CONTINUING BONDS, MEANING MAKING, AND COLLECTIVISM:

PREDICTORS OF COMPLICATED GRIEF

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CONTINUING BONDS, MEANING MAKING, AND COLLECTIVISM: PREDICTORS OF COMPLICATED GRIEF

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ABSTRACT

Continuing bonds or maintaining a physical or mental connection with a deceased loved one is an aspect of the bereavement process that has displayed mixed results in the bereavement literature with respect to its adaptive or maladaptive effects. The purpose of the present study is to investigate the effect of continuing bonds on complicated grief symptoms and how this effect is influenced by the meaning making the bereaved individual engages in, and their level of relational collectivism. One hundred and fifty seven participants who had lost a human loved one were recruited from counseling psychology masters and doctoral programs. A bootstrap mediation analysis was used to examine a moderated mediation model. Results of the main analysis revealed a significant partial mediation effect of meaning making on continuing bonds influence on complicated grief symptoms. However, results indicated no significant moderation effect of relational collectivism on the relationship between continuing bonds and meaning making. Preliminary analysis revealed no significant relationship between the outcome variables and participant age, race/ethnicity, religious affiliation, or time passed since the loss. However, the type of death reported and the reported level of closeness to
the deceased had significant relationships with both meaning making and complicated grief symptoms. These findings, their limitations and implications are discussed with respect to their impact on bereaved individuals and possible avenues for counselors working with bereaved clients are presented. Recommendations for future research which may expand the bereavement literature are explored.
The faculty listed below, appointed by the Dean of the School of Graduate Studies have examined a dissertation titled “Continuing Bonds, Meaning Making, and Collectivism: Predictors of Complicated Grief,” presented by Christopher G. Black, candidate for the Doctor of Philosophy degree, and certify that in their opinion it is worthy of acceptance.

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CHAPTER 1
INTRODUCTION

Every individual experiences loss, of one kind or another, repeatedly through the course of his or her life. This loss can take a variety of forms, such as the loss of a job, loss of a relationship to a significant other, loss of security, or the loss of a role (e.g. mother, employee, athlete, etc.). Grief is the term describing the emotional response to such a personal loss. This response can often include feelings of sadness, anger, disorientation, and purposelessness. While grief can accompany any loss, the loss that grief is most often associated with is the death of a loved one, or bereavement. The possible range of emotions one might be expected to experience during bereavement varies greatly and typically includes negative feelings. In addition, there are secondary grief-related consequences during bereavement as well, such as increased chances for heart disease, cancer, death from natural causes, and suicide.

In a large majority of cases, an estimated 80-90%, bereaved individuals are able to recover after a period of grieving and continue living their lives in a healthy productive manner. However, in the remaining 10-20%, recovery from grief does not follow a typical course. For these individuals, depression and sadness persist along with the loss of the ability to see a positive future or any kind of future life without the deceased. This course of grieving is often referred to as complicated grief or prolonged grief disorder. Individuals suffering from complicated grief typically experience these symptoms for a period longer than 6 months. In addition to the mental and physical vulnerabilities mentioned earlier that accompany typical grief, complicated grief increases an individual’s risk for prolonged
periods of depression and anxiety. Bereavement is currently listed as a V code, or a factor for clinical consideration, in the DSM-IV (APA, 1994) and has no formal diagnosis. However, given the severity and course of symptoms experienced by individuals suffering from complicated grief, a diagnosis of complicated grief is being considered for inclusion in the DSM-V. Surprisingly little research has been conducted on the causes of complicated grief, but investigations have been conducted on some variables thought to influence complicated grief. This study will examine several variables that may predict and buffer individuals from complicated grief: continuing bonds, meaning making, and collectivism.

**Continuing Bonds**

Many theories have been forwarded about the effects of bereavement and the best ways to cope (Rothaupt & Becker, 2007). Traditional Western psychology posits that emotional energy that was invested in the deceased needs to be recovered and reinvested elsewhere, a process called decathexis. For optimal health and recovery from the loss, new relationships should be formed with living others that can reciprocate psychic energy with the bereaved in a healthy way. Maintaining a connection with the deceased was theorized to trap the energy of the bereaved. However, in recent years the possibility of maintaining an emotional connection with the lost loved one has been explored. This connection, or continuing bond, can take a number of forms. These forms may be either psychical or mental. Physical connections might range from a small keepsake that reminds the bereaved of the deceased to a shrine of the dead individual maintained in their honor. Mental forms of a continuing bond might be a special set of memories the bereaved has involving the deceased in some way. Alternatively, the mental representation might be in the form of advice or
support such as when the bereaved imagines what their loved one might say or do when confronted by a difficult situation. This use of continuing bonds as a coping mechanism during bereavement is a relatively unexplored area of psychology. In the little research that has been conducted, results have been mixed regarding their adaptive or maladaptive nature.

Some studies have shown that bereaved individuals may benefit from some forms of continuing bonds but other forms of continuing bonds may be harmful, suggesting it is the form that the continuing bonds take that determines its utility to the bereaved (Field, Nichols, Holen, & Horowitz, 1999). Findings of other studies simply suggest that, over time, continuing bonds are a maladaptive coping mechanism for most participants regardless of the form they take (Boelen, Stroebe, Schut, & Zijerveld, 2006; Field, Gal-Oz, Bonanno, 2003). Alternatively, the adaptive/maladaptive nature of continuing bonds may be determined by how they are used by the bereaved (e.g., for making meaning; Currier, Holland, & Neimeyer, 2006; Michael & Snyder, 2005; Neimeyer, Baldwin, & Gilles, 2006). Given the relatively unexplored status of continuing bonds and the potential benefit or complications that may be involved in using them to cope, further investigation of their effects seems warranted.

Meaning Making

Some studies suggest that if the death of a loved one was traumatic in nature, such as the case of a homicide or suicide, there is an increased chance that the bereaved will experience complicated grief symptoms (Owens, Lambert, Lloyd, & Donovan, 2008). Attachment has also been investigated as a possible contributor to complicated grief. Some theorists suggest that an insecure attachment type contributes to complicated grief because the bereaved is unable to transform the attachment relationship from an external one into an
internal mental representation of the relationship, leaving the bereaved unable to emotionally admit to the reality of the loss and its permanent nature (Stroebe & Schut, 2005; Stroebe, Schut, & Boerner, 2010). Researchers have also looked into a bereaved individual’s ability or inability to make meaning from the loss as a potential contributing factor to complicated grief (Neimeyer, 2005). In other words, the inability of the bereaved to fit the loss into their current worldview may play a role in the development of complicated grief. However, some promising findings in the field of meaning making suggest that if a person is able to make sense of the loss, find some benefit in the situation, or experiences positive identity change, these may serve as preventative factors to complicated grief (Currier et al., 2006; Neimeyer et al., 2006).

One meaning making model forwarded by Park (2010) proposes the idea of a global meaning structure. This structure is unique to each individual and is composed of that person’s beliefs about the world, the self, and personal goals. Beliefs about the world might include ideas about justice, fairness, peace, or religion. Beliefs about the self can include things such as one’s place in the world, purpose, role, or significance (Gilles & Neimeyer, 2006; Park, 2010). Beliefs about personal goals typically include ideas about what the person wants to accomplish with their lives or what they want to become in the future. In addition to the global meaning structure, people give appraised meaning to events that occur in their daily lives (Park, 2010). Usually the appraised meaning assigned to an event falls in line with their global meaning structure. For example, when a person witnesses a criminal brought to the law, or sees a philanthropist being honored, the appraised meaning that person assigns to these events will most likely fall in line with the aspect of their global meaning structure that
deals with fairness or justice. However, when the appraised meaning given to an event is in conflict with a person’s global meaning structure (e.g. a known criminal goes free), this creates distress (Wortman & Park, 2009).

According to Park’s (2010) model, this distress is usually relieved by dealing with the incongruent appraised meaning through two meaning making processes: accommodation and assimilation. Assimilation includes changing the appraised meaning of an event to be more in line with the global meaning structure, while accommodation involves altering the global meaning structure to fit with the appraised meaning of the event. Gilles and Neimeyer (2006) go a step further and propose specific mechanisms of the meaning making process: Sense making, benefit finding, and identity change. As stated earlier, research on meaning making in the field of bereavement has shown promising results. More specifically, the sense making mechanism was shown to significantly predict fewer complicated grief symptoms in a sample of bereaved parents. Interestingly, for this particular sample, sense making was also a better predictor of fewer complicated grief symptoms than time elapsed since the loss and the expectedness of the death (Keesee, Currier, & Neimeyer, 2008). In other studies, meaning making has been shown to play a mediating role between violence of the death (a risk factor for complicated grief) and complicated grief (Currier, Holland, & Neimeyer, 2006), as well as acting as a moderator between continuing bonds and complicated grief (Neimeyer et al., 2006). Considering previous research findings of meaning makings effect on complicated grief, as well as its interaction with continuing bonds, it is a very promising variable in learning more the interrelation of these two bereavement factors.
Culture

With the interaction of meaning making with continuing bonds as well as its influence on complicated grief, it raises the question: What factors might possibly promote meaning making through the use of continuing bonds? One study by Lalande and Bonanno (2006) provides an interesting suggestion. In a continuing bonds study comparing bereaved individuals in the United States and bereaved individuals in the People’s Republic of China, results suggested that continuing bond reported after the loss provided a buffering effect against later distress. However, this effect was only found with the Chinese participants, continuing bonds provided no buffering effect for the participants from the United States. The results of this study suggest that there may be some aspect of culture that influences how using continuing bonds affects grief outcomes. Investigation of bereavement traditions from other cultures reveals that Freud’s concept of decathexis, or the severing of emotional ties to lost loved ones, is not always applicable or even recommended depending on the culture of the deceased (Klass, 2006). For example, Hsu, Kahn, Yee, and Lee’s (2004) study of Taiwanese widows and their children revealed several types of culturally acceptable ways to maintain a continuing bond with a deceased husband and father. In a qualitative study of Pakistani Muslims, Hussein and Oyebode (2009) reported cultural forms of continuing bonds that included activities such as following the example of the deceased and extensively talking about the deceased with others. These studies suggest that continuing bonds are not only acceptable in other cultures, but use of continuing bonds is often a very common practice. However, this leads us to yet another question: What factors of a particular culture make
continuing bonds a more accepted practice and, presumably, more likely to be accompanied by meaning making during bereavement?

**Collectivism**

With the search for the influential cultural factor in mind, collectivism seems to be a promising candidate to shed light on this question. Oyserman, Coon, and Kemelmeier (2002) conducted a meta-analysis of studies investigating collectivism and individualism. Oyserman and colleagues stated that a core aspect of collectivism is the assumption that an individual is bound and obligated to the groups to which they belong, whereas this does not hold true for individualism. The analysis also investigated effects of this assumption on psychological factors such as well-being, self-concept, and relationality to others. The authors cite study results indicating that collectivism may have a buffering effect on depression, participants higher in collectivism define themselves more by their group than by their individual traits, and levels of collectivism correlate strongly with social identity compared to personal identity. In addition, Brewer and Chen (2007) further separated collectivism into relational and group collectivism, concerning relationships with close others (e.g., family) and relationships with larger symbolic groups (e.g., nation) respectively. Theoretically, maintaining behaviors in line with one’s values (relationally collectivistic, group collectivism, or individualism) will have a significant impact on a person’s well-being. Taken together with the findings of Oyserman et al. (2002), this suggests that collectivism may have significant influence on a bereaved person’s ability to make meaning from continuing bonds after a loss.
The Current Study

The purpose of the current study is to investigate the effects of continuing bonds, meaning making, and collectivism on complicated grief. Considering the relatively unexplored nature of continuing bonds the potentially useful knowledge to be gained through exploration of the specific benefits or risks of continuing bonds, the goal of the current study is to explore possible means by which the study variables interact with continuing bonds to affect bereavement outcome, specifically complicated grief.

Participants for this study were recruited online through counseling psychology graduate program websites. Individuals will be eligible to participate if they are over the age of 18 and have lost a loved one. Within this population, it is expected that participants reporting higher collectivism will also report higher use of continuing bonds. It is also expected that any effect that continuing bonds have on complicated grief symptoms will be mediated by meaning making. Further, any influence that continuing bonds have on meaning making will be moderated by collectivism. In other words, continuing bonds are more likely to be used by bereaved individuals whose culture views them as acceptable (as measured by collectivism). The impact continuing bonds have on complicated grief depends on the degree of meaning the bereaved is capable of making from the experience. Lastly, the amount of meaning making that occurs during continuing bonds use will depend on the level of collectivism reported by the bereaved (with higher reported collectivism facilitating greater meaning making). The results of this study will hopefully shed light on the interaction of these variables and be helpful to clinicians working with bereave populations to better
understand the intricacies of their emotional processes and help the bereaved through the stressful experience of losing a loved one.
Most people will experience the death of a loved one at some point in the course of their lives (Walter & McCoyd, 2009). The experience that follows is the process of grieving about the loss. The process typically begins with the irreversible physical separation from a loved one as a result of their passing. Reactions to this loss can vary extremely between individuals depending on their relationship with the deceased, the amount of time passed since the death, as well as the circumstances of the death itself (Parkes & Prigerson, 2010). Sometimes individuals experience a prolonged grieving process that is intense enough to affect normal functioning and does not improve over the course of time specified in the Diagnostic and Statistical Manual IV (DSM-IV). Under the current clinical standards, after a period of 6 months, clients no longer fit the diagnostic criteria for bereavement and any symptoms must be attributed to an alternative diagnosis. To account for these individuals who experience symptoms of prolonged grief, scholars in the bereavement field are considering the diagnosis of prolonged grief disorder to include in the next version of the DSM (APA, 1994; Prigerson & Jacobs, 2001).

Relatively little is known about why some individuals experience a course of grief that is significantly longer than others. Researchers have examined several variables that predict prolonged or complicated grief, such as attachment type (Stroebe & Schut, 2005; Stroebe et al., 2010) and expectedness of the loss (Currier et al., 2006; Laurie & Neimeyer,
This study will investigate three variables that have been examined in less depth, continuing bonds, collectivism, and the meaning making.

Continuing bonds are a relatively new idea in western psychology. Traditional views of adaptive behavior during bereavement included severing all ties with the deceased in order to reinvest one’s energy with the living. However, Continuing Bonds represent the idea of maintaining an emotional connection with the deceased as a way to cope with the loss (Klass, 1996). Continuing Bonds may come in psychological or physical form (e.g., a fond memory or a treasured keepsake, respectively) and serve the purpose of preserving the emotional connection between the bereaved and the deceased (Klass, 1996).

While Continuing Bonds are a relatively new idea for consideration in Western, mainly individualistic cultures, they are a part of many traditions from cultures that are typically higher in collectivism. Collectivism can be described as the sense of obligation and duty to the group or groups that one is a part of. This tenet of collectivism has been shown to have connections to psychological factors such as well-being and relationality. For example, some studies investigating collectivism suggest that individuals reporting high levels of collectivism are more likely to define themselves by the groups they belong to (Oyserman et al., 2002).

Individuals’ adaptive and maladaptive coping with bereavement may involve the amount of meaning they are able to make from their loss (Park, 2010). Meaning-making, as a general theoretical concept, has been broken down by some theorists into more specific aspects such as sense-making and benefit-finding. These aspects describe any understanding that bereaved individuals are able to make and any ‘silver linings’ they may find in the loss
respectively (Gilles & Neimeyer, 2006). The meaning that bereaved individuals make from a loss is itself influenced by the culture of the individual, and their cultures bereavement traditions (Rosenblatt, 2008). An investigation into the influence of meaning-making on continuing bonds and grief should also take into account the traditional cultural views of the bereaved individual, which may itself influence the meaning attributed to the continuing bonds.

In this chapter, I will discuss grief, review current theories on the nature and uses of continuing bonds in the grieving process, describe traditional cultural differences in the use of continuing bonds, review the meaning making process and its relationship with adaptive coping, describe the differences between complicated versus non-complicated grief symptoms, and explore the possible contributions of collectivism on meaning making.

**Grief**

Given its wide array of presentations, grief can be a difficult concept to define (Weiss, 2008). Taking an inclusive stance on the meaning of grief, Stroebe, Hansson, Schut, and Stroebe (2008) defined it as, “the primarily emotional (affective) reaction to the loss of a loved one through death” (p. 5). To prevent confusion and provide an informal guideline for research, Stroebe and colleagues also provided definitions for bereavement and mourning. Bereavement is the relatively objective state of losing a significant other (parent, sibling, partner, friend, child, or other relative) to death. Mourning differs from grief in that, while grief is a mostly internal emotional reaction to loss, mourning is the culturally appropriate outward expression of loss that typically involves social and religious rituals or traditions (Stroebe et al., 2008).
People that experience normal, or non-pathological, grief are more likely than non-bereaved individuals to experience negative emotional and physical consequences such as depression (Bruce, Kim, Leaf, & Jacobs, 1990), heart disease (Parkes, Benjamin, & Fitzgerald, 1969), certain types of cancer (Levav, Friedlander, Kark, & Peritz, 1988), suicide (Kaprio, Koskenvuo, & Rita, 1987), and even an increased risk to their own mortality (Schaefer, Quesenberry, & Wi, 1995). However, 80% to 90% of all bereaved individuals will be able to cope in an adaptive way and continue to live their lives in a relatively healthy manner that does not affect their daily activities (Prigerson, Vanderwerker, & Maciejewski, 2008).

Currently the DSM-IV (APA, 1994) lists bereavement as an additional condition that may be a focus of clinical attention, or a V code, and notes that symptoms of bereavement may resemble those of a major depressive episode that may not persist for the required 2 months to meet the diagnostic criteria for a major depressive episode. However, in a study investigating stage theories of grief, Maciejewski, Zhang, Block, and Prigerson (2007) studied 200 bereaved participants over the course of 24 months after their loss. Participants were repeatedly surveyed about aspects of their emotional state with items that inquire about different theoretical stages of grief such as disbelief, yearning, anger, depression, and acceptance. Their results indicated that with the exception of acceptance, which increased steadily over time, all indicators of the other stages did not peak (on average) until 6 months after the loss. In other words, the measures of disbelief, yearning, anger, and depression rose at various rates before beginning to decline, but this decline did not begin for all stages until six months had passed. Maciejewski et al. (2007) suggested these results support a revision
of the diagnostic criteria for bereavement in favor of a diagnosis that can assess grieving individuals more closely.

In addition to normal grief, some researchers have found support for the inclusion of Prolonged Grief Disorder (PGD; also referred to as complicated grief) in the next edition of the DSM (Prigerson et al., 2008). PGD is characterized, as the name suggests, by the bereaved remaining in a state of elevated grief, typically beyond the 6 months suggested by Maciejewski et al. (2007) as the window for normal grief (Prigerson, 2004). Researchers have found that PGD is often characterized by a refusal of the bereaved to accept the reality of the loss. The bereaved cannot make healthy adaptations to cope and sees no way to move forward. Some of the criteria proposed for a PGD diagnosis in the next edition of the DSM include confusion about one's role in life, difficulty moving on, and feeling that life is unfulfilling, empty, and meaningless (Prigerson et al., 2008). In addition, individuals experiencing PGD have an increased risk of negative mental and physical symptoms such as anxiety and depression beyond what would be expected for non-complicated grief (Ott, 2003; Prigerson et al., 1997). Given the severe physical and psychological effects of PGD, learning about factors that may potentially influence it seems warranted. Continuing Bonds has shown promise as such a factor.

**Continuing Bonds**

In the following section, I will define continuing bonds, examine theories about when continuing bonds are adaptive or maladaptive in the grieving process, as well as review empirical evidence of its impact for the bereaved.
Definition and Theory of Continuing Bonds

The traditional Western view of how individuals cope with the loss of a loved one involved the individual severing all emotional bonds to the deceased or cathexis (Freud, 1957). The generally accepted reasoning for the severing of these emotional bonds was so that the psychic energy used to create them could be released. Freud theorized that the energy originally used to create emotional bonds with the lost loved one would be trapped there and would be unavailable to the grieving individual. The reinvestment of this energy into a newer, presumably healthier, relationship with the living was the ideal goal in this model of grieving. For decades, this model was generally accepted as the correct way for a bereaved individual to deal with the grieving process, without much scrutiny into the model's accuracy. However, in the past twenty years there has been a renewed look at the fundamental assumption that emotional bonds with the deceased must be severed for the bereaved to grieve in a healthy manner. The concept of continuing bonds, or maintaining emotional bonds with the deceased, has been forwarded as a potentially important aspect of the grieving process (Klass et al., 1996).

It has been argued that the use of continuing bonds is related to its acceptability in a given culture (Klass & Goss, 1999). How a bereaved individual interacts with a deceased loved one differs according to the customs of their culture of origin. For instance, the use of continuing bonds in Western culture is not as common as it may be in Japan (Klass & Goss, 1999), China, or in the Middle East (Klass & Goss, 2003). In its most basic form, continuing bonds describes the event of a bereaved individual maintaining a connection with the deceased (Klass et al., 1996). This connection can take several forms including a mental...
representation of the deceased, by retaining a keepsake associated with the deceased, or by maintaining a location dedicated to them. A mental representation of the deceased can take the form of a fond memory or memories that the bereaved associates with the deceased, a sense of being spiritually guided or watched over by them, or a perception that the deceased is physically nearby. A continuing bond might also take the form of a keepsake of the deceased that the bereaved retains, such as a photograph or a watch that belonged to the loved one. Finally, a continuing bond might be a location the bereaved associates with the deceased. This location can be as formal or informal as desired by the bereaved, such as a religious shrine or the deceased’s former bedroom, respectively (Field et al., 1999; Field et al., 2003).

Multiple theories about the bereaved maintaining a connection with the deceased have been introduced (Bowlby 1980; Klass et al., 1996). Unfortunately, the theoretical advancements in the field of continuing bonds have so far outpaced the empirical research to support them (Hussein & Oyebode, 2009). Klass et al. (1996) introduced the term continuing bonds in their largely qualitative view of the connection the bereaved maintain with the deceased in cultures with traditional death rituals different from those in the west. More recently, however, bereavement theorists have used attachment theory to attempt to explain the adaptiveness or maladaptiveness of continuing bonds (Field, Gao, & Paderna, 2005; Stroebe et al., 2010; Field, 2006; Stroebe & Schut, 2005). Using attachment theory, Field et al. described the continuing bonds as a way to transform the physical representation the bereaved had of the deceased into a mental representation. Field argued that this transformation was necessary for healthy adaptation to the loss.
After the death of loved ones, bereaved individuals are compelled to search for them on an instinctual level to reestablish contact with the deceased (Field et al., 2005). This period was termed the protest stage and is characterized by the subconscious refusal of the bereaved to believe the separation from the deceased is permanent (Bowlby 1980; Field et al., 2005). During this stage, it is not uncommon for the bereaved to see the deceased’s face suddenly appear out of a crowd or to mistake another individual’s voice for that of the deceased. However, after repeated failures to reestablish contact with the deceased, the bereaved usually moves on to the despair stage. During this stage, the permanence of the loss is integrated by the bereaved, but the goal of reestablishing contact with the deceased is not relinquished at an instinctual level. During the final stage, reorganization, the bereaved integrates the concept of the permanence of the loss as well as the impossibility of reestablishing contact with their lost loved one (Field, et al., 2005).

**Continuing Bonds and Empirical Support**

Perhaps due to the relatively new nature of the continuing bonds field, the amount of research and number of research teams working on various lines of inquiry about continuing bonds remains relatively few. Empirical research into the benefits or risks of maintaining a continuing bond with a deceased loved one has unfortunately turned up mixed results (e.g., Boelen et al., 2006; Field et al., 1999; Field et al., 2003). One of the first studies on continuing bonds was Field et al.’s (1999) longitudinal study, where they surveyed 70 participants who had lost a spouse within 3 to 6 months prior to being recruited for the study, and again at a 14 and 25 months post-loss. Although only four continuing bond items were used in the study, results suggested that participants that reported maintaining a continuing
bond using the deceased’s possessions or contact with the deceased’s belongings showed less reduction in grief specific symptoms. However, participants reporting continuing bonds in the form of fond memories demonstrated evidence of less distress, suggesting that the adaptive value of a continued bond seemed to depend on the particular way the bond manifested. Field et al., (2003) conducted a 5-year follow-up study, surveying 39 of the original 70 participants from the group mentioned in the previous study. The authors found that at the 5-year follow up, higher continuing bond scores were related to higher grief-specific scores but were not consistently related to other general psychological measures. The results suggest that no matter what form the continuing bond takes (focusing on loved one’s possessions or memories), it indicates poorer grief-specific symptoms at 5 year follow-up.

Since then, researchers have looked for differences in continuing bonds manifestations such as Field and Filanosky (2010), which is also the most comprehensive study of continuing bonds I could find. Field and Filanosky surveyed 502 (84.3% female, 15.7% male; 85.9% Caucasian, 4.9% African American, 4.9% Asian American, 2.8% Hispanic, 1.6% other) bereaved individuals with internet surveys. The investigators collected information on participants’ use of externalized and internalized continuing bonds. In this study externalized continuing bonds referred to participants’ reports of continuing bonds through hallucination or illusion and internalized referred to participants’ reports of continuing bonds through use of their deceased loved one as a role model, inspirational guide, or safe haven. Field and Filanosky (2010) assessed participants’ continuing bonds use with a 16 item instrument developed by the first author.
These items were obtained from an original group of 47 items by surveying 375 bereaved undergraduate students who had experienced a loss within the last 5 years (Field, 2005, unpublished data). The first author then conducted a factor analysis, forcing a 2 factor structure on the outcome (Field, 2005, unpublished data). Unfortunately, the 47 original items and the statistical analysis were derived from unpublished data so although the present group of 16 items is the most normative continuing bonds survey currently developed, the raw data is unavailable and its construct validity has not been assessed. The names given to the two factors of the 16 item survey, externalized (hallucination/illusion) and internalized (role model/inspirational guide/safe haven) continuing bonds were the names given to the factors used by Field and Filanowski (2010). Field and Filanowski also collected data on cause of death (violent vs. nonviolent), perceived responsibility for the death, attachment style (measured by the Relationship Questionnaire; Bartholomew & Horowitz, 1991), interpersonal closeness (measured by the Inclusion of Other in Self Scale; Aron, Aron, & Smollan, 1992), complicated grief symptoms (measured by the Inventory of Complicated Grief; Prigerson & Jacobs, 2001), perceived physical health (measured by NCHSR items; Stewart, Ware, Brook & Davies-Avery, 1978), and personal growth (as measured by the Posttraumatic Growth Inventory; Tedeschi & Calhoun, 1996).

The authors conducted a path analysis with the hypothesis that external and internal continuing bonds would mediate the relationship between the independent variables (attachment style, cause and responsibility for the death, and interpersonal closeness) and the grief variables (complicated grief symptoms, perceived physical health and post traumatic growth). They found that internalized continuing bond use was a mediator for relationship
closeness to posttraumatic growth (positive direction, fully mediated) and complicated grief (positive direction, partially mediated). In other words, internalized continuing bonds accounted for the effects of relationship closeness on posttraumatic growth and a portion of the effects of relationship closeness on complicated grief. The higher a participant’s reported relationship closeness, the higher their internalized continuing bonds would be, which would then indicate higher levels of posttraumatic growth and more complicated grief symptoms.

Externalized continuing bond use was a mediator for both type of death (positive direction, fully mediated) and responsibility for death (negative direction, partially mediated) to complicated grief (Field & Filanosky, 2010). In other words, externalized continuing bonds accounted for the effects of the type of death on complicated grief, and accounted for a portion of the effects of responsibility for the death on complicated grief. The more violent the loss experienced by the participant, the higher externalized continuing bonds they would report and in turn, report higher levels of complicated grief. In contrast, the less a participant reported feeling responsible for the loss, the lower their reported levels of externalized continuing bonds and thus, the lower levels of complicated grief they reported. Interestingly, attachment style was not significantly related to either continuing bonds type.

However, supporting their attachment theory hypotheses, Field and Filanosky (2010) suggested that because internalized continuing bonds fully mediated the relationship between closeness and posttraumatic growth, this supports the idea that internalized continuing bonds provide a secure base for the bereaved while they experience life without their loved one.

With the sample approximately 86% Caucasian and 84% female, the participant pool is fairly homogenous. This limits the conclusions we can draw about the results of the current study.
generalizing to bereaved individuals from other cultures, suggesting that investigating the effects of continuing bonds with bereaved from more diverse backgrounds. Also, the temporal precedence or timing of continuing bonds relative to complicated grief and post-traumatic growth cannot be established in this study, so the strict definition of a mediator can’t be applied in this case. In addition, for the development of the continuing bonds measure that was used in this study, Field and Filanowsky reported that a two factor structure was forced on the items to generate the internal and external item categories for the their study. This may limit the usefulness of the measure in future studies due to the items being generated for this specific purpose instead of using a more general measure of continuing bonds. For my study I will use the single factor CBS (Field et al., 2003) because it is the measure of choice in the majority of research on continuing bonds. However, it is still important to note that the significant relationship between continuing bonds and complicated grief in the sample suggests further investigation into how these variables interact.

**Continuing Bonds and Culture**

The extent to which individuals use continuing bonds during bereavement appears to be culturally influenced. In other words, how bereaved individuals interact with a deceased loved one differs according to the customs of their culture of origin (Klass & Goss, 1999). Klass (1996, 2001) draws comparisons between the continuing bonds use in the United States and other cultures. The conclusions he drew suggest that use of continuing bonds can be a normal, and in some cases expected, occurrence in the mourning process depending on the culture of the bereaved. A few studies have investigated the different effects on grief of continuing bonds. However, with a few exceptions, these studies have looked at almost
exclusively U.S. ethnicity groups. The field of research into the effects of continuing bonds will remain limited as long as few multicultural investigations have been conducted.

In a U.S. based study, Laurie and Neimeyer (2008) examined differences in the grieving process between African American and White American college students. They surveyed 1581 bereaved undergraduates (59.4% Caucasian, 40.5% African American; 75% female, 25% male) on their use of continuing bonds (CBS, Field et al., 2003), complicated grief symptoms (ICG, Prigerson & Jacobs, 2001), and variables surrounding the death. Participants were recruited over the course of four years from a pool of students taking undergraduate psychology courses. The authors found that, compared to the Caucasian participants, African American participants showed more frequent use of continuing bonds (Caucasian, M = 25.87, SD = 9.57; African American, M = 28.55, SD = 11.34, F[1, 453] = 7.32, p < .01) and greater grief symptoms for the loss of extended kin (beyond the immediate family; relationship x ethnicity interaction, F[2, 884] = 3.12, p = .05). African American participants in the sample also had a lower tendency to talk with others about the loss (Chi Square [4, N = 944] = 39.16, p < .01) or seek professional support (Caucasian, 14.6%, African American, 3.8%; Chi Square [1, N = 1529] = 46.5, p < .01). The authors then tested continuing bonds, ethnicity, cause of death (homicide vs. non-homicide), identity change, use of professional services (counseling), time spent talking about the loss and perceived social support as predictors in a multiply regression analysis. However, the only variable that significantly predicted complicated grief symptoms was ethnicity (B = .07, t = 2.80m p < .01). Considering the impact that continuing bonds had shown on complicated grief symptoms in previous research, Laurie and Neimeyer concluded that these results suggest continuing
bonds may impact complicated grief symptoms differently in the African American community compared to participants from other cultures, suggesting further research. The authors also found an interaction between ethnicity and the amount of time that a participant spent talking about the loss. In this case, African American participants that spent little time talking about the loss would present with higher levels of complicated grief (as measured by the ICG). A strength of this study is the inclusion of a large number of African American participants, allowing a comparison to be done between these participants and the Caucasian participants, revealing significant differences in the ways continuing bonds interact with ethnicity and culture. However, one of the main limitations of this study is the exclusion of participants from other cultures, narrowing the focus of the study but limiting the populations that the results can be generalized to, indicating the need to examine how continuing bonds are used in other cultures.

In a cross national study of the effects of Chinese versus U.S. culture on the (mal)adaptiveness of continuing bonds, Lalande and Bonanno (2006) surveyed 61 recently bereaved U.S. citizens as well as 58 recently bereaved citizens from the Peoples Republic of China (PRC). Participants completed measures on continuing bonds, distress, and grief processing at 4 and 18 months post loss. While participants in the PRC showed significantly higher levels of continued bonds at 4 months compared to the U.S. participants, the difference was not significant at 18 months. Results of multiple regression analyses indicated that increased levels of continuing bonds at 4 months and 18 months were positively predictive of distress at 4 and 18 months, respectively, in both countries. However, for participants from the PRC, levels of continuing bonds at 4 months predicted less distress at
18 months. In contrast, for U.S. participants, levels of continuing bonds at 4 months were positively related to distress at 18 months. In other words, continuing bonds at time one served as a buffer against distress at time two for participants from the PRC, but not for participants from the U.S. For time one grief processing, there was a continuing bonds and culture interaction. Specifically, increased levels of continuing bonds was positively predictive of higher levels of grief processing in both cultures, but significantly more so for the PRC participants. Because of the positive relationship between continuing bonds and grief processing at time one, the authors speculated that the communal nature of the bereavement rituals in the PRC may have increased these participants’ actual or perceived levels of social support. The authors argued that the drop off in intensity of bereavement rituals in the PRC after the first year (and the non-communal nature of bereavement rituals in the United States at either point) explained the time two relationship between continuing bonds and distress. Alternatively, one could argue that the meaning making process that is either searched for, promoted, or found as a result of the bereavement rituals in each culture could also influence the relationship between continuing bonds and grief.

In a qualitative study, Hussein and Oyebode (2009) interviewed 10 Pakistani Muslims residing in the United Kingdom who had lost a loved one in the last one to five years. The authors conducted open question interviews with the participants about how their religion, culture, and family affected their continuing bonds with the loved one. The results revealed that the religious forms of continuing bonds (specific to Islam) included: (a) finishing well, that is being there for the loved one at the time of death and (b) performing actions thought to help the deceased in the afterlife. Cultural forms of continuing bonds (specific to Pakistanis)
included following the deceased’s example, talking about the deceased with others, and showing saddened emotion to the community around the time of the deceased’s funeral. It appears that the majority of the participants (this was a finding of the authors but the data were never presented in a summary form for the reader) found these forms of continuing bonds positive and were able to derive meaning from their practice. However, some participants cited a negative experience when they felt cultural expectations ran contrary to their personal feelings about their mourning process. Hussein and Oyebode cited this as evidence of the effect of degree of cultural assimilation from the participant’s culture of origin (Pakistan) to the culture of their current residence (United Kingdom), further emphasizing culture’s effect on expectations for the mourning process and the emotions of grief.

The relationships among culture, continuing bonds, and grief raise important questions for how these variables interact. While many theorists have conceptualized the effects of continuing bonds as acting only through the attachment system (e.g., Stroebe et al., 2010), the effects of culture on continuing bonds influence on grief suggest that further investigation into this area could yield valuable findings to the bereavement literature. Findings indicate that continuing bonds may have different effects on bereavement outcomes depending on the culture of the bereaved (Lalande & Bonanno, 2006; Laurie & Neimeyer, 2008). Lalande and Bonanno suggested these effects may be due to differences in perceived social support related to the specific bereavement rituals that vary amongst cultures. However, culture may also have an effect on continuing bonds influence on grief through the meaning that can be associated with the bonds.
Continuing Bonds and Meaning Making

As was mentioned earlier, Park (2010) theorized that an individual’s adaptive and maladaptive coping in response to bereavement may depend on the amount of meaning they are able to make from their loss. The concept of meaning-making has been further divided by some theorists into the aspects of sense-making and benefit-finding, which describe any understanding that bereaved individuals are able to take from the loss and any ‘silver linings’ they may find in the loss respectively (Gilles & Neimeyer, 2006).

Meaning Making

In an extensive review of the meaning-making literature, Park (2010) described the process of meaning making by first establishing the existence of a global meaning structure. This structure is unique to each individual and encompasses her/his beliefs about the world (eg., fairness, justice, religion) and the self (eg., purpose, place in the world, significance), as well as personal goals. Park also described the existence of appraised meaning or the meaning an individual assigns to a given occurrence or event. In the case of bereavement, appraised meaning might include the bereaved individuals’ thoughts about why the loss occurred, if it could have been prevented, and how the loss affects their future. On the occasions where there is a discrepancy between the global meaning and appraised meaning, the individual experiences distress. In order to relieve this distress, individuals engage in active meaning making to reconcile the differences between global and appraised meaning, thereby reducing the distress they experience. To accomplish this, individuals engage in either assimilation or accommodation. In assimilation, appraised meaning that is discrepant from global meaning is made to fit in line with the preexisting global information.
Accommodation involves the changing of the preexisting global meaning to become more in line with the appraised meaning of the event, or in the case of a bereaved individual, the loss of a loved one. The results of both the assimilation and accommodation processes are the meanings that are made for a particular event.

Gilles and Neimeyer (2006) used constructivist theory to propose a more specific model of meaning making reconstruction. They proposed that the meaning making process occurs via three specific pathways: sense making, benefit finding, and identity change. According to the authors, sense making refers to bereaved individuals’ attempt to question, search for, and find sense in their grief experience. Some questions asked by individuals involved in sense making might include why the death occurred, why it was their loved one that died, what the loss means in context to the life they had been living, and how their grieving emotions fit with their bereavement experience. According to Gilles and Neimeyer, benefit finding involves the process of the bereaved discovering some positive aspect of their life that would not have occurred without the loss, such as an improved perspective or learning something new about themselves. Identity change refers to the process bereaved individuals experience involving some degree of personal transformation, such as increased empathy, resilience or independence as a result of their loss. Through these three processes, Gilles and Neimeyer proposed that individuals accomplish assimilation or accommodation and, thereby, reduce the distress brought up by the perceived differences between their global meaning structures and the appraised meaning of the loss.

In an investigation of the meaning making processes of bereaved parents, Keesee, Currier, and Neimeyer (2008) conducted a study of 157 parents who had lost a child at some
point in their past (81% female, 19% male; 93% Caucasian, 4% African American, 3%
Hispanic/Latino/biracial). The participants completed the Core Bereavement Items (to assess
normalized grief symptoms), the Inventory of Complicated Grief (to assess complicated grief
symptoms), items assessing the level of sense-making (how much sense the participant made
from the experience), and benefit-finding engaged in (whether the participant was able to
find any benefit from the experience), as well as items concerning the circumstances of the
loss (time since loss, age of child at death, and violent or expected death). Using a
hierarchical regression analysis, the authors found that the participants’ reported use of
sense-making significantly predicted both normalized grief symptoms (as measured by the
CBI; \(B = -0.19, p < .05, \text{sr-squared} = .10\)) and complicated grief symptoms (as measured by
the ICG, \(B = -0.30, p < .05, \text{sr-squared} = .15\)) above what was predicted by the circumstances
surrounding the death. In other words, the participants’ use of sense-making accounted for
more variance in normalized and complicated grief than the time elapsed since the loss
occurred or the cause of death (violent vs. expected). Interestingly, benefit-finding was only a
significant predictor of participants’ complicated grief symptoms, however, the authors
suggested that this may be due to participants’ misunderstanding or being offended by the
item inquiring about any benefits they may have found from the loss of their child.

One strength of Keesee et al.’s study is the inclusion of a wide range of the
participants’ ages, the time since loss, and age of the child at death. While only time since the
loss was a significant contributor to the prediction of CBI scores and none of them were
significant contributors to the prediction of ICG scores, the variables inclusion improves the
strength of the study by examining the potential contribution of the objective variables
surrounding the death. Limitations of this study include the instrumentation and the sample itself. Like the previous study, only a single item was used to assess sense-making and benefit-finding. Again, a more developed instrument might improve the accuracy of the measurement of the underlying variables of interest and strengthen the study. In addition, the low diversity of the sample (93% Caucasian and 81% female) limits the generalizability of the results to more diverse populations. However, the fact that increased levels of both sense-making and benefit-finding predicted lower levels of complicated grief suggests these two meaning making activities may help bereaved individuals cope with their grief in an adaptive way.

Currier, Holland and Neimeyer (2006) tested a meditational model of the role of sense-making on violent loss to complicated grief symptoms. They surveyed 1056 undergraduates (75% female, 25% male; 56% Caucasian, 38.4% African American, 1.5% Asian, 4% other) from introductory psychology courses that had reported the death of a friend or loved one within the previous two years. Participants completed the Inventory of Complicated Grief (ICG; Prigerson & Jacobs, 2001), questions about the cause of death (homicide, suicide, accident or natural causes), expectedness (anticipated or sudden), and a single item about sense-making (‘How much sense would you say you have made of the loss?’ 1 – no sense, 4 - a good deal of sense). Currier et al. (2006) used hierarchical regression to test four hypotheses on the meditational role of sense-making on loss to complicated grief: (a)that sense-making would be a mediator between cause of death (homicide, suicide, or accident vs. anticipated or sudden natural) and complicated grief symptoms; (b) sense-making would mediate between the cause of sudden deaths (homicide,
suicide, or accident vs. sudden natural deaths only) and complicated grief symptoms; (c) sense-making would mediate between volition of violent death (homicide and suicide vs. accident) and complicated grief symptoms; (d) sense-making would mediate between type of volitional death (homicide vs. suicide) and complicated grief symptoms. Significant results were found for hypothesis 1 (sobel test, $z = 8.46$, $p < .001$), indicating that sense-making was a partial mediator between violent vs. nonviolent death to complicated grief symptoms. Significant results were also found for hypothesis 2 (sobel test, $z = 5.87$, $p < .001$), indicating that sense-making fully mediated the relationship between violent vs. sudden nonviolent death to complicated grief symptoms. In other words, the amount of sense that a participant reported partially accounted for the relationship between violent vs. nonviolent (sudden or anticipated) death to complicated grief symptoms, and fully accounted for the relationship between violent death vs. sudden nonviolent death to complicated grief symptoms. The more sense a participant was able to make about a loss, the lower the amount of complicated grief symptoms they reported. Volition of violent death (homicide and suicide vs. accident) and type of volition in violent death (homicide vs. suicide) did not significantly predict complicated grief, so no mediation analysis was conducted with these variables.

Limitations of Currier et al.’s (2006) study include operationalizing the variable of sense-making with a single item. While often done in past studies in the meaning-making field, using a single item measure reduces the chance of detecting variability in the sample regarding what participants might consider sense-making. A more developed scale might detect these differences better. However, the large number of African American participants included in the study increases its generalizability to a more diverse population. In addition,
Currier et al.’s (2006) demonstration of the predictive effects of a meaning-making variable, specifically sense-making, on bereaved participants’ experience of complicated grief following a violent loss indicates the potential importance of this variable to grief outcomes.

Considering the results of recent studies (e.g., Keesee et al., 2008; Currier et al., 2006), the influence of meaning-making on other bereavement variables (e.g., violence and suddenness of the death, time elapsed since the death) effects on complicated grief symptoms may warrant further investigation. In other words, the potential of meaning making to influence the effects of variables such as violence of the death on complicated grief symptoms indicates that meaning making may influence the effects of continuing bonds on complicated grief symptoms as well. The results of Keesee et al. and Currier et al. suggested that the effects of bereaved individuals’ benefit-finding and sense-making in particular on complicated grief symptoms have the potential to provide further insight into how meaning-making influences the bereavement experience. Of particular interest in this study is how continuing bonds affects complicated grief symptoms in the presence of meaning-making.

**Continuing Bonds and Meaning Making**

Some research has already been conducted on the interactive effects of continuing bonds and meaning making, with promising results. For example, Neimeyer, Balldwin, and Gillies (2006) surveyed 506 undergraduates (76.5% female, 23.5% male; 57.9% Caucasian, 36.9% African American) who had experienced a significant loss within the last 2 years. Participants completed measures of continuing bonds (Continuing Bonds Scale; Field et al., 2003), complicated grief (Inventory of Complicated Grief; Prigerson & Jacobs, 2001), as well as individual items about any meaning making that may have occurred, specifically
personal identity change (positive or negative), benefit finding, and finding meaning in the loss. Information about the circumstances of the loss was also collected including strength of the participants’ relationship with the deceased, time elapsed since death, expectedness of the loss, presence of support, and participation in counseling. The authors conducted hierarchical regressions and found a significant main effect for continuing bonds (in the positive direction) and the meaning making items (in the negative direction) in predicting complicated grief symptoms. In other words, the higher a participant’s reported use of continuing bonds, the higher their complicated grief symptoms were predicted to be as measured by the ICG. In addition, the more sense made, benefit finding and identity change (positive change only) a participant reported, the lower their complicated grief symptoms were predicted to be on the ICG. Interestingly, an interaction was also found between continuing bonds and one of the meaning making variables, specifically the amount of sense made item. Higher levels of continuing bonds indicated greater levels of complicated grief, but only when a participant was unable to make sense of the loss. These results provide support for the effects of meaning making on the (mal)adaptiveness of grief as well as meaning makings interactive effects with continuing bonds.

One limitation with this study includes the measures they used to assess the variables of interest. The 11-item version of the CBS developed by Field, Gal-Oz, and Bonanno (2003) was developed specifically for that study and no normative data was provided. Although it represents the most commonly used measure of continuing bonds, due to the lack of normative data, we can draw limited conclusions about its generalizability. Despite this limitation, the 11-item version of the CBS has shown good internal consistency (Chronbach’s
alpha = .87) and it was shown to correlate positively with ratings of satisfaction with the
spousal relationship and correlate negatively with ratings of blame in the spousal
relationship. In addition, although single item measures of meaning making have
traditionally been used in the past, a more standardized measure could provide a more
accurate representation of participants’ meaning making efforts. Another limitation of the
study concerns the sample Neimeyer, et al. (2006) used. The large majority of the sample in
the present study was female (76.5%) and only 5% of the sample represented ethnicities
other than Caucasian (57.9%) or African American (36.9%). While the results provide
evidence for the effects of continuing bonds and meaning making on complicated grief, we
can only generalized these results to other bereaved individuals from cultural groups that
were represented. Investigation of these effects with groups from other cultural backgrounds
seems warranted. The results of this study demonstrate the quantitative interaction between
continuing bonds and meaning making, however, qualitative studies have also shown support
for the relationship between these two variables.

One qualitative study that explored complicated grief was Ronen, Packman, and Field
(2009) describe the cases of six bereaved participants who have lost children. Three were
described as being in the non-complicated grief group (low scores on the Inventory of
Complicated Grief) and three were in the complicated grief group (high scores on the
Inventory of Complicated Grief). In addition to the ICG, all six participants completed the
Continuing Bonds Interview (CBI; a semi-structured interview) and two projective drawings
depicting their emotions about their deceased child. The results suggested that parents in the
non-complicated grief group not only had projective drawings that were (according to an
expert rater) deemed more adaptive compared to the drawings of parents in the complicated grief group, but their responses to the CBI indicate that they were more able to see their deceased child as a positive influence on their current lives as well as internalize positive qualities of the child. The authors interpret these results as supporting the meaning making theories of Neimeyer (2000) because of the positive benefits that parents in the non-complicated grief group were able to find in their bereavement.

Chan et al. (2005) also conducted a qualitative study to determine the meaning made and continuing bonds used by 52 bereaved individuals in a Hong Kong counseling center. Sessions were transcribed and analyzed for subthemes of meaning made by the participants (cause of death, observations at the moment of death, life of the deceased after death, life of the bereaved after the loss, and the rituals used) as well as subthemes of continuing bonds (continuing bonds initiated by the deceased or initiated by the bereaved). The authors found that regardless of whether the bond was initiated by the deceased or by the bereaved, the large majority of participants that reported using continuing bonds viewed them as a positive experience. The authors draw the conclusion that various forms of continuing bonds are traditional in Chinese culture and provided a sense of meaning and comfort for the bereaved.

These results reflect, both qualitatively and quantitatively, that an interaction between continuing bonds and meaning making is a strong possibility. The results of Neimeyer et al. (2006) are of particular interest to this study because of the interaction effects meaning had with the effects of continuing bonds on complicated grief. The moderating effect of meaning on the relationship between continuing bonds and complicated grief suggests that meaning could be a variable of particular interest in this field of study.
Culture and Bereavement

Culture has the potential to affect multiple aspects of the bereavement process. In this section I will describe findings related to culture, bereavement traditions, the inclusion of Continuing Bonds in these traditions, and how this inclusion can influence meaning making. I will mainly address Asian cultures in the present study.

Culture, Ritual, and Meaning Making

In addition to the situational factors discussed in the previous section that may affect any meaning made during bereavement, the cultural of origin of the bereaved individual should be considered to understand the cultural context of the bereavement (Klass & Goss, 2003). Braun and Nichols (1997) conducted qualitative interviews with individuals from four different cultures (Chinese, Japanese, Vietnamese, and Filipino) about bereavement topics including grieving, the process of dying, suicide, euthanasia, advanced directives (living wills and resuscitation orders), and organ donation. The authors interviewed two key informants (a religious leader and a bilingual health or social services worker in all cases) as well as between 5 to 8 focus group members from each group about the above topics.

Participants in the study reported Confucian, Taoist, Catholic and Buddhist influences in their cultural traditions regarding death. Specific burial customs reported by participants included burning symbolic paper money, paper cars and/or paper servants so that their dead loved one would be taken care of in the afterlife (Chinese), and placing coffee, tea, rice, gold (Vietnamese), and personal belongings (Filipino) inside the casket with the deceased. Participants also reported memorial customs that included performing prayer rituals every seven days for seven weeks after the funeral to benefit the deceased one’s soul (Chinese,
Japanese, and Vietnamese), as well as holding memorial services after 100 days, 1 year, 3 years, 7 years (Japanese and Vietnamese) and 40 days (Filipino). The observance of an annual traditional day or season, Ching Ming (Chinese), Oban (Japanese), and Thanh Minh/Vu Lan (Vietnamese) was also reported, where individuals honor their ancestors by making offerings of incense or food. Participants also reported an extended and prescribed time of mourning for the deceased depending on their relationship to the bereaved that may last for years (Filipino and Chinese; Braun & Nichols, 1997).

According to the results of Braun and Nichols (1997), some customs indicate that bereaved individuals should not participate in any form of public entertainment such as parties or celebrations for 100 days (Chinese) or one year (Filipino). Some participants reported that their cultural tradition also includes the existence of ghosts: hungry ghosts that may harass the living and family ghosts which are not necessarily negative. Instead, participants reported that according to tradition, the spirit of a recently deceased family member will return three days after their death to say goodbye to their loved ones and family members lay out the deceased’s favorite food, books, etc. to welcome them (Chinese). Other participants reported speaking to the deceased through the use of a medium (Filipino). Braun and Nichols findings suggest that bereavement traditions from each of the participant cultures may support the idea of a continuing bond with the deceased loved one. Although their findings do not address the specifics of maintaining emotional connections with the deceased, the idea of cutting off ties to the deceased, or decathexis, does not seem to exist in the bereavement traditions studied according to Braun and Nichols as it did in the Western tradition of Freud (1957).
Limitations of this study include lack of a description of more specific behaviors. For example, although time periods for mourning were given by the Chinese participants (1 year for a spouse, 3 years for a parent or child), few specifics were provided on how a bereaved individual’s behavior should differ during this period versus a non-mourning period. A potential strength of the study is its inclusion of participants from multiple cultural backgrounds, providing a cross section of cultural differences in bereavement rituals. Braun and Nichols (1997) reported that although all the Filipino participants reported Catholicism as their religion, Buddhism was represented among the participants from the Chinese, Japanese, and Vietnamese cultures. The various differences that were reported between the bereavement rituals of these cultures, despite their common religion, seems to support the idea that these rituals are influenced by the context of the culture in which they occur. Another strength of the study includes its translation of its findings into suggestions for health care professionals to better serve patients/clients from the populations represented in the present study.

While Braun and Nichols (1997) describe some of the specific traditions that may facilitate the use of Continuing Bonds, other studies have explored specific uses of the bonds. In a qualitative study on the cultural effects of grief, Hsu, Kahn, Yee, and Lee (2004) interviewed 52 Taiwanese widows (27-80 years old) and 30 of their children (9-18 years old, 18 female, 12 male) on how they coped with the loss of their husbands and fathers. Participants were asked open ended questions about their loss (e.g. Would you like to tell me anything important about your life since you became a widow? Would you please tell me the story of your father’s death?) and the interviews were transcribed and analyzed for their
thematic content. Utilizing a constructivist perspective, Hsu et al. (2004) described the cultural meaning that widows and their children search for after the death of a husband/father and the ways this meaning helps them adapt to their loss. Tradition holds that a complete family consists of a father, a mother, and a child, but that wives are restricted to “one man per lifetime” (Hsu, 1998). Hsu et al. (2004) described the Chinese cultural concept of wholeness, or yuan-man, as an ultimate life goal. However, one of the conditions of this wholeness is being a part of a complete family, or a father, mother, and a child. Combined with the taboo of a widow remarrying, this condition makes the goal of wholeness a difficult one for widows and their children to achieve.

However, Hsu et al. (2004) described three themes that occurred in their interviews that participants seemed to use to achieve a sense of wholeness and reconstruct meaning in their lives: attempts to maintain the status quo; restoring images of the deceased; and communicating with the deceased. By maintaining the status quo, widows and their children attempt to maintain their lives to resemble life as close as possible to how they were prior to the loss of their husband or father. This may include things such as a mother performing various tasks the father used to perform in a way that closely approximates how he used to perform that particular task. One example given was of a widow cooking her child the same breakfast the father used to make. The purpose of maintaining the status quo was to ensure that the deceased husband and father was not forgotten and to make daily life feel like it used to prior to the death. Restoring images of the deceased, in the context of this study, does not necessarily refer to a literal pictographic image of the deceased, but instead, can refer to the memory of his presence. For example, one 15 year old male participant reported that his
grandfather would invoke the image of the boy’s dead father to encourage him to study hard and do well in his school work. With the cultural tradition of belief in family spirits, restoring the deceased’s image is done so that they can continue to serve as an object of connection with the living. Communicating with the deceased was a theme that referred to direct contact by the participants to the deceased either through folk traditions or mainstream religion. This often takes the form of talking directly to the deceased (eg., through speaking to a symbolic representation like a shrine or photograph or simple prayer) to ask for guidance or discuss important issues. Hua and colleagues suggested that this communication is a way to reduce anxiety in the widows and children and make them feel like they are still members of a complete family.

There are some limitations of Hua et al.’s (2004) study that might be important to consider, including the demographics of the population and the narrow scope of the deceased. Although representing a wide range of ages (widows 27-80, 9-18 for the children), all of the participants in this study come from the same region, Taiwan. While still representative of Chinese culture, the results may not be generalizable beyond the population of this particular region. In addition, all cases of bereavement involved the loss of a husband or a father so data from this study represents the efforts to find wholeness of only widows and their children but does not examine the effects of similar loss on widowers. There is the potential that Taiwanese widowers do not experience similar cultural restrictions concerning remarriage and so their attempts to find meaning through wholeness after a loss may appear different than those themes represented in the present study. However, within Taiwan, the participants do represent a wide range of backgrounds (rural vs. urban) and loss types
(accident, suicide, illness). The data provide us with an intimate look at how bereaved individuals from Taiwan use continuing bonds (in the form of maintaining the status quo, restoring the image of the deceased, and communicating with the deceased) to search for meaning after the loss of a loved one.

Clearly the influence of culture on the use of continuing bonds and to a further extent, the meaning that is attributed to these bonds, is an important one. For example, Braun and Nichols (1997) describe beliefs about communicating with deceased spirits. While these beliefs may seem strange or even delusional to bereavement experience from a western view, it may be a perfectly acceptable experience of Chinese bereavement. Furthermore, contrary to the traditional Freudian (1957) view (which was developed in an individualistic culture), the widows and children in the Hua et al. study (individuals from a more collectivistic culture) found sources of meaning in the continuing bonds they maintained with their deceased loved ones. This seeming contradiction leads us to suspect that how meaning is found in bereavement may depend on the global meaning structures which are influenced by a cultural context. The potential exists that meaning is more likely promoted through a continuing bond in a collectivistic context than in an individualistic context.

**Collectivism and Bereavement**

Given the cultural effects on differences in meaning making following the death of a loved one, it could prove useful to future research to investigate precisely what cultural factor or factors influence these differences in meaning making. Considering the research just reviewed, the degree an individual ascribes to collectivistic values is a likely candidate for consideration. According to Oyserman, Coon, and Kemelmeier (2002), the core of
collectivism is an assumption that an individual is bound and obligated to the groups to which they belong. Theoretically, multiple social and psychological consequences may stem from this assumption, such as an increased feeling of trust in one’s in-group members as well as valuing group harmony over personal accomplishment. Oyserman, et al. (2002) conducted a meta-analysis of 170 studies that looked at the psychological influence of collectivism and individualism, particularly on the factors of well-being, self-concept, and relationality.

Summarizing studies on collectivism and well-being, the authors cited results that suggest collectivism may have some influence on level of depression. Specifically, the authors cited study results that suggest lower levels of perceived personal control were associated with higher levels of depression in European Americans (who were presumed to have higher levels of individualism and lower levels of collectivism) while perceived personal control was unrelated to levels of depression in Asian Americans. In addition, other study results suggest collectivism has a moderating effect between the experience of daily hassles and subsequent depression (Oyserman et al., 2002). Findings from studies examining collectivism and self-concept suggest that individuals with higher levels of collectivism define themselves more by their group membership than by individual traits. Specifically, when choosing descriptors for themselves, European American undergraduates used more personal trait descriptors and fewer social role descriptors than Asian Americans, Chinese, Indians, and Koreans. Other findings suggest that among European, Korean, and Chinese Americans, levels of collectivism correlated more strongly with social identity (Oyserman, et al. 2002). Finally, study findings investigating collectivism and relationality suggest that individuals higher in collectivism may see responsibility to their group as a matter of
obligation instead of a matter of choice. These findings on collectivisms effects on factors such as well-being, self-concept, and relationality suggest collectivism may have the potential to moderate continuing bonds effects on Complicated Grief. However, reviewing these studies it appears that many studies simply compared participants of different nationalities which were assumed to differ in collectivism (e.g., Americans and Chinese) without actually measuring levels of collectivism of the participants, in effect substituting nationality for a direct assessment of collectivism. This method of assuming levels of collectivism to exist in an expected relationship between two sample countries may limit the conclusions we can draw from these studies. In addition, few studies included in Oyserman et al., (2002) review used identical methods of measuring collectivism, making comparison of results between these studies difficult.

In a content analysis of previous collectivism-individualism scales, Brewer and Chen (2007) divided collectivism further into relational collectivism and group collectivism. Relational collectivism refers to the connection an individual feels for their network of close others (e.g. family, friends, community). Relational collectivism involves a person’s connections with others that are on a one-to-one basis. Group collectivism refers to the connection an individual has with a large scale group that does not involve one-to-one relationships to others, but instead emphasizes one’s connection to a more symbolic group (e.g. nation or religion). Brewer and Chen also make the argument that individualism, relational collectivism and group collectivism each have locus of identity, locus of agency, and locus of obligation components. These components describe the philosophy of self-representation, beliefs about the origin of action/achievement, and focus of values
respectively for each individualism/collectivism category. Drawing from Rogers’ concepts of real and ideal selves (Rogers, 1951), Brewer and Chen theorize that the locus of obligation, or where an individual focuses their sense of duty and their values (e.g. duty to themselves, duty to their close others, or duty to a larger group) can influence well-being through any perceived discrepancy between one’s real and ideal self. In other words, any perceived difference between an individual’s real self and the ideal self (which is presumably based on the values of their locus of obligation) has the potential to affect their well-being (Brewer & Chen, 2007).

Due to the interpersonal nature of losing a love one, Brewer and Chen’s (2007) theory is helpful for the present study because it implicates how collectivism, specifically relational collectivism, may influence continuing bond use. If an individual’s well-being is influenced by discrepancy between the real and ideal selves, an individual from a culture that places a high value on relational collectivism may be motivated to find greater meaning through continuing bonds with a lost loved one (i.e., highly valuing close others, thus providing real/ideal congruence) compared to an individual from a culture with low relational collectivism (i.e., placing less value on duty to close others).

**Purpose of the Present Study**

Investigations into the effects of continuing bonds on grief are still in their infancy. Despite the mixed results that have been reported on their adaptiveness or maladaptiveness for bereaved individuals (e.g., Field et al. 1999; Field et al. 2003; Lalande & Bonanno, 2006), several factors exist that may provide insight into how continuing bonds influence grief or even who may benefit most from the use of continuing bonds (Field & Filanowsky, 2010;
Klass, 2006). Research in the field of meaning-making has provided interesting results (Park, 2010). Research indicates that the meaning that individuals are able to find after bereavement, particularly in the form of sense-making and benefit-finding, has the potential to influence their grief reactions to bereavement. In the instance of Keesee et al., parents who had lost a child but were able to report making sense of the loss reported fewer complicated grief symptoms than parents who were unable to make sense of their loss experience (Keesee et al., 2008). Continuing bonds, in the presence of meaning-making, may have a positive influence on grief during bereavement. In other words, the grief that individuals experience when they use continuing bonds may vary depending on the meaning they are able to make from those bonds. For example, in Neimeyer et al. participants who reported higher levels of continuing bonds also reported higher levels of complicated grief symptoms, except when they were also able to report sense making from their experience (Neimeyer et al., 2006). In addition, the bereaved person’s culture may influence how the use of continuing bonds is perceived or promoted, which may influence any meaning made from the use of those continuing bonds, and in turn may reduce the complicated grief symptoms she/he experiences (e.g., Lalande & Bonanno, 2006). One cultural factor that has the potential to influence how continuing bonds are perceived by people from a particular culture is their level of collectivism (Oyserman et al., 2002, Laurie & Neimeyer, 2008), specifically their level of relational collectivism (Brewer & Chen, 2007). Investigation into the influence of meaning-making, culture, and relational collectivism could prove beneficial to the understanding of continuing bonds effects on complicated grief symptoms, specifically, amongst bereaved adults with a diverse range of collectivism and culture.
In summary, I hypothesize that:

(1) Meaning making will mediate the relationship between continuing bonds and complicated grief symptoms such that participants reporting higher levels of meaning making will report lower levels of complicated grief symptoms and participants reporting lower levels of meaning making will report higher levels of complicated grief symptoms.

(2) Relational collectivism will moderate the relationship between continuing bonds and meaning making such that continuing bonds will have a negative relationship with meaning making except when a participant reports higher levels of relational collectivism, in which case the relationship between continuing bonds and meaning making will be positive.

Figure 1. Model of the Predicted Moderated Mediation
CHAPTER 3

METHODS

Participants

Participants in the current study were individuals, who had “experienced the death of a human love one” and who also were at least 18 years of age with English as their first language. A total of 184 participants participated in the study, but due to outliers ($n = 9$) and incomplete data ($n = 17$), the sample was reduced to 157. Of the 157 participants, 130 (82.9%) were female, 26 (16.5%) male, and 1 did not report. The participants ranged in age from 21 to 63 years ($M = 32.4$, $SD = 9.65$). Participants were asked to rate the level of closeness to their lost loved ones ranged from 1 (extremely close) to 5 (not close at all; $M = 1.8$, $SD = 0.94$). Time elapsed since the loss ranged from 0-25 years ($M = 6.11$, $SD = 6.10$). Data about race/ethnicity (table 1), religious affiliation (table 2), type of death reported (table 3), and relationship to the deceased (table 4) was also collected.
Table 1

*Race and Ethnicity of the Sample*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>9</td>
<td>5.7</td>
</tr>
<tr>
<td>African American</td>
<td>9</td>
<td>5.7</td>
</tr>
<tr>
<td>Caucasian</td>
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<td>79.7</td>
</tr>
<tr>
<td>Hispanic</td>
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<td>2.5</td>
</tr>
<tr>
<td>Native American</td>
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<td>4.4</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>2</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Table 2

*Religious Affiliation of the Sample*

<table>
<thead>
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<th>Religion</th>
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<th>Percentage</th>
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</thead>
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<td>63.1</td>
</tr>
<tr>
<td>Buddhist</td>
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</tr>
<tr>
<td>Jewish</td>
<td>4</td>
<td>2.5</td>
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<td>Islam</td>
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<td>0.6</td>
</tr>
<tr>
<td>Not reported</td>
<td>47</td>
<td>29.9</td>
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Table 3

*Type of Death Reported*

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</tr>
</thead>
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<td>Natural, expected</td>
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<td>45.9</td>
</tr>
<tr>
<td>Natural, unexpected</td>
<td>53</td>
<td>33.8</td>
</tr>
<tr>
<td>Accident</td>
<td>14</td>
<td>8.9</td>
</tr>
<tr>
<td>Suicide</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Homicide</td>
<td>3</td>
<td>1.9</td>
</tr>
<tr>
<td>Not reported</td>
<td>4</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Table 4

*Relationship to the Deceased*

<table>
<thead>
<tr>
<th>Type</th>
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<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grandmother</td>
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<td>15.2</td>
</tr>
<tr>
<td>Grandfather</td>
<td>23</td>
<td>14.6</td>
</tr>
<tr>
<td>Mother</td>
<td>21</td>
<td>13.3</td>
</tr>
<tr>
<td>Father</td>
<td>18</td>
<td>11.4</td>
</tr>
<tr>
<td>Friend</td>
<td>14</td>
<td>8.9</td>
</tr>
<tr>
<td>Aunt</td>
<td>9</td>
<td>5.7</td>
</tr>
<tr>
<td>Child</td>
<td>8</td>
<td>5.1</td>
</tr>
</tbody>
</table>
Table 4 Continued

<table>
<thead>
<tr>
<th>Type</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brother</td>
<td>7</td>
<td>4.4</td>
</tr>
<tr>
<td>Uncle</td>
<td>5</td>
<td>3.2</td>
</tr>
<tr>
<td>Grandchild</td>
<td>5</td>
<td>3.2</td>
</tr>
<tr>
<td>Sister</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Cousin</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Significant other</td>
<td>3</td>
<td>1.9</td>
</tr>
</tbody>
</table>

**Measures**

**Demographics**

The participants were asked to complete several items assessing age, gender, ethnicity, relationship to the deceased, closeness to the deceased, type of death (homicide, suicide, accident, sudden or expected natural death), any religious affiliation, and time since the loss. Examples of an expected natural death might include cancer or another terminal illness. Unexpected natural deaths include such things as heart attack or stroke. Closeness to the deceased was assessed because some bereavement studies (Hardison, Neimeyer, & Lichstein, 2005; Laurie & Neimeyer, 2008) have found that, although participants may identify the deceased as an immediate family member (e.g., a father or husband), subsequent responses revealed that the participants’ relationship with the deceased at the time of death may not have been particularly strong for various reasons (e.g. estrangement or divorce).
Lower scores on the closeness item indicate the participants were closer to the deceased, higher scores indicate participants were less close to the deceased.

**Meaning Making**

The Inventory of Stressful Life Events Scale (ISLES; Holland, Currier, Coleman, & Neimeyer, 2010) was used to measure the amount of meaning an individual makes following a stressful event. The ISLES consists of 16 statements with Likert-type responses ranging from 1-strongly disagree to 5-strongly agree. Responses are totaled with higher scores indicating greater meaning made from the stressful event in question. Exploratory and confirmatory factor analyses of the ISLES was conducted with a sample that had experienced a stressful event (e.g., loss of a relationship, financial problems, trouble at school) within the last two years ($n = 178$) as well as a sample that had experienced bereavement in the last two years ($n = 150$). The ISLES is a made up of two subscales, Comprehensibility, measuring the sense one makes from the stressful event, and Footing In the World, measuring one’s sense of purpose or security since the event. However, for the purposes of the current study, only the total scale score was used. Good internal consistency for the full scale in the general stress and bereaved samples has been reported, with Chronbach’s alpha of .92 and .94 respectively (Holland et al., 2010). Three month test-retest reliability for full scale ISLES scores were .57 ($p < .001$) and .57 ($p < .001$) in the general stress and bereaved samples respectively (Holland et al., 2010). Evidence of construct validity is supported with ISLES scores being strongly associated with the traditional single item sense-making measure ($r = .40, p < .001$) and the World Assumptions Scale (WAS-Benevolence, $r = .25, p < .01$; WAS-Self Worth, $r = .36, p < .001$; Holland et al., 2010).
To examine the internal structure of the scale in the current sample, a principle component analysis using varimax rotation revealed three significant factors accounting for 57.52% of the variance. These findings are slightly different than the two factor structure demonstrated by Holland et al. (2010). The first two factors in the current sample accounted for 48.40% of the variance, with the remaining 9.12% of the variance accounted for by the third factor. Interestingly, eleven items loaded on factor one, including six crossloading items, ten items loaded on factor two, including seven crossloading items, and four items loaded on factor three, including three crossloading items. Results of a factor analysis forcing a single factor only accounted for 40% of the variance. Despite the factor structure of the ISLES being different than predicted by Holland et al. (2010), the Chronbach’s alpha for the current sample was good (.88), indicating the ISLES measured a consistent underlying construct.

**Continuing Bonds**

The Continuing Bonds Scale (CBS; Field et al., 2003) is an 11 item Likert-type self-report scale that measures the degree to which bereaved individuals maintain a connection with a deceased spouse. Sample items include “I am aware of the positive influence of my spouse on who I am today” and “I have inner conversations with my spouse where I turn to him or her for comfort or advice”. The items in the original version were worded to assess the participant’s continuing bonds with a spouse, however, they were re-worded in the current study to assess a broader range of deceased loved ones similarly to Neimeyer et al. (2006); Lalande and Bonanno, (2006). Responses to the 11 statements range from 1 (not true at all) to 5 (very true) and the average score for all items is calculated, with higher scores
indicating a higher degree of connectedness with the deceased. The scale has demonstrated
good internal consistency with Chronbach’s alpha of .87 as well as being positively related to
ratings of satisfaction in the relationship and negatively related to ratings of blame in the
relationship (Field et al., 2003). Chronbach’s alpha for the current sample was .87. A
principal component analysis was conducted for the CBS in the current sample. A three
factor structure was supported, accounting for 66% of the variance. Results of a factor
analysis forcing a single factor only accounted for 45% of the variance. Field et al. (2003) did
not publish a factor analysis of the 11 item CBS so it cannot be determined if the factor
structure found for the current sample differs from the authors’ sample.

Complicated Grief

The Inventory of Complicated Grief – Revised (ICG-R; Prigerson & Jacobs, 2001) is
a 30-item Likert-type scale that assesses the degree to which a participant is experiencing
complicated grief symptoms. Items assess such symptoms as feelings of purposelessness,
numbness, irritability, loneliness since the death, and intrusive thoughts about the deceased.
The ICG-R provides both a continuous score and a diagnostic “case-ness” scoring criteria.
For purposes of the present study, continuous scores were used to explore symptom severity
on a continuum instead of only evaluating results on the dichotomy of meeting or not
meeting criteria for “case-ness” of complicated grief. Participants respond to statements (e.g.,
“I feel like I have trouble accepting the death”) on a scale of 1 to 5 depending on their
severity, with higher scores indicating more severe complicated grief symptoms (Prigerson,
et al., 1999). Strong internal consistency for the ICG-R is reported, with a Chronbach’s alpha
of .95. In addition, evidence of convergent validity is supported via strong relationships

A principal component analysis was conducted for the current sample. This analysis yielded seven factors accounting for 63.68% of the variance in the current sample. This finding is different from the single factor that the ICG-R was reported to have by Prigerson and Jacobs (2001). Results of a factor analysis forcing a single factor only accounted for 33% of the variance of the current sample, with one item failing to load more than .3 on this factor. However given that the ICG-R contains 30 items, the size of the current sample ($n = 157$) does not provide sufficient power for a factor analysis of a 30 item scale, suggesting that results of this factor analysis should be interpreted with caution. Chronbach’s alpha for the current sample was good (.92) suggesting that the ICG-R measured a consistent underlying construct.

**Collectivism**

The Relational, Individual, and Collective Self Scale (RIC; Kashima & Hardie, 2000) is a 30-item Likert-type measure that assesses participants’ endorsements of individualistic, relational and collective aspects of the self. The RIC consists of three subscales, relational (RIC-R), individual (RIC-I), and collectivistic (RIC-C). Participants receive a separate score for each subscale that indicates the strength of that self-aspect for the participant. The RIC consists of 10 groups of three items. Each group begins with a sentence stem (e.g., “I regard myself as…”) followed by three responses to complete the stem, one from each subscale: individual, relational, and collective (e.g., “…someone with his or her own will, an
individual”, “…a good partner and friend”, “…a good member of my group”). Participants provide responses to each of the three sentence completions separately using a scale from 1 (does not describe me/is not true of me) to 7 (describes me/is very true of me). To obtain a subscale score, Likert-type responses from the ten corresponding sentence completions (one from each of the ten item sets) are added, resulting in a possible subscale score from 10 to 70. Higher scores on a subscale indicate the relative prominence of that self aspect for a participant. Because relational collectivism is the variable of interest in the current study, only the relational subscale of the RIC was used.

Construct validity for the RIC has be supported through significant correlations with the Inclusion of Other in the Self scale, Singelis’ Independence/Interdependence scale, Takata’s Independence/Interdependence scale, the Cheek aspect of Identity questionnaire, and the ARC scale (Kashima & Hardie, 2000). The RIC-R subscale has demonstrated acceptable internal consistency with Chronbach’s alpha of .81; however, the Chronbach’s alpha for the current sample was low, .61. A principal component analysis of the RIC-R subscale in the current sample revealed a three factor structure that explained 53.79% of the variance. Within the RIC-R subscale several items cross loaded onto multiple factors (appendix F). Results of a factor analysis forcing a single factor only accounted for 26% of the variance of the current sample with two items failing to load more than .30 on this factor. During the RIC scale creation, Kashima and Hardie described difficulties in organizing items into their theorized subscales (e.g. placing an item that refers to a personal relationship into the RIC-R) while also having that item load on the same factor as the other items from the same subscale. Taking this into consideration, along with the relatively low Chronbach’s alpha and
multiple cross loadings found for this sample, any results for the RIC-R should be interpreted with caution.

**Procedure**

Participants were recruited from 93 masters and doctoral counseling psychology graduate programs found using an online search. Programs were located by entering the terms “counseling psychology graduate program”, “counseling psychology doctorate”, “counseling psychology masters”, and “counseling psychology education” into an online search engine (www.Google.com) Training directors from these graduate programs were contacted with an email requesting the participation of their students. This email included a solicitation to the participants that training directors could distribute to their listserv. Study measures and the demographic questionnaire were completed via an online website that participants accessed anonymously (www.Surveymonkey.com). To increase response rate, participants had the chance to enter a drawing for one of three, one hundred dollar donations to the charity of their choice. When participants were finished with the study measures they were given the option to follow a link to the drawing website. Participants could submit the charity of their choice, the name they would like the donation to be given under, and an email address where they could be contacted to inform the winners. After data collection was completed, three participants were selected from the drawing entries using a random number generator and one hundred dollars was donated to the charity each of these participants named.
CHAPTER 4

RESULTS

Data Cleaning

A total of 184 participants completed the survey. Of these, 17 participants were removed for omitting at least one of the measures of the study, 9 participants were removed as univariate outliers, and one participant was removed as a multivariate outlier after Mahalanobis distance (15.51) was calculated for this sample in the current analysis, leaving 157 valid cases. To conserve data, mean replacement was used in cases of participants only missing individual items. The 17 participants removed due to missing data included those that omitted more than 4 individual items across the non-demographic measures. Measures other than the demographics were given in randomized order for each participant to prevent fatigue affecting the responses to any one measure and to eliminate any potential response bias due to measure order. For the 157 cases retained, no single item was skipped by more than three participants for the non-demographic measures.

Before conducting the primary analysis, assumptions of normality, multicollinearity, and homoscedasticity of the sample were examined. Normality for all scales was assessed. Scores on the ICG were positively skewed (Standardized Skew = 6.27), so it was transformed using a logarithmic function. This transformation resulted in a normal distribution (Standardized Skew = 2.27, table 5). Scatter plots of the variables were examined and homoscedasticity between variable pairs was supported. Multicollinearity was assessed using the colinearity statistics for each regression analysis. No predictors were found to be multicollinear.
Table 5

*Means, Standard Deviations, Chronbach’s Alpha, Skewness and Kurtosis Statistics of Study Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M (SD)</th>
<th>Possible Range</th>
<th>Actual Range</th>
<th>alpha</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>Transformed Skew</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS</td>
<td>157</td>
<td>3.28 (0.83)</td>
<td>1.0-5.0</td>
<td>1.09-5.00</td>
<td>0.88</td>
<td>-0.24</td>
<td>-0.542</td>
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<td>ISLES</td>
<td>157</td>
<td>59.02 (9.61)</td>
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<td>29-75</td>
<td>0.88</td>
<td>-0.5</td>
<td>0.24</td>
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<tr>
<td>RIC-R</td>
<td>157</td>
<td>62.83 (4.55)</td>
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<td>ICG</td>
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<td>52.67 (7.44)</td>
<td>30.0-150.0</td>
<td>30.0-98.0</td>
<td>0.92</td>
<td>1.03</td>
<td>0.95</td>
<td>0.43</td>
</tr>
</tbody>
</table>

*Note:* CBS = Continuing Bonds Scale; ISLES = Inventory of Significant Life Events Scale; RIC-R = subscale of the Relational, Individual, and Collective self-aspect Scale; ICG = Inventory of Complica
**Preliminary Analysis**

Significant relationships between demographic variables (gender, age, race/ethnicity, religion, time since loss, closeness to the deceased, and type of death) and outcome measures were assessed. There were no significant relationships between the demographic variables and the outcome measures except for closeness to the deceased and the type of death. A significant correlation was found for closeness to the deceased with both the ISLES \((r = .21, p < .01)\) and the ICG \((r = -.24, p < .01; \text{table } 6)\). In addition, an analysis of variance revealed that both the ISLES (table 7) and the ICG (table 8) were influenced by the type of death reported. These relationships were controlled for in the main analysis by entering the closeness and type of death variables into the first step of the regression, followed by the study variables in the later steps. The level of closeness question was a likert-type item and its values were entered directly into the regression. However, the type of death item was categorical with five possible responses: natural-expected, natural-unexpected, accident, suicide, and homicide. To include this item in the regression, each type of death was dummy coded into its own variable. For example, in the dummy coded variable “accident”, all participants that reported accident as the type of death were assigned a value of 1 and all other participants were assigned a value of zero. The dummy coded variables for four of the five types of death were chosen and entered into the first step of the regression analyses, while the variable for the fifth type of death, the reference group, was excluded from the analyses. The reference group selected for these analyses was the natural-expected type of death. The regression results for the other types of death indicate how they impact the outcome variable compared to the reference group.
Table 6

*Correlations Among Study Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Closeness</td>
<td>-0.178</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Time</td>
<td>0.061</td>
<td>-0.182</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CBS</td>
<td>0.041</td>
<td>-0.467</td>
<td>-0.078</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ISLES</td>
<td>-0.047</td>
<td>0.212**</td>
<td>0.025</td>
<td>-.190*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. RIC-R</td>
<td>-0.083</td>
<td>-0.029</td>
<td>0.165</td>
<td>0.07</td>
<td>0.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ICG</td>
<td>-0.008</td>
<td>-.243**</td>
<td>-0.16</td>
<td>.391**</td>
<td>-.722**</td>
<td>-0.007</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Age = Participant age, Closeness = Participants’ rating of closeness to the deceased, Time = Time elapsed since the loss, CBS = Continuing Bonds Scale, ISLES = Inventory of Significant Life Events Scale, RIC-R = Relational, Individual, and Collectivistic Self Aspect Scale – Relational subscale, ICG = Inventory of Complicated Grief. * p < .05, ** p < .01

Table 7

*Analysis of Variance (ANOVA) Predicting Meaning Making with Type of Death*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1537.17</td>
<td>4</td>
<td>384.29</td>
<td>4.52</td>
<td>0.002</td>
<td>0.11</td>
</tr>
<tr>
<td>Within Groups</td>
<td>12849.37</td>
<td>151</td>
<td>85.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14386.54</td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8

*Analysis of Variance (ANOVA) Predicting ICG* with Type of Death*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>0.28</td>
<td>4</td>
<td>0.07</td>
<td>5.61</td>
<td>.001</td>
<td>0.13</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1.92</td>
<td>151</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.2</td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* *ICG* represents the transformed ICG scale.

Main Analysis

Based on the process outlined in Edwards and Lambert (2007), the hypothesis that meaning making would mediate the relationship between continuing bonds and complicated grief was tested. This process involved using a bootstrapping method to calculate more accurate estimates of the relationships among these variables. A number of bootstrap samples (*n* = 1000) were generated using SPSS and coefficient estimates for each of these samples were generated, resulting in 1000 bootstrap estimates for each regression coefficient. Using equations provided by Edwards and Lambert (2007), these coefficient estimates were used to calculate values for the relationships between continuing bonds, meaning making, and complicated grief. Specifically, the simple effects of the mediation include continuing bonds (CBS) influence on meaning making (ISLES), meaning makings (ISLES) influence on complicated grief symptoms (ICG), and continuing bonds (CBS) influence on complicated grief (ICG). The indirect effect of the mediation involves meaning makings (ISLES)
influence on the relationship between continuing bonds (CBS) and complicated grief symptoms (ICG). The equations provided by Edwards and Lambert (2007) were also used to calculate the total effect of all paths. These equations were used with each bootstrap sample, yielding 1000 values for each of the simple, indirect, and total effects. Using recommendations form Stein (1983), a bias corrected confidence interval (95% CI) was constructed for each effect from the 1000 estimates. The 95% confidence interval for the indirect effect of the model was calculated and did not include zero, indicating support for a partial mediation effect of meaning making (2.5% lower bound = .005, 97.5% upper bound = .03, table 9). Since continuing bonds (CBS) remained a significant predictor of complicated grief (ICG, table 10), only a significant partial mediation effect is supported. In other words, a participant’s ability to construct meaning after the loss of a loved one partially mediated the effect of their continuing bonds with that loved one on their level of complicated grief due to the loss. Specifically this mediation occurred in the negative direction, meaning that higher levels of continuing bonds led to lower levels of meaning making, which then led to higher levels of complicated grief symptoms (figure 2). Step one of the regression predicting complicated grief with closeness and type of death accounted for 18% of the variance, \( F(5, 148) = 6.43, p < .001, R^2 = .18 \). Step two of the regression added continuing bonds and meaning making as predictors and accounted for an additional 45% of the variance, \( \Delta F(2, 146) = 88.08, p < .001, \Delta R^2 = .45 \).
Table 9

Bias Corrected Confidence Intervals for Indirect and Total Effects

<table>
<thead>
<tr>
<th>Path</th>
<th>Base Value</th>
<th>Lower Bound (2.5%)</th>
<th>Upper Bound (97.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect</td>
<td>0.02</td>
<td>0.005</td>
<td>0.03</td>
</tr>
<tr>
<td>Total</td>
<td>0.06</td>
<td>0.04</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Table 10

Hierarchical Multiple Regression Analysis Predicting Complicated Grief From Type of Death, Continuing Bonds, and Meaning Making

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>t</th>
<th>Step ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.18***</td>
</tr>
<tr>
<td>Closeness</td>
<td>-0.03</td>
<td>0.01</td>
<td>-0.21</td>
<td>-2.82**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NU</td>
<td>0.04</td>
<td>0.02</td>
<td>0.15</td>
<td>1.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td>0.12</td>
<td>0.04</td>
<td>0.25</td>
<td>3.56**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide</td>
<td>0.17</td>
<td>0.06</td>
<td>0.2</td>
<td>2.66**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accident</td>
<td>.09</td>
<td>0.03</td>
<td>0.22</td>
<td>2.80**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.45***</td>
</tr>
<tr>
<td>Closeness</td>
<td>0.001</td>
<td>0.01</td>
<td>0.04</td>
<td>0.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NU</td>
<td>0.03</td>
<td>0.01</td>
<td>0.11</td>
<td>2.05*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td>0.03</td>
<td>0.03</td>
<td>0.07</td>
<td>1.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide</td>
<td>0.14</td>
<td>0.04</td>
<td>0.17</td>
<td>3.25**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accident</td>
<td>0.05</td>
<td>0.02</td>
<td>0.13</td>
<td>2.35*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBS</td>
<td>0.04</td>
<td>.01</td>
<td>0.28</td>
<td>4.81***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISLES</td>
<td>-0.01</td>
<td>0.001</td>
<td>-0.64</td>
<td>-11.64***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Closeness = Rating of closeness to the deceased, NU = Natural and unexpected death, CBS = Continuing Bonds Scale, ISLES = Inventory of Significant Life Events Scale. Effects of type of death are relative to the natural and expected type. *p < .05  **p < .01  ***p < .001
Next, hypothesis two proposed relational collectivism would moderate the relationship between continuing bonds and meaning making. Following Edwards and Lambert, a hierarchical regression analysis was conducted predicting scores on the ISLES. Significant demographic variables were entered in the first step, the centered scales of CBS, and RIC-R were entered in the second step, and the interaction term CBS*RIC-R was entered in the third step. The first step of the regression model with only the demographic variables was significant, $F(5, 148) = 4.69, \ p = .001, R^2 = .14$. However, neither the CBS nor RIC-R in step two, $R^2$ change = .02, $\Delta F (2, 146) = 1.48, p = .23$, nor their interaction in step three, $R^2$ change = .01, $\Delta F (1, 145) = 1.33, p = .25$, demonstrated any significant improvement. The results of the regression do not support the idea that continuing bonds, relational collectivism, or their interaction effects are significant predictors of meaning making (table 11). Thus in testing hypothesis two, the results indicate that relational collectivism does not moderate the relationship between continuing bonds and meaning making. As stated earlier, results of the analyses involving the RIC-R should be interpreted with caution.
Table 11

*Hierarchical Multiple Regression Analysis Predicting Meaning Making From Closeness, Type of Death, Continuing Bonds, and Relational Self Aspect*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>t</th>
<th>Step ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14**</td>
</tr>
<tr>
<td>Closeness</td>
<td>1.94</td>
<td>0.83</td>
<td>0.18</td>
<td>2.35*</td>
<td></td>
</tr>
<tr>
<td>NU</td>
<td>-1.83</td>
<td>1.71</td>
<td>-0.09</td>
<td>-1.07</td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td>-10.34</td>
<td>3.07</td>
<td>-0.27</td>
<td>-3.39**</td>
<td></td>
</tr>
<tr>
<td>Homicide</td>
<td>-2.7</td>
<td>5.58</td>
<td>-0.04</td>
<td>-0.48</td>
<td></td>
</tr>
<tr>
<td>Accident</td>
<td>-6.68</td>
<td>2.78</td>
<td>-0.19</td>
<td>-2.4*</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
</tr>
<tr>
<td>Closeness</td>
<td>1.226</td>
<td>0.94</td>
<td>0.115</td>
<td>1.31</td>
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</tr>
<tr>
<td>NU</td>
<td>-2.06</td>
<td>1.71</td>
<td>-0.1</td>
<td>-1.21</td>
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</tr>
<tr>
<td>Suicide</td>
<td>-9.95</td>
<td>3.07</td>
<td>-0.26</td>
<td>-3.24**</td>
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</tr>
<tr>
<td>Homicide</td>
<td>-1.84</td>
<td>5.61</td>
<td>-0.03</td>
<td>-0.33</td>
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</tr>
<tr>
<td>Accident</td>
<td>-7.25</td>
<td>2.79</td>
<td>-0.21</td>
<td>-2.60**</td>
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</tr>
<tr>
<td>CBS</td>
<td>-1.75</td>
<td>1.07</td>
<td>-0.14</td>
<td>-1.63</td>
<td></td>
</tr>
<tr>
<td>RIC-R</td>
<td>-.11</td>
<td>0.17</td>
<td>0.05</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
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<td></td>
<td>0.01</td>
</tr>
<tr>
<td>Closeness</td>
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<td>0.94</td>
<td>0.1</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>NU</td>
<td>-2.26</td>
<td>1.72</td>
<td>-0.11</td>
<td>-1.32</td>
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</tr>
<tr>
<td>Suicide</td>
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<td>3.07</td>
<td>-0.26</td>
<td>-3.28**</td>
<td></td>
</tr>
<tr>
<td>Homicide</td>
<td>-2.06</td>
<td>5.6</td>
<td>-0.03</td>
<td>-0.37</td>
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</tr>
<tr>
<td>Accident</td>
<td>-7.46</td>
<td>2.8</td>
<td>-0.22</td>
<td>-2.67**</td>
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</tr>
<tr>
<td>CBS</td>
<td>-1.92</td>
<td>1.08</td>
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<td>-1.78</td>
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</tr>
<tr>
<td>RIC-R</td>
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<td>0.17</td>
<td>0.07</td>
<td>0.83</td>
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</tbody>
</table>
Table 11 Continued

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>t</th>
<th>Step ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td>CBS x RIC-R</td>
<td>-0.26</td>
<td>0.23</td>
<td>-0.09</td>
<td>-1.15</td>
<td></td>
</tr>
</tbody>
</table>

Note: Closeness = Rating of closeness to the deceased, NU = Natural and unexpected death, CBS = Continuing Bonds Scale, RIC-R = Relational, Individual, and Collectivistic Self Aspect Scale – Relational subscale, CBS x RIC-R = interaction between CBS and RIC-R. *p < .05  **p < .01  ***p < .001

Figure 2. Simple Effects of the Mediation

Post Hoc Analyses

Several additional analyses were run to examine potential relationships among the study variables and demographics that may have influenced the results. An anova examining the effects of participants’ race/ethnicity on their CBS scores revealed no significant
difference $F(5, 149) = 1.74, p = .13$ (table 12). Similarly, an anova examining the effects of participants’ race/ethnicity on their RIC-R scores was not significant $F(5, 149) = .69, p = .63$ (table 13). To minimize any statistical limitations due to unequal cell sizes, the minority categories were collapsed into a single group and the previous analyses were rerun. These analyses revealed no significant effects of race/ethnicity with respect to CBS scores ($F(1, 154) = .78, p = .38$) or RIC-R scores ($F(1, 154) = .43, p = .51$). These results, combined with the analyses of the preliminary data screening, suggest that race/ethnicity had little, if any impact on the study variables.

Table 12

*Analysis of Variance (ANOVA) Predicting CBS with Race/Ethnicity*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5.72</td>
<td>5</td>
<td>1.15</td>
<td>1.74</td>
<td>.13</td>
</tr>
<tr>
<td>Within Groups</td>
<td>98.1</td>
<td>149</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>103.83</td>
<td>154</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the preliminary analysis revealed that closeness and type of death held significant relationships with the outcome variables. Their variance was partialed out and accounted for in the regressions of the main analysis. To investigate potential moderating effects of these variables, further analyses were conducted. To examine any moderation effect of closeness, a regression predicting ICG scores with centered closeness scores, centered CBS scores, and their interaction was conducted. The results revealed no significant interaction, $B = .08, t = 1.04, p = .30$ (table 14). A similar regression was run to check for this moderating effect when predicting ISLES scores, revealing no significant interaction, $B = -.05, t = -.57, p = .57$ (table 15). The results of these analyses suggest that although closeness was significantly correlated with the ICG and ISLES, there was no interaction between CBS and closeness in the regressions predicting ICG and ISLES.

Table 13

*Analysis of Variance (ANOVA) Predicting RIC-R with Race/Ethnicity*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>71.71</td>
<td>5</td>
<td>14.34</td>
<td>.69</td>
<td>.63</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3100.65</td>
<td>149</td>
<td>20.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3172.35</td>
<td>154</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 14

*Hierarchical Multiple Regression Analysis Predicting Complicated Grief From Closeness and Continuing Bonds*

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>t</th>
<th>Step ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.16*</td>
</tr>
<tr>
<td></td>
<td>Closeness</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.08</td>
<td>-0.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CBS</td>
<td>0.05</td>
<td>0.01</td>
<td>0.36</td>
<td>4.2*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Closeness x CBS</td>
<td>0.01</td>
<td>0.01</td>
<td>0.09</td>
<td>1.04</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Closeness</td>
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<td>0.01</td>
<td>-0.04</td>
<td>-0.41</td>
<td></td>
</tr>
<tr>
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<td>CBS</td>
<td>0.05</td>
<td>0.01</td>
<td>0.35</td>
<td>4.2*</td>
<td></td>
</tr>
</tbody>
</table>

Note: Closeness = Rating of closeness to the deceased, CBS = Continuing Bonds Scale, Closeness x CBS = interaction between Closeness and CBS. *p < .001
Table 15

*Hierarchical Multiple Regression Analysis Predicting Meaning Making From Closeness and Continuing Bonds*

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>t</th>
<th>Step ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Closeness</td>
<td>1.7</td>
<td>0.95</td>
<td>0.16</td>
<td>1.79</td>
<td>.06*</td>
</tr>
<tr>
<td></td>
<td>CBS</td>
<td>-1.6</td>
<td>1.09</td>
<td>-0.13</td>
<td>-1.47</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Closeness</td>
<td>1.45</td>
<td>1.05</td>
<td>0.14</td>
<td>1.39</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>CBS</td>
<td>-1.59</td>
<td>1.09</td>
<td>-0.13</td>
<td>-1.46</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Closeness x CBS</td>
<td>-0.58</td>
<td>1</td>
<td>-0.05</td>
<td>-0.57</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Closeness = Rating of closeness to the deceased, CBS = Continuing Bonds Scale, Closeness x CBS = interaction between Closeness and CBS. *p < .01

To examine potential moderating effects of type of death with CBS, two separate factorial anovas were conducted. Specifically, interaction effects between type of death and CBS on participants’ ICG scores were investigated in the first anova, and on participants’ ISLES scores in the second anova. Factorial anovas were chosen to accommodate the categorical nature of the type of death variable. First, the CBS scores of the sample were dichotomized by dividing scores into high and low groups. The high CBS group (N = 79) consisted of participants with continuing bonds scores above the sample mean and the low CBS group (N = 77) included participants with continuing bonds scores below the sample
mean. The results of the first factorial anova using ICG as the dependent variable revealed a non-significant interaction between type of death and the dichotomized CBS score, $F(4, 145) = .66, p = .62$ (table 16). Results of the second factorial anova using ISLES as the dependent variable also revealed a non-significant interaction between type of death and dichotomized CBS scores, $F(4, 145) = 1.49, p = .21$ (table 17).

Table 16

*Factorial Analysis of Variance (ANOVA) Predicting ICG with Type of Death and Continuing Bonds*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS</td>
<td>0.02</td>
<td>1</td>
<td>0.02</td>
<td>1.41</td>
</tr>
<tr>
<td>Type of Death</td>
<td>0.22</td>
<td>4</td>
<td>0.06</td>
<td>4.86*</td>
</tr>
<tr>
<td>CBS x Type of Death</td>
<td>0.03</td>
<td>4</td>
<td>0.01</td>
<td>0.66</td>
</tr>
<tr>
<td>Total</td>
<td>450.84</td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: *$p < .001$
Table 17

*Factorial Analysis of Variance (ANOVA) Predicting Meaning Making* with Type of Death and Continuing Bonds

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS</td>
<td>105.39</td>
<td>1</td>
<td>105.39</td>
<td>1.16</td>
</tr>
<tr>
<td>Type of Death</td>
<td>1474.54</td>
<td>4</td>
<td>368.63</td>
<td>4.06*</td>
</tr>
<tr>
<td>CBS x Type of Death</td>
<td>540.36</td>
<td>4</td>
<td>135.09</td>
<td>1.49</td>
</tr>
<tr>
<td>Total</td>
<td>640197.9</td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: *p < .01

To investigate if type of death had a moderating effect that occurred with more extreme CBS scores, the sample was divided into three percentile groups according to their CBS score: low 33%, middle 33%, and high 33%. The middle group was removed and the anovas described previously were repeated using only the low 33% and high 33%. The results of the factorial anova using ICG as the dependent variable revealed a non-significant interaction between type of death and the high/low CBS score, \( F(4, 95) = .85, p = .50 \) (table 18). Similarly, the factorial anova using ISLES as the dependent variable also revealed a non-significant interaction between type of death and high/low CBS scores, \( F(4, 95) = 1.16, p = .33 \) (table 19). These results suggest that despite the significant relationship between type of death and the outcome variables, which was revealed in the preliminary analysis, type of death had no moderating effect between the CBS and those same outcome variables.
Table 18

*Factorial Analysis of Variance (ANOVA) Predicting ICG with Type of Death and High/Low Continuing Bonds*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS</td>
<td>0.04</td>
<td>1</td>
<td>0.04</td>
<td>3.94</td>
</tr>
<tr>
<td>Type of Death</td>
<td>0.21</td>
<td>4</td>
<td>0.05</td>
<td>5.18*</td>
</tr>
<tr>
<td>CBS x Type of Death</td>
<td>0.04</td>
<td>4</td>
<td>0.01</td>
<td>0.85</td>
</tr>
<tr>
<td>Total</td>
<td>307.93</td>
<td>105</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* *p < .001

Table 19

*Factorial Analysis of Variance (ANOVA) Predicting Meaning Making with Type of Death and High/Low Continuing Bonds*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS</td>
<td>12.15</td>
<td>1</td>
<td>12.15</td>
<td>.13</td>
</tr>
<tr>
<td>Type of Death</td>
<td>1368.82</td>
<td>4</td>
<td>342.21</td>
<td>3.70*</td>
</tr>
<tr>
<td>CBS x Type of Death</td>
<td>429.22</td>
<td>4</td>
<td>107.31</td>
<td>1.16</td>
</tr>
<tr>
<td>Total</td>
<td>426630.93</td>
<td>105</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* *p < .01
In summary, 157 valid cases were collected for the current study. Normality, multicollinearity and homoscedasticity of the sample were assessed and the skew found for complicated grief symptoms (ICG) was transformed using a log function. The demographic variables collected were assessed for any relationship with the outcome variables and type of death reported and closeness to the deceased were each significantly related to both meaning making (ISLES) and complicated grief symptoms (ICG). The variance of these significant relationships was accounted for in step one of the regression calculations. Edwards and Lambert (2007) method of analyzing moderated mediation was used to test the hypotheses and support for a partial mediation by meaning making was found for hypothesis one. However, after testing hypothesis two, no support was found for moderation effect of relational collectivism (RIC-R). Given the low internal consistency and the result of the factor analysis for the RIC-R in the current sample, results using this scale should be interpreted with caution.
CHAPTER 5
DISCUSSION

The concept of continuing bonds represents an emotional connection with a deceased loved one that is maintained by the bereaved after the loss (Klass et al., 1996). Using continuing bonds as a way to cope with grief is a concept that was forwarded in the bereavement literature relatively recently. The concept of maintaining this emotional connection was contrary to more traditional views of psychologically adaptive ways of coping with grief. Previously it was theorized that cutting off ties to the deceased in order to reinvest that energy into new relationships or strengthen existing relationships was the most adaptive way to cope with a significant loss (Freud, 1957; Rothaupt & Becker, 2007). There has been relatively little research on the effects of continuing bonds on grief and previous research in this area has produced mixed results about the adaptive or maladaptive nature of continuing bonds to the bereaved. By learning more about the potentially positive, harmful, or neutral effects of continuing bonds and the conditions when these effects occur, some clarity may be brought to this area of the bereavement literature and clinicians that work with bereaved individuals may have more information on how to counsel their clients. This could be particularly helpful with clients experiencing complicated grief. Although negative emotional and physical complications are associated with all forms of grief, research suggests that complicated grief last for a prolonged period after the loss compared to normal grief. This can result in bereaved individuals suffering for months or even years. The current study was intended to examine the effects of continuing bonds, specifically on complicated grief, and what factors might influence this effect.
Mediation Effects of Meaning Making

Meaning making refers to the process by which bereaved individuals make sense of, gain perspective, or find benefit from their loss. Meaning making is one factor that was examined for its influence on the relationship between continuing bonds and complicated grief. Previous literature suggests that meaning making may have a strong influence on grief outcomes and hypothesis one of the current study predicted that continuing bonds effects on complicated grief would be mediated by meaning making. Specifically, hypothesis one states that the more meaning making a participant reported, the fewer complicated grief symptoms they would report and participants who reported less meaning making would report greater complicated grief symptoms. Support was found for a partial mediation effect of meaning making between continuing bonds and complicated grief. This finding is similar to findings of previous studies on meaning making (Currier, Holland, & Neimeyer, 2006; Kessee, Currier, & Neimeyer, 2008). In addition, the results show that the relationship between continuing bonds and meaning making was also negative, indicating that participants reporting higher levels of continuing bonds reported lower levels of meaning making. The results of the current study help add to the bereavement literature, as there are relatively few quantitative studies examining the relationship between continuing bonds and meaning making. Identifying meaning making as a partial mediator indicates some of the effects of continuing bonds on complicated grief are accounted for by meaning making.

In addition to the results of hypothesis one indicating a partial mediation effect of meaning making, continuing bonds also had a significant and positive direct effect on complicated grief, indicating that higher continuing bonds suggests higher complicated grief symptoms. This finding, in addition to the negative relationship between continuing bonds
and meaning making, suggests that continuing bonds may not be an adaptive response to grief for participants in the current sample. These results help to fill a gap in the current grief literature by answering a question fundamental to the current study: are continuing bonds an adaptive or maladaptive grief response. The results suggest that not only do continuing bonds affect complicated grief directly, but also indirectly through their influence on meaning making. It may be that continuing bonds disrupt meaning making. Maintaining a continuing emotional bond with a deceased loved one may decrease the bereaved individuals’ motivation to engage in the meaning making process to try to make sense of the loss. Further the direct effect of continuing bonds on complicated grief suggests that continuing bonds influence complicated grief independent of the meaning made by the bereaved. This could potentially be due to a continuing bond serving as a persistent reminder of the relationship the bereaved has lost with their loved one, supporting the maintenance of the negative emotions associated with grief. In addition, adding continuing bonds and meaning making in step two of the regression predicting complicated grief symptoms accounted for an additional 45% of the variance beyond that accounted for by the covariates in step one, resulting in 63% variance explained in the total regression model. In other words, meaning making, continuing bonds, closeness, and type of death accounted for 63% of the variance in complicated grief symptoms of the current sample. These results suggest that meaning making and continuing bonds have a large impact on complicated grief. The effects of meaning making in particular on complicated grief suggest that ways to promote meaning making may benefit bereaved individuals by reducing the likelihood of complicated grief symptoms. These findings add to
the literature supporting the potential benefit of meaning making for bereaved individuals, especially those at risk of experiencing symptoms of complicated grief.

**Moderation Effects of Relational Collectivism**

In addition to meaning making, the effects of culture on the grieving process were examined, specifically the role of relational collectivism, which is defined as the level of importance a participant places on their relationships with groups of people that they know personally (e.g., friends, family, coworkers). Hypothesis two of the study predicts that continuing bonds effects on meaning making will be moderated by a participant’s relational collectivism. More specifically, for low levels of relational collectivism, a participant reporting high levels of continuing bonds would report low levels of meaning making. With the non-significant interaction between continuing bonds and relational collectivism explaining only 1% additional variance in meaning making, the result did not support hypothesis two. Relational collectivism of the current sample had no significant influence on continuing bonds relationship with meaning making. Participants reporting high levels of continuing bonds reported low levels of meaning making regardless of their levels of relational collectivism. One possible reason may include the relational collectivism variable itself. It is possible that relational collectivism is not an aspect of an individual’s culture that influences the relationship between continuing bonds and meaning making. Alternatively, the low Chronbach’s alpha and a factor structure for the RIC-R that includes multiple cross loadings in the current sample, may have limited the ability to reliably measure participants’ relational collectivism. In addition the lack of diversity in the sample may have led to a restricted range in the relational collectivism variable overall, reducing the ability to detect
any impact it may have had on the model. The results of the current study are in contrast to the findings of Lalande and Bonanno (2006) which indicated differing effects of continuing bonds on the grief of Chinese and U.S. participants. It is possible these differences may have been due to an unknown or unmeasured variable. However, considering findings from Lalande and Bonanno (2006) and other studies (e.g., Laurie & Neimeyer, 2008) that have found cultural differences in grief, further research examining the impact of culture on grief may shed light on this issue.

Additional Findings

The results yielded a few interesting findings that were not originally hypothesized. During the preliminary analysis, all of the demographic data collected were examined for any significant relationships with meaning making or complicated grief. The data revealed that both meaning making and complicated grief symptoms varied as a result of two of the demographic variables: a participant’s rating of their closeness to the deceased and the type of death that occurred. Specifically, a participant’s rating of closeness with the deceased was significantly correlated with complicated grief symptoms and levels of meaning making, and participants that reported lower levels of closeness with the deceased tended to indicate higher levels of meaning making and lower levels of complicated grief. Participants that reported higher levels of closeness to the deceased tended to indicate lower levels of meaning making and higher levels of complicated grief. It is interesting to note that closeness was a significant predictor of complicated grief symptoms in the regression analysis testing of hypothesis one, and a significant predictor of meaning making in the analysis testing hypothesis two. This finding is similar to previous studies that have found a significant,
positive relationship between closeness and complicated grief (Field & Filanowski, 2010). However, after being controlled for, closeness became non-significant as a predictor, indicating it shares much of its predictive variance with continuing bonds and/or meaning making. An analysis of variance revealed that meaning making and complicated grief varied with the type of death reported. The type of death categories were included as covariates in the regression analyses and remained significant predictors of meaning making and complicated grief through all stages of the regression. Specifically, participants that reported accident, homicide, or natural-unexpected as the type of death their loved one experienced indicated higher complicated grief symptoms compared to participants that reported a natural-expected death. In addition, participants that reported losing a loved one to an accident or suicide indicated less meaning making compared to participants that reported a natural expected death. These findings are similar to previous studies investigating the effects of the type of death on complicated grief (Field & Filanowski, 2010).

These findings suggest that the type of death a lost loved one experiences has a significant influence on the meaning making processes and complicated grief symptoms of the bereaved. Specifically, when used to predict meaning making, type of death (along with closeness) explained 14% of the variance in meaning making. Considering the additional variance explained when continuing bonds and relational collectivism were added in step 2 of the regression (2%) and their interaction term in step 3 (1%), the results reveal that type of death and closeness account for the large majority of the predictive capability of the model. Given that type of death remains a significant predictor of meaning making through all stages of the regression and closeness does not, it may be reasonable to conclude that type of death
is the strongest individual predictor of meaning making. It is interesting to note that, while type of death was controlled for during the mediation analysis of hypothesis one, it was a stronger predictor of meaning making than continuing bonds in the original regression analysis. In addition, for the regression predicting complicated grief symptoms, type of death (along with closeness) accounted for 18% of the variance explained. While this is only a portion of the total variance explained by the regression, it still suggests that type of death contributes significantly to the predictive value of the regression model. Interestingly, suicide was the only type of death that did not differ significantly from the natural, expected type of death with respect to predicting complicated grief symptoms in step two of the regression. While it was a significant predictor in step one of the regression, this change to non-significance in step two suggests that the variance accounted for by suicide in step one was accounted for by continuing bonds and/or meaning making in step two. One possible explanation for this change may be the sample consisting of counseling psychology graduate students. While their progress or stage of completion in their program was not collected, it is likely that many of the participants have counseling training and experience. This may have involved formal training and/or actually working with clients with suicidal ideation. This exposure to the idea of death from a completed suicide (vs. other types of unexpected loss) may have decreased the likelihood participants would experience complicated grief symptoms as a result of losing a loved one due to suicide.

Limitations

The current study has several limitations. The current sample was not particularly diverse with regards to race/ethnicity, religion, or gender. This homogeneity of the sample
may have limited the power to detect effects due to these variables that may have otherwise been present if a more diverse sample was used in the analysis. Similarly, overrepresentation of some demographic groups (e.g., Caucasian, Christian, female) limits the ability for the results to be generalized beyond these groups. Additionally, contrary to previous studies (Laland & Bonanno, 2006; Laurie & Neimeyer, 2008), race/ethnicity groups did not differ significantly in continuing bond usage in the current study. Future studies, especially those examining any potential impact of culture, may benefit from using a more diverse sample. Another limitation of a homogenous sample includes the unequal cell sizes involved in the ANOVAs that were conducted. The imbalance between the number of Caucasian and Christian participants in the sample and participants of other race/ethnicity and religious affiliations violates assumptions of the ANOVA and limits their effectiveness in the current analysis. The size of the sample is also a limitation. Fritz and MacKinnon (2007) recommend a sample size of 462 for a moderated mediation analysis if path coefficients for both the first stage (continuing bonds effect on meaning making) and second stage (meaning makings effect on complicated grief) of the indirect effect are expected to be small (.14). However, if both paths are expected to be slightly larger (.26), the recommended sample size becomes 148, which is met by the current sample size of 157. Previous research on the relationship between meaning making and complicated grief has indicated an expected path coefficient for the second stage of the indirect effect that meets the .26 recommendation (Keesee, Currier, & Neimeyer, 2008). However, little prior research was available to provide an estimate of the path coefficient for the first stage of the indirect effect. As a result, it is unknown if the current sample size provides sufficient power to detect all the effects that
might be present in the model. Also, analyses involving a moderator encounter difficulties when dealing with small effect sizes of the variables used, making it difficult to detect moderation effects. This may have made it more difficult to detect a significant moderation effect of relational collectivism in the current study.

In addition, the method of data collection through internet solicitation leads to self-selection in the sample. This self-selection could potentially result in a sample with a restricted range of responses to the study variables. For example, the positive skew of the ICG distribution in the current sample indicates a trend among participants who reported few complicated grief symptoms. This distribution may be due in part to the possibility that a person experiencing more complicated grief symptoms is less likely to participate in a study about grief than a person experiencing fewer complicated grief symptoms. In addition, the sample consisted of counseling psychology graduate students. This implies that the participants may have been more educated, more knowledgeable of psychological issues, and more likely to utilize personal counseling. These characteristics of the sample may have influenced the study variables (e.g. the distribution of the ICG) differently than a sample more representative of the general population. Also, the wording of the instructions to the participants asked them to respond to the survey measures if they had “experienced the death of a human loved one”. The ambiguous wording of these instructions gives no indication of how significant or impactful the loss was for any particular participant. For example, one participant may have responded to the measures with an important loss in mind, while another participant may have lost a loved one but did not consider the loss impactful or important. In both cases the participant complied with the instructions, but there is no way to
differentiate between them with the current methodology. If some participants responded with respect to the loss of a loved one that was not impactful or important to them, this may obscure the relationship among the study variables. For example, a participant that responded to the death of a loved one without feeling particularly impacted by the loss may have a decreased likelihood of experiencing complicated grief symptoms independent of his or her levels of meaning making or continuing bonds.

A restricted range on variables such as the RIC-R may have been influenced by social presentation bias. The possible range of scores on the RIC-R is 10 to 70, however, the average score for the current sample is 62.83 with a standard deviation of only 4.55. This may have served to obscure any significant effects the RIC-R might have had due to the fact that, compared to the total range of scores possible, participants all had very similar responses. Because the study used only self-report measures, the data are susceptible to participants’ potential desire to present socially favorable responses. Future studies may benefit from using data from multiple sources to prevent single source bias. In addition, while several measures revealed factor structures different from what is reported by their authors (the ISLES, ICG, and RIC-R), the RIC-R specifically demonstrated poor internal consistency in addition to an unexpected factor structure (Appendix F). As mentioned previously, results of the RIC-R should be interpreted with caution. Finally, while a significant mediation effect for meaning making was found in the current study, no causal conclusions can be drawn from the results. Temporal precedence of the predictors compared to complicated grief cannot be established. For example, it cannot be determined if continuing bonds occurred before complicated grief symptoms or if complicated grief
symptoms preceded a bereaved individual’s continuing bonds. While causal relationships can be theorized, only associative relationships can be supported with the current methodology.

**Implications**

There are several clinical and research implications of the current study. The significant relationship between meaning making and complicated grief symptoms suggests that bereaved individuals that are able to find greater meaning after a significant loss are less likely to suffer from complicated grief symptoms. Clinicians counseling bereaved clients may find that techniques such as logotherapy or narrative therapy, which promote or facilitate clients’ search for meaning, an effective method of helping them cope with a loss. In addition, clients might prefer to take a more active approach to creating meaning from the loss of a loved one. For example, after experiencing a loss in a particular way (e.g., cancer, heart disease, or suicide) bereaved individuals sometimes raise funds for a meaningful, often related, charity or even start their own foundation to generate a tangible benefit to others in addition to any emotional meaning they may find in the effort itself. In this way, bereaved individuals may find meaning in helping others who have experienced a similar loss or prevent similar losses from happening in the future. The significant relationship between continuing bonds and complicated grief symptoms also has clinical implications. The results suggest that continuing bonds increase the likelihood of complicated grief. Counselors with bereaved clients that demonstrate extensive continuing bond use may find it beneficial to monitor their clients for any complicated grief symptoms such as feelings of emptiness, difficulty accepting the loss, or difficulty moving on (Prigerson et al., 2008). While it may be unethical to contradict a client’s choices of how they wish to grieve, it may be helpful to
encourage clients to remain mindful of how their continuing bonds effect their mental and emotional health, for both the long and short term.

Several of the findings of the current study have implications for future research. The non-significant interaction effects of relational collectivism with continuing bonds suggest that, for the current sample, relational collectivism had no influence on continuing bonds relationship with meaning making. As mentioned previously, this lack of an effect could be due to the restricted range of relational collectivism in the sample. The average of the RIC-R scores in the current sample was relatively high compared to the total possible range. This result was not expected and may have been due to the selection pool of the sample. Participants were counseling psychology graduate students. While it is possible this sample had high RIC-R scores, it is also possible that the RIC-R was measuring another aspect of the sample such as participants’ conscientiousness or belief in social support. Examining the moderation effects of other variables may prove more informative. For example, global collectivism, representing participants’ connection to their larger group could analyzed as a moderator. Alternatively, if it is assumed that participants’ individualism and collectivism are opposing constructs, individualism scores could be investigated for moderation effects. In addition to testing other possible moderators, future studies investigating the effects of relational collectivism will benefit from having a wide range of responses in their sample. In addition, considering the low reliability and multiple cross loading found in the current study, future studies utilizing the RIC-R specifically may benefit from examining the reliability and the factor structure of the measure within their sample as well. The utility of using a diverse sample is also demonstrated in other aspects of the study. For example, while there was no
significant difference between race/ethnicity groups in relational collectivism or continuing bond usage, the same investigation could not be meaningfully conducted with religion. Of the 112 participants in the final participant pool that reported their religion, only 11 were non-Christian. Future investigations of continuing bonds could benefit greatly from using a multicultural or even multinational sample if possible. In this way, future studies of relational collectivism and continuing bonds will be able to investigate cultural, religious, regional, and political influences on these variables, any of which may play important roles for the bereaved.

The type of death by which participants reported losing their loved ones was a significant predictor of complicated grief symptoms. Specifically, participants that reported losing a loved one through natural-unexpected death, homicide, or accident were significantly more likely to report higher complicated grief symptoms compared to participants that reported losing a loved one to a natural-expected death. With the exception of losing a loved one from suicide, every type of unexpected death predicted greater complicated grief scores. It is possible that the unexpectedness of the loss prevented these participants from communicating their feelings to their loved ones, saying goodbye, or otherwise settling their affairs. The loss of these opportunities may contribute to the development of complicated grief symptoms. Future research on complicated grief may benefit from investigating how the type of loss, or its unexpected nature, influences the likelihood the bereaved will experience complicated grief symptoms. In addition, type of death reported, specifically loss due to suicide or accident, was a significant predictor of meaning making. It is possible that losing a loved one because they ended their own life or
simply because of unfortunate, uncontrollable circumstances makes it difficult for bereaved individuals to make sense of or find meaning after these losses. Given the potential benefits of meaning making suggested by the current results and the uncontrollable nature of how a bereaved individual loses a loved one, research into how these variables interact could prove very beneficial to the bereavement literature as well as the counselors working with bereaved individuals.

In summary, the findings of the current study suggest that meaning making and continuing bonds have the potential to influence complicated grief symptoms in bereaved individuals. Counselors working with bereaved clients may benefit from assessing these variables while helping their clients cope with grief. However, relational collectivism as measured by the RIC-R was not found to have a significant moderation effect on continuing bonds relationship with meaning making. Considering the limitations of the current study, future studies may benefit from using a more diverse sample or an alternative measure of collectivism to further our knowledge of the relationship between continuing bonds and culture. Additionally, the type of death that claims the life of a loved one (e.g. accident, suicide, etc.) can have a significant impact on the meaning making and complicated grief symptoms bereaved individuals experience, suggesting this may be an important focus for counselors and future research alike.
APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE
DEMOGRAPHIC QUESTIONNAIRE

Gender: Female_____ Male_____ Transgendered_____

Age:_____

Ethnicity: African American_____ Asian American_____ European American_____ Hispanic_____ Native American_____ Other______________(please specify)

Relationship to the deceased:__________

Closeness to the deceased: 1 – Extremely close

2

3

4

5 – Not close at all

Type of death: natural, expected_____ natural, unexpected_____ accident_____ homicide_____ suicide_____

Time passed since the loss (please provide for the closest known year and month): ___years and ___months

Religious affiliation:_____

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APPENDIX B

CONTINUING BONDS SCALE
CONTINUING BONDS SCALE

For each item below, please rate the extent to which each of the items is true with respect to your deceased loved one.

1 – Not true at all
2
3
4
5 – Very true

1. I seek out things to remind me of my loved one. 1 2 3 4 5
2. I keep items that belonged to or were closely associated with my loved one as a reminder of him or her. 1 2 3 4 5
3. I like to reminisce with others about my loved one. 1 2 3 4 5
4. I have inner conversations with my loved one where I turn to him or her for comfort or advice. 1 2 3 4 5
5. Even though no longer physically present, my loved one continues to be a loving presence in my life. 1 2 3 4 5
6. I am aware of having taken on many of my loved one’s habits, values, or interests. 1 2 3 4 5
7. I am aware of the positive influence of my loved one on who I am today. 1 2 3 4 5
8. I attempt to carry out my loved one’s wishes. 1 2 3 4 5
9. I have many fond memories that bring joy to me. 1 2 3 4 5
10. When making decisions, I imagine my loved one’s viewpoint and use this as a guide in deciding what to do. 1 2 3 4 5
11. I experience my loved one as continuing to live on through me. 1 2 3 4 5
APPENDIX C

INTEGRATION OF STRESSFUL LIFE EXPERIENCES SCALE
INTEGRATION OF STRESSFUL LIFE EXPERIENCES SCALE

Please indicate the extent to which you agree or disagree with the following statements with regard to (the most stressful life event you experienced in the past two years). Read each statement carefully and be aware that a response of agreement or disagreement may not have the same meaning across all items.

Strongly agree - 1  
Agree - 2  
Neither agree nor disagree - 3  
Disagree - 4  
Strongly disagree - 5

1. Since this event, the world seems like a confusing and scary place.  
2. I have made sense of this event.  
3. If or when I talk about this event, I believe people see me differently.  
4. I have difficulty integrating this event into my understanding about the world.  
5. Since this event, I feel like I’m in a crisis of faith.  
6. This event is incomprehensible to me.  
7. My previous goals and hopes for the future don’t make sense anymore since this event.  
8. I am perplexed by what happened.  
9. Since this event happened, I don’t know where to go next in my life.  
10. I would have an easier time talking about my life if I left this event out.  
11. My beliefs and values are less clear since this event.  
12. I don’t understand myself anymore since this event.  
13. Since this event, I have a harder time feeling like I’m part of something larger than myself.  
14. This event has made me feel less purposeful.  
15. I haven’t been able to put the pieces of my life back together since this event.  
16. After this event, life seems more random.
APPENDIX D

INVENTORY OF COMPLICATED GRIEF - REVISED
The death of ______ feels overwhelming or devastating.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Blank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td>less than once a month</td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td>once a month or more, less than once a week</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td>once a week or more, less than once a day</td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td>once every day</td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>Several times every day</td>
<td></td>
</tr>
</tbody>
</table>

I think about _____ so much that it can be hard for me to do the things I normally do.

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Blank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Memories of _____ upset me.

I feel that I have trouble accepting the death.

I feel myself longing and yearning for _____
I feel drawn to places and things associated with _____

<table>
<thead>
<tr>
<th>Frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td>___</td>
</tr>
<tr>
<td>Rarely</td>
<td>___</td>
</tr>
<tr>
<td>Sometimes</td>
<td>___</td>
</tr>
<tr>
<td>Often</td>
<td>___</td>
</tr>
<tr>
<td>Always</td>
<td>___</td>
</tr>
</tbody>
</table>

I can’t help feeling angry about _____’s death.

<table>
<thead>
<tr>
<th>Frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td>___</td>
</tr>
<tr>
<td>Rarely</td>
<td>___</td>
</tr>
<tr>
<td>Sometimes</td>
<td>___</td>
</tr>
<tr>
<td>Often</td>
<td>___</td>
</tr>
<tr>
<td>Always</td>
<td>___</td>
</tr>
</tbody>
</table>

I feel disbelief over _____’s death

<table>
<thead>
<tr>
<th>Frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td>___</td>
</tr>
<tr>
<td>Rarely</td>
<td>___</td>
</tr>
<tr>
<td>Sometimes</td>
<td>___</td>
</tr>
<tr>
<td>Often</td>
<td>___</td>
</tr>
<tr>
<td>Always</td>
<td>___</td>
</tr>
</tbody>
</table>
I feel stunned, dazed, or shocked over _____’s death

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never</td>
<td>___</td>
</tr>
<tr>
<td>Rarely</td>
<td>___</td>
</tr>
<tr>
<td>Sometimes</td>
<td>___</td>
</tr>
<tr>
<td>Often</td>
<td>___</td>
</tr>
<tr>
<td>Always</td>
<td>___</td>
</tr>
</tbody>
</table>

Ever since _____ died it is hard for me to trust people

<table>
<thead>
<tr>
<th>Difficulty Level</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No difficulty</td>
<td>___</td>
</tr>
<tr>
<td>A slight sense</td>
<td>___</td>
</tr>
<tr>
<td>Some sense</td>
<td>___</td>
</tr>
<tr>
<td>A marked sense</td>
<td>___</td>
</tr>
<tr>
<td>An overwhelming</td>
<td>___</td>
</tr>
</tbody>
</table>

Ever since _____ died I feel like I have lost the ability to care about other people or I feel distant from people I care about.

<table>
<thead>
<tr>
<th>Detachment Level</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>No difficulty</td>
<td>___</td>
</tr>
<tr>
<td>A slight sense</td>
<td>___</td>
</tr>
<tr>
<td>Some sense</td>
<td>___</td>
</tr>
<tr>
<td>A marked sense</td>
<td>___</td>
</tr>
<tr>
<td>An overwhelming</td>
<td>___</td>
</tr>
</tbody>
</table>
I have pain in the same area of my body, some of the same symptoms, or have assumed some of the behaviors or characteristics of _____.

Almost never ___
Rarely ___
Sometimes ___
Often ___
Always ___

I go out of my way to avoid reminders that _____ is gone.

Almost never ___
Rarely ___
Sometimes ___
Often ___
Always ___

I feel that life is empty or meaningless without _____

No sense of emptiness or meaninglessness ___
A slight sense of emptiness or meaninglessness ___
Some sense ___
A marked sense ___
An overwhelming sense ___
I hear the voice of _____ speak to me.

Almost never ___
Rarely ___
Sometimes ___
Often ___
Always ___

I see _____ stand before me.

Almost never ___
Rarely ___
Sometimes ___
Often ___
Always ___

I feel like I have become numb since the death of _____.

No sense of numbness ___
A slight sense of numbness ___
Some sense ___
A marked sense ___
An overwhelming sense ___
I feel that it is unfair that I should live when _____ died.

No sense of guilt over surviving the deceased

A slight sense of guilt

Some sense

A marked sense

An overwhelming sense

I am bitter over _____’s death

No sense of bitterness

A slight sense of bitterness

Some sense

A marked sense

An overwhelming sense

I feel envious of others who have not lost someone close.

Almost never

Rarely

Sometimes

Often

Always
I feel like the future holds no meaning or purpose without _____.

No sense that the future holds no purpose
A slight sense that the future holds no purpose
Some sense
A marked sense
An overwhelming sense

I feel lonely ever since _____ died.

Almost never
Rarely
Sometimes
Often
Always

I feel unable to imagine life being fulfilling without _____.

Almost never
Rarely
Sometimes
Often
Always
I feel that a part of myself died along with the deceased.

Almost never ___
Rarely ___
Sometimes ___
Often ___
Always ___

I feel that the death has changed my view of the world.

No sense of a changed world view ___
A slight sense of a changed world view ___
Some sense ___
A marked sense ___
An overwhelming sense ___

I have lost my sense of security or safety since the death of _____.

No change in feelings of security ___
A slight sense of insecurity ___
Some sense ___
A marked sense ___
An overwhelming sense ___
I have lost my sense of control since the death of ____.

- No change in feelings of being in control
- A slight sense of being out of control
- Some sense of being out of control
- A marked sense
- An overwhelming sense

I believe that my grief has resulted in significant impairment in my social, occupational or other areas of functioning.

- No functional impairment
- Mild functional impairment
- Moderate
- Severe
- Extreme

I have felt on edge, jumpy, or easily startled since the death.

- No change in feelings of being on edge
- A slight sense of feeling on edge
- Some sense
- A marked sense
- An overwhelming sense
Since the death, my sleep has been…

<table>
<thead>
<tr>
<th>Option</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basically okay</td>
<td>___</td>
</tr>
<tr>
<td>Slightly disturbed</td>
<td>___</td>
</tr>
<tr>
<td>Moderately disturbed</td>
<td>___</td>
</tr>
<tr>
<td>Very disturbed</td>
<td>___</td>
</tr>
<tr>
<td>Extremely disturbed</td>
<td>___</td>
</tr>
</tbody>
</table>
APPENDIX E

RELATION, INDIVIDUAL, AND COLLECTIVISTIC SELF-ASPECTS SCALE
THE RELATIONAL, INDIVIDUAL, AND COLLECTIVE
SELF-ASPECT SCALE (RIC)

Please circle a number between 1 and 7 for each of the three phrases at the end of the sentence.

1 – Does not describe me/is not true of me
2
3
4
5
6
7 – Describes me/is very true of me

I think it is most important in life to…

- Have personal integrity/be true to myself
  1  2  3  4  5  6  7

- Have good personal relationships with people who are important to me
  1  2  3  4  5  6  7

- Work for causes to improve the well-being of my group
  1  2  3  4  5  6  7

I would teach my children…

- To know themselves and develop their own potential as a unique individual
  1  2  3  4  5  6  7

- To be caring for their friends and attentive to their needs
  1  2  3  4  5  6  7

- To be loyal to the group to which they belong
  1  2  3  4  5  6  7

I regard myself as…

- Someone with his or her own will, individual
  1  2  3  4  5  6  7

- A good partner and friend
  1  2  3  4  5  6  7

- A good member of my group
  1  2  3  4  5  6  7
I think honor can be attained by…
- Being true to myself
  1 2 3 4 5 6 7
- Being true to people with whom I have personal relationships
  1 2 3 4 5 6 7
- Being true to my groups such as my extended family, work group, religious and social groups
  1 2 3 4 5 6 7

I would regard someone as a good employee for a company if
- He or she takes personal responsibility for the task assigned
  1 2 3 4 5 6 7
- He or she gets on well and works cooperatively with other colleagues
  1 2 3 4 5 6 7
- He or she works for the development of the organization or the work group
  1 2 3 4 5 6 7

The most satisfying activity for me is…
- Doing something for myself
  1 2 3 4 5 6 7
- Doing something for someone who is important to me
  1 2 3 4 5 6 7
- Doing something for my group (e.g., my school, church, club, neighborhood, and community)
  1 2 3 4 5 6 7

When faced with an important personal decision to make…
- I ask myself what I really want to do most
  1 2 3 4 5 6 7
- I talk with my partner or best friend
  1 2 3 4 5 6 7
- I talk to my family and relatives
  1 2 3 4 5 6 7
I would feel proud if…
- I was praised in the newspaper for what I have done
  1 2 3 4 5 6 7
- My close friend was praised in the newspaper for what he or she has done
  1 2 3 4 5 6 7
- A group to which I belong was praised in the newspaper for what they had done
  1 2 3 4 5 6 7

When I attend a musical concert…
- I feel that enjoying music is a very personal experience
  1 2 3 4 5 6 7
- I feel enjoyment if my company (partner, friend, guest) also enjoys it
  1 2 3 4 5 6 7
- I feel good to be part of the group
  1 2 3 4 5 6 7

I am most concerned about…
- My relationship with myself
  1 2 3 4 5 6 7
- My relationship with a specific person
  1 2 3 4 5 6 7
- My relationship with my group
  1 2 3 4 5 6 7
APPENDIX F

FACTOR LOADINGS OF STUDY MEASURES WITH THE CURRENT SAMPLE
FACTOR LOADINGS FOR THE CURRENT SAMPLE

The Relational, Individual, and Collective self-aspect Scale – Relational subscale (RIC-R)

### Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIC-R 1</td>
<td>.549</td>
<td>.496</td>
<td></td>
</tr>
<tr>
<td>RIC-R 2</td>
<td>.620</td>
<td>.310</td>
<td></td>
</tr>
<tr>
<td>RIC-R 3</td>
<td>.642</td>
<td>.300</td>
<td></td>
</tr>
<tr>
<td>RIC-R 4</td>
<td>.721</td>
<td></td>
<td></td>
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<tr>
<td>RIC-R 5</td>
<td>.741</td>
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<tr>
<td>RIC-R 6</td>
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<td>.655</td>
</tr>
<tr>
<td>RIC-R 7</td>
<td></td>
<td>.663</td>
<td>.307</td>
</tr>
<tr>
<td>RIC-R 8</td>
<td>.698</td>
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<tr>
<td>RIC-R 9</td>
<td>.631</td>
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<td></td>
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<tr>
<td>RIC-R 10</td>
<td>.450</td>
<td>.653</td>
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</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Inventory of Complicated Grief - Revised

### Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel disbelief over _____’s death.</td>
<td>.824</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel stunned, dazed, or shocked over _____’s death.</td>
<td>.803</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can’t help feeling angry about _____’s death.</td>
<td>.722</td>
<td>.386</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am bitter over _____’s death.</td>
<td>.670</td>
<td>.384</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I have trouble accepting the death.</td>
<td>.648</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The death of _____ feels overwhelming or devastating.</td>
<td>.543</td>
<td>.508</td>
<td>.388</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memories of _____ upset me.</td>
<td>.529</td>
<td>.350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Since the death, my sleep has been…</td>
<td></td>
<td></td>
<td>.605</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I go out of my way to avoid reminders that _____ is gone.</td>
<td></td>
<td>.604</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I think about _____ so much that it can be hard for me to do the things I normally do.</td>
<td>.394</td>
<td>.579</td>
<td>.331</td>
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<td></td>
</tr>
<tr>
<td>I feel like I have become numb since the death of ______.</td>
<td></td>
<td>.540</td>
<td></td>
<td>.455</td>
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<tr>
<td>Statement</td>
<td>Rotation 1</td>
<td>Rotation 2</td>
<td>Rotation 3</td>
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<td></td>
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</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel unable to imagine life being fulfilling without ______.</td>
<td>.438</td>
<td>.357</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever since _____ died I feel like I have lost the ability to care about other people or I feel distant from people I care about.</td>
<td>.412</td>
<td>.318</td>
<td>.410</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that a part of myself died along with the deceased.</td>
<td>.397</td>
<td>.361</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel drawn to places and things associated with ______.</td>
<td></td>
<td>.765</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel myself longing and yearning for ______.</td>
<td>.323</td>
<td>.733</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel envious of others who have not lost someone close.</td>
<td>.382</td>
<td>.559</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel lonely ever since _____ died.</td>
<td>.532</td>
<td>.547</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have lost my sense of control since the death of ______.</td>
<td>.337</td>
<td>.681</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have lost my sense of security or safety since the death of ______.</td>
<td></td>
<td>.676</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that it is unfair that I should live when _____ died.</td>
<td></td>
<td>.498</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that the death has changed my view of the world.</td>
<td></td>
<td>.476</td>
<td>.348</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel like the future holds no meaning or purpose without ______.</td>
<td></td>
<td></td>
<td>.811</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>I feel that life is empty or meaningless without ______.</td>
<td>.438</td>
<td>.342</td>
<td>.578</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I believe that my grief has resulted in significant impairment in my social, occupational or other areas of functioning.</td>
<td></td>
<td>.333</td>
<td>.519</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have felt on edge, jumpy, or easily startled since the death.</td>
<td>.422</td>
<td>.382</td>
<td>.443</td>
<td></td>
<td></td>
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<tr>
<td>I see _____ stand before me.</td>
<td></td>
<td></td>
<td>.837</td>
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<td></td>
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</tr>
<tr>
<td>I hear the voice of _____ speak to me.</td>
<td></td>
<td></td>
<td>.832</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have pain in the same area of my body, some of the same symptoms, or have assumed some of the behaviors or characteristics of ______.</td>
<td></td>
<td></td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever since _____ died it is hard for me to trust people.</td>
<td>.344</td>
<td>.425</td>
<td>.311</td>
<td>.459</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Integration of Stressful Life Events Scale

Rotated Component Matrix

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>This event has made me feel less purposeful.</td>
<td>.787</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Since this event happened, I don’t know where to go next in my life.</td>
<td>.763</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t understand myself anymore since this event.</td>
<td>.742</td>
<td>.345</td>
<td></td>
</tr>
<tr>
<td>Since this event, I have a harder time feeling like I’m part of something</td>
<td>.723</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.714</td>
<td></td>
<td></td>
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<tr>
<td>I haven’t been able to put the pieces of my life back together since this event.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My previous goals and hopes for the future don’t make sense anymore since this event.</td>
<td>.639</td>
<td>.343</td>
<td></td>
</tr>
<tr>
<td>My beliefs and values are less clear since this event.</td>
<td>.612</td>
<td>.431</td>
<td></td>
</tr>
<tr>
<td>ISLES Question 2</td>
<td></td>
<td>.743</td>
<td></td>
</tr>
<tr>
<td>I am perplexed by what happened.</td>
<td>.739</td>
<td>.310</td>
<td></td>
</tr>
<tr>
<td>I have difficulty integrating this event into my understanding about the world.</td>
<td>.330</td>
<td>.729</td>
<td></td>
</tr>
<tr>
<td>This event is incomprehensible to me.</td>
<td></td>
<td>.677</td>
<td></td>
</tr>
<tr>
<td>Since this event, the world seems like a confusing and scary place.</td>
<td>.322</td>
<td>.557</td>
<td></td>
</tr>
<tr>
<td>After this event, life seems more random.</td>
<td>.369</td>
<td>.556</td>
<td></td>
</tr>
<tr>
<td>Since this event, I feel like I’m in a crisis of faith.</td>
<td>.424</td>
<td>.513</td>
<td></td>
</tr>
<tr>
<td>I would have an easier time talking about my life if I left this event out.</td>
<td></td>
<td></td>
<td>.678</td>
</tr>
<tr>
<td>If or when I talk about this event, I believe people see me differently.</td>
<td></td>
<td>.322</td>
<td>.677</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Continuing Bonds Scale

**Rotated Component Matrix**

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attempt to carry out _____’s wishes.</td>
<td>.803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When making decisions, I imagine _____’s viewpoint and use this</td>
<td></td>
<td>.444</td>
<td></td>
</tr>
<tr>
<td>I am aware of having taken on many of _____’s habits, values, or interests.</td>
<td>.670</td>
<td>.304</td>
<td></td>
</tr>
<tr>
<td>I am aware of the positive influence of _____ on who I am today.</td>
<td>.578</td>
<td>.469</td>
<td></td>
</tr>
<tr>
<td>I have inner conversations with _____ where I turn to him or her for comfort or advice.</td>
<td></td>
<td>.767</td>
<td></td>
</tr>
<tr>
<td>I experience _____ as continuing to live on through me.</td>
<td></td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td>Even though no longer physically present, _____ continues to be a loving presence in my life.</td>
<td></td>
<td>.745</td>
<td></td>
</tr>
<tr>
<td>I keep items that belonged to or were closely associated with _____ as a reminder of him or her.</td>
<td></td>
<td>.754</td>
<td></td>
</tr>
<tr>
<td>I like to reminisce with others about _____</td>
<td></td>
<td>.708</td>
<td></td>
</tr>
<tr>
<td>I seek out things to remind me of _____</td>
<td></td>
<td>.459</td>
<td>.698</td>
</tr>
<tr>
<td>I have many fond memories that bring joy to me.</td>
<td>.473</td>
<td>.614</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
APPENDIX G

PERMISSION FOR USE OF STUDY MEASURES
PERMISSION FOR USE OF STUDY MEASURES

Continuing Bonds Scale

Field, Nigel <nfield@paloaltou.edu>

Tue 10/11/2011 11:52 AM

To: Black, Christopher G. (UMKC-Student);

Chris,
That’s fine. Free feel to use it and adapt it to your needs.

Regards,
Nigel Field

-----Original Message-----
From: Black, Christopher G. (UMKC-Student) [mailto:cgbgg3@mail.umkc.edu]
Sent: Mon 10/10/2011 4:23 PM
To: Field, Nigel
Subject: Continuing Bonds Scale

Hello Dr. Field,

My name is Christopher Black, I am a doctoral candidate in counseling psychology an the University of Missouri - Kansas City. I’m currently working on my dissertation research project and I would like to ask your permission to use the Continuing Bonds Scale (Field, Gal-Oz, & Bonanno, 2003) in my project. The use of the scale will be limited to fulfilling this academic requirement, but the study could also have the potential to be published in a peer reviewed journal at some point in the future. I would also like to ask permission to substitute "loved one" in the place of "spouse" where appropriate to include different types of relationships with the deceased. If this is acceptable, please let me know of any limitations or conditions for using the scale. Thank you for your time.

Sincerely,

Chris
Christopher G. Black
Doctoral Student - Counseling Psychology
University of Missouri - Kansas City
cgbgg3@mail.umkc.edu
Relational, Individual, and Collective self-aspects Scale

Emiko Kashima <E.kashima@latrobe.edu.au>
Tue 10/11/2011 4:43 AM
To: Black, Christopher G. (UMKC-Student);
Thank you for your interest. Go ahead and use the scale, please.
Emi

From: Black, Christopher G. (UMKC-Student) [mailto:cgbgg3@mail.umkc.edu]
Sent: Monday, 10 October 2011 1:07 PM
To: Emiko Kashima
Subject: Relational, Individual, and Collective self-aspects Scale

Hello Dr. Kashima,
My name is Christopher Black, I am a doctoral candidate in counseling psychology at the University of Missouri - Kansas City. I'm currently working on my dissertation research project and I would like to ask your permission to use the Relational, Individual, and Collective self-aspects Scale in my study. The use of the scale will be limited to fulfilling this academic requirement, but the study could also have the potential to be published in a peer reviewed journal at some point in the future. If this is acceptable, please let me know of any limitations or conditions for using the scale. Thank you for your time.
Sincerely,
Chris

Christopher G. Black
Doctoral Student - Counseling Psychology
University of Missouri - Kansas City
cgbgg3@mail.umkc.edu

Inventory of Complicated Grief

Prigerson, Holly G, Ph.D. <Holly_Prigerson@dfci.harvard.edu>
Mon 10/10/2011 3:47 PM
To: Black, Christopher G. (UMKC-Student);
Understood. Permission granted.

Holly G. Prigerson, PhD
Director, Center for Psychooncology & Palliative Care Research
Department of Medical Oncology
Dana-Farber Cancer Institute
Associate Professor of Psychiatry, Brigham & Womens’ Hospital Harvard Medical School
450 Brookline Avenue, Smith 268, Boston, MA 02115
T: (617) 632-2369; F: (617) 632-3161
Hello Dr. Prigerson,

Thank you for the PG-13 as well as it's validation. However, for the purposes of this particular study, permission for use of the ICG-R would be preferable.

Thank you again for your time.

Sincerely,

Chris

Christopher G. Black
Doctoral Student - Counseling Psychology
University of Missouri - Kansas City
cgbgg3@mail.umkc.edu
Hello Dr. Prigerson

My name is Christopher Black, I am a doctoral candidate in counseling psychology an the University of Missouri - Kansas City. I’m currently working on my dissertation research project and I would like to ask your permission to use the Inventory of Complicated Grief (Prigerson & Jacobs, 2001) in my project. The use of the measure will be limited to fulfilling this academic requirement, but could also have the potential to be published in a peer reviewed journal at some point in the future. If this is acceptable, please let me know of any limitations or conditions for using the measure. Thank you for your time.

Sincerely,

Chris

Christopher G. Black
Doctoral Student - Counseling Psychology
University of Missouri - Kansas City
cgbgg3@mail.umkc.edu

The information in this e-mail is intended only for the person to whom it is addressed. If you believe this e-mail was sent to you in error and the e-mail contains patient information, please contact the Partners Compliance HelpLine at http://www.partners.org/complianceline. If the e-mail was sent to you in error but does not contain patient information, please contact the sender and properly dispose of the e-mail.

Integration of Stressful Life Experiences Scale

Black, Christopher G. (UMKC-Student)

Mon 11/28/2011 9:15 AM
To: Jason Holland <jmhollnd@gmail.com>
Thank you very much Dr. Holland, I really appreciate it. Also, thank you for the article. Chris

Christopher G. Black
Doctoral Student - Counseling Psychology
University of Missouri - Kansas City
cgbgg3@mail.umkc.edu

From: Jason Holland [jmhollnd@gmail.com]
Sent: Sunday, November 27, 2011 6:47 PM
To: Black, Christopher G. (UMKC-Student)
Subject: Re: Integration of Stressful Life Experiences Scale

Yes, please reword that part of the instructions to make them as relevant as possible to your population of interest. We have certainly done that in our own research.
Best,
JH
P.S. - I've attached an in press article you may wish to cite in your dissertation, which examines the validity of the ISLES with combat vets returning from Iraq and Afghanistan.

On Sun, Nov 27, 2011 at 4:40 PM, Black, Christopher G. (UMKC-Student) <cgbgg3@mail.umkc.edu> wrote:
> Hello Dr. Holland,
> I wanted to thank you for allowing me to use the ISLES in my dissertation research. My study will investigate bereavement experiences and I think the ISLES is an excellent measure to use in this area of research. Currently, the instructions ask participants to respond with regard to the most stressful life event they have experienced. However, I would like to ask your permission to reword the instructions of the ISLES to ask participants specifically about their experience with bereavement. Would this be an acceptable change? Again, thank you, I really appreciate your help.
> Sincerely,
> Chris
>
> Christopher G. Black
> Doctoral Student - Counseling Psychology
> University of Missouri - Kansas City
> cgbgg3@mail.umkc.edu
>
> From: Jason Holland [jmholln@gmail.com]
> Sent: Sunday, October 09, 2011 9:08 PM
> To: Black, Christopher G. (UMKC-Student)
> Subject: Re: Integration of Stressful Life Experiences Scale
>
> Hi Chris,
>
> No special permission needed to use the measure, except I would ask that you keep me posted on your work. I'm always interested to find out what others are finding with regard to the measure. Please let me know if you have any questions about the measure or how to administer it.
>
> Best of luck with your research!
>
> Best,
> Jason
>
> On Sun, Oct 9, 2011 at 6:50 PM, Black, Christopher G. (UMKC-Student) <cgbgg3@mail.umkc.edu> wrote:
> Hello Dr. Holland,
>>> My name is Christopher Black, I am a doctoral candidate in counseling psychology at the University of Missouri - Kansas City. I'm currently working on my dissertation research project and I would like to ask your permission to use the Integration of Stressful Life Experiences Scale in my study. The use of the scale will be limited to fulfilling this academic requirement, but could also have
the potential to be published in a peer reviewed journal at some point in the future. If this is acceptable, please let me know of any limitations or conditions for using the scale. Thank you for your time.

>> Sincerely,

>> Chris

>> Christopher G. Black
>> Doctoral Student - Counseling Psychology
>> University of Missouri - Kansas City
>> cgbgg3@mail.umkc.edu
REFERENCES


VITA

Christopher Black was born August 7, 1979 in St. Louis Missouri. He was educated primarily in the local public school system and graduated from Ladue Horton Watkins High School in 1998. He attended the University of Iowa and graduated with a bachelor’s of science in psychology in 2003.

After gaining research experience by working and volunteering for various psychology labs at the University of Iowa, Mr. Black began his doctoral studies in counseling psychology at the University of Missouri-Kansas City. After completing his degree, Mr. Black plans to continue his career providing counseling services in a university setting.