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Integrative Meaning, Mindfulness, and Traumatic Grief Among Bereaved Adults

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A dissertation submitted in partial fulfillment

Of the requirements for the degree of

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In

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Abstract

Traumatic Grief (TG) entails clinically significant expressions of grief and posttraumatic stress following bereavement. TG experiences are more likely following violent, sudden, or accidental losses, which has been largely explained by integrative meaning-making processes. In this study, I aimed to explore relationships between integrative meaning, mindfulness, and TG among a sample of adults (*N* = 237) bereaved by various circumstances. First, I sought to contribute to findings regarding the negative association between integrative meaning and TG experiences by investigating whether this relationship persists among individuals bereaved by varied circumstances. Second, I sought to explore the role of mindfulness in meaning-making and grieving processes. Specifically, I was interested in exploring mindfulness as a potential mediator between integrative meaning and TG experiences. The omnibus test was statistically significant, $F(3, 232) = 112.75$, $p < .001$, $R^2 = .60$, indicating that 60% of variance in the outcome (TG) was accounted for by the model. Further, I found statistically significant direct effects between integrative meaning and TG experiences ($b = -.568$, CI = -.648, -.489) as well as integrative meaning and mindfulness ($b = .334$, CI = .232, .437). However, the indirect effect of mindfulness on the relationship between integrative meaning and TG experiences was not statistically significant, and thus a mediation model was not supported. Findings challenge categorical methods for assessing trauma and suggest relevance of research examining relationships between integrative meaning and mindfulness.

Keywords: bereavement, traumatic grief, integrative meaning, meaning-making, mindfulness

Integrative Meaning, Mindfulness, and Traumatic Grief Among Bereaved Adults

Chapter I: Introduction

Bereavement—the loss of a relationship to death—is a universal human experience often considered one of the most stressful events to occur across the lifespan. Although bereavement constitutes a single moment in time, grief—the reaction to bereavement—may last a lifetime. Grief can be experienced and expressed through a wide array of thoughts, feelings, behaviors, and physiological changes, all of which are known to fluctuate and evolve in context and over time, with considerable variability across individuals and cultures (Shear, 2015). While pain and suffering are normative reactions to loss that need not be pathologized, there remains a small but meaningful proportion of individuals—estimated to be about 7% in United States samples—for whom the grieving process includes ongoing distress and functional impairment that greatly impacts quality of life (Kertsing et al., 2011; Prigerson et al., 2009). Clinically significant forms of grief are thought to occur when loss itself is experienced as "separation trauma" (Prigerson et al., 1999, p. 67). Boelen and Smid (2017) describe Traumatic Grief (TG) as entailing enduring expressions of both grief (e.g., intense sadness and yearning for the deceased) and posttraumatic stress (e.g., intrusive thoughts and memories about loss). TG is more likely to occur following circumstances such as violent or unnatural causes of death, sudden deaths, viewing the death as preventable or unjust, believing the deceased suffered, having witnessed the death, having one's own life threatened, and being faced with multiple losses. TG negatively impacts many domains of life, including family and parenting relationships, marriage and intimate partnerships, occupational functioning, recreation, and social support (Barlé et al., 2017).

Like other expressions of posttraumatic stress, TG is characterized by disruption to core systems of meaning regarding self, others, and the world (Barlé et al., 2017; Janoff-Bulman, 1992). It is well established within both the bereavement and trauma literature that meaning-making processes function as a key mechanism within the adaptation to trauma and other major life changes (Currier et al., 2006; Ehlers & Clark, 2000; Rozalski et al., 2017; Milman et al., 2019). In particular, findings suggest that adaptive adjustment to bereavement entails integrating the experience of loss into a global system of meaning in such a way that facilitates development of a cohesive narrative that includes the reality of loss (Holland et al., 2006; Neimeyer, 2006). Considering the deleterious consequences of TG, it is imperative that behavioral scientists work to elucidate variables that complicate the grieving process, thus creating barriers to adaptation following bereavement. Identification of factors that may impede or support adaptive adjustment serve as the foundation for further research focused on effective interventions to support bereaved individuals. Therefore, the purpose of the present study was to build upon extant research examining the relationship between integrative meaning and TG and to explore factors that may facilitate adaptive meaning-making following loss, such as mindfulness.

Mindfulness, a concept derived from Eastern contemplative traditions, is the practice of observing one's present moment experiences with an attitude of acceptance (Gunaratana, 1996). Bereavement inherently confronts us with the reality of impermanence—that is, the temporary nature of our being—which can cause profound suffering when there is difficulty accepting or making sense of this reality. Scholars (e.g., Cacciatore, et al., 2016; Kumar, 2005; Wada & Park, 2009) have proposed that

approaching grief from a position of mindful awareness/acceptance can be highly adaptive. Like other forms of posttraumatic stress, TG is characterized by avoidance strategies that, while very understandable, ultimately serve to maintain distress and functional impairment when employed as the predominant form of coping. According to the dual process model of grief (Stroebe & Schut, 1999), adaptively coping with grief entails oscillation between approaching the tasks of actively making sense of loss (i.e., loss-oriented coping) and avoiding grief reminders in order to seek respite (i.e., restoration-oriented coping). From this perspective, some avoidance of reminders can actually be helpful when balanced with approach strategies. In the case of TG, however, where grief experiences entail intrusive symptoms characteristic of posttraumatic stress, predominant avoidance is likely to create barriers to effective integration of loss into systems of meaning. Mindfulness opposes avoidance such that it entails being present with the fullness of one's experience, including painful thoughts, emotions, and memories associated with loss. Moreover, the attitude of acceptance central to mindfulness is compatible with the concept of integration of loss into global systems of meaning. Thus, it seems possible that mindfulness may facilitate meaning-making in ways that may lessen TG experiences.

Traumatic Grief

TG entails enduring and clinically significant expressions of grief and posttraumatic stress in response to bereavement. Characteristic expressions of TG include experiences such as intense emotional pain and yearning for the deceased; recurrent intrusive thoughts and memories about the deceased; avoidance of reminders of loss; preoccupation with ruminative thoughts about the circumstances of loss; difficulty with

issues around responsibility and guilt/shame; suicidal ideation, often including themes of wanting to join the deceased; disbelief or difficulty accepting loss; disconnection from relationships; fear of additional loss and hypervigilance to future threat; and difficulty imagining a meaningful life without the deceased (Barlé et al., 2017; Shear, 2015). TG is a form of posttraumatic stress in which bereavement itself is traumatic.

Operationalization of Traumatic Grief

Clinically significant forms of grief have been described within the literature using various terminology with different emphases. TG is closely related to the concepts of prolonged grief disorder (PGD; Prigerson et al., 2009) and complicated grief (CG; Shear et al., 2011). Both groups of scholars submitted proposals to the American Psychiatric Association (APA) in an effort to legitimize the diagnosis of a functionally impairing form of grief in the Diagnostic and Statistical Manual 5th edition (DSM-5; 2013). The APA included Persistent and Complex Bereavement Disorder (PCBD) as a condition for further study within the DSM-5, which represents a synthesis of the PGD and CG diagnostic proposals. The terms TG and traumatic bereavement have been used by scholars such as Barlé and colleagues (2017) and Boelen and Smid (2017) more recently, as well as Prigerson, Shear, and colleagues (e.g., 1997; 1999) in some of their earlier work. While each construct has an associated line of research evidence, there is considerable overlap. Research corroborates to suggest that maladaptive grief reactions predict adverse trajectories, regardless of the label. For the purpose of this study, I have chosen to utilize the language TG because (a) I believe it most clearly represents the notion of clinically significant grief as a trauma reaction and (b) I have utilized Boelen and Smid's Traumatic Grief Inventory (TGI) to measure enduring symptoms of grief and

posttraumatic stress related to bereavement. The TGI was designed to synthesize and measure elements of PGD, CG, and PCBD. Thus, while there is considerable overlap between these constructs, the TG construct advantageously includes important elements of each. It should be noted, however, that research using each label may be referenced throughout.

Traumatic Grief Outcomes and Risk Factors

TG reactions have been found to predict a multitude of negative health outcomes, including higher rates of cancer, hypertension, cardiac events, immunological dysfunction, mortality, suicidal ideation, impaired relational functioning, impaired occupational functioning, decreased relationship satisfaction, and decreased quality of life, even when controlling for depression and anxiety symptoms (Barlé et al., 2017; Prigerson et al., 2009; Prigerson et al., 1999; Prigerson et al., 1997; Stroebe et al., 2007). According to Prigerson and colleagues, it is not solely the stress of bereavement that increases the likelihood of negative health outcomes, but rather the TG sequelae that follow for some individuals. Thus, while bereavement constitutes a normal and manageable stressor in most cases, it can have significant consequences for individuals whose grieving process includes elements of TG.

Moreover, there is robust research evidence to suggest that clinically significant forms of grief (i.e., TG, PGD, CG) represent a clinical presentation distinct from other established diagnostic categories, such as PTSD and Major Depressive Disorder (MDD; Boelen & van den Bout, 2005; Boelen et al., 2003; Bonanno et al., 2007). For example, Bonanno and colleagues (2007) completed a thorough examination of the incremental validity of CG, in which they conducted structured clinical interviews on PTSD and

MDD diagnostic criteria, semi-structured clinical interviews on grief experiences, measures of autonomic arousal, self-report, and friend reports. They found that grief emerged as a unique predictor of functioning, both cross-sectionally and prospectively, even after controlling for PTSD and MDD. Further, both exploratory and confirmatory factor analyses have shown that depression, anxiety, PTSD, and TG emerge as distinct factors representing related yet distinguishable clusters of symptoms (e.g., Boelen et al., 2003; Boelen et al., 2005; Boelen et al., 2010; Golden & Dalgleish, 2010; Lichtenthal et al., 2004). Finally, clinically significant forms of grief have also been distinguished from normative grief presentations (e.g., Boelen & van den Bout, 2008). TG, like other forms of posttraumatic stress, shares some aspects in common with depression and anxiety symptomology, yet also includes aspects of reexperiencing unique to posttraumatic stress, as well as themes of yearning that are characteristic of grief expressions.

There are a variety of factors that increase risk for TG experiences following bereavement. Established predictors of clinically significant forms of grief include: (a) characteristics of the bereaved, such as a history of trauma, a history of depression and/or anxiety, neuroticism, insecure attachment style, and pre-existing negative schemas about self, others, and the world; (b) characteristics of the relationship between the bereaved and deceased, such as loss of a primary attachment figure or first-degree relative; and (c) characteristics of the loss(es), such as violent or accidental causes of death, sudden death, witnessing death, having one’s own life threatened, experiencing multiple losses, and ineffective social support following bereavement (Barlé et al., 2017; Burke & Neimeyer, 2013; Currier et al., 2008; Prigerson et al., 2002; Prigerson et al., 2009). While there are a variety of interpretations throughout the literature concerning why these particular

characteristics are more likely to predict TG symptoms following bereavement, the pervading theme is that each of these factors serve as barriers to adaptive meaning-making post-loss. That is, risk factors for TG reactions have the potential to disrupt fundamental assumptions concerning safety, control, purpose, personal worth, and expectations for the future, leaving the bereaved with the challenging task of reconstructing their personal narrative and global sense of meaning in life (Janoff-Bulman, 1989).

Integrative Meaning

Meaning reconstruction serves as a key mechanism of coping and adaptation throughout the grieving process. Bereavement, and in particular losses that are experienced as traumatic, constitute a highly disruptive stressor that necessitates examination of core systems of meaning (Janoff-Bulman, 1992; Neimeyer, 2006). Meaning can be considered both a process and an outcome and several variants of meaning-making have been identified (e.g., sense-making, benefit-finding, identity reconstruction; Park, 2010). As Park indicated in their influential review and integration of the meaning literature, any clear operationalization of meaning necessarily illuminates some aspects of the construct and neglects others. Park sought to clarify such complexity by proposing an integrative model of meaning built upon the work of many influential thinkers within the meaning literature (e.g., Bonanno & Kaltman, 1999; Davis, Wortman, Lehman, & Silver, 2000; Janoff-Bulman, 1992; Joseph & Linley, 2005; Lepore & Helgeson, 1998; Neimeyer, 2001; Taylor, 1983; Thompson & Janigian, 1988).

Operationalization of Integrative Meaning

Park's integrative model includes two main aspects of meaning: global meaning

and situational meaning. Global meaning refers to the core beliefs, goals, and subjective sense of meaningfulness through which we interpret and appraise all experiences. Global meaning is thought to develop early in life, is strongly informed by cultural and relational contexts, and can change over time with new experiences. Situational meaning refers to the appraisals we make concerning specific situations or life experiences. One of the key elements of Park's integrative model is the notion that discrepancy between situational meaning and the broader global meaning system creates distress, which then initiates the process of meaning-making. Meaning-making may entail assimilation (i.e., reappraising an experience such that situational meaning becomes consistent with global meaning) and/or accommodation (i.e., modifying the global meaning system such that situational meaning can be accounted for), with the latter often posing greater difficulty. Ultimately, meaning-making processes serve to reduce distress by creating greater coherence between global and situational meaning through integration, resulting in meaning-made concerning particular life experiences (Park, 2010).

The construct of integrative meaning in this context, therefore, represents the bereaved person integrating the experience of loss into their global meaning system, whether that entails assimilating the loss into existing global meaning or accommodating the global meaning system all together to make sense of loss (Holland et al., 2010). Difficulty with integration, in contrast, entails a lack of elaboration and contextualization of memories associated with loss into the broader autobiographical narrative (Boelen et al., 2006; Ehlers & Clark, 2000). Less integrative meaning, reflecting discrepancy between global and situational meaning, has been found to predict higher likelihood and severity of CG symptoms (Holland et al., 2010).

Boelen and colleagues (2006) proposed a cognitive-behavioral model of CG in which they described three core processes thought to influence the development and maintenance of separation distress and traumatic stress observed in clinically significant expressions of grief. The core processes are as follows: (a) insufficient integration of loss into autobiographical memory, (b) negative global beliefs and interpretations, and (c) avoidance strategies. Boelen and colleagues theorized that each of these processes may differentially interact in important ways to contribute to various expressions of CG symptomology (while Boelen et al. refer to CG, their theory readily applies to TG as well, which is the terminology they later adopted). In particular, Boelen and colleagues theorized that insufficient integration of loss into autobiographical memory may contribute to the simultaneous experience of intrusive memories, thoughts, and emotions related to loss and sense of disbelief or unreality typically thought to underly “searching” behavior characteristic of CG. This notion is consistent with Park’s integrative model of meaning, which suggests that discrepancy between global and situational meaning creates distress. That is, intrusive symptoms may represent distress elicited by reminders of this discrepancy between what occurred and what the bereaved may have previously believed about themselves, others, and the world, with searching behavior representing efforts to engage in the process of meaning-making. However, as Boelen and colleagues pointed out, the meaning-making process can be thwarted by avoidance strategies and negative global beliefs, compounding difficulties with integration and acceptance of loss.

Global beliefs are importantly connected to attachment security. According to attachment theory (Bowlby, 1980), human beings have evolved to possess an inherent attachment system that serves the function of getting relational needs met. From this

perspective, global beliefs about self, others, and the world begin developing early based on the ways in which primary caregivers do or do not meet our fundamental attachment needs. Thus, the nature of a bereaved person's attachment history may in part shape how they make sense of loss(es). For example, a bereaved person with a history of their attachment needs being rejected or punished may develop a more avoidant attachment style characterized by deactivation of attachment needs and development of self-reliance in order to adapt to their relational environment (Mikulincer & Shaver, 2012). This person may develop beliefs about relationships as unpredictable and dangerous, and thus, loss of a loved one, especially to violent or accidental means, is likely to further support these global beliefs. In contrast to the role of avoidant strategies in deactivating the attachment system, a bereaved individual with a history of their attachment needs being met inconsistently may develop a more anxious attachment style characterized by activation of attachment needs through behaviors aimed at regaining proximity, support, and care (Mikulincer & Shaver, 2012). This individual may hold beliefs that relationships are unreliable and that others will ultimately abandon them, and thus, loss of loved one, especially in an unexpected manner, may serve to confirm these global beliefs. Finally, we might consider a bereaved individual whose attachment needs were sufficiently and consistently met and thus is likely to develop a more secure attachment style. This person is likely to possess beliefs about self, others, and the world as basically good, dependable, and purposeful. In this case, global beliefs may then be completely contradicted by a sudden loss or death by violent means. These are merely a few specific examples to highlight some of the ways in which attachment is an important consideration when thinking about integrative meaning processes because attachment style can have such a

powerful impact on global beliefs and thus situational appraisals.

Integrative Meaning and Traumatic Grief

Many studies have demonstrated that meaning-making plays a mechanistic role in the development of TG experiences post-loss (e.g., Currier et al., 2006; Gillies & Neimeyer, 2006; Milman et al., 2019; Rozalski et al., 2017; Thimm & Holland, 2017). More specifically, these studies examined integrative meaning—the extent to which the bereaved reported adaptive integration of loss into global systems of meaning—in relation to established risk factors for TG. For example, one study by Milman and colleagues (2019) was focused on longitudinal analysis of well-established risk factors, integrative meaning, and CG symptoms. They found that anxious attachment, avoidant attachment, neuroticism, low social support, and spousal loss assessed at Time 1 each indirectly predicted increased CG symptoms *through* the mechanism of integrative meaning at Time 2. Notably, Milman and colleagues found this to be the case using two separate measures of integrative meaning. Similarly, a study by Rozalski and colleagues (2017) was focused on examination of violent causes of death and loss of first-degree relatives, integrative meaning, and CG symptoms. They found that integrative meaning fully mediated the relationship between violent causes of death and CG symptoms and partially mediated the relationship between loss of first-degree relative(s) and CG symptoms. Finally, Thimm and Holland (2017) conducted an interesting analysis of early maladaptive schemas, integrative meaning, and CG symptoms, finding that integrative meaning mediated the relationship between schemas concerning themes of rejection and disconnection and CG symptoms. Thus, there is strong evidence to suggest that reconstruction of meaning through adaptive integration of loss into global meaning

systems serves as key explanatory mechanism between known risk factors and clinically significant expressions of grief.

Milman and colleagues (2019) argued that research has been limited concerning the relationship between integrative meaning and TG symptoms in bereaved populations beyond those bereaved by violent/accidental causes of death. Research has understandably been focused on the role of integrative meaning in the context of known risk factors for TG given the clear implications of meaning-making in populations most likely to experience a TG response (e.g., those bereaved by violent/accidental causes of death). However, there remains much unknown about the connection between integrative meaning and TG experiences in the broader population of bereaved. Thus, this study was aimed at clarifying this gap in the literature by analyzing the extent to which difficulties with integrative meaning might predict TG experiences in a population of adults bereaved by a variety of causes of death, as well as exploring how mindfulness may facilitate integrative meaning in ways that impact the likelihood and severity of TG experiences.

Mindfulness

I believe Henepola Gunaratana said it well when they wrote: “Mindfulness is an extremely difficult concept to define in words – not because it is complex, but because it is too simple and open.” Gunaratana’s effort to define mindfulness in words included descriptions such as “pure awareness,” “non-judgmental observation,” and “an alert participation in the ongoing process of living” (pp. 83-84, 1996). Thich Nhat Hanh described mindfulness as “…the practice of being fully present and alive, body and mind united” (2008). Pema Chödrön characterized mindfulness as “…a lifetime’s journey to relate honestly to the immediacy of our experience and to respect ourselves enough not to

judge it" (1997, p. 39). Each of these venerable teachers share their experience of mindfulness as an embodied, open, and engaged relationship with life itself.

Mindfulness is derived from contemplative spiritual traditions of South Asia, East Asia, and Southeast Asia, most commonly associated with Buddhism, Hinduism, and Janism, and has existed as a sacred practice within these communities for centuries. Relatively speaking, the application of mindfulness as an intervention to support mental health has only recently entered the sphere of contemporary Western psychology. In that time, however, the concept of mindfulness has seen burgeoning interest in the West, including a growing body of empirical research examining various applications of mindfulness in everyday life. As such, today there exist many definitions of mindfulness, with considerable variability in the extent to which authors acknowledge or seek to accurately represent the historical and cultural roots of mindfulness. Before further defining mindfulness in relation to TG and integrative meaning, I find it important to do my best to describe the history and cultural origins of mindfulness, the Westernization of mindfulness, and how these dynamics inform the conceptualization of mindfulness in contemporary psychological research.

Mindfulness and Buddhism

While the concept of mindfulness (*sati* in Pali, *smṛti* in Sanskrit, *trenpa* in Tibetan, *niàn* in Chinese) is represented within multiple contemplative traditions, for the purposes of this work, I will describe mindfulness as defined within Buddhist philosophy. Buddhism originated with Siddhartha Gautama (the Historical Buddha) in India in 5th century BCE and later spread throughout Asia, eventually developing into three primary schools of Buddhist tradition: Theravada Buddhism, Mahayana Buddhism, and

Vajrayana Buddhism. In this paper, I will not focus on any one particular school of Buddhism but rather will draw from each of these traditions as well as contemporary work within Buddhist psychology to define mindfulness and other related concepts and their relevance to grief.

Mindfulness is an essential component of the broader system of teachings (*dharma*) delineated within Buddhist traditions concerning the spiritual path to awakening and liberation from *samsara* (the cycle of rebirth, suffering, and death). The Buddha defined mindfulness through the *Discourse on the Four Establishments of Mindfulness* within the Satipatthana Sutta. The first establishment is mindfulness of body (*kaya*), including awareness of the breath and body sensations. The second establishment is mindfulness of feelings (*vedanā*), which focuses on the quality or tone (e.g., positive, negative, or neutral) of all physical and mental experiences. The third establishment is mindfulness of mind (*citta*), including awareness of one's general mental state, thoughts, and attachments. Finally, the fourth establishment is mindfulness of processes (*dhammas*), which integrates the three preceding establishments, focusing on the totality of one's experiences, including the relationship between establishments. *Dhammas* can also refer to truth or the nature of reality, and thus the fourth foundation might also be interpreted as mindfulness of the principles that govern life, such as continual change and the connection between all life forms (Sīlānanda, 2004; Nhat Hanh, 1990).

In Buddhist traditions, mindfulness is most often cultivated through meditation, with dedicated meditation practice supporting the development of greater capacity to meet all of life's moments with mindfulness (Goldstein & Kornfield, 1987). There are many valuable perspectives on mindfulness meditation within Buddhist psychology and

teachings. Across meditation practices, two of the core tenets typically taught are *observation* and *equanimity*.

Meditation practitioners are instructed to attend to and observe their present moment experience. Some practices emphasize observation of the breath as the object of attention, observing and remaining present with each inhalation and each exhalation, training the mind to return to the breath when it naturally and inevitably wanders to other objects, such as thoughts or external distractions. Other practices emphasize observation of all elements of experience (e.g., breath, body sensations, emotions, thoughts, urges) as they move, change shape, and interact in each moment. Regardless of emphasis, the idea remains that practice in observation brings greater clarity, raising the practitioner's awareness of reality and discernment of truth. The Buddha taught that dedicated practice in observation of the present moment can teach us to see more clearly so we can act with greater wisdom.

In addition to observation, meditation practitioners are instructed to meet whatever they become aware of with an attitude of equanimity (Sīlānanda, 2004). Equanimity (*upekkhā*) is to regard all experiences—including those experienced as pleasant, unpleasant, or neutral—as equally welcome. This attitude counters our human tendency and habit of avoiding or resisting out of aversion and grasping or clinging out of attachment (Chödrön, 2001). Sometimes teachings on equanimity may also use the term acceptance. From this perspective, acceptance does not mean to like, condone, or desire an experience (i.e., experiences can still be regarded as unpleasant). Rather, acceptance means to regard the experience as the reality of what is, liberating oneself from the entrapment of resistance and creating freedom to change one's relationship with what is,

even if what is cannot itself be changed. From this perspective, pain is viewed as a natural and inevitable part of living, and it is our resistance to pain that causes us to suffer. Cultivating an attitude of equanimity through mindfulness practice supports our ability to minimize unnecessary suffering by relating authentically with our pain, without compounding it.

Westernization of Mindfulness

While trans-cultural diffusion—the spread of cultural ideas and practices between cultures—is often gradual and develops out of multiple sources (Kroeber, 1940), the introduction and popularization of mindfulness in the West is often traced to Jon Kabat-Zinn, an American molecular biologist who studied Buddhism with teachers such as Thich Nhat Hanh. Kabat-Zinn developed Mindfulness-Based Stress Reduction (MBSR; 1979)—an eight-week stress reduction program that has since been widely applied and researched across various medical and psychiatric populations. The integration of mindfulness into science and health care has been an influential factor in mindfulness becoming secularized and popularized within the United States. Beyond the introduction of mindfulness through science, Buddhist teachers such as Jack Kornfield, Sharon Salzberg, and Joseph Goldstein also played an important role in popularizing mindfulness practice through their development of the Insight Meditation Society in 1975.

Many compelling critiques have been posed regarding the Westernization of mindfulness, such as commentaries about reductionism, decontextualization, secularization, and cultural appropriation, to name a few. Some authors (e.g., Analayo, 2020; Monteiro et al., 2015; Purser & Loy, 2013) have argued that the Western conception of mindfulness has been reduced down to parts and decontextualized from the

broader system of teachings to which it belongs such that what we mean and practice when we talk about mindfulness in the West may not always do justice to the full concept at its roots in Eastern traditions. For example, "right mindfulness" is only but one component of the eightfold path outlined by the Buddha as instruction for the journey toward transformation and liberation. In the West, mindfulness is often framed as an attentional skill or technique that can be applied to regulate and tolerate challenging emotions. While developing the attentional skill of concentration—that is, being able to notice and return to the object(s) of awareness over and over again—is certainly an important aspect of mindfulness, viewing mindfulness as purely an attentional means toward a desired emotional end misrepresents mindfulness and decontextualizes mindfulness from its original liberative purpose as part of a broader spiritual path (Monteiro et al., 2015; Purser & Loy, 2013).

Relatedly, Western conceptions of mindfulness have often been secularized. Again, this is not necessarily problematic in and of itself. One does not have to be a Buddhist to practice or benefit from mindfulness. However, secularization of mindfulness has arguably come with some costs. In addition to the reduction described above, divorcing mindfulness from its spiritual roots has in some cases led to loss of the ethical and relational aspects of mindfulness. Monteiro and colleagues (2015) offered caution about individualist interpretation of mindfulness leading to potentially unethical action aimed at relieving individual suffering at the expense of others, when the full concept of mindfulness rests upon assumptions more common to collectivist cultures, such as interconnectedness and interdependence. Thus, what is often lost in Western conceptualizations of mindfulness is an ethical stance toward self *and* others. Purser

(2015) described how, without the ethical foundation of mindfulness teaching, the promotion of acceptance and non-judgment could lead to acquiescence or tolerance of oppression. In contrast, a mindfulness founded on ethical values of care and acceptance for self and other (i.e., the whole of which *we* are part) remains connected to the socially just perspective that the Buddha taught, which recognizes the political and social conditions in which we are embedded and how those conditions contribute to individual and collective suffering (Analayo, 2020).

Finally, another poignant critique of the Westernization of mindfulness is concerning cultural appropriation. Cultural appropriation occurs when a dominant culture utilizes objects or ideas from a non-dominant culture in a way that misrepresents, exploits, and/or further oppresses that culture (Matthes, 2019). It can certainly be argued that mindfulness has been culturally appropriated in the West, especially given that many systems not only portray mindfulness in ways that are not fully representative and do not give due credit to Asian cultures of origin, but also profit considerably from the integration of mindfulness into services offered. As Matthes details in their oppression account of cultural appropriation, sharing between cultures is not inherently wrong (e.g., in some cases we call this cultural assimilation); rather, cultural appropriation occurs in the context of power imbalance, thus furthering the oppression of marginalized groups. This is not to say that mindfulness should not be taught/practiced in the West. The gift of mindfulness was intended to be shared far and wide in ways that can benefit all beings. However, I would argue that there is a need to do so from a more critical and thoughtful position that seeks to respect, honor, and center the traditions and communities from which mindfulness originates.

Operationalization of Mindfulness

Research in the West commonly cites Kabat-Zinn's definition of mindfulness as "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (2009, p. 2). Here mindfulness is described as both an attentional skill and attitudinal development, with intentional mindfulness practice such as meditation being the primary means of strengthening the capacity to engage with life circumstances mindfully. While we know that meditation experience predicts increased mindfulness and well-being (Baer et al., 2008; Goldstein & Kornfield, 1987), research also suggests that individual differences in mindfulness occur and impact psychological distress and sense of well-being even in the absence of formal meditation experience (Baer et al., 2006). Thus, there has been increasing interest in research questions focused on understanding how individual differences in mindfulness predict various outcomes.

The most widely utilized measure of individual differences in mindfulness has been Baer and colleagues' Five Facet Mindfulness Questionnaire (FFMQ; 2006). Baer and colleagues operationalized mindfulness as a multifaceted construct comprised of five interrelated facets: *Observing* (noticing and attending to internal/external experiences), *Describing* (assigning labels or meaning to experiences), *Acting with Awareness* (consciously attending to one's current activities), *Non-Judging of Inner Experience* (meeting experiences with a non-judgmental attitude), and *Nonreactivity to Inner Experience* (allowing experiences to come in and out of awareness without getting carried away by them). While initial exploratory factor analyses revealed five distinct interpretable factors, hierarchical confirmatory factor analyses suggested that only four of the facets (all but the observe facet) represent clear indicators of an overarching

mindfulness construct (Baer et al., 2006). Baer and colleagues later confirmed the five-factor structure in a sample of experienced meditators (Baer et al., 2008), supporting their hypothesis that the observe facet may function differently across meditating versus non-meditating samples. Baer and colleagues theorized that this difference may be in part because meditation practice teaches both observation of internal/external experiences *and* non-judgmental attitude toward experiences, and thus non-meditators who report being highly observant of their experiences may be doing so from a ruminative or critical lens that promotes negative outcomes. Baer and colleagues argue that viewing mindfulness as a multifaceted construct comprised of distinct but interrelated facets is advantageous for understanding the relationship between mindfulness and other variables.

Much of the extant empirical literature on mindfulness has focused on the application of mindfulness-based interventions (MBIs) to various concerns. MBIs have demonstrated efficacy in reducing symptoms related to a broad range of medical and psychological concerns including chronic pain, fibromyalgia, heart disease (e.g., Grossman et al., 2004), posttraumatic stress (e.g., Gordon et al. 2008), depression (e.g., Kuyken et al. 2008), and substance use (e.g., Li et al., 2017). Additionally, therapeutic models highly dependent upon inclusion of MBIs, such as Dialectical Behavior Therapy (DBT; Linehan, 1993), Acceptance and Commitment Therapy (ACT; Hayes et al., 2001), and Mindfulness Based Cognitive Therapy (MBCT; Williams et al., 2007) have a strong evidence base to support their application to a variety of expressions of distress and impairment. Mindfulness teachings have reached even further beyond meditation halls and healthcare settings to permeate many aspects of Western culture, including mindfulness in the realms of business, intimate partnership, parenting, eating, and more.

Mindfulness and Grief

Although not yet extensively, MBIs have been applied to bereavement and grief as well. For example, Cacciatore and Flint (2012) developed the ATTEND model for mindfulness-based treatment of traumatic bereavement. The ATTEND model focuses on the development of mindfulness in both the bereaved client as well as the provider of psychological care in order to reduce possible burnout and secondary trauma. In an uncontrolled quasi-experimental study, Cacciatore and colleagues (2014) found that application of the ATTEND model decreased depressive, anxious, and posttraumatic stress symptoms in a sample of bereaved parents. Additionally, Neimeyer and Young-Eisendrath (2015) developed a two-day workshop intervention combining principles of mindfulness and meaning reconstruction as means of healing nonadaptive grief responses such as preoccupation with the loss event story, rumination, self-blame, and social withdrawal. They found that workshop participants reported significant decreases in grief-related despair and increases in personal growth and meaning-making.

While MBIs for grief are not yet widely studied, preliminary findings suggest that mindfulness training may support bereaved individuals in making adaptive meaning following loss and reducing clinically significant TG experiences. However, it is unknown whether individual differences in mindfulness may play a role in the meaning-making process and development of TG experiences following loss. From a theoretical stance, there seems to be clear relevance of elements of mindfulness—such as willingness to experience sorrow, acceptance, embracing impermanence, and recognizing our fundamental interconnectedness—to the experience of bereavement and grief.

Wada and Park (2009) thoughtfully detailed the relevance of Buddhist psychology

for grief counseling. Specifically, they highlighted some of the ways human beings tend to relate with death and grief that can further our suffering, particularly in Western cultures. For example, a common belief about grief in Western contexts includes the idea that grief occurs in a linear, time-limited fashion, with any deviation from this course indicating pathology (i.e., the medical model of grief). Another common belief is that of “moving on” or “letting go” of the deceased as opposed to maintaining on ongoing connection. While there has certainly been movement away from these ideas and toward a more normalizing and accepting view of varied expressions of grief in the West, these beliefs remain a part of our social understanding in ways that can further suffering for many. Wada and Park described how Buddhist principles can serve as an adaptive framework for relating with grief in ways that lessen unnecessary suffering.

One of the foundational tenets of Buddhist philosophy includes the notion of impermanence. From this perspective, the cycle of birth, death, and rebirth is ongoing and ever changing; death does not represent a static end but rather an evolution or change in form. Viewing our experiences as permanent or static causes suffering. In the case of bereavement, this may be suffering associated with the view that life should have unfolded in a particular way (e.g., without the loss, different circumstances of loss) or the view that painful grieving experiences will never end. Arguably, there is truth to these views. Loss is often unfair and untimely, and at the same time, it is one of life’s fundamental realities that each of us will die. Similarly, the pain of grief often lasts a lifetime, and at the same time, it ebbs and flows, usually evolving in ways that allow it to become more livable. Clear seeing and acceptance of the transitory nature of pain can offer the bereaved strength to endure grief (Wada & Park, 2009).

Moreover, a mindful approach to grief may facilitate integrative meaning processes. Bereaved individuals are tasked with reconstructing their global sense of meaning by making sense of their loss(es); this entails interpreting our continuous stream of inner states, finding ways to explain our immediate experiences through the symbolic means of language (Neimeyer, 2001). Greater mindfulness can facilitate this process by allowing grieving individuals to be with the fullness of their experience, and an accepting attitude is likely to foster more adaptive integrative meaning.

Present Study

The primary aims of the present study were two-fold. First, I sought to contribute to previous findings regarding the negative association between integrative meaning and TG experiences. Specifically, I sought to test the hypothesis that this relationship would persist among a population of adults bereaved by a variety of causes of death. While it has been well established that integrative meaning functions as an explanatory mechanism between known risk factors such as violent/sudden causes of death and TG, there is a lack of research evidence demonstrating whether these findings are applicable to individuals bereaved by other circumstances. I believe I can begin to clarify this gap by first examining the extent to which integrative meaning predicts TG experiences in a population of adults bereaved by varied circumstances. I hypothesize that individuals who report more integrative meaning—suggesting greater coherence between global and situational meaning—will report less TG experiences.

Second, I sought to explore the potential role of mindfulness in meaning-making and grieving processes. For the purpose of this work, I focused on individual differences in mindfulness as a form of awareness in which one tends to relate with their present-

moment experiences with an attitude of acceptance (Bodhi, 2011). Specifically, I was interested in exploring mindfulness as a potential mediator between integrative meaning and TG experiences. Mindfulness is to be present and engaged with one's experience with equanimity, including experiences of sorrow and other painful feelings associated with grief. This level of presence with and acceptance of experience is in direct contrast to the emotional dysregulation (moving toward pain with an attitude of despair) and avoidance (moving away from pain out of aversion) associated with TG. Additionally, increased presence with and acceptance of experiences is likely to facilitate more adaptive integrative meaning as the bereaved works to make sense of their loss(es) in the context of their global meaning system. I hypothesize that integrative meaning will be positively associated with mindfulness, and the relationship between integrative meaning and TG will be partially explained by individual differences in mindfulness. Therefore, I expect that bereaved individuals who report more integrative meaning will also report more mindfulness and thus less TG experiences.

Chapter II: Method

Participants and Procedure

This study was approved by the Seattle Pacific University Institutional Review Board prior to data collection. Participants were recruited through social media sites (facebook.com, reddit.com). Posts to social media sites included an explanation of the general purpose of the research (i.e., to increase understanding of adult grief experiences) and an invitation to participate via a link to an online survey administered through qualtrics.com. To be included within the study, participants needed to be at least 18 years of age and bereaved within the past 10 years. Those who met inclusion

criteria and consented to participate were assigned a unique participant ID, preventing the possibility of participating multiple times. The survey took participants about 45 minutes to complete on average and included a variety of measures, only some of which were utilized for the present study.

Sample Size, Power, and Precision

The final sample of participants included 237 bereaved adults within the United States. I conducted an a priori G power analysis using power of .95, alpha of .05, and effect size of .10 to yield a conservative estimate of required sample size for linear multiple regression analyses. Results revealed that a sample of at least 110 was needed for adequate power, and thus the sample size of 237 was deemed sufficient.

Measures

Demographic Information

Full participant characteristics are presented in Table 1. The sample was primarily Caucasian and female, and the average age of participants was 36.62 years old (*SD* = 14.10, range = 18 to 67 years). Nearly half of the participants (42.2%) had lost a significant relationship within one year of survey completion. A variety of relationships to the deceased were represented, with spouses, children, and parents of the deceased being the most common categories. A variety of causes of death were represented within the sample; however, deaths by illness were the most common (65.4%).

Table 1. Participant Demographics.

		n	%
Gender			
	Female	178	75.4
	Male	52	22
	Non-binary	3	1.3
	Transgender	3	1.3

Age			
	18-29	88	37.1
	30-39	68	28.7
	40-49	29	12.2
	50-59	32	13.5
	60 or above	20	8.4
Ethnicity			
	Caucasian	205	86.5
	Other	12	5.1
	Asian American	9	3.8
	Hispanic	8	3.4
	African American	2	.8
	Native American	1	.4
Relationship to the Deceased			
	Spouse	49	20.7
	Child	48	20.3
	Parent	40	16.9
	Extended Family	32	13.5
	Sibling	25	10.5
	Romantic Partner	17	7.2
	Close Friend	15	6.3
	Grandchild	7	3
	Other	4	1.7
Time Since Death			
	< 1 year	100	42.2
	1-2 years	53	22.4
	2-5 years	47	19.8
	5-10 years	37	15.6
Cause of Death			
	Illness	155	65.4
	Accidents	32	13.5
	Suicide	18	7.6
	Other	16	6.8
	Natural Causes	15	6.3
	Homicide	1	.4
Expectancy			
	Expected	85	36
	Unexpected	151	64

Traumatic Grief

The Traumatic Grief Inventory Self Report version (TGI-SR; Boelen & Smid, 2017) was utilized to measure TG experiences following loss. The TGI-SR is an 18-item

self-report questionnaire designed to measure symptoms of PCBD and PGD in clinical and research contexts. Example items include "I had intrusive thoughts and images associated with his/her death" and "I experienced intense emotional pain, sorrow, or pangs of grief." Items are rated on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (a*lways*). A total score was utilized by summing all items. Higher scores reflect greater severity of TG experiences. It should be noted that the TGI-SR can also be utilized to obtain a provisional PCBD diagnosis (i.e., by item level analysis that assures symptom criteria are met within each symptom category). I elected not to utilize the measure in this way because I am more interested in studying the relationship between TG severity and integrative meaning as opposed to TG as a diagnostic category. For the present sample, internal consistency for the TGI-SR was .93 for the total scale.

Boelen and Smid (2017) developed the TGI-SR using criteria for PCBD and PGD, including an item intended to measure clinical significance. They evaluated the scales psychometric properties using data from 327 adults in a mental health setting that provides specialized care for individuals experiencing symptoms related to loss and trauma. Exploratory and confirmatory factor analyses suggested that a one-factor solution best represented the data. Cronbach's alpha was .95, suggesting strong internal consistency. Concurrent validity was supported by positive correlations between the TGI-SR and other measures of psychopathology and negative correlations between the TGI-SR and indices of quality of life. Thus, the TGI-SR was deemed a theoretically and psychometrically valid measure of clinically significant expressions of grief.

Integrative Meaning

The Integration of Stressful Life Experiences Scale (ISLES; Holland, Currier,

Coleman, & Neimeyer, 2010) was utilized to measure meaning-made following loss. The ISLES is a 16-item self-report questionnaire that measures the degree to which participants have adaptively integrated a stressful life experience, such as bereavement, into their existing system of meaning. Example items include, “This event is incomprehensible to me” and “My beliefs and values are less clear since this loss.” Items are answered on a 5-point Likert-type scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*), referring to a recent loss. Relevant items were reverse coded such that higher scores indicate more integrative meaning-made. Total scores, ranging from 16 to 80, were calculated by summing the individual items of the scale. In the present study, internal consistency for the ISLES was .94 for the total scale.

More specifically, the ISLES was developed to measure the extent to which a respondent has adaptively integrated the stressful experience into their broader life narrative. During initial scale development, Holland and colleagues established reliability, validity, and factor structure within two samples of young adults. The first sample (N = 178) had experienced a range of stressful life experiences in the past two years, while the second sample (N = 150) had experienced bereavement in the past two years. Holland and colleagues (2010) developed candidate items based on established psychological theory of meaning (e.g., Park, 2010) with the goal of including accommodative and assimilative elements of meaning-making processes. Although there were some positively worded candidate items intended to reflect greater adaptive integration, Holland and colleagues opted for primarily negatively worded items intended to reflect lack of integration or greater discrepancy. That is, because meaning-making is thought to occur largely outside of conscious awareness, it has been argued that

individuals might be more aware of and thus able to more accurately report on discrepancy between global and situational meaning (Janoff-Bulman & Frantz, 1997).

Holland and colleagues conducted exploratory and confirmatory factor analyses, finding a two-factor structure. They labeled the first factor footing in the world, as it included 11 items reflecting respondents' sense of orientation or disorientation following the stressful event. They labeled the second factor comprehensibility, as it included 5 items that reflecting the degree to which respondents had made sense of the stressful event. Holland and colleagues (2010) assessed convergent validity for the ISLES subscales (i.e., footing in the world and comprehensibility) and global scale (i.e., sum scores) by correlating with a variety of related measures, examining constructs such as sense-making, benefit-finding, global meaning assumptions, and general physical and mental health outcomes. The ISLES was significantly positively correlated with sense-making, benefit-finding, and adaptive assumptions concerning self and the world. Thus, it was concluded that the ISLES is theoretically consistent with related measures of adaptive meaning-made following stressful experiences.

Holland and colleagues (2010) assessed reliability of the ISLES through examination of internal consistency and test-retest reliability. Internal consistency coefficients for the global scale were .92 for the general stress sample and .94 for the bereaved sample, respectively. Test-retest reliability was calculated for a subset of participants (n = 41 from general stress sample; n = 61 from bereaved sample) who completed the measure again three months later. Moderate test-retest correlations were found (ranging from .48-.59, $p < .001$), indicating moderate stability across a three-month interval. Holland and colleagues analyzed the relationship between changes in ISLES

scores over time and overall health indices, finding that greater integration over time was associated with lower psychological distress scores in the general stress sample and lower complicated grief scores in the bereaved sample.

Following Holland and colleagues' (2010) initial validation study, the ISLES has since been utilized successfully with military veterans (Currier, Holland, Christy, & Allen, 2011), depressed older adults (Marquett et al., 2013), and bereaved adults (Burke et al., 2014; Holland, Currier, & Neimeyer, 2014; Holland et al., 2010; Lee, Feudo, & Gibbons, 2014; Lichtenthal, Burke, & Neimeyer, 2011). The ISLES has been demonstrated to possess strong predictive abilities as well as promising clinical application (Holland, 2015).

Mindfulness

The Five Facet Mindfulness Questionnaire Short Form (FFMQ-SF; Bohlmeijer et al., 2011) was utilized to measure mindfulness. The FFMQ-SF is a 24-item self-report questionnaire that measures individual differences in mindfulness. Example items include "I watch my feelings without getting carried away by them" and "I tell myself I shouldn't be feeling the way I'm feeling." Items are rated on a 5-point Likert-type scale ranging from 1 (*never or rarely true*) to 5 (*very often or always true*). The FFMQ-SF includes five subscales: *Observing* (noticing and attending to internal/external experiences), *Describing* (assigning labels or meaning to experiences), *Acting with Awareness* (consciously attending to one's current activities), *Non-Judging of Inner Experience* (meeting experiences with a non-judgmental attitude), and *Nonreactivity to Inner Experience* (allowing experiences to come in and out of awareness without getting carried away by them). The measure can be utilized by scoring individual subscales

and/or a total score. In this case, a total score was utilized by summing all items after reverse scoring negatively worded items. Higher scores reflect greater self-reported mindfulness. For the present sample, internal consistency was .88 for the total scale. Internal consistency for the subscales were as follows: Observing (α = .82), Describing (α = .87), Acting with Awareness (α = .86), Nonjudgement of Inner Experience (α = .81), Nonreactivity to Inner Experience (α = .78).

Bohlmeijer and colleagues (2011) developed the FFMQ-SF using select items from the FFMQ found to be the most conceptually and statistically representative of the full scale, including each of the five facets. They tested the reliability and validity of the FFMQ-SF in a sample of adults reporting symptoms of depression and anxiety as well as a sample of adult fibromyalgia patients. They found that total facet scores for the FFMQ-SF were highly correlated. Consistent with the FFMQ, Bohlmeijer and colleagues determined a unidimensional model showed poor fit with the data, while the correlated five-factor model and second-order hierarchical models showed good fit with the data. Of the two models, the correlated five-factor model was slightly superior. Internal consistency values for the full scale and subscales were each found to be well above the cut-off criterion of .70. Facet intercorrelations and convergent validity values were similar to those found using the full FFMQ. Thus, the FFMQ-SF is a reliable and valid measure that can be considered comparable to the full scale FFMQ.

Statistical Analysis

All data screening and analyses were conducted using SPSS version 28. Prior to conducting statistical analyses, I screened the data for missing values and violation of assumptions for ordinary least squares regression: independence, normality, linearity, and

homogeneity of variance (Hayes, 2013). Missingness was managed using multiple imputation. Following Olinsky, Chen, and Harlow's (2003) recommendation, I deleted cases with over 24% missingness prior to imputation. This resulted in deleting 43 cases, leaving 237 cases for imputation. Multiple imputation generated five data sets, of which I randomly selected one. I assessed independence using the Durbin-Watson test, obtaining a value of 2.04, indicating no autocorrelation and thus consistency with the assumption of independence. I assessed normality by testing for skewness and kurtosis. All model variables had absolute values of < 3 for skewness and < 10 for kurtosis, indicating they were normally distributed. I assessed linearity and homogeneity of variance by visually inspecting scatterplots, finding that both assumptions were sufficiently met (Field, 2017). Further, upon conducting the full analyses, I tested for heteroscedasticity by selecting the Huber-White option, finding no significant results, providing further support for assuming homogeneity of variance.

I tested the theoretical model illustrated in Figure 1 using Haye's (2017) PROCESS macro in SPSS. As part of this analysis, predictor variables were mean-centered and 5,000 bootstrapped resamples were utilized. Specifically, I tested Haye's Model 4 of mediation. As seen in Figure 1, I entered integrative meaning as the predictor (X), TG as the outcome (Y), and mindfulness total score as the mediator (M). I also included expectancy as a covariate in the model based on its statistically significant relationship with the outcome. Based on findings described below, I also opted to conduct post-hoc analyses examining FFMQ-SF subscales to increase specificity in understanding how individual components of mindfulness might operate on the

relationship between integrative meaning and TG experiences. For this analysis, I ran Haye's Model 4 of mediation again but with FFMQ-SF subscales as parallel mediators.

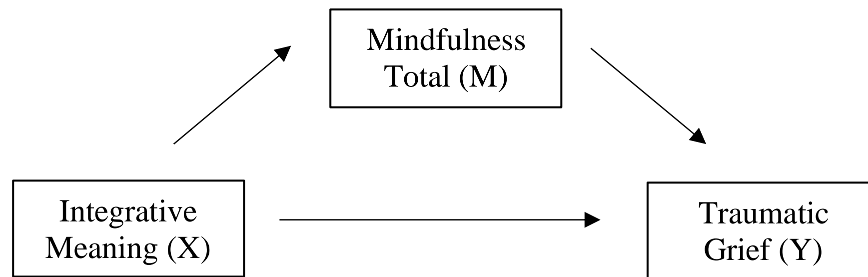

Figure 1. Theoretical model of proposed effects of integrative meaning and mindfulness on traumatic grief experiences while controlling for expectancy.

Chapter III: Results

Descriptive statistics and bivariate correlations for all continuous model variables are depicted in Table 2. Results indicated that integrative meaning was negatively associated with TG, meaning that participants with higher reports of integrative meaning were less likely to report TG experiences. Mindfulness total scores were comparable to those observed in prior research using the FFMQ-SF (e.g., Bohlmeijer et al., 2011). Mindfulness total scores were negatively associated with TG experiences and positively associated with integrative meaning, indicating that participants who endorsed more mindfulness were less likely to report TG experiences and more likely to report integrative meaning. Each of these correlations were statistically significant. Similarly, each of the mindfulness subscales—with exception of the observing subscale—were negatively associated with TG and positively associated with integrative meaning to a statistically significant degree. Finally, expectancy, the only categorical model variable, was statistically significantly correlated with TG ($\rho = .299^{**}$).

Table 2. Descriptive Statistics and Bivariate Correlations Between Model Variables.

Variable	M *(SD)*	1.	2.	3.	4.	5.	6.	7.
1. Traumatic Grief	48.85 *(12.80)*	---						
2. Integrative Meaning	47.15 *(16.14)*	-.764**	---					
3. Mindfulness Total	72.64 *(13.20)*	-.303**	.387**	---				
4. Observing	14.33 *(3.51)*	.045	.036	.472**	---			
5. Describing	16.96 *(4.57)*	-.133*	.222**	.743**	.267**	---		
6. Awareness	13.89 *(4.14)*	-.357**	.425**	.765**	.204**	.491**	---	
7. Nonjudgement	14.26 *(4.27)*	-.198**	.201**	.634**	.086	.287**	.325**	---
8. Nonreactivity	13.19 *(3.56)*	-.341**	.378**	.636**	.082	.290**	.453**	.316**

Note. $N = 237$. *$p < .05$ **$p < .01$ ***$p < .001$

Primary Analyses

My primary analysis evaluated a mediation model predicting TG experiences from integrative meaning mediated by mindfulness. Full results are presented in Table 3. The omnibus test for the model was statistically significant, $F(3, 232) = 112.75$, $p < .001$, $R^2 = .60$, indicating that 60% of variance in the outcome (TG) was accounted for by the model. Further, I found statistically significant direct effects between integrative meaning and TG experiences ($b = -.568$, CI = -.648, -.489) as well as integrative meaning and

mindfulness (b = .334, CI = .232, .437). However, the indirect effect of mindfulness (total score) on the relationship between integrative meaning and TG experiences was not statistically significant (b = -.009, CI = -.042, .025). Thus, while integrative meaning was found to predict mindfulness (A path) and TG experiences (C path) to a statistically significant degree, mindfulness did not predict TG (B path) to a statistically significant degree. Therefore, a mediation model was not supported.

Table 3. The Effect of Integrative Meaning on TG Mediated by Mindfulness.

Predictor	*b*	*SE*	*t*	*p*
Mediator Model (Outcome = Mindfulness Total)				
Constant	55.266	3.058	18.073	0.000
Integrative Meaning	0.334	0.052	6.421	0.000
Expectancy	2.565	1.650	1.555	0.121
Outcome Model (Outcome = TG)				
Constant	74.844	3.320	22.546	0.000
Integrative Meaning	-0.568	0.040	-14.069	0.000
Mindfulness Total	-0.027	0.050	-0.535	0.593
Expectancy	4.340	1.178	3.684	0.000

Note: N= 237, all p values indicate 2-tailed test.

Post-Hoc Analyses

I conducted post-hoc analyses examining potential indirect effects of four of the five mindfulness subscales (describing, acting with awareness, nonjudgment, and nonreactivity) on the relationship between integrative meaning and TG experiences. I did

not include the observing subscale in these analyses because correlations between the observing subscale and the predictor and outcome variables were non-significant. Full results from post-hoc mediation analyses are depicted in Table 4. The omnibus test for the model remained statistically significant, $F(6, 229) = 65.49$, $p < .001$, $R^2 = .62$, indicating that 62% of variance in the outcome (TG) was accounted for by the model. As with the primary analysis, there were statistically significant direct effects between integrative meaning and TG and mindfulness (see Table 4). Indirect effects of mindfulness subscales on the relationship between integrative meaning and TG experiences were not statistically significant. Interestingly, though ultimately non-significant, the describing subscale had the strongest co-efficient of the four subscales and was approaching significance. Further, while the direction of effects on the integrative meaning/TG relationship remained negative for all other subscales, it switched to positive for the describing subscale. Overall, however, a mediation model was not supported based on post-hoc analyses of subscales.

Table 4. The Effect of Integrative Meaning on TG Mediated by Mindfulness Facets

Predictor	*b*	*SE*	*t*	*p*
Mediator Model (Outcome = Describing)				
Constant	13.497	1.169	11.542	0.000
Integrative Meaning	0.067	0.020	3.453	0.001
Expectancy	0.478	0.601	0.795	0.428
Mediator Model (Outcome = Awareness)				
Constant	8.229	0.886	9.291	0.000
Integrative Meaning	0.113	0.015	7.390	0.000

Expectancy	0.525	0.490	1.071	0.285
Mediator Model (Outcome = Nonjudgment)				
Constant	11.162	1.071	10.421	0.000
Integrative Meaning	0.057	0.019	3.046	0.003
Expectancy	0.631	0.571	1.105	0.270
Mediator Model (Outcome = Nonreactivity)				
Constant	8.885	0.784	11.332	0.000
Integrative Meaning	0.086	0.014	6.091	0.000
Expectancy	0.387	0.455	0.851	0.396
Outcome Model (Outcome = TG)				
Constant	75.427	2.968	25.413	0.000
Integrative Meaning	-0.546	0.043	-12.702	0.000
Describing	0.211	0.113	1.873	0.062
Awareness	-0.173	0.125	-1.379	0.169
Nonjudgment	-0.148	0.112	-1.316	0.190
Nonreactivity	-0.207	0.194	-1.068	0.287
Expectancy	4.435	1.170	3.791	0.000

Note: N= 237, all p values indicate 2-tailed test.

Chapter IV: Discussion

In this study, I investigated integrative meaning, mindfulness, and TG experiences among a sample of bereaved adults. Understanding the relationship between these variables may lend greater clarity to how integrative meaning and mindfulness may be implicated in adaptation to bereavement that is experienced as traumatic. I hypothesized

that 1) integrative meaning would negatively predict TG experiences, 2) integrative meaning would positively predict mindfulness, and 3) mindfulness would partially explain the relationship between integrative meaning and TG.

Primary Analysis of Direct and Indirect Effects

My first hypothesis—that integrative meaning would negatively predict TG—was supported. Participants who reported more integrative meaning were less likely to report TG experiences. This finding is consistent with established trends in the trauma and bereavement literature, suggesting that individuals who are able to integrate loss(es) into their global meaning system are likely to have more positive adjustment outcomes. This finding adds to the existing literature by demonstrating that this relationship holds among populations bereaved by a variety of circumstances. The fact that the majority of this sample (78.5%) was composed of participants bereaved by circumstances not typically regarded as traumatic strengthens the argument that losses by illness, natural causes, and other varied circumstances can result in TG experiences. I believe this points to the limitation of traditional categorical methods of determining what constitutes trauma and highlights the need for a more flexible understanding of trauma that honors the lived experience and perception of those who experience them. The present sample did not contain a balanced proportion of losses typically regarded as traumatic by categorical methods (i.e., suicides, homicides, accidents) and thus did not allow for a robust analysis comparing the integrative meaning and TG relationship across groups. However, I believe this would be an interesting direction for future research. Additionally, I believe that future research should further examine integrative meaning as an explanatory mechanism between cause of death and TG experiences, including populations bereaved

by a variety of causes of death. This research would have the potential to further illustrate the limits of categorically defining trauma and lay the foundation for a more flexible understanding of how cognitive/meaning-making processes may more accurately predict TG outcomes as compared to trauma categories.

My second hypothesis—that integrative meaning would positively predict mindfulness—was supported. Participants who reported more integrative meaning also reported more mindfulness. This is not surprising given the central focus on acceptance within both integrative meaning and mindfulness constructs. The meaning-making process tasks the bereaved with integrating the experience of loss, including the reality that loss occurred and the circumstances surrounding loss, into their global meaning system and personal life narrative (Neimeyer, 2006). Present findings suggest that bereaved individuals who engage with this integration process are increasingly likely to meet more of life's moments with mindfulness. Interpreting these findings through the lens of Park's (2010) integrative meaning model, it makes sense that integrative meaning—reflecting coherence between global and situational meaning—would predict more mindfulness, which may reflect participant's having successfully accommodated the reality of impermanence into global meaning. That said, it could also be the case that the effect is bi-directional, with greater mindfulness creating the conditions of awareness that make the integration process more possible. Further research might continue to build on this finding by examining mindfulness as a predictor of integrative meaning to test whether the effect is bi-directional and also possible explanatory mechanisms through which integrative meaning predicts mindfulness.

My third hypothesis—that mindfulness would partially explain the inverse relationship between integrative meaning and mindfulness—was not supported. There could be a variety of reasons for this outcome. First, it may be the case that mindfulness genuinely does not act on the integrative meaning/TG relationship in an explanatory manner. Perhaps they are related (as reflected in correlation findings) and yet not mechanistically or not in the configuration that I theorized. For example, I now wonder if perhaps it would have made more sense to theorize that mindfulness would predict TG experiences through integrative meaning. That is, perhaps more mindfulness would create the conditions such that the integration process could occur. This theory would align well with the previously mentioned study conducted by Neimeyer and Young-Eisendrath's (2015), where they found that a two-day workshop intervention combining principles of mindfulness and meaning reconstruction resulted in significant decreases in grief-related despair and increases in integrative meaning. It would be interesting to see a controlled study in which some participants received MBIs only while others received only meaning reconstruction interventions to compare outcomes and determine whether mindfulness alone creates conditions for more integrative meaning.

Second, there could be variables acting in the model that I did not measure. For example, in retrospect, I would have gathered more detailed data around circumstances of loss. Instead of simply asking about cause of death categories, I would have also measured details such as experiencing multiple losses, witnessing death, having one's own life threatened, and being met with low social support when grieving. These are risk factors for TG and thus their exclusion may pose risk for confounds in the model. Additionally, the mindfulness-related findings are limited by the fact that I did not

measure prior meditation experience. According to Coffey and colleagues (2010), not controlling for meditation experience presents an inherent confound because individuals who do not meditate regularly, thus building up the attentional skill, may be less able to accurately identify how much of the time they are mindfully aware.

Third, it could be that I simply did not find an effect within this particular sample, which seems possible given the highly skewed nature of the sample demographics. Perhaps the variable relationships could have functioned differently with a more representative sample. Finally, it may have been a measurement related issue in which the way mindfulness is being defined and measured in the present study did not accurately capture the potential role of mindfulness in the integrative meaning/TG relationship. While ultimately it remains unknown why the mediation hypothesis was not supported, my hope is that this null finding will help point future research in more productive directions.

Post-Hoc Analysis of Mindfulness Subscales

After obtaining results from my primary analysis, I opted to test my hypotheses again post-hoc with the inclusion of mindfulness subscales instead of the total score alone. I hoped to gain clarity on whether individual facets of mindfulness—which are conceptualized as distinct but related parts of the whole of mindfulness—would relate any differently with integrative meaning and TG experiences. Overall, the findings were very similar. The first and second hypotheses—that integrative meaning would directly predict TG experiences and mindfulness—were supported. The third hypothesis—testing the indirect effect of mindfulness facets on the relationship between integrative meaning

and TG experiences—was not supported. There were, however, a few interesting subscale-related findings worth discussing.

First, I found that the observing scale was not statistically significantly associated with integrative meaning and TG experiences, while the rest of the subscales were. This finding is consistent with prior research using the FFMQ. According to Baer and colleagues (2008), who demonstrated differential results with the observing subscale in meditating versus non-meditating samples, the observing subscale likely functions differently across these samples because it is the most strongly connected to formal meditation practice. That is, the attentional skill of returning to an object of awareness (e.g., the breath) again and again may take more practice to develop into a trait-like habit. Thus, the present finding of non-significant associations with the observing scale further support the general trend of research using the FFMQ.

Second, within the post-hoc meditation analysis, the describing subscale had the strongest co-efficient and was trending toward significance. Additionally, while each of the other subscales effect on the integrative meaning/TG relationship remained negative, the sign switched to positive for the describing subscale. Although this finding was ultimately non-significant and a mediation model was not supported, it is interesting to wonder about the change in direction of effect, especially given the approach toward significance. Theoretically, considering what the describing subscale measures (i.e., assigning labels or meaning to experiences), it makes sense that this facet would be most strongly related to the construct of integrative meaning. With regard to the change in direction of effect, I wonder if perhaps describing, without the coinciding nonjudgment and nonreactivity facets (i.e., the more acceptance-focused facets of mindfulness), could

also reflect more maladaptive or ruminative expressions of meaning-making. According to Park's (2010) model, meaning-making processes are initiated by distress related to discrepancy between global and situational meaning, and thus perhaps higher endorsements on the describing subscale may reflect this distress without the coinciding acceptance-based facets of mindfulness.

Limitations

The present study has many noteworthy limitations that should be considered when drawing conclusions about its findings. First and perhaps most notable, the sample was composed of primarily white women. While this is not unusual in cross-sectional survey research, it does severely limit the generalizability of findings to varied cultural groups. This limitation may be particularly impactful in the context of grief research given what we know about the wide variability of grief experiences and expressions across cultures (Stroebe & Schut, 1998). I believe these findings could look quite different among a more diverse and representative sample. Future research should prioritize utilizing more superior sampling methods aimed at recruiting a more diverse sample of bereaved adults.

Second, the self-report and cross-sectional design of the present study limits our understanding of how variables in the model may interact over time. This limitation is particularly relevant for mediation analyses, where it is sometimes argued that temporal precedence of the predictor variable is necessary to establish true mediation. While cross-sectional methods can provide valuable information about associations between variables, they cannot provide information about causal effects between variables. My hope is that this cross-sectional research, which was largely exploratory in nature, can provide some

information to further build and test hypotheses using more controlled/experimental methods. Third, as described above, there are possible confounds in the model, such as common risk factors for TG and prior meditation experience. I did not measure these variables and thus was unable to control for them, which may limit confidence and specificity in the model.

Finally, while ultimately I recognize that I utilized a tool developed to measure mindfulness as it has been interpreted/operationalized by Western psychology, I do wonder how this research might be different with a more holistic and culturally appreciative definition of mindfulness. As one example of many, the Buddha’s teaching on the four foundations of mindfulness includes many elements not adequately captured by the FFMQ (e.g., mindfulness as first and foremost an embodied experience, mindfulness of processes or interactions between internal experiences, mindfulness as a fundamentally relational concept). Thus, I believe one limitation to the study goes back to the limitations of our often-reductive way of understanding mindfulness in Western psychology in general.

Clinical Implications

While the present study has noteworthy limitations, there were statistically significant findings that lend themselves to meaningful clinical implications when applied conservatively. I believe one of the most notable clinical implications from this research is the importance of conducting a thorough assessment of losses and potentially clinically significant grief responses. Because loss is such a universal aspect of life, inquiring about bereavement experiences and their impact on a person’s quality of life and functioning can at times be overlooked unless the loss qualifies as what we would typically deem

traumatic according the DSM-5. This research suggests that perhaps inquiring about how people make meaning of their losses may be a better indicator of whether they need further assessment and support for TG compared to inquiring about categories of loss.

Additionally, while the present research was cross-sectional and thus does not speak directly to the clinical utility of MBIs as applied to TG, findings further support for the connection between mindfulness and integrative meaning, aligning with prior research that suggests mindfulness practice and the broader paradigm of embracing impermanence may be beneficial for people who are navigating grief. For example, a key component of Neimeyer and Young-Eisendrath's (2015) open trial study was delivery of dharma teachings on impermanence in addition to formal mindfulness meditation practice. Following this approach, participants reported decreased grief-related suffering and increased adaptive meaning and sense of personal growth. I believe this speaks to the potential value of moving beyond solely teaching clients mindfulness meditation to include discussion of Buddhist philosophy and its relevance to grief (in a way that is person-centered and culturally responsive). Sharing about core Buddhist concepts such as impermanence and interconnectedness may have the potential to enhance the benefits of mindfulness meditation practice. For example, observing how objects of awareness are continually changing and are deeply interconnected during the course of meditation may facilitate generalization of these understandings to loss, helping the bereaved find comfort in knowing that life itself is always changing and interconnection can remain even in the midst of loss (Wada & Park, 2009). Not only could inclusion of dharma teachings in MBIs potentially aid in integrative meaning processes, but this approach

could also represent small but potentially meaningful movement toward a more holistic and culturally appreciative application of mindfulness in the practice of psychology.

References

Analayo, B. (2020). The myth of mcmindfulness. *Mindfulness, 11*, 472-479. https://doi.org/10.1007/s12671-019-01264-x

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27–45. https://doi.org/10.1177/1073191105283504

Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Duggan, D., & Williams, J. M. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, *15*(3), 329–342. https://doi.org/10.1177/1073191107313003

Barle, N., Wortman, C. B., & Latack, J. A (2017). Traumatic bereavement: Basic research and clinical implications. *Journal of Psychotherapy Integration, 27*, 127-139.

Bodhi, B. (2011). *What does mindfulness really mean? A canonical perspective. Contemporary Buddhism, 12*(1), 19-39

Boelen, P. A. & Smid, G. E. (2017). The traumatic grief inventory self-report version (TGI-SR): Introduction and preliminary psychometric evaluation. *Journal of Loss and Trauma, 22*, 3, 196-212. https://doi.org/10.1080/15325024.2017.1284488

Boelen, P. A., & van den Bout, J. (2005). Complicated grief, depression, and anxiety as distinct postloss syndromes: A confirmatory factor analysis study. *The American Journal of Psychiatry, 162*(11), 2175–2177. doi:10.1176/appi.ajp.162.11.2175

Boelen, P. A., van den Bout, J. (2008). Complicated grief and uncomplicated grief are distinguishable constructs. *Psychiatry Res, 157*, 311-4. doi: 10.1016/j.psychres.2007.05.013. Epub 2007 Oct 3. PMID: 17916387.

Boelen, P. A., van den Bout, J., & de Keijser, J. (2003). Traumatic grief as a disorder distinct from bereavement-related depression and anxiety: A replication study with bereaved mental health care patients. *American Journal of Psychiatry, 160*(7), 1339–1341. doi:10.1176/appi.ajp.160.7.1339

Boelen, P. A., van den Schnoot, R., van den Hout, M. A., & de Keijser, J. (2010). Prolonged grief disorder, depression, and posttraumatic stress disorder are distinguishable syndromes. *Journal of Affective Disorders, 125*, 374-378.

Boelen, P. A., van den Hout, M. A., & van den Bout, J. (2006). A Cognitive-Behavioral Conceptualization of Complicated Grief. *Clinical Psychology: Science and Practice, 13*(2), 109–128. https://doi.org/10.1111/j.1468-2850.2006.00013.x

Bonanno, G. A., & Kaltman, S. (1999). Toward an integrative perspective on bereavement. *Psychological Bulletin*, *125*(6), 760-776. doi:10.1037/0033-2909.125.6.760

Bonanno, G. A., Neria, Y., Mancini, A., Coifman, K. G., Litz, B., & Insel, B. (2007). Is there more to complicated grief than depression and posttraumatic stress disorder? A test of incremental validity. *Journal of Abnormal Psychology, 116*(2), 342–351. doi:10.1037/0021-843X.116.2.342

Bohlmeijer, E., ten Klooster, P. M., Fledderus, M., Veehof, M., & Baer, R. (2011). Psychometric properties of the five facet mindfulness questionnaire in depressed

adults and development of a short form. *Assessment*, *18*(3), 308–320. https://doi.org/10.1177/1073191111408231

Bowlby, J. (1980). *Attachment and loss, Vol. III. Loss: Sadness and depression.* New York, NY: Basic Books.

Burke, L. A., & Neimeyer, R. A. (2013). Prospective risk factors for complicated grief: A review of the empirical literature. In M. Stroebe, H. Schut, & J. van den Bout (Eds.), *Complicated grief: Scientific foundations for health care professionals* (pp. 145–161). Routledge/Taylor & Francis Group.

Cacciatore, J., & Flint, M. (2012). ATTEND: toward a mindfulness-based bereavement care model. *Death studies*, *36*(1), 61–82. https://doi.org/10.1080/07481187.2011.591275

Cacciatore, J., Rubin, J.B. (2016). The last of human desire: Grief, death, and mindfulness. In: Shonin, E., Gordon, W., Griffiths, M. (eds) Mindfulness and Buddhist-Derived Approaches in Mental Health and Addiction. Advances in Mental Health and Addiction. Springer, Cham. https://doi.org/10.1007/978-3-319-22255-4_12

Chödrön, P. (1997). *When things fall apart: heart advice for difficult times.* Boston : [New York]: Shambhala; Distributed in the United States by Random House.

Chödrön, P. (2001). The Places That Scare You. Shambhala Publications. Boston, MA.

Currier, J. M., Holland, J. M., Coleman, R. A., & Neimeyer, R. A. (2008). Bereavement following violent death: An assault on life and meaning. In R. G. Stevenson & G. R. Cox (Eds.), Perspectives on violence and violent death (pp. 177–202). Amityville, NY: Baywood.

Currier, J. M., Holland, J. M., Chisty, K., & Allen, D. (2011). Meaning made following deployment in Iraq or Afghanistan: examining unique associations with posttraumatic stress and clinical outcomes. *Journal of traumatic stress*, *24*(6), 691–698. https://doi.org/10.1002/jts.20691

Currier, J. M., Holland, J. M., & Neimeyer, R. A. (2006). Sense-making, grief, and the experience of violent loss: A mediation model. *Death Studies, 30*, 403-428.

Davis, G., Wortman, C. B., Lehman, D. R., & Silver, R. C. (2000). Searching for meaning in loss: Are clinical assumptions correct? *Death Studies*, *24*(6), 497-540. doi:10.1080/07481180050121471

Ehlers, A. & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behavior Research and Therapy, 38*, 319-345.

Field, A. (2017). *Discovering statistics using SPSS* (5th ed.) London, England: Sage Publications.

Gillies, J., & Neimeyer, R. A. (2006). Loss, grief, and the search for significance: Toward a model of meaning reconstruction in bereavement. *Journal of Constructivist Psychology*, *19*(1), 31-65. doi:10.1080/10720530500311182

Golden, A.-M., Dalgleish, T. (2010). Prolonged grief as a distinct disorder from bereavement-related posttraumatic stress, depression, and anxiety. *Psychiatry Res. 178*(2), 336–341. doi: 10.1016/j.psychres.2009.08.021

Goldstein, J. & Kornfield, J. (1987). *Seeking the heart of wisdom: The path of insight meditation.* Shambhala Publications.

Gordon, J. S., Staples, J. K., Blyta, A., Bytyqi, M., & Wilson, A. T. (2008). Treatment of posttraumatic stress disorder in postwar Kosovar adolescents using mind-body

skills groups: a randomized controlled trial. *The Journal of clinical psychiatry*, *69*(9), 1469–1476. https://doi.org/10.4088/jcp.v69n0915

Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research, 57*, 35–43.

Gunaratana, H. (1996). *Mindfulness in plain English.* Bhavana Society.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.

Hayes, A. F. (2018). The PROCESS macro for SPSS and SAS [computer program]. Retrieved April 11, 2021. http://processmacro.org/index.html

Hayes, S. C., Barnes-Holmes, D., & Roche, B. (Eds.). (2001). Relational Frame Theory: A Post- Skinnerian account of human language and cognition. New York: Plenum Press.

Holland, J. M., Currier, J. M., & Neimeyer, R. A. (2006). Meaning reconstruction in the first two years of bereavement: The role of sense-making and benefit-finding. *Omega: Journal of Death and Dying, 53*(3), 175–191. doi:10.2190/FKM2-YJTY-F9VV-9XWY

Holland, J. M., Currier, J. M., Coleman, R. A., & Neimeyer, R. A. (2010). The Integration of Stressful Life Experiences Scale (ISLES): Development and initial validation of a new measure. *International Journal of Stress Management, 17*(4), 325–352. doi:10.1037/a0020892

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition*, *7*(2), 113-136. doi:10.1521/soco.1989.7.2.113

Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York, NY: Free Press.

Janoff-Bulman, R., & McPherson Frantz, C. (1997). The impact of trauma on meaning: From meaningless world to meaningful life. In M. J. Power & C. R. Brewin (Eds.), *The transformation of meaning in psychological therapies: Integrating theory and practice* (pp. 91–106). John Wiley & Sons Inc.

Joseph, S., & Linley, P. A. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology*, *9*(3), 262-280. doi:10.1037%2F1089-2680.9.3.262

Kabat-Zinn, J. (2009). *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life.* United States: Hachette Books.

Kersting, A., Brähler, E., Glaesmer, H, & Wagner, B. (2011). Prevalence of complicated grief in a representative population-based sample. *J Affect Disord, 131*, 339-43. doi: 10.1016/j.jad.2010.11.032

Kroeber, A. L. (1940). Stimulus diffusion. *American Anthropologist*, 42, 1-20.

Kumar, S. M. (2005). *Grieving mindfully: A compassionate and spiritual guide to coping with loss*. New Harbinger Publications.

Kuyken, W., Byford, S., Taylor, R., Watkins, E., Holden, E., Gardner, K., Barrett, B., Byng, R., Evans, A., Mullan, E., & Teasdale, J. (2009). Mindfulness-based

cognitive therapy to prevent relapse in recurrent depression. *Journal of Consulting and Clinical Psychology, 76*, 966-78. 10.1037/a0013786.

Lee, S. A., Feudo, A., & Gibbons, J. A. (2014). Grief among near-death experiencers: Pathways through religion and meaning. *Mental Health, Religion & Culture, 17*(9), 877–885. https://doi.org/10.1080/13674676.2014.936846

Lepore, S. J., & Helgeson, V. S. (1998). Social constraints, intrusive thoughts, and mental health. *Journal of Social and Clinical Psychology*, *17*, 89-106. doi:10.1521/jscp.1998.17.1.89

Li, W., Howard, M. O., Garland, E. L., McGovern, P., & Lazar, M. (2017). Mindfulness treatment for substance misuse: A systematic review and meta-analysis. Journal of Substance Abuse Treatment, 75, 62–96. doi:10.1016/j.jsat.2017.01.008

Lichtenthal, W. G., Burke, L. A., & Neimeyer, R. A. (2011). Religious coping and meaning-making following the loss of a loved one. *Counselling and Spirituality / Counseling et spiritualité, 30*(2), 113–135.

Lichtenthal, W. G., Cruess, D. G., Prigerson, H. G. (2004). A case for establishing complicated grief as a distinct mental disorder in DSM-V. *Clin Psychol Rev, 24*, 637–662.

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder.* Guilford Press.

Marquett, R. M., Thompson, L. W., Reiser, R. P., Holland, J. M., O'Hara, R. M., Kesler, S. R., Stepanenko, A., Bilbrey, A., Rengifo, J., Majoros, A., & Thompson, D. G. (2013). Psychosocial predictors of treatment response to cognitive-behavior

therapy for late-life depression: an exploratory study. *Aging & mental health*, *17*(7), 830–838. https://doi.org/10.1080/13607863.2013.791661

Mikulincer, M., & Shaver, P. R. (2012). Adult attachment orientations and relationship processes. *Journal of Family Theory & Review*, *4*(4), 259-274. doi:10.1111/j.1756-2589.2012.00142.x

Milman, E., Neimeyer, R. A., Fitzpatrick, M., MacKinnon, C. J., Muis, K. R., & Cohen, S. R. (2019). Prolonged grief and the disruption of meaning: Establishing a mediation model. *Journal of Counseling Psychology, 66*, 714-725.

Monteiro, L. M., Musten, R. F., & Compson, J. (2015). Traditional and Contemporary Mindfulness: Finding the Middle Path in the Tangle of Concerns. *Mindfulness, 6*, 1-13.

Neimeyer, R. A. (2001). The language of loss: Grief therapy as a process of meaning reconstruction. In R. A. Neimeyer (Ed.), *Meaning reconstruction & the experience of loss* (pp. 261-292). Washington, DC: American Psychological. doi:10.1037/10397-014

Neimeyer, R. A. (2006). Complicated grief and the reconstruction of meaning: Conceptual and empirical contributions to a cognitive-constructivist model. *Clinical Psychology: Science and Practice, 13*(2), 141-145.

Neimeyer, R. A., & Young-Eisendrath, P. (2015). Assessing a Buddhist treatment for bereavement and loss: the mustard seed project. *Death studies*, *39*(1-5), 263–273. https://doi.org/10.1080/07481187.2014.937973

Nhat Hanh, Tich (1990). *Transformation & Healing: Sutra on the Four Establishments of Mindfulness.* Parallax Press. Berkeley, CA.

Olinsky, A., Chen, S., & Harlow, L. (2003). The comparative efficacy of imputation methods for missing data in structural equation modeling. *European Journal of Operational Research*, *151*(1), 53-79. doi:10.1016/S0377-2217(02)00578-7

Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, *136*, 257–301. doi:10.1037/a0018301

Prigerson, H., Ahmed, I., Silverman, G. K., Saxena, A. K., Maciejewski, P. K., Jacobs, S. C., … Hamirani, M. (2002). Rates and risks of complicated grief among psychiatric patients in Karachi, Pakistan. *Death Studies, 26*(10), 781–792. doi:10.1080/07481180290106571

Prigerson, H. G., Bierhals, A. J., Kasl, S. V., Reynolds, C. F., Shear, M.K., et al. (1997). Traumatic grief as a risk factor for mental and physical morbidity. *Am J Psychiatry 154*, 616–623.

Prigerson, H. G., Bridge, J., Maciejewski, P. K., Beery, L. C., Rosenheck, R. A., et al. (1999). Influence of traumatic grief on suicidal ideation among young adults. *Am J Psychiatry 156*. 1994–1995.

Prigerson, H. G., Horowitz, M. J., Jacobs, S. C., Parkes, C. M., Aslan, M., Goodkin, K., … Maciejewski, P. K. (2009). Prolonged grief disorder: Psychometric validation of criteria proposed for DSM-V and ICD-11. *PLoS Medicine, 6*(8), e1000121. doi:10.1371/journal.pmed.1000121

Prigerson, H. G., Shear, M. K., Jacobs, S. C., Reynolds, C. F., III, Maciejewski, P. K, Davidson, J. T. R., …Zisook, S. (1999). Consensus criteria for traumatic grief. *British Journal of Psychiatry, 174*, 67–73.

Prigerson, H. G., Vanderwerker, L. C., & Maciejewski, P. K. (2008). A case for inclusion of prolonged grief disorder in DSM-V. In M. S. Stroebe, R. O. Hansson, H. Schut, & W.

Purser, R. E., & Loy, D. R. (2013). Beyond mcmindfulness. *Huffington Post, 1*(7), 13.

Rozalski, V., Holland, J. M., & Neimeyer, R. A. (2017). Circumstances of death and complicated grief: Indirect associations through meaning made of loss. *Journal of Loss and Trauma, 22*(1), 11-23.

Shear, M. K. (2015). Complicated grief. *The New England Journal of Medicine, 372*, 153-160.

Shear, M. K., Simon, N., Wall, M., Zisook, S., Neimeyer, R., Duan, N., … Keshaviah, A. (2011). Complicated grief and related bereavement issues for DSM-5. *Depression and Anxiety, 28*(2), 103–117. doi:10.1002/da.20780

Stroebe (Eds.), Handbook of bereavement research and practice: Advances in theory and intervention (pp. 165–186). Washington, DC: American Psychological Association.

Stroebe, M., Schut, H., Stroebe, W. (2007). Health outcomes of bereavement. *Lancet, 370*, 1960–1973.

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, M., Schut, H., Stroebe, W. (2007). Health outcomes of bereavement. *Lancet, 370*, 1960-73. doi: 10.1016/S0140-6736(07)61816-9. PMID: 18068517.

Stroebe, M., Schut, H., & Stroebe, W. (1998). Trauma and grief: A comparative analysis. In J. H. Harvey (Ed.), *Perspectives on loss: A sourcebook* (pp. 81–96). Brunner/Mazel.

Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, *38*(11), 1161-1173. doi:10.1037/0003-066X.38.11.1161

Thieleman, K., Cacciatore, J. & Hill, P.W. Traumatic Bereavement and Mindfulness: A Preliminary Study of Mental Health Outcomes Using the ATTEND Model. *Clin Soc Work J, 42*, 260–268 (2014). https://doi.org/10.1007/s10615-014-0491-4

Thimm, J. C., & Holland J. M. (2017). Early maladaptive schemas, meaning making, and complicated grief symptoms after bereavement. *International Journal of Stress Management, 24*, 347-367.

Thompson, S. C., & Janigian, A. S. (1988). Life schemes: A framework for understanding the search for meaning. *Journal of Social and Clinical Psychology*, *7*(2-3), 260-280. doi:10.1521/jscp.1988.7.2-3.260

Wada, K. & Park, J. (2009). Integrating Buddhist psychology into grief counseling. *Death Studies, 33*, 657-683.

Williams J. M. G., Teasdale J. D., Segal Z. V., & Kabat-Zinn J. (2007). *The mindful way through depression: Freeing yourself from chronic unhappiness*. New York: Guilford.