = .105, ΔR^2 = .02. The results do not support the hypothesis that perceived COVID-19 impact is associated with perceived social support while grieving. The unstandardized partial regression coefficients for the eight predictor variables from the final model were

Table 4

Hierarchical Regression Results for Perceived COVID-19 Impact (Predictor) and Perceived Social Support (Outcome)

Variable	*B*	95% Cl for *B*		*SE*	β	R^2	ΔR^2
		LL	UL				
Step 1						.04	.04
Constant	3.42	2.96	3.87	0.23			
Age	-0.01	-0.02	0.00	0.01	-0.12		
Gender	0.12	-0.26	0.51	0.20	0.05		
Hispanic/Latinx vs White/European	0.01	-0.53	0.55	0.27	0.00		
Non-White/Non-Hispanic or Latinx vs White/European	0.41	-0.05	0.88	0.24	0.14		
Step 2						.05	.01
Constant	3.58	2.99	4.17	0.30			
Age	-0.01	-0.02	0.00	0.01	-0.11		
Gender	0.14	-0.25	0.53	0.20	0.06		
Hispanic/Latinx vs White/European	0.02	-0.54	0.58	0.28	0.01		
Non-White/Non-Hispanic or Latinx vs White/European	0.37	-0.10	0.84	0.24	0.13		
Cause of Death- Unnatural vs COVID-19	-0.19	-0.54	0.16	0.18	-0.11		
Cause of Death- Natural vs COVID-19	-0.05	-0.51	0.40	0.23	-0.02		
Time since Death in Months	-0.01	-0.03	0.01	0.01	-0.05		
Step 3						.07	.02
Constant	4.29	3.25	5.34	0.53			
Age	-0.01	-0.02	0.00	0.01	-0.13		
Gender	0.10	-0.30	0.49	0.20	0.04		
Hispanic/Latinx vs White/European	-0.04	-0.60	0.52	0.28	-0.01		
Non-White/Non-Hispanic or Latinx vs White/European	0.35	-0.12	0.82	0.24	0.12		
Cause of Death- Unnatural vs COVID-19	-0.26	-0.62	0.10	0.18	-0.15		
Cause of Death- Natural vs COVID-19	-0.15	-0.61	0.32	0.24	-0.07		
Time since Death in Months	0.00	-0.02	0.02	0.01	-0.01		
Perceived COVID-19 Impact	-0.16	-0.36	0.03	0.10	-0.14		

Note. CI = confidence interval; LL = lower limit; UL = upper limit;

* $p < .05$. ** $p < .01$. *** $p < .001$.

examined. Of the eight predictor variables, no individual predictor was statistically significant in the final model (all *p*s > .11). Thus, contrary to expectations, perceived

COVID-19 impact was not associated with perceived social support while grieving.

The second hierarchical regression analysis specified satisfaction with social support during mourning rituals as the dependent variable and entered the predictors in the following order: 1) demographic factors (i.e., gender, age, race/ethnicity), 2) death-related factors (i.e., time since death and cause of death), and 3) perceived COVID-19 impact. The full model was not statistically significant, $F(8, 143) = 1.53$, $p = .152$, $R^2 = 0.08$, suggesting that the complete set of eight predictors did not account for significant variance in the outcome, satisfaction with social support during mourning rituals (see Table 5).

The incremental variance associated with the addition of each predictor block is as follows: 1) the demographic predictors (i.e., gender, age, and race/ethnicity) did not account for significant incremental variance in satisfaction with social support during mourning rituals, $F(4, 147) = 0.78$, $p = .538$, $R^2 = .02$; 2) the death related factors (i.e., time since death and cause of death) did not account for significant incremental variance in satisfaction with social support during mourning rituals over demographic predictors, $\Delta F(3, 144) = 1.24$, $p = .299$, $\Delta R^2 = .03$; 3) perceived COVID-19 impact did account for significant incremental variance in satisfaction with social support during mourning rituals over the demographic variables and death related factors, $\Delta F(1, 143) = 5.17$, $p = .024$, $\Delta R^2 = .03$. In this block, perceived COVID-19 impact was statistically significant, supporting the hypothesis that perceived COVID-19 impact would be associated with satisfaction with social support during mourning rituals. The unstandardized partial regression coefficients for the eight predictor variables from the final model were

examined. Of the eight predictor variables, only the unstandardized partial regression coefficient for perceived COVID-19 impact was statistically significant, b = -0.32, SE = .14, p = .024, indicating as perceived negative impact of COVID-19 increases, satisfaction with social support received during mourning rituals decreases. Perceived COVID-19 impact showed a small effect size (f^2 = .02).

Social Support

To examine the role of social support on grief symptomatology following the death of a loved one during a life-threatening pandemic, a five-stage hierarchical linear regression analysis was conducted. This hierarchical regression specified grief symptomatology as the dependent variable and entered the predictors in the following order: 1) demographic factors (i.e., gender, age, and race/ethnicity), 2) death-related factors (i.e., time since death and cause of death), 3) emotional closeness to the deceased, 4) number of ritual modifications, and 5) perceived social support and satisfaction with social support received during rituals. The full model was statistically significant, F(11, 140) = 8.03, p < .001, R^2 = .39, indicating that the complete set of eleven predictors accounted for significant variance in the outcome, grief symptomatology (see Table 6).

The incremental variance associated with the addition of each predictor block is as follows: 1) the demographic predictors (i.e., gender, age, and race/ethnicity) did not account for significant incremental variance in grief symptomatology, F(4, 147) = 0.91, p = .459, R^2 =.02; 2) the death-related factors (i.e., time since death and cause of death) accounted for significant incremental variance in grief symptomatology over the

Table 5

Hierarchical Regression Results for Perceived COVID-19 Impact (Predictor) and Satisfaction with Social Support during Mourning Rituals (Outcome)

Variable	*B*	95% Cl for *B*		*SE*	β	R^2	ΔR^2
		LL	UL				
Step 1						.02	.02
Constant	3.16	2.52	3.81	0.33			
Age	-0.01	-0.02	0.01	0.01	-0.07		
Gender	0.32	-0.23	0.87	0.28	0.10		
Hispanic/Latinx vs White/European	-0.40	-1.18	0.37	0.39	-0.09		
Non-White/Non-Hispanic or Latinx vs White/European	0.14	-0.52	0.81	0.34	0.04		
Step 2						.05	.03
Constant	3.14	2.30	3.97	0.42			
Age	0.00	-0.02	0.01	0.01	-0.05		
Gender	0.26	-0.30	0.82	0.28	0.08		
Hispanic/Latinx vs White/European	-0.30	-1.10	0.49	0.40	-0.07		
Non-White/Non-Hispanic or Latinx vs White/European	0.13	-0.54	0.80	0.34	0.03		
Cause of Death- Unnatural vs COVID-19	0.31	-0.19	0.81	0.25	0.12		
Cause of Death- Natural vs COVID-19	0.05	-0.60	0.70	0.33	0.02		
Time since Death in Months	-0.02	-0.05	0.01	0.01	-0.12		
Step 3						.08*	.03*
Constant	4.54	3.07	6.00	0.74			
Age	-0.01	-0.02	0.01	0.01	-0.08		
Gender	0.17	-0.38	0.72	0.28	0.05		
Hispanic/Latinx vs White/European	-0.42	-1.21	0.37	0.40	-0.09		
Non-White/Non-Hispanic or Latinx vs White/European	0.08	-0.58	0.74	0.33	0.02		
Cause of Death- Unnatural vs COVID-19	0.17	-0.34	0.68	0.26	0.07		
Cause of Death- Natural vs COVID-19	-0.14	-0.79	0.52	0.33	-0.04		
Time since Death in Months	-0.01	-0.04	0.02	0.01	-0.06		
Perceived COVID-19 Impact	-0.32*	-0.59	-0.04	0.14	-0.20*		

Note. CI = confidence interval; LL = lower limit; UL = upper limit;

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6

Hierarchical Regression Results for Social Support (Predictor) and Grief Symptomatology (Outcome)

Variable	*B*	95% Cl for *B*		*SE*	β	R^2	ΔR^2
		LL	UL				
Step 1						.02	.02
Constant	38.44	34.05	42.83	2.22			
Age	-0.07	-0.17	0.03	0.05	-0.12		
Gender	-0.71	-4.45	3.04	1.89	-0.03		
Hispanic/Latinx vs White/European	-0.12	-5.36	5.12	2.65	0.00		
Non-White/Non-Hispanic or Latinx vs White/European	2.30	-2.20	6.79	2.28	0.08		
Step 2						.09*	.06*
Constant	38.28	32.75	43.82	2.80			
Age	-0.03	-0.13	0.08	0.05	-0.04		
Gender	-0.94	-4.63	2.74	1.86	-0.04		
Hispanic/Latinx vs White/European	1.66	-3.62	6.93	2.67	0.05		
Non-White/Non-Hispanic or Latinx vs White/European	1.57	-2.86	6.01	2.24	0.06		
Cause of Death- Unnatural vs COVID-19	0.48	-2.84	3.80	1.68	0.03		
Cause of Death- Natural vs COVID-19	3.60	-0.68	7.87	2.17	0.17		
Time since Death in Months	-0.25**	-0.44	-0.07	0.09	-0.23**		
Step 3						.26***	.17***
Constant	27.91	21.76	34.06	3.11			
Age	-0.08	-0.18	0.02	0.05	-0.13		
Gender	-2.41	-5.78	0.96	1.70	-0.11		
Hispanic/Latinx vs White/European	0.29	-4.50	5.09	2.42	0.01		
Non-White/Non-Hispanic or Latinx vs White/European	2.48	-1.55	6.50	2.04	0.09		
Cause of Death- Unnatural vs COVID-19	0.06	-2.94	3.07	1.52	0.00		
Cause of Death- Natural vs COVID-19	1.57	-2.36	5.50	1.99	0.07		
Time since Death in Months	-0.17	-0.33	0.00	0.09	-0.15		

Emotional Closeness	2.31**	1.52	3.10	0.40	0.44**		
Step 4						.29*	.03*
Constant	28.91	22.81	35.01	3.09			
Age	-0.09	-0.19	0.00	0.05	-0.15		
Gender	-2.35	-5.66	0.97	1.68	-0.10		
Hispanic/Latinx vs White/European	0.38	-4.34	5.09	2.38	0.01		
Non-White/Non-Hispanic or Latinx vs White/European	2.68	-1.28	6.64	2.00	0.10		
Cause of Death- Unnatural vs COVID-19	-0.03	-2.98	2.93	1.50	0.00		
Cause of Death- Natural vs COVID-19	0.89	-3.02	4.79	1.98	0.04		
Time since Death in Months	-0.08	-0.26	0.11	0.09	-0.07		
Emotional Closeness	2.44***	1.65	3.23	0.40	0.46***		
Number of Ritual Modifications	-0.73*	-1.34	-0.13	0.31	-0.19*		
Step 5						.39***	.10***
Constant	39.92	32.40	47.45	3.81			
Age	-0.11*	-0.20	-0.02	0.05	-0.18*		
Gender	-1.75	-4.86	1.36	1.57	-0.08		
Hispanic/Latinx vs White/European	0.06	-4.37	4.48	2.24	0.00		
Non-White/Non-Hispanic or Latinx vs White/European	3.55	-0.18	7.28	1.89	0.13		
Cause of Death- Unnatural vs COVID-19	-0.04	-2.84	2.77	1.42	0.00		
Cause of Death- Natural vs COVID-19	1.02	-2.63	4.68	1.85	0.05		
Time since Death in Months	-0.13	-0.30	0.04	0.09	-0.12		
Emotional Closeness	2.38***	1.64	3.12	0.38	0.45***		
Number of Ritual Modifications	-0.56	-1.13	0.01	0.29	-0.14		
Perceived Social Support	-2.09**	-3.50	-0.68	0.71	-0.22**		
Satisfaction with Social Support during Mourning Rituals	-1.17*	-2.16	-0.18	0.50	-0.17*		

Note. CI = confidence interval; LL = lower limit; UL = upper limit;

*$p < .05$. **$p < .01$. ***$p < .001$.

demographic predictors, $\Delta F(3, 144) = 3.35$, $p = .021$, $\Delta R^2 = .06$; 3) emotional closeness to the deceased accounted for significant incremental variance in grief symptomatology over the demographic variables and death-related factors, $\Delta F(1, 143) = 33.12$, $p < .001$, $\Delta R^2 = .17$; 4) number of ritual modifications accounted for significant incremental variance in grief symptomatology over the demographic variables, death-related factors, and emotional closeness to the deceased, $\Delta F(1, 142) = 5.81$, $p = .017$, $\Delta R^2 = .03$; and 5) social support-related predictors (i.e., perceived social support and satisfaction with social support during mourning rituals) accounted for significant incremental variance in the outcome over the demographic variables, death-related factors, emotional closeness to the deceased, and number of ritual modifications, $\Delta F(2, 140) = 11.24$, $p < .001$, $\Delta R^2 = .10$. The results support the hypothesis that perceived social support while grieving and satisfaction with social support during mourning rituals are associated with grief symptomatology. The unstandardized partial regression coefficients for all eleven predictors from the final model were examined. Of the eleven predictors, age, emotional closeness to the deceased, perceived social support, and satisfaction with social support during mourning rituals were statistically significant. The regression coefficient for age is statistically significant, $b = -0.11$, $SE = .05$, $p = .017$, indicating as participant age increases, grief symptomatology decreases. Age shows a small effect size ($f^2 = .04$). The regression coefficient for emotional closeness is statistically significant, $b = 2.32$, $SE = .37$, $p < .001$, indicating as participants' sense of emotional closeness to the deceased increases, grief symptomatology increases. Emotional closeness shows a medium effect size ($f^{2=} .29$). Finally, the unstandardized partial regression coefficient for the social

support variables, perceived social support while grieving and satisfaction with social support during mourning rituals, are statistically significant, b = -2.05, SE = .71, p = .005 and b = -1.13, SE = .50, p = .03, respectively, indicating that grief symptomatology decreases as social support increases. Perceived social support while grieving (f^2 =.06) and satisfaction with support during mourning rituals (f^2 =.04) showed small effect sizes.

Chapter V: Discussion

Given the continued infection rate of COVID-19, increasing number of deaths related to the virus, and subsequent safety precautions endorsed by the CDC (2022), the purpose the current dissertation study was to gain a better understanding of bereaved individuals' experiences when traditional mourning rituals are interrupted during a life-threatening pandemic. The following study met two aims. The first aim investigated whether perceived impact of COVID-19 on participant grief experience was associated with perceived social support while grieving and satisfaction with social support during mourning rituals. To address the issues of lack of empirical evidence regarding grief during a pandemic expressed by Mayland et al. (2020), the second aim was to understand the potential association between perceived social support while grieving, satisfaction with social support during mourning rituals, and grief symptomatology during a life-threatening pandemic.

Contrary to the assertion that health and safety restrictions related to the COVID-19 pandemic would negatively impact grief experiences (Mortazavi, 2021), the results of the study did not support the hypothesis that perceived negative impact of COVID-19 is associated with lower perceived social support while grieving. However, the results of the study did support the hypothesis that perceived negative impact of COVID-19 is associated with decreased satisfaction with social support during mourning rituals. In other words, the findings suggest the more someone felt COVID-19 negatively impacted them, the less satisfied they were with the social support they received during mourning rituals. This finding is meaningful given previous research supporting the negative association between satisfaction with support and grief (Cacciatore, 2021; Mason et al.,

2020). These findings further suggest COVID-19's negative impact perceived by the bereaved may be felt more significantly during specific moments (i.e., mourning rituals) following the death of their loved one, rather than throughout their grief. Given this study found total number of ritual modifications to be correlated with perceived COVID-19, this suggests increased number of modifications enforced and/or suggested by the CDC (2020), utilized by the bereaved during mourning rituals, is associated with an increased negative perception of COVID-19 impact.

It is important to note the perceived negative impact of COVID-19's association with satisfaction of social support during mourning rituals did not extend to or generalize to overall perceived social support while grieving. This may possibly be due to other factors that influence overall sense of social support while grieving; however, the results of this study did not indicate demographic factors (i.e., age, gender, race/ethnicity), cause of death, or time since death as variables of significance in the regression. Perhaps the bereaved felt the negative impact of COVID-19 during moments when restrictions directly impeded their ability to engage in mourning rituals they wanted to (e.g., culturally significant practices such as hosting large funerals and quick burials) or believed would be meaningful (Burrell & Selmon, 2020), influenced the support they felt during the mourning rituals.

Additionally, the study results clarify previous research findings regarding the association between grief and social support. Findings from the study supported the hypothesis that social support is negatively associated with grief symptomatology. Specifically, perceived social support while grieving and satisfaction with social support during mourning rituals were negatively related to grief symptomatology. This study is

unique as it examines social support through the grief experience, using a grief-specific measure of social support (the ISS; Hogan & Schmidt, 2016), while also assessing satisfaction with support specifically received during mourning rituals. Further, it examined the association between social support and grief during a pandemic which, as noted by Al Gamal (2019) and Mortazavi (2021), poses unique challenges to traditional mourning and limits social support availability. This study's findings support the assertion of previous literature that social support may be a protective factor for grief (Aoun et al., 2018; Bottomley et al., 2017; Burke et al., 2010; Hogan & Schmidt, 2002; Lobb et al., 2010). Essentially, the bereaved feeling less socially supported, as relevant to the experience of grief and during mourning rituals, is associated with increased grief symptomatology.

Surprisingly, the results did not identify an effect of gender of the bereaved on grief severity, despite, as noted by Logan et al. (2018), literature highlighting gender as a bereaved-related determinant of social support. Time since death was negatively correlated with grief symptomatology, although it did not contribute significantly to the incremental variance in the final regression model predicting grief symptomatology. Considering this and Logan et al.'s finding that the bereaved are offered less social support as time since death increases, it important to consider the role of the pandemic in prolonging grief symptomatology. The findings of this study suggest social support variables, whether that be overall perceived social support while grieving or specifically satisfaction with support during mourning rituals, contribute greater incremental variance than time since death in predicting grief symptomatology.

As found by Eisma and Tamminga (2020), there was no significant difference in grief symptomatology across those bereaved by natural causes, unnatural causes, or by COVID-19 illness in the current study. However, it is important to acknowledge the mean grief scores for each group were above the recommended threshold of 30 for the PG13R set by Prigerson et al. (2021). Although the results showed no significant difference in grief symptomatology across groups categorized by cause of death, it is necessary to acknowledge the elevated grief scores across all groups. Boelen and Lenferink (2020) emphasize acute grief as a predictor for prolonged grief. Further, given the recency of the deaths (i.e., within the last two years), findings from Boelen and Lenferink shine light on the increased risk of higher grief severity symptoms in those bereaved by COVID-19 loss.

In line with previous literature (Eisma et al., 2021; Schaal et al., 2014), emotional closeness was positively correlated with grief symptomatology in this study. Keeping in mind the developmental model of grief proposed by Neimeyer and Cacciatore (2016), findings of this study suggest that regardless of whether disruptions in the grief experience occur in early, middle, or later grief, social support contributes more significantly to the prediction of grief severity, over and above other factors, except for emotional closeness to the deceased.

Limitations and Future Directions

A significant limitation of this study is the narrow diversity of the sample, which limits its generalizability. Future research would benefit from recruiting more diverse samples (Burrell & Selmon, 2020). As noted by Carmack and DeGroot (2014), several issues arise for researchers studying death and grief, especially online. Carmack and

DeGroot (2014) highlight the topic of death and grief being considered socially sensitive, issues of privacy, and challenges that arise with language choice when communicating online about grief and death. As such, research in grief requires deliberate recruitment efforts to build trust within grief support communities, in person and online.

Additionally, a limitation in this study's design is the use of several single items and items developed for the purpose of this study. Specifically, the questions related to perceived COVID-19 impact, satisfaction with social support during mourning rituals, and number of mourning ritual modifications made by the bereaved were developed for the purpose of the study. These items have not been empirically validated and future research is encouraged to conduct scale development studies to develop reliable measures of these constructs. Further, although this study utilized a measure designed to evaluate diagnostic criteria related to prolonged grief (i.e., PG13R; Prigerson et al., 2021), this study did not exclude participants who experienced the death of a loved one less than 12 months ago given the recency of the COVID-19 pandemic. As such, conclusions and generalizations related to prolonged grief are not possible given participant inclusion, despite not meeting recognized criteria (i.e., over 12 months) for prolonged grief per the DSM-5-TR (APA, 2022). Future research should examine the association between perceived social support, satisfaction with social support during mourning rituals and grief symptomatology over time to better understand prolonged grief.

Walter (2010) asserts the importance of recognizing distinctions in ethnicity in the context of grief, especially in relation to variations in mourning rituals. Interestingly, the results of this study found no significant difference across race/ethnicity groups in either perceived COVID-19 impact, perceived social support while grieving, satisfaction with

support during mourning rituals, or grief symptomatology. It is proposed that simply asking participants to select their race/ethnicity may not accurately capture the variations that exist within culture. A more accurate analysis may ask participants to identify the degree to which they feel they belong to a community (e.g., Psychological Sense of Community Scale, Jason et al., 2015), identify with their race/ethnicity (e.g., a brief form of Ethnic Identity Scale, Douglass & Umaña-Taylor, 2015), or adhere to cultural values (e.g.., Adherence to Asian and European American cultural values as investigated by Kim, 2007). Additionally, previous literature has detailed unique qualities of mourning rituals within faith-based communities and their relation to the COVID-19 pandemic (Bear et al., 2020). Future research should consider including questions examining the impact of modifications on faith-based observances and beliefs, especially in relation to grief severity in the bereaved.

Likewise, the sample of this study could be considered biased, given recruitment strategies relied heavily on internet visibility and accessibility by participants. Research should continue to evaluate whether individuals seeking help online through grief support groups may be seeking support either due to insufficient social support in their immediate circles and/or higher grief severity. The results of this study, especially given 43% of participants indicated they connected virtually with friends and family during the grieving process, provide valuable information regarding the grief experience of people who are considerably technologically literate, evidenced by their participation in online grief groups, engagement with the research post on social media pages, and completion of the online survey required for this study. Future research should expand in the

direction of examining the constructs within this study in samples beyond the reach of technology.

Similarly, given a significant portion of the sample of this study were spouses of the deceased, future research is encouraged to further explore the presence of disenfranchised grief amongst sexual and gender minoritized individuals during COVID-19. Curtin and Garrison (2018) help to address this issue of disenfranchised grief, defined as "grief that person's experience when they incur a loss that is not or cannot be openly acknowledged, publicly mourned, or socially supported" (p. 264) within the LGBTQ+ community, highlighting limited existing literature on diverse sexual minoritized clients.

Keeping in mind findings from Logan et al. (2018) supporting gender as a specific support determinant, future research is encouraged to investigate the associations between help-seeking behavior, grief, and gender. Going further, research should examine the availability, accessibility, and patterns of help-seeking behavior, as well as support determinants, across various dimensions of intersectionality. Curtin and Garrison (2018) discuss the implications of social intersection that may occur, noting contrasting grief situations between a socially privileged person versus someone who is part of historically socially oppressed categories. Tying in the dual-process model of coping with bereavement proposed by Stroebe and Schut (1999), an individual belonging to a socially privileged group may not experience the same changes in LO and RO needs due to greater existing financial and/or interpersonal resources they have than an individual belonging to a historically oppressed or disadvantaged group.

Interestingly, age was found to significantly contribute to grief symptomatology in the final model of the regression, indicating that as participant age increases, grief

symptomatology decreases. Given the disproportionate number of deaths of older adults due to COVID-19 illness (CDC, 2022), future research is encouraged to examine contributors of resiliency (e.g., life circumstances, socioeconomic security, extended familial or interpersonal relationships) associated with age in preventing severe grief symptomatology.

Considering satisfaction with support received during mourning rituals was found to be correlated with an overall perception of social support while grieving, these results and concerns raised by grief and palliative care researchers (Breen, 2021; Kokou-Kpolou et al., 2020; Wallace et al., 2020), suggest mourners may benefit from increased social support during rituals, regardless of modifications, as well as throughout their grief experience. Future research related to social support and grief during or following a global pandemic should examine other factors which may influence perceived social support. For example, future research may examine other elements of LO needs (e.g., searching for meaning in the loss) and RO needs (e.g., financial changes or shifts in identity) as detailed by Stroebe and Schut (1999).

Interestingly, total number of ritual modifications was significant in the final regression predicting grief symptomatology, prior to entering the social support variables, perceived social support and satisfaction with social support during mourning rituals. Future research is encouraged to examine qualities of ritual modifications, specifically whether elements of the modifications impacted only the individual grief experience (e.g., avoiding touching the body) or access to important elements of social support (e.g., wearing a mask around others). Bearing in mind the many reasons an individual may have modified their mourning rituals, total count may not provide a sufficient

representation of the subjective feelings associated with mourning ritual modifications. A mourner who chose to modify versus a mourner who felt forced to modify may develop differing subsequent emotions related to honoring their loved one that may influence perceptions of social support, satisfaction with social support, and grief symptomatology. Perhaps feelings of resentment may arise in mourners who felt forced by circumstance, societal pressure, or legal obligation. Similarly, the bereaved may perceive different modifications suggested by the CDC (2020) as positive modifications and others as prohibitive. For example, connecting virtually may be perceived as a positive adaptation allowing others geographically restricted to participate in mourning rituals, while requiring a negative COVID-19 test may be perceived as prohibitive to some. Future research should consider the readability of the CDC guidelines pertaining to ritual modifications given that the measure used in this study, created based on the CDC (2020) guidelines, are considerably challenging complex, falling at a 11.5 on a Flesh-Kincaid Grade Level, suggesting advanced or college-level education necessary to read.

In their review, Eisma and Boelen (2021) stress the limitations of two recent studies examining grief during the COVID-19 pandemic (e.g., voluntary response sampling and use of cross-sectional survey data; Eisma & Tamminga, 2020; Eisma et al., 2021). They emphasize the importance of further empirical analysis of the factors that contribute to the development, as well as the prevention, of prolonged grief during COVID-19. Cross-sectional analysis has potential drawbacks given cause and effect cannot be distinguished. Likewise, the state of grief of the participants may impact their ability to complete the survey, given the emotional toll such an activity would take. Participants with significantly higher levels of grief symptomatology may not engage or

complete the survey. Similarly, although the homogeneity of the sample may limit the generalizability of the results, it may also provide insight into the help-seeking behaviors of the bereaved. Further, this study included participants who experienced the death of loved ones between January 2020 and March 2020, during which widespread disruption and/or restrictions imposed due to COVID-19 were not yet widespread in the United States. While these bereaved individuals may not have been directly impacted by the restrictions or took part in suggested modifications, mourning rituals do not occur only at the initial start of bereavement. Perhaps some participants' mourning rituals (e.g., unveilings at cemeteries which can occur a year past the death), even if the death occurred prior to widespread changes related to COVID-19 pandemic, may have been impacted by the imposed health and safety restrictions. Additionally, this study did not restrict participation based on geographic location. Keeping this in mind, participants in differing geographic locations, outside or inside the United States, may have experienced varying degrees of impact related to COVID-19.

Considering the sample was over 66% White or European women, raises questions of who is seeking help online and how we might engage underrepresented mourners to provide more culturally competent and universal grief support. Research should further examine cultural values that influence mental health help-seeking behavior in the bereaved (e.g., Zhou et al., 2022). Going further, once help is sought by the bereaved, it is necessary to acknowledge findings by Aoun et al., (2018) which specified guidance (i.e., from informal sources) was perceived as least by the bereaved. Perhaps this is where social support provided by palliative care, healthcare, and mental healthcare professionals would be perceived as most valuable. Given this, perception of social

support by professional services, including clinical psychologists, should be further researched. Further, as Logan et al. (2018) examined existing literature on support determinants, future research should expand in this direction and examine whether feelings of burdensomeness (Hamid & Jahangir, 2020), patterns in cognitions and beliefs, and regularity of death due to COVID-19 (Breen, 2021; Kokou-Kpolou et al., 2020; Wallace et al., 2020) are associated with support behaviors among supporters of the bereaved.

Implications and Conclusion

Along with consideration of the developmental model of grief proposed by Neimeyer and Cacciatore (2016), disruptions in the grieving process and lack of adequate support, whether that be in early grief, middle grief, or later grief, may lend to elevated grief symptoms among the recently bereaved. While Aoun and colleagues (2018) highlighted guidance through informal sources was perceived as the least helpful form of social support, palliative care, healthcare, and mental healthcare professionals should consider expanding outreach to provide social support through guidance and relational bonds. As mentioned by Mortazavi (2021), increasing public education regarding the silent "pandemic" of grief to inform the bereaved of available resources, helpful adaptations, community resources, virtual networks, and clinical care to prevent the development of prolonged grief symptomatology is necessary.

Given the subsequent spike in deaths due to COVID-19 illness, healthcare providers and mental health care workers in contact with the bereaved should trace relationships of the deceased, screen for risk factors, and look for potential indicators for development of prolonged grief. Clinicians should expect and as a response screen for

situations of disenfranchised grief, presence of problematic grief reactions in acute grief (e.g., maladaptive cognitions as discussed by Boelen and Lenferink, 2020), and incidence of prolonged grief. Mourners may benefit from clinical providers and researchers inquiring more specifically, perhaps through a measure such as the Psychological Sense of Community Scale (Jason et al., 2015), the role of community in an individual's sense of social support while grieving.

As discussed by Zuniga-Villanueva et al. (2021), compassionate communities, a novel approach to grief support that relies on local caring networks to provide emotional support and views grief as a universal responsibility rather than solely healthcare professions, offers a community-based solution to meet grieving needs. Demonstrated in a recent study, increased program attendance and growth may inadvertently provide evidence of program impact on grief within the community (Zuniga-Villanueva et al., 2021). As suggested in the study, four components aid in the reach, sustainability, and effectiveness of compassionate community programs: 1) cost free attendance, 2) open, unrestricted grief groups, 3) educational component, and 4) opportunity to learn about, recognize, and support other people through their grief. Community programs or agencies interested in providing grief support should consider approaching the task through a compassionate community lens, to help foster educated and inclusivity oriented local grief support networks.

Healthcare providers and clinicians should continue to screen for prolonged grief symptomatology given the disproportionate percentage of deaths in older adults (CDC, 2022) due to COVID-19 illness, this study's findings indicating a high percentage of respondents being widowers, and findings from Vable et al. (2015) indicating in a

national sample of Americans aged 50+ years spousal bereavement is associated with health across multiple outcomes (i.e., mental, cognitive, and functional health). Additionally, clinicians would benefit from gaining further training on recognizing and providing culturally competent interventions for situations of disenfranchised grief, especially in the context of same sex relationships. Curtin and Garrison (2018) highlight important questions to consider when working with clients, including whether the client has experienced discrimination because of their sexual orientation and whether there are limitations of current laws of rights of partners. Clinicians would benefit from reviewing Curtin and Garrison's provided lists of micro, mezzo, and macro level perspective questions prior to working with clients dealing with same-sex couple grief.

Now, past two years into the COVID-19 pandemic, mental health professionals should prepare for incidence of prolonged grief in clients by familiarizing themselves with cultural/religious differences in mourning practices and how to explore these differences with clients (e.g., utilizing the cultural checklist provided by Walter, 2010). Similarly, clinicians should explore dissatisfaction with support during mourning rituals in the bereaved considering the results of this study supporting satisfaction with support during mourning rituals association with grief outcomes. In a recent report by Bear et al. (2020), findings related to several faith communities and vulnerable groups were presented to provide guidance on what a "good death" means to various groups of people. Clinicians would benefit from reviewing literature such as this to gain insight into meaningful practices across racial/ethnic/religious groups and ways in which the pandemic may have (and may continue to) negatively impact these cultural/religious norms (e.g., restrictions delaying post-mortem release of the body preventing a typically

rapid burial in Jewish faith, technology illiteracy and lack of access which means that some suggested modifications are not feasible solutions in underprivileged groups, and restrictions on large gatherings typical of Afro-Caribbean communities may intensify feelings of resentment). Holding communal memorials later or a National Day of Mourning to recognize the traumatic loss experienced by the bereaved and potential gaps in meaningful mourning practices of those grieving during the pandemic, regardless of the cause of death, may be a valuable means of generating sense of belongingness and community for the bereaved (Bear et al., 2020). Providers should also consider modified mourning ritual through virtual means (e.g., virtual reality or virtual funerals in video game worlds) as another avenue to aid the bereaved in honoring the deceased and helping them feel supported and find meaning. However, it is important consider the individual being treated, the circumstances surrounding the death, and concerns related to technological literacy and access when designing or adapting interventions for virtual care (Bear et al., 2020).

Clinicians should adapt and provide interventions aimed at helping the bereaved identify and build resiliency traits (e.g., self-efficacy and social support; Zhai & Du, 2020) through support networks in their communities and/or online resources. Although there is not a consensus in the literature on the best social support interventions, a review of 100 studies provided support for their overall usefulness (Hogan et al., 2002). Clinicians should consider this when treatment planning and collaboratively explore with clients to address perceived gaps in social support (e.g., emotional and/or tangible) that may improve through interventions and guided help.

Guiding the bereaved through creative means of grief expression and honoring the deceased may help them learn to adapt to loss (e.g., creative writing and the "Grief Drawer" as described by Niemeyer, 2016, or connecting via virtual reality as described by Mason et al., 2020), and balance LO and RO needs that arise (Stroebe & Schut, 1999). Aiding the bereaved to effectively move through the stages detailed in the developmental model of grief proposed by Niemeyer and Cacciatore (2016) is essential to improved bereavement outcomes. In considering the potential for technology to aid the bereaved in feeling more connected (Enari & Rangiwai, 2021), clinicians should also consider technologically creative means of helping clients engage with others online. Although virtual reality has yet to be utilized in the context of grief during COVID-19, hosting virtual reality support groups, as described by Knowles et al. (2017), may be a valuable avenue to explore given the significant findings demonstrating improved psychosocial outcome in widowers.

A recent systematic review of seven studies examining internet-based interventions for grief found significant effects for improved grief symptoms and high user satisfaction with the interventions (Zuelke et al., 2021). Adapting existing interventions for an online format may provide effective treatment of grief symptoms in bereaved adults. The present study provides valuable information regarding involvement in community grief groups, given that participants recruited from the New Hope for Kids grief support organization reported lower mean grief scores (n = 11, M = 29.73, SD = 11.24) compared to participants recruited from online support groups (n = 141, M = 36.10, SD = 8.14), t (150) = 2.43, p = .035, d = 0.65. Community organizations such as New Hope for Kids should continue to provide services to the bereaved anchored in

social support and grief expression. Future research should expand to evaluate involvement in such organizations, sense of community, and its relation to grief and perceived social support.

Additionally, clinicians should aim to offer online care especially for vulnerable populations and individuals who perceive themselves as high risk for infection considering findings of a recent study showing perceived infectibility and fear of COVID-19 in adults is associated with avoidance of dental services (Gonzalez-Olmo et al., 2022). Although these findings specifically apply to dental services, it raises the question of whether some bereaved individuals are avoiding seeking mental health care due to contagion fears.

The findings of the present study suggest that social support is essential to bereavement outcomes during a life-threatening pandemic. This has the potential to improve future societal responses to situations involving mass grief. Considering the results of this study and alarms raised in existing literature by grief and palliative care researchers (Breen, 2021; Kokou-Kpolou et al., 2020; Wallace et al., 2020), concern regarding the surplus of death and subsequent disenfranchisement of mourning experiences due to COVID-19 are well-founded. Although this study included participants who did not meet the time criterion for prolonged grief disorder outlined in the DSM-5-TR (APA, 2022), Boelen and Lenferink (2022) emphasize elevated prolonged grief disorder symptoms during the first year of bereavement predicts prolonged grief later. As such, individuals, communities, and clinical care providers should aim to provide greater means of social support to those experiencing grief to help prevent early

elevated symptoms to reduce the risk of the bereaved potentially developing prolonged grief disorder.

References

Al-Gamal, E., Saeed, S. B., Victor, A., & Long, T. (2019). Prolonged grief disorder and its relationship with perceived social support and depression among university students. *Journal of Psychosocial Nursing and Mental Health Services*, *57*(2), 44–51. https://doi.org/10.3928/02793695-20181023-03

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc. https://doi.org/10.1176/appi.books.9780890425596

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders (5th ed., text rev.)*. https://doi.org/10.1176/appi.books.9780890425787

Aoun, S. M., Breen, L. J., White, I., Rumbold, B., & Kellehear, A. (2018). What sources of bereavement support are perceived helpful by bereaved people and why? Empirical evidence for the compassionate communities approach. *Palliative Medicine*, *32*(8), 1378–1388. https://doi.org/10.1177/0269216318774995

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*(4), 596–612. https://doi.org/10.1037/0022-3514.63.4.596

Bear, L., Simpson, N., Angland, M., Bhogal, J.K., Bowers, R., Cannell, F., Gardner, K., Lohiya, A., James, D., Jivraj, N., Koch, I.L., Laws, M., Lipton, J., Long, N.J., Vieira, J., Watt, C., Whittle, C., & Zidaru-Barbulescu, T. (2020). 'A good death' during the Covid-19 pandemic in the UK: a report on key findings and recommendations. London School of Economics Anthropology. https://eprints.lse.ac.uk/104143/4/GoodDeath_Report_FINAL.pdf

Boelen, P. A., & Lenferink, L. I. (2020). Symptoms of prolonged grief, posttraumatic stress, and depression in recently bereaved people: Symptom profiles, predictive value, and cognitive behavioural correlates. *Social Psychiatry and Psychiatric Epidemiology: The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services*, *55*(6), 765–777. https://doi.org/10.1007/s00127-019-01776-w

Boelen, P. A., & Lenferink, L. I. (2022). Prolonged grief disorder in DSM-5-TR: Early predictors and longitudinal measurement invariance. *The Australian and New Zealand Journal of Psychiatry*, 56(6), 667–674. https://doi.org/10.1177/00048674211025728

Bottomley, J. S., Burke, L. A., & Neimeyer, R. A. (2017). Domains of social support that predict bereavement distress following homicide loss: Assessing need and satisfaction. *Omega: Journal of Death and Dying*, *75*(1), 3–25. https://doi.org/10.1177/0030222815612282

Bravo, V. (2017). Coping with dying and deaths at home: How undocumented migrants in the United States experience the process of transnational grieving. *Mortality*, *22*(1), 33–44. https://doi.org/10.1080/13576275.2016.1192590

Breen, L. J. (2021). Harnessing social support for bereavement now and beyond the COVID-19 pandemic. *Palliative Care and Social Practice*, *15*. https://doi.org/10.1177/2632352420988009

Burke, L. A., Neimeyer, R. A., & McDevitt-Murphy, M. E. (2010). African American homicide bereavement: Aspects of social support that predict complicated grief,

PTSD, and depression. *Omega: Journal of Death and Dying*, *61*(1), 1–24. https://doi.org/10.2190/OM.61.1.a

Burrell, A., & Selman, L. E. (2020). How do funeral practices impact bereaved relatives' mental health, grief and bereavement? A mixed methods review with implications for COVID-19. *Omega: Journal of Death and Dying*, *85*(2), 345–383. https://doi.org/10.1177/0030222820941296

Cacciatore, J., Thieleman, K., Fretts, R., & Jackson, L. B. (2021). What is good grief support? Exploring the actors and actions in social support after traumatic grief. *PLoS ONE*, *16*(5), Article e0252324. https://doi.org/10.1371/journal.pone.0252324

Carmack, H. J., & DeGroot, J. M. (2013). Exploiting Loss?: Ethical considerations, boundaries, and opportunities for the study of death and grief online. *OMEGA, 68*(4), 315–336.

Centers for Disease Control and Prevention. (2020). *Funeral Guidance for Individuals and Families*. Retrieved from https://stacks.cdc.gov/view/cdc/88415/cdc_88415_DS1.pdf

Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC; 2022, July 31. https://covid.cdc.gov/covid-data-tracker

Corpuz J. (2021). Beyond death and afterlife: the complicated process of grief in the time of COVID-19. *Journal of Public Health, 43*(2), 281–282. https://doi.org/10.1093/pubmed/fdaa247

Currier, J. M., Irish, J. E. F., Neimeyer, R. A., & Foster, J. D. (2015). Attachment, continuing bonds, and complicated grief following violent loss: Testing a moderated model. *Death Studies*, *39*(4), 201–210. https://doi.org/10.1080/07481187.2014.975869

Curtin, N.J., & Garrison, M.E. (2018). "She was more than a friend": Clinical intervention strategies for effectively addressing disenfranchised grief issues for same-sex couples. *Journal of Gay & Lesbian Social Services, 30*, 261-281.

Douglass, S., & Umaña-Taylor, A. J. (2015). A brief form of the Ethnic Identity Scale: Development and empirical validation. *Identity, 15*(1), 48-65.

Eisma, M. C., & Boelen, P. A. (2021). Commentary on: A call to action: facing the shadow pandemic of complicated forms of grief. *Omega: Journal of Death and Dying*. https://doi.org/10.1177/00302228211016227

Eisma, M. C., & Tamminga, A. (2020). Grief before and during the COVID-19 pandemic: Multiple group comparisons. *Journal of Pain and Symptom Management*, *60*(6), e1–e4. https://doi.org/10.1016/j.jpainsymman.2020.10.004

Eisma, M. C., Tamminga, A., Smid, G. E., & Boelen, P. A. (2021). Acute grief after deaths due to COVID-19, natural causes and unnatural causes: An empirical comparison. *Journal of Affective Disorders*, *278*, 54–56. https://doi.org/10.1016/j.jad.2020.09.049

Enari, D., & Rangiwai, B. W. (2021). Digital innovation and funeral practices: Māori and Samoan perspectives during the COVID-19 pandemic. *AlterNative: An International Journal of Indigenous Peoples*, *17*(2), 346–351. https://doi.org/10.1177/11771801211015568

Gächter, S., Starmer, C., & Tufano, F. (2015). Measuring the closeness of relationships: A comprehensive evaluation of the 'Inclusion of the Other in the Self' Scale.' *PLoS ONE*, *10*(6), Article e0129478. https://doi.org/10.1371/journal.pone.0129478

Goldsmith B., Morrison R.S., Vanderwerker, L.C. & Prigerson, H.G. (2008) Elevated rates of prolonged grief disorder in African Americans, *Death Studies*, *32*(4), 352-365, https://doi.org/10.1080/07481180801929012

González-Olmo, M., Delgado-Ramos, B., Ortega, A., Romero-Maroto, M., Carrillo-Diaz, M. (2021). Fear of COVID-19 in Madrid: Will patients attend for dental care?. *International Dental Journal*. *72*. https://doi.org/10.1016/j.identj.2021.01.013.

Goveas, J. S., & Shear, M. K. (2020). Grief and the COVID-19 pandemic in older adults. *The American journal of geriatric psychiatry: official journal of the American Association for Geriatric Psychiatry*, *28*(10), 1119–1125. https://doi.org/10.1016/j.jagp.2020.06.021

Hamid, W., & Jahangir, M. S. (2020). Dying, death and mourning amid COVID-19 pandemic in Kashmir: A Qualitative Study. *Omega: Journal of Death and Dying*, *85*(3), 690–715. https://doi.org/10.1177/0030222820953708

Hardy-Bougere, M. (2008). Cultural manifestations of grief and bereavement: a clinical perspective. *Journal of Cultural Diversity*, *15*(2), 66–69.

Hockey, J., Katz, J., & Small, N. (Eds.). (2001). *Grief, mourning and death ritual*. Open University Press.

Hogan, B. E., Linden, W., & Najarian, B. (2002). Social support interventions: do they work?. *Clinical Psychology Review, 22*(3), 383–442. https://doi.org/10.1016/s0272-7358(01)00102-7

Hogan, N. S., & Schmidt, L. A. (2002). Testing the grief to personal growth model using structural equation modeling. *Death Studies*, *26*(8), 615–634. https://doi.org/10.1080/07481180290088338

Hogan, N. S., & Schmidt, L. A. (2016). Inventory of Social Support (ISS). In R. A. Neimeyer (Ed.), *Series in death, dying, and bereavement: Techniques of grief therapy: Assessment and intervention* (pp. 99–102). Routledge/Taylor & Francis Group.

Jason, L.A., Stevens, E. and Ram, D. (2015). Development of a Three-Factor Psychological Sense of Community Scale. *J. Community Psychol*., *43*, 973-985. https://doi.org/10.1002/jcop.21726

Jones, S. (2004). 404 Not Found: The Internet and the afterlife. *Omega: Journal of Death and Dying*, *49*(1), 83–88. https://doi.org/10.2190/8UUF-GLEG-X6T5-UNJM

Kakar, V., & Oberoi, N. (2016). Mourning with social media: Rewiring grief. *Indian Journal of Positive Psychology*, *7*, 371–375. https://doi.org/10.15614/IJPP/2016/V7I3/121833

Kersting, A., Brähler, E., Glaesmer, H., & Wagner, B. (2011). Prevalence of complicated grief in a representative population-based sample. *Journal of Affective Disorders*, *131*(1-3), 339–343. https://doi.org/10.1016/j.jad.2010.11.032

Kessler, D. (2019). *Finding Meaning: The Sixth Stage of Grief*. Simon and Schuster.

Kim, B. S. K. (2007). Adherence to Asian and European American cultural values and attitudes toward seeking professional psychological help among Asian American college students. *Journal of Counseling Psychology*, 54(4), 474–480. https://doi.org/10.1037/0022-0167.54.4.474

Knowles, L.M., Stelzer, E., Joval, K., O'Conner, M. (2017). A pilot study of virtual support for grief: Feasibility, acceptability, and preliminary outcomes. *Computers in Human Behavior*, *73*, 650-658. http://dx.doi.org/10.1016/j.chb.2017.04.005

Kokou-Kpolou, C. K., Fernández-Alcántara, M., & Cénat, J. M. (2020). Prolonged grief related to COVID-19 deaths: Do we have to fear a steep rise in traumatic and disenfranchised griefs? *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(S1), S94–S95. https://doi.org/10.1037/tra0000798

Kübler-Ross, E. (1970). *On death and dying*. Collier Books/Macmillan Publishing Co.

Lobb, E. A., Kristjanson, L. J., Aoun, S. M., Monterosso, L., Halkett, G. K. B., & Davies, A. (2010). Predictors of complicated grief: A systematic review of empirical studies. *Death Studies*, *34*(8), 673–698. https://doi.org/10.1080/07481187.2010.496686

Logan, E. L., Thornton, J. A., & Breen, L. J. (2018). What determines supportive behaviors following bereavement? A systematic review and call to action. *Death Studies*, *42*(2), 104–114. https://doi.org/10.1080/07481187.2017.1329760

Maciejewski, P., Maercker, A., Boelen, P.A., & Prigerson, H. (2016). "Prolonged grief disorder" and "persistent complex bereavement disorder", but not "complicated grief", are one and the same diagnostic entity: an analysis of data from the Yale

Bereavement Study. *World Psychiatry*, *15*(3), 266–275. https://doi.org/10.1002/wps.20348

Mancini, A. D., Sinan, B., & Bonanno, G. A. (2015). Predictors of prolonged grief, resilience, and recovery among bereaved spouses. *Journal of Clinical Psychology*, *71*(12), 1245–1258. https://doi.org/10.1002/jclp.22224

Mason, T. M., Tofthagen, C. S., & Buck, H. G. (2020). Complicated grief: Risk factors, protective factors, and interventions. *Journal of Social Work in End-of-Life & Palliative Care*, *16*(2), 151–174. https://doi.org/10.1080/15524256.2020.1745726

Mayland, C. R., Harding, A. J. E., Preston, N., & Payne, S. (2020). Supporting adults bereaved through COVID-19: A rapid review of the impact of previous pandemics on grief and bereavement. *Journal of Pain and Symptom Management*, *60*(2), e33–e39. https://doi.org/10.1016/j.jpainsymman.2020.05.012

Menichetti Delor, J. P., Borghi, L., Cao di San Marco, E., Fossati, I., & Vegni, E. (2021). Phone follow up to families of COVID-19 patients who died at the hospital: Families' grief reactions and clinical psychologists' roles. *International Journal of Psychology*, *56*(4), 498–511. https://doi.org/10.1002/ijop.12742

Mortazavi, S. S., Shahbazi, N., Taban, M., Alimohammadi, A., & Shati, M. (2021). Mourning during Corona: A phenomenological study of grief experience among close relatives during COVID-19 pandemics. *OMEGA - Journal of Death and Dying*. https://doi.org/10.1177/00302228211032736

Neimeyer, R. A., & Cacciatore, J. (2016). Toward a developmental theory of grief. In R. A. Neimeyer (Ed.), *Series in death, dying, and bereavement: Techniques of grief*

therapy: Assessment and intervention (pp. 3–13). Routledge/Taylor & Francis Group.

Nesteruk, O. (2018). Immigrants coping with transnational deaths and bereavement: The influence of migratory loss and anticipatory grief. *Family Process*, *57*(4), 1012–1028. https://doi.org/10.1111/famp.12336

Perng, A. & Renz, S. (2018). Identifying and treating complicated grief in older adults. *The Journal for Nurse Practitioners*, *14*(4), 289-295. https://doi.org/10.1016/j.nurpra.2017.12.001.

Prigerson, H. G., Boelen, P. A., Xu, J., Smith, K. V., & Maciejewski, P. K. (2021). Validation of the new DSM-5-TR criteria for prolonged grief disorder and the PG-13-Revised (PG-13-R) scale. *World Psychiatry*, *20*(1), 96–106. https://doi.org/10.1002/wps.20823

Prigerson, H.; Horowitz, M.; Jacobs, S.; Parkes, C.; Aslan, M.; Goodkin, K., et al. (2009). Prolonged grief disorder: Psychometric validation of criteria proposed for DSM-V and ICD-11. *PLoS Medicine*, *6*(8), Article e1000121. http://dx.doi.org/10.1371/journal.pmed.1000121

Prigerson, H.G., Jacobs, S. (2001) Traumatic grief as a distinct disorder: a rationale, consensus criteria, and a preliminary empirical test. In: Stroebe M.S., Hansson R.O., Stroebe W. et al (eds). *Handbook of bereavement research: consequences, coping, and care* (pp. 613-645). Washington: American Psychological Association.

Rings, J. A. (2010). Perceived closeness to the deceased and its predictive effect on the development of prolonged grief disorder and suicidality among bereaved college

students. [Doctoral dissertation, University of Denver]. *Electronic Theses and Dissertations*. https://digitalcommons.du.edu/etd/910

Sarason, I. G., & Sarason, B. R. (2009). Social support: Mapping the construct. *Journal of Social and Personal Relationships*, *26*(1), 113–120. https://doi.org/10.1177/0265407509105526

Schaal, S., Richter, A. & Elbert, T. (2014) Prolonged grief disorder and depression in a German community sample. *Death Studies*, *38*(7), 476-481. https://doi.org/10.1080/07481187.2013.809032

Scherer, Z., Berchick, E. R., Krieder, R. M. (2014) Risk of parental death across the life course. U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/working-papers/2020/demo/sehsd-wp2020-21.pdf

Scott, H. R., Pitman, A., Kozhuharova, P., & Lloyd-Evans, B. (2020). A systematic review of studies describing the influence of informal social support on psychological wellbeing in people bereaved by sudden or violent causes of death. *BMC Psychiatry*, *20*(1), 265. https://doi.org/10.1186/s12888-020-02639-4

Shear, M. K., Simon, N., Wall, M., Zisook, S., Neimeyer, R., Duan, N., Reynolds, C., Lebowitz, B., Sung, S., Ghesquiere, A., Gorscak, B., Clayton, P., Ito, M., Nakajima, S., Konishi, T., Melhem, N., Meert, K., Schiff, M., O'Connor, M.-F., Keshaviah, A. (2011). Complicated grief and related bereavement issues for DSM-5. *Depression and Anxiety*, *28*(2), 103–117. https://doi.org/10.1002/da.20780

Stroebe, M., & Schut, H. (1999). The dual process model of coping with bereavement: Rationale and description. *Death Studies*, *23*(3), 197–224. https://doi.org/10.1080/074811899201046

Stroebe, W., & Schut, H. (2001). Risk factors in bereavement outcome: A methodological and empirical review. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of Bereavement Research: Consequences, Coping, and Care* (pp. 349–371). American Psychological Association. https://doi.org/10.1037/10436-015

Stroebe, W., Zech, E., Stroebe, M. S., & Abakoumkin, G. (2005). Does social support help in bereavement? *Journal of Social and Clinical Psychology*, *24*(7), 1030–1050. https://doi.org/10.1521/jscp.2005.24.7.1030

Vable, A. M., Subramanian, S. V., Rist, P. M., & Glymour, M. M. (2015). Does the "widowhood effect" precede spousal bereavement? Results from a nationally representative sample of older adults. *The American Journal of Geriatric Psychiatry: Official Journal of The American Association for Geriatric Psychiatry*, *23*(3), 283–292. https://doi.org/10.1016/j.jagp.2014.05.004

Vanderwerker, L. C., & Prigerson, H. G. (2004). Social support and technological connectedness as protective factors in bereavement. *Journal of Loss and Trauma*, *9*(1), 45–57. https://doi.org/10.1080/15325020490255304

Villacieros, M., Serrano, I., Bermejo, J.-C., Magaña, M., & Carabias, R. (2014). Social support and psychological well-being as possible predictors of complicated grief in a cross-section of people in mourning. *Anales de Psicología*, *30*(3), 944–951.

Wagner, A. (2018). Do not click “like” when somebody has died: The role of norms for mourning practices in social media. *Social Media + Society*, *4*(1), 2056305117744392. https://doi.org/10.1177/2056305117744392

Wallace, C. L., Wladkowski, S. P., Gibson, A., & White, P. (2020). Grief during the COVID-19 pandemic: Considerations for palliative care providers. *Journal of Pain and Symptom Management*, *60*(1), e70–e76. https://doi.org/10.1016/j.jpainsymman.2020.04.012

Walter, T. (2010). Grief and culture. *Bereavement Care*, *29*(2), 5–9. https://doi.org/10.1080/02682621003707431

Walter, T., Hourizi, R., Moncur, W., & Pitsillides, S. (2011). Does the internet change how we die and mourn? Overview and analysis. *Omega: Journal of Death and Dying*, *64*(4), 275–302. https://doi.org/10.2190/OM.64.4.a

World Health Organization. (2019). International statistical classification of diseases and related health problems (11th ed.). https://icd.who.int/

Wortman, C. B., & Pearlman, L. A. (2016). Traumatic bereavement. In R. A. Neimeyer (Ed.), *Series in death, dying, and bereavement: Techniques of grief therapy: Assessment and intervention* (pp. 25–29). Routledge/Taylor & Francis Group

Zhai, Y., & Du, X. (2020). Loss and grief amidst COVID-19: A path to adaptation and resilience. *Brain, Behavior, and Immunity*, *87*, 80–81. https://doi.org/10.1016/j.bbi.2020.04.053

Zhou, E., Kyeong, Y., Cheung, C.S., Michalska, K.J. (2021) Shared cultural values influence mental health help-seeking behaviors in Asian and Latinx college

students. *J. Racial and Ethnic Health Disparities 9,* 1325–1334. https://doi.org/10.1007/s40615-021-01073-w

Zuelke, A. E., Luppa, M., Löbner, M., Pabst, A., Schlapke, C., Stein, J., & Riedel-Heller, S. G. (2021). Effectiveness and feasibility of internet-based interventions for grief after bereavement: Systematic Review and Meta-analysis. *JMIR Mental Health*, *8*(12), e29661. https://doi.org/10.2196/29661

Zuniga-Villanueva, G., Ramirez-GarciaLuna, J. L., & Villafranca-Andino, R. I. (2021). A compassionate communities approach in a grief and bereavement support program: Bridging the gap in palliative care. *Journal of Social Work in End-of-Life & Palliative Care*, *17*(1), 9–18. https://doi.org/10.1080/15524256.2021.1894309

Appendix A

DSM-5-TR PGD

DSM Draft Criteria: Prolonged Grief Disorder

A. The death of a person close to the bereaved at least 12 months previously.

B. Since the death, there has been a grief response characterized by intense yearning/longing for the deceased person or a preoccupation with thoughts or memories of the deceased person. This response has been present to a clinically significant degree nearly every day for at least the last month.

C. As a result of the death, at least 3 of the following symptoms have been experienced to a clinically significant degree, nearly every day, for at least the last month:

1. Identity disruption (e.g., feeling as though part of oneself has died)
2. Marked sense of disbelief about the death
3. Avoidance of reminders that the person is dead
4. Intense emotional pain (e.g., anger, bitterness, sorrow) related to the death
5. Difficulty moving on with life (e.g., problems engaging with friends, pursuing interests, planning for the future)
6. Emotional numbness
7. Feeling that life is meaningless
8. Intense loneliness (i.e., feeling alone or detached from others)

D. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

E. The duration of the bereavement reaction clearly exceeds expected social, cultural or religious norms for the individual's culture and context.

F. The symptoms are not better explained by another mental disorder.

Retrieved from Prigerson et al. (2021).

Appendix B

Mourning Ritual Questions

For the following questions please keep in mind the following definition.

Mourning rituals are defined as symbolic actions that provide meaningful experiences for the grieving.

Examples include: Attending a funeral, hosting a virtual memorial, sitting shiva, donating to charity in honor of the deceased, etc...

How satisfied are you with the support you received during the mourning rituals you engaged in?
Extremely dissatisfied
Somewhat dissatisfied
Neither satisfied nor dissatisfied
Somewhat satisfied
Extremely satisfied

Please select any mourning ritual modifications you engaged in resulting from the COVID-19 pandemic?
-Practiced social distancing by maintaining at least 6 feet between attendees, facility staff, and clergy or officiants when small, in person services were held
-Limiting attendance at funerals held during shortly after the time of death to a small number of immediate family members and friends
-Holding additional memorial services when social distancing guidelines are less restrictive
-Wearing cloth face coverings while around others and outside of your home
-Avoided travel or were unable to due to travel restrictions
-Required COVID-19 Negative Test and/or Vaccination
-Used technology to connect virtually with family and friends during the grieving process
-Avoided touching the deceased person's body or personal belongings or other ceremonial objects
-Use of protective equipment such as disposable and waterproof isolation gowns, face shields or goggles, and facemasks
-Did not attend in-person meetings if you were sick, might have been exposed to COVID-19, or have higher risk of severe illness from COVID-19
-No modifications
-Other, please describe

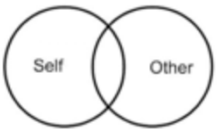
Appendix C

Inclusion of the Self Scale – Modified

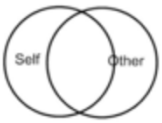
Please select which picture best describes your relationship with the deceased?

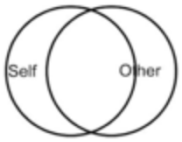
1 

2 

3 

4 

5 

6 

7 

Adapted from Aron et al., (1992).

Appendix D

Death Related Questions

Have you lost someone significant to you since January 2020?
Yes
No

How many total deaths of loved ones have you experienced since January 2020?

What was the cause of death of your loved one?
Natural Death (illness unrelated to COVID-19, Heart Failure/Attack, Dementia, Cancer)
Unnatural Death (accidental, murder, suicide, natural disaster, manmade disaster)
COVID-19 illness related death
Other, please specify

Relationship to the deceased... The deceased is my
Parent
Grandparent
Spouse
Sibling
Child
Aunt
Uncle
Cousin
Friend
Other, please specify

Appendix E

Demographic Questions

Finally, a few questions to help us group your answers.

What is your gender identity?
Man
Woman
Non-binary

Which best describes your race?
White or European
Black or African American
American Indian or Alaska Native
Asian
Native Hawaiian or Pacific Islander
Multiracial or Biracial
Hispanic or Latinx
Middle Eastern or North African
A race/ethnicity not listed here:

What is your age? (in years)

Is there anything else you think we should know?

Appendix F

Feedback Sheet

Feedback Sheet

Thank you for participating in this research study! You have assisted us in conducting our research and, more broadly, have contributed to knowledge in the field of psychology. This letter is intended to give you more information about the purpose of our research.

The purpose of this study is to examine the investigate the association between social support and prolonged grief during a life-threatening pandemic. The study will also highlight the impact of interrupted mourning rituals on bereavement outcomes and the importance of examining the role of new technology in the modern grief experience.

We greatly appreciate your participation in this project, and we thank you for taking the time to carefully answer the surveys. We would like to emphasize again that the data from this study will remain confidential, and no identifying information will be used or kept on record. You may print a copy of this form for your records.

There are many local and national bereavement support resources available to help you as you grieve, from online resources to local workshops and camps. For more information, please visit https://healgrief.org/grief-support-resources/

For resources for understanding grief and loss during the COVID-19 pandemic please visit https://connectingwithothers.prolongedgrief.com

New Hope for Kids is a support center for grieving children and for those who are a part of their lives. For children ages 3-18. Located at 544 Mayo Ave Maitland, FL More info prior attending please call Tamari Miller (407) 331-3059 or send an email to information@newhopeforkids.org. More info please visit: www.newhopeforkids.org.

If you have any questions about this research, please contact one of the researchers listed below. If you have questions about your rights as a research participant, you may also contact the Human Research Oversight Board (Institutional Review Board or IRB) at Nova Southeastern University at (954) 262-5369/Toll Free: (866) 499-0790 or at IRB@nsu.nova.edu.

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