

University of Northern Colorado

Scholarship & Creative Works @ Digital UNC

Dissertations

Student Work

8-2019

Afterlife Beliefs, Attachment, and Continuing Bonds in Predicting Complicated Grief

Kiersten Michele Eberle Medina
University of Northern Colorado

Follow this and additional works at: <https://digscholarship.unco.edu/dissertations>

Recommended Citation

Eberle Medina, Kiersten Michele, "Afterlife Beliefs, Attachment, and Continuing Bonds in Predicting Complicated Grief" (2019). *Dissertations*. 603.
<https://digscholarship.unco.edu/dissertations/603>

This Dissertation is brought to you for free and open access by the Student Work at Scholarship & Creative Works @ Digital UNC. It has been accepted for inclusion in Dissertations by an authorized administrator of Scholarship & Creative Works @ Digital UNC. For more information, please contact Nicole.Webber@unco.edu.

© 2019

KIERSTEN MICHELE EBERLE MEDINA

ALL RIGHTS RESERVED

UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

AFTERLIFE BELIEFS, ATTACHMENT, AND
CONTINUING BONDS IN PREDICTING
COMPLICATED GRIEF

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Kiersten Michele Eberle Medina

College of Education and Behavioral Sciences
Department of Applied Psychology and Counselor Education
Program of Counseling Psychology

August 2019

This Dissertation by: Kiersten Michele Eberle Medina

Entitled: *Afterlife Beliefs, Attachment, and Continuing Bonds in Predicting Complicated Grief*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Education and Behavioral Sciences in School of Applied Psychology and Counselor Education, Program of Counseling Psychology.

Accepted by the Doctoral Committee

Jeffrey Rings, PhD, Research Advisor

Lu Tian, PhD, Committee Member

Heather Helm, PhD, Committee Member

Melanie Moore, PhD, Faculty Representative

Date of Dissertation Defense _____

Accepted by the Graduate School

Linda L. Black, Ed.D.
Associate Provost and Dean
Graduate School and International Admissions

ABSTRACT

Eberle Medina, Kiersten. *Afterlife Beliefs, Attachment, and Continuing Bonds in Predicting Complicated Grief*. Published dissertation, University of Northern Colorado, 2019.

This study examined the possible moderating effect afterlife beliefs and attachment have on the impact of continuing bonds on complicated grief. Although research has examined the relationship between attachment and complicated grief, and between afterlife beliefs and complicated grief, little is known about how these constructs interact with continuing bonds to affect complicated grief symptomatology. Research questions asked: (a) Does complicated grief symptomatology (CGS) severity differ between individuals who hold afterlife beliefs versus those who do not? (b) Does the presence of internalized continuing bonds (ICB) expressions differ between individuals who hold afterlife beliefs versus those who do not? (c) Does attachment insecurity moderate the relationship between ICB and CGS? (d) Does the strength of an individual's afterlife beliefs moderate the relationship between ICB and CGS? To answer these questions, a cross-sectional design was used. A convenience sample of bereaved university students ($n = 175$) was collected, and a MANOVA and a hierarchical regression were run.

Initial analyses showed that neither CGS nor ICB differed according to afterlife belief. Additionally, neither attachment insecurity nor afterlife beliefs moderated the

relationship between ICB and CGS. Post hoc analyses, which used all participants, regardless of their expressed afterlife beliefs, found that CGS still did not differ according to afterlife belief, but ICB did. Specifically, Individuals who reported afterlife beliefs reported significantly more ICB than those that were unsure of their afterlife beliefs. Furthermore, in a hierarchical regression, strength of afterlife beliefs predicted the use of ICB. Post hoc analyses also found that afterlife beliefs moderated the relationship between ICB and CGS, with ICB becoming less predictive of CGS as strength of afterlife belief increased. Additionally, post hoc analyses were run using the ECB subscale of the CBS-R. These analyses found that ECB did not differ according to afterlife beliefs. Furthermore, afterlife beliefs and attachment avoidance individually both moderated the relationship between ECB and CGS, with ECB being less predictive of CGS as strength of each attachment anxiety and afterlife beliefs increased. Lastly it was found that a belief that one would be reunited explained a significant amount of variance in ICB expressions.

Overall, the results from this study added to the literature on continuing bonds, afterlife beliefs, attachment, and grief. It also provides some implications for future research and clinical implications that suggest that the impact ICB and ECB have on CGS may be influenced by the strength of afterlife beliefs. Furthermore, this study provides evidence that ICB expressions are related to afterlife beliefs. This study also emphasized the need to measure ICB and ECB as separate constructs and indicated afterlife beliefs may best be measured as a continuous variable.

DEDICATION

This dissertation is dedicated in loving memory to my mother, Toni, who taught me the meaning of love, attachment, and grief. I inherited the strength it took to get through my program from her.

ACKNOWLEDGEMENTS

First, I would like to acknowledge my Research Advisor, Dr. Jeffrey Rings. Thank you for your time and effort with each and every rewrite and edit. I could not have done any of this without your constant support, continual guidance, and critical eye. Thank you for your patience with all my split infinitives. A huge thank you to the rest of my dissertation committee—Dr. Lu Tian, Dr. Heather Helm, and Dr. Melanie Moore—for your patience and dedication in supporting me through this process.

I also want to acknowledge my family for their support and love through my program. Thank you to my dad and Helen for always supporting me, Jason and Jaimie for always pushing me, and my siblings for putting up with me. Thank you to my new found family—Teresa, Joe, Christina, and Shayan—for loving me even at my most stressed and burnt out. Now that this is all almost done, I hope to actually see you all during the holidays! A special thank you to my grandfather—without out his support, I could not have gotten this far in my education.

I would like to thank my husband, Joe, who has been by my side throughout this entire process. I owe him a debt that I could never repay for the love, support, and patience he has shown through this all. He has continued to be my rock through thick and thin. I cannot wait for the adventures we have ahead of us and I am thankful for the journey you have taken with me so far.

Lastly, and most importantly, I want to thank Jobin and Fievel for their love and support on even my worst days.

TABLE OF CONTENTS

CHAPTER

I. INTRODUCTION.....	1
Background	
Rationale	
Statement of Purpose	
Research Questions	
Limitations and Delimitations	
Definitions of Terms	
II. REVIEW OF LITERATURE.....	17
Introduction	
Attachment	
Grief in Psychology	
Complicated Grief	
Continuing Bonds	
Religion and Afterlife Beliefs	
Conclusion	
III. METHODOLOGY.....	79
Participants	
Procedures	
Instrumentation	
Data Analysis	
Summary	
IV RESULTS.....	95
Descriptive Statistics for the Sample	
Descriptive Statistics and Reliability Analyses for the Measures	
Statistical Analyses for the Research Questions and Hypotheses	
Post Hoc Analyses	
Summary	

V. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH.....	138
Afterlife Beliefs and its Relationship with Complicated Grief Symptomatology	
Afterlife Beliefs and its Relationship with Internalized Continuing Bonds	
Attachment Anxiety, Internalized Continuing Bonds, and Complicated Grief Symptomatology	
Attachment Avoidance, Internalized Continuing Bonds, and Complicated Grief Symptomatology	
Afterlife Beliefs, Internalized Continuing Bonds, and Complicated Grief Symptomatology	
Post Hoc Examinations of Externalized Continuing Bonds	
Results from the Valence Analysis	
Summary of Results and Additional Theoretical Implications	
Practice Implications from the Results	
Directions for Future Research	
Limitations	
Conclusion	
REFERENCES.....	179
APPENDIX A – IRB APPROVAL LETTERS.....	218
APPENDIX B – RECRUITMENT EMAIL.....	222
APPENDIX C – INFORMED CONSENT.....	225
APPENDIX D – DEBRIEFING STATEMENT.....	228
APPENDIX E – RELIGIOUS BELIEFS ITEMS.....	231
APPENDIX F – DEMOGRAPHICS QUESTIONNAIRE.....	233
APPENDIX G – BELIEF IN AN AFTERLIFE SCALE.....	236
APPENDIX H – EXPERIENCES IN CLOSE RELATIONSHIPS - RELATIONSHIP STRUCTURES.....	238
APPENDIX I – CONTINUING BONDS SCALE - REVISED.....	240
APPENDIX J – INVENTORY OF COMPLICATED GRIEF - REVISED.....	242

LIST OF TABLES

Table		
1.	Participant Demographics.....	98
2.	Demographics of the Deceased Loved Ones as Reported by the Participants	99
3.	Descriptive Analysis for the Belief in an Afterlife Scale (BAS) Scores..	101
4.	Descriptive Analysis of the Experiences in Close Relationships – Relationship Structures Subscales.....	103
5.	Descriptive Analysis of the Continuing Bonds Scale – Revised Subscales.....	104
6.	Descriptive Analysis of the Inventory of Complicated Grief – Revised	106
7.	Means, SEs, and MANOVA statistics for Afterlife Beliefs and Race/Ethnicity related to ICB and ICG-R score.....	109
8.	Correlations Matrix for Multiple Linear Regression.....	114
9.	Summary of Hierarchical Regression Analysis for Variables Predicting Complicated Grief Symptomatology.....	115
10.	Summary of Post Hoc Hierarchical Regression Analysis for Afterlife Beliefs Predicting Internalized Continuing Bonds.....	121
11.	Summary of Post Hoc Hierarchical Regression Analysis for Variables Predicting Complicated Grief Symptomatology.....	123
12.	Simple Slope Analysis for Different Levels of Afterlife Beliefs on ICB.....	125
13.	Summary of Post Hoc Hierarchical Regression Analysis for Variables Predicting Complicated Grief Symptomatology.....	128
14.	Simple Slope Analysis for Different Levels of Afterlife Beliefs on ECB.....	130

15.	Simple Slope Analysis for Different Levels of Avoidant Attachment on ECB.....	132
16.	Summary of Post Hoc Hierarchical Regression Analysis for Valence of Beliefs Predicting Internalized Continuing Bonds.....	135

LIST OF FIGURES

Figure

1. The Moderating Effect of Strength of Afterlife Beliefs on the Relationship between Internalized Continuing Bonds (ICB) and Complicated Grief Symptomatology (CGS) Based on Predicted Values 126
2. The Moderating Effect of Strength of Afterlife Beliefs on the Relationship between Externalized Continuing Bonds (ECB) and Complicated Grief Symptomatology (CGS) Based on Predicted Values 131
3. The Moderating Effect of Strength of Attachment Avoidance on the Relationship between Externalized Continuing Bonds (ECB) and Complicated Grief Symptomatology (CGS) Based on Predicted Values 133

CHAPTER I
INTRODUCTION

Background

Death is a universal phenomenon. As such, every individual at one point in their life will be faced with the death of a loved one and the grief that accompanies such a loss. While this phenomenon may be universal, the actual bereavement experience is unique to the individual. Some bereaved individuals may gain meaning in life and feel increased closeness in their remaining relationships (Neimeyer, Prigerson, & Davies, 2002), while others may suffer months to years of intense grief symptomatology following their loss (Prigerson et al., 2009).

Psychologists have worked to define and understand these differences in grief reactions, wishing to draw a line between uncomplicated grief (UG) and more problematic reactions following a loss, which Prigerson et al. (1995) referred to as *complicated grief* (CG). While they were not the first to give a name to this phenomenon, their research has been influential in the modern literature on the subject and CG is the name that this study will use. Researchers have struggled to agree on a specific symptom profile of CG, but most agree that CG is defined as grief that goes beyond the culturally defined norm of intensity or time course of the grief reaction to the point of disrupting an individual's ability to function (Stroebe, Hansson, Schut, & Stroebe, 2008).

Not everyone who experiences a loss will go on to develop CG. Researchers have estimated that from 1 to 15% of bereaved individuals may develop CG following their loss (Bonanno, 2004; Forstmeier & Maercker, 2007). These individuals are at higher risk of developing physical health problems, such as cancer, high systolic blood pressure, and heart problems than those with UG (Prigerson et al., 1997). Additionally, compared to UG, CG has higher co-occurrence rates with posttraumatic stress disorder (PTSD) and major depressive disorder (MDD; Melhem et al., 2001). CG also has been found to uniquely predict suicidality, beyond other co-occurring mental health disorders and UG (Latham & Prigerson, 2004).

Complicated Grief and Continuing Bonds

Psychologists have worked to understand the unique nature of grief across individuals, examining what factors might contribute to certain individuals developing more severe or prolonged symptoms of grief following a death. One factor which has been woven throughout the literature on CG is the continuation or relinquishment of bonds or emotional attachments with the deceased. Freud (1917/2005) famously discussed the concept of bonds, specifically stating that only with the severing of these bonds could an individual recover fully from grief. He proposed that a continued attachment to these bonds could, conversely, lead to depression (or melancholia).

Many years later, Klass, Silverman, and Nickman (1996) challenged Freud's original statements regarding these emotional bonds. While they did not outright state that continuing bonds (CB) were necessarily healthy, they did note that cross-cultural research appeared to suggest that CB, or the continued emotional attachment with a deceased individual, could be a healthy part of the grieving and recovery process. Their

research led to a wave of studies examining the relationship between CB and CG, adding much discussion to the debate on whether it is better for the bereaved to sever their bonds with the deceased or to continue these bonds into recovery.

This debate has continued into the present day, as researchers continue to struggle with the findings in the literature. Much of the literature agrees that the presence of CB in bereaved individuals is extremely common (Asai et al., 2010; Bell, Bailey, & Kennedy, 2015; Carnelley, Wortman, Bolger, & Burke, 2006; Chan et al., 2005; Costello & Kendrick, 2000; Doran & Hansen, 2006; Epstein, Kalus, & Berger, 2006; Foster et al., 2011; Ganzevoort & Falkenburg, 2012; Harper, O'Connor, Dickson, & O'Carroll, 2011; Ho & Brotherson, 2007; Hussein & Oyebode, 2009; Jahn & Spencer-Thomas, 2014; Khosravan, Salehi, Ahmadi, Sharif, & Zamani, 2010; Klugman, 2006; Mangione, Lyons, & DiCello, 2016; Russac, Steighner, & Canto, 2002; Scholtes & Browne, 2015; Suhail, Jamil, Owebode, & Ajmal, 2011). Studies have also shown that individuals may find CB comforting (Asai et al., 2010; Beischel, Mosher, & Boccuzzi, 2014-15; Chan et al., 2005; Costello & Kendrick, 2000; Doran & Hansen, 2006; Jahn & Spencer-Thomas, 2014; Sochos & Bone, 2012). Yet, much of the quantitative literature has linked the presence of CB with more intense and complicated grief reactions (Cowchock, Lasker, Toedter, Skumanich, & Koenig, 2010; Field & Filanosky, 2010; Field & Friedrichs, 2004; Field, Gal-Oz, & Bonanno, 2003; Ho, Chan, Ma, & Field, 2013; Mancini, Sinan, & Bonanno, 2015; Stroebe, Abakoumkin, Stroebe, & Schut, 2012).

Given that this discrepancy remains quite evident in the now copious, extant literature, researchers have attempted to further examine additional, related constructs in order to understand how CB can be both extremely common and comforting for some,

while also being linked with higher rates of CG in others. Field, Gao, and Paderna (2005) attempted to differentiate between two types of CB: externalized CB (ECB) and internalized CB (ICB). According to Field et al. (2005), ECB represent an attempt at relief in the early stages of grief in which individuals experience illusions or feel a need to hold on to possessions of deceased. ICB, on the other hand, represent a more internalized sense of connection and security to the deceased. Field et al. (2005) theorized that ICB would therefore be less predictive of CG than would ECB. While the research has shown the distinct nature of these two types of CB (Field & Filanosky, 2010), researchers have continued to find that both ICB and ECB are predictive of CG symptomatology (CGS) severity (Field & Filanosky, 2010; Gassin & Lengel, 2014; Ho et al., 2013).

Continuing Bonds, Attachment, and Complicated Grief

Still, it appears that CB, whether internalized or externalized, do not account for all the variance in grief symptomatology between individuals. Thus, researchers have continued to explore other possible explanations for why only some suffer from CG following a loss. One construct that researchers have examined in an attempt to explain how the relationship between CB and CG may differ across individuals is attachment. Defined as a strong, enduring emotional bond developed between one individual and another, attachment was originally studied in the formation of relationships between mothers and their children (Ainsworth, 1969). Bowlby (1977, 1980) quickly connected the theory of attachment to adult relationships and how both adults and children experience loss and death. Most modern literature on the subject distinguishes between

secure and insecure attachment, with researchers often placing insecure attachment on two orthogonal dimensions of attachment anxiety and attachment avoidance.

Some particular attachment styles have been linked directly with CG. Studies have found that individuals who score low on both attachment avoidance and attachment anxiety (i.e., securely attached individuals) are less likely to develop CG (Beverung & Jacobvitz, 2016; Cohen & Katz, 2015; Field, Tzadikario, Pel, & Ret, 2014; Pini et al., 2012; Uren & Wastell, 2002; Waskowic & Chartier, 2003). On the other hand, general insecure attachment has been linked with more severe grief reactions (Meert et al., 2011; Waskowic & Chartier, 2003). Specifically, high attachment anxiety uniquely predicts more prolonged and severe grief reactions (Delespaux, Ryckebosch-Dayez, Heeren, & Zech, 2013; Field, Orsini, Gavish, & Packman, 2009; Field & Sundin, 2001; Jerga, Shaver, & Wilkinson, 2011; Meier, Carr, Currier, & Neimeyer, 2013; Scheidt et al., 2012; Uren & Wastell, 2002). Research on attachment avoidance shows more mixed results, with general avoidance being correlated with CGS (Boelen & Klugkist, 2011; Currier, Irish, Neimeyer, & Foster, 2015; van der Houwen, Stroebe, Schut, Stroebe, & van den Bout, 2010; van der Houwen, Stroebe, Stroebe et al., 2010) and specific avoidant attachment to the deceased being predictive of less severe grief reactions (Delespaux et al., 2013; Jerga et al., 2011; Mancini, Robinaugh, Shear, & Bonanno, 2009).

Yet, while attachment and CB have both been studied in separately in relation to CG, few studies have examined the interaction between those two constructs as they relate to the development of CG. Among them, two specific and more recent studies have shown links between attachment, CB, and CG. Yu, He, Xu, Wang, and Prigerson (2016) examined how ICB and ECB mediated the relationship between attachment and grief

reactions. Looking at a sample of community members in China, their study found that the relationship between attachment avoidance and CG was fully mediated by ECB, while attachment anxiety and CG was only partially mediated by ECB. They did not specifically examine or discuss if or how ICB mediated the relationship between attachment and CG.

Currier et al. (2015) proposed a different theory, examining if anxious attachment or avoidant attachment would moderate the relationship between CB and CG in a sample of United States (U.S.) university students who had lost a loved one to violent death. Controlling for age, gender, and ethnicity, the researchers found that both avoidant and anxious attachment styles moderated the relationship between CB and CG. They found that CB was positively correlated with CG for individuals regardless of their levels of attachment insecurities. Yet, for individuals with high anxiety and/or low avoidance, this relationship was less predictive than for individuals with high avoidance. Currier et al. (2015) proposed that congruence between CB expressions and attachment is key; individuals with high anxiety who hold CB show more congruence than those with high avoidance holding these CB. CB held by highly anxious or low avoidant individuals are therefore less maladaptive than those held by highly avoidant individuals.

As of now, these two studies are the most prominent among the very few that have examined the relationship between these constructs; sadly, no agreement has been reached on how these constructs might interact. One presented a model of moderation (Currier et al., 2015) and the other presented a model of mediation (Yu et al., 2016), leaving future researchers with little if any definitive directions at present. While both models should be studied further, the present study will adhere more so to the Currier et

al. (2015) model as a basis for examination. This is because Yu et al. (2016) did not theorize a connection between ICB and CG, and thus did not explore for this, which is what this study plans to do. While Currier et al. (2015) also did not directly measure ICB in their study, their more generalized model, which accounted for a broader definition of CB than did Yu et al. (2016), can be used to more specifically examine how ICB interacts with CG.

The Role of Afterlife Beliefs

While there have been only a few studies that have examined the interaction between attachment and CB as it relates to CG, there does appear to be strong agreement among the research that one's attachment style may impact grief responses, and that this impact may be predicated on its interaction with CB. Yet once again, this does not appear to be the entire picture, with attachment unable to explain the relationship between CB and variance in grief reactions. One factor which has been rarely empirically examined in the CG literature, but may help explain, in part, the relationship between CG and CB, is the concept of death-specific religious beliefs, especially afterlife beliefs (Root & Exline, 2014). Afterlife beliefs are the specific beliefs individuals hold regarding whether or not an individual's soul continues to exist beyond death and in what form. Individuals who possess a belief in the afterlife believe in this continued existence. While these beliefs may be related to religious beliefs and religious affiliation, they are not necessarily equivalent and individuals who have afterlife beliefs may not necessarily ascribe to them based on a specific religion (Draper, Holloway, & Adamson, 2013; Harley & Firebaugh, 1993). In the research, afterlife beliefs have been measured both as a dichotomous construct, with individuals either possessing the belief or not possessing the belief (Carr

& Sharp, 2013; McClain-Jacobson et al., 2004), and as a continuous construct with individuals being measured on the strengths of their beliefs (Cohen et al., 2005). This study will examine afterlife beliefs in both ways, seeing these beliefs as something that individuals may or may not possess, while acknowledging that the strength of these beliefs may differ across those individuals who hold them.

Research has examined how afterlife beliefs may relate to grief symptom severity. For example, Klaassen, Young, and James (2015) reported that some bereaved individuals find increased comfort due to their afterlife beliefs. Yet, despite numerous researchers pointing to the theoretical connection between CB and afterlife beliefs (Benore & Park, 2004; Field et al., 2005; Field et al., 2013; Mangione et al., 2016; Root & Exline, 2014), no study has specifically, empirically examined this relationship.

Rationale

Death is a universal experience. Everyone will lose a close loved one at least once in their lives. Researchers have estimated that from 1 to 15% (Bonanno, 2004; Forstmeier & Maercker, 2007) of bereaved individuals may develop CG following their loss. While it may be best for UG to remain untreated (Jordan & Neimeyer, 2003), CG can lead to significant occupational and social impairment (Monk, Houck, & Shear, 2006; Simon et al., 2007), physical health problems (Prigerson et al., 1997), further psychological difficulties and disorders (Melhem et al., 2001), and even suicide (Latham & Prigerson, 2004; Melhem, Moritz, Walker, Shear, & Brent, 2007). It is vital that counseling psychologists understand how to predict and separate out those individuals who will progress through grief without intervention and those who may require more targeted

interventions to fully recover so that counseling psychologists can best provide treatment to those individuals who need it.

Currently there is some agreement on aspects of the CG research. For example, there is a clear connection between grief symptom severity and factors such as attachment style (Schenck, Eberle, & Rings, 2016), CB (Root & Exline, 2014), and afterlife beliefs (Carr & Sharp, 2013; Klaassen et al., 2015). However, there is much less clarity in the literature on the exact nature of these relationships and how these factors may interact, with only two studies so far (Currier et al., 2015; Yu et al., 2016) looking at specific relationships between these CB, attachment, and CG. Both studies present competing theories on this relationship, one a mediation model (Yu et al., 2016) and the other a moderation model (Currier et al., 2015). There was a glaring need at present for further research to better understand the exact nature of these relationships. This study expanded on the moderation model of Currier et al. (2015), looking specifically at ICB in relationship to attachment and CG. While Yu et al. (2016) should also be further examined, their model did not connect ICB with CG as this study planned to do. If individuals of different attachment styles react to CB differently and CB are adaptive for some and not others, this is vital information for counseling psychologists on how best to approach clients with CG and CB. Through exploring these relationships more fully, counseling psychologists then can better understand the adaptive or maladaptive nature of CB expression, and subsequently understand whether these bonds should be encouraged or treated as a symptom and maladaptive coping mechanism. In other words, counseling psychologists need to better understand for each client if these bonds should be

encouraged and strengthened, or if they should be working to lead clients away from these overt expressions of continued attachment with the deceased.

Moreover, despite the theoretical discussions linking religion and afterlife beliefs specifically to CB and grief symptom severity (Benore & Park, 2004; Field et al., 2005), very little empirical research has explored this connection. In fact, researchers have directly stated that CB should be examined while considering afterlife or religious beliefs. As Field et al. (2005) noted, the “sense of presence and hallucinatory CB experiences might be interpreted by those with pre-existing religious beliefs as evidence for the existence of the soul continuing on after death” (p. 293), and therefore these CB expressions may be seen as comforting and easily interpreted in their sense of meaning. Yet researchers have done little to explore this idea empirically. Instead, Dossey (2014) and Root and Exline (2014) both pointed out the lack of openness in the research to religious understandings of CB and how these beliefs may change the interpretations made. As psychologists move toward a more inclusive stance on culture, including religion (Vieten et al., 2013), there needs to be a movement in the bereavement literature toward a more inclusive understanding of religion and beliefs related to death. Respect for these beliefs and being able to adapt to these differences is a piece of culturally competent practice (Sue, 2001; Vieten et al., 2013). This is particularly important to our understanding of CB expressions and their adaptiveness in grief. As Dossey (2014) argued, it is simply “not fair to grieving, bereaved patients” to place onto them our own ideologies of the afterlife and continuity of the soul (p. 187). Further research is needed to examine the relationship between CB, afterlife beliefs, and CG so that counseling

psychologists may treat their bereaved clients in a more culturally competent manner, particularly when client CB expression may be related to their religion or afterlife beliefs.

Statement of Purpose

The purpose of this study was to explore the relationships between CB, attachment, afterlife beliefs, and CGS. Specifically, in this study the researcher aimed to explore how attachment and afterlife beliefs affect, or moderate, the impact that ICB has on CGS, expanding upon the model used by Currier et al. (2015). Age, ethnicity, and gender were controlled for this study. Age and ethnicity have been found to impact grief responses (Boulware & Bui, 2016; Goldsmith, Morrison, Vanderwerker, & Prigerson, 2008; Meier et al., 2013), and ethnicity and gender have been shown to impact continuing bonds (Lalande & Bonanno, 2006; Laurie & Neimeyer, 2008; Sochos & Bone, 2012). In doing so, this study added to the literature base on CB, attachment, and afterlife beliefs and discovered direct implications for counseling psychologists working with grieving individuals, keeping their attachment style and afterlife beliefs in mind.

One of the anticipated benefits of this study was to help counseling psychologists to gain a better understanding of how CB expressions should be approached in treatment, depending on clients' attachment levels and afterlife beliefs. This study hoped to understand if counseling psychologists need to take afterlife beliefs or attachment into account when determining if CB expressions are maladaptive or adaptive. Another anticipated benefit was that this study hoped to support the theoretical assumption that some CB may be expressions of a religious or spiritual beliefs system for some individuals with strong religious beliefs, rather than maladaptive coping strategies (Field et al., 2013; Mangione et al., 2016). It was hoped this study would encourage counseling

psychologists to examine religious and afterlife beliefs as a part of clients multicultural identity (Sue, 2001), particularly for clients coping with grief.

Research Questions

The research questions for this study were as follows:

- Q1 Does CGS severity differ between individuals who hold afterlife beliefs versus those who do not?
- Q2 Does the presence of ICB expressions differ between individuals who hold afterlife beliefs versus those who do not?
- Q3 Among those who believe in an afterlife, does attachment insecurity moderate the relationship between ICB and CGS?
- Q4 Among those who believe in an afterlife, does the strength of an individual's afterlife beliefs moderate the relationship between ICB and CGS?

Limitations and Delimitations

A limitation of this study and any current study of CGS is the lack of consensus in the field on a defined set of criteria for the syndrome of CG. Numerous researchers have created multiple sets of criteria and measures of CG (Horowitz et al., 1997; Prigerson et al., 1995; Prigerson et al., 2009; Shear et al., 2011). Furthermore, the American Psychiatric Association's (2013) 5th edition of the *Diagnostic and statistical manual of mental disorders* (DSM 5) offered up another new set of proposed criteria for Persistent Complex Bereavement Disorder, much to the criticism of other researchers in the field (Bandini, 2015; Boelen & Prigerson, 2012; Theileman & Cacciatore, 2014). These disagreements on the very definition of CG and the symptoms it entails—even the time frame in which it can be diagnosed—makes it difficult to measure the syndrome consistently across studies.

Limitations also existed in regard to the generalizability of the results of this study. For the purposes of this study, students were recruited using convenience sampling from two universities in the Rocky Mountain region of the U.S. The majority of the sample was Caucasian and Christian. The results from this study may not generalize to other religions, other regions of the U.S., or to community samples. Additionally, as Stroebe, Stroebe, and Schut (2003), noted, self-selection is a salient issue in grief research. The individuals who selected to take this survey may look inherently different than those who did not wish to complete the survey. For example, those coping through avoidance or struggling to cope may not have chosen to take the survey.

Lastly, a limitation of this study was the utilization of self-report surveys. The reliability of the results is based solely on the reliability of the participants' self-report. Individuals must be trusted to answer the items truthfully and thoughtfully, having understood each item (Remler & Van Ryzin, 2011). This may be particularly difficult for individuals actively grieving (Stroebe et al., 2003).

Definitions of Terms

Afterlife Beliefs. The beliefs that individuals hold about what happens after an individual dies, including the possibility of continued existence and reunion with loved ones after death (Lester et al., 2001-02; Root & Exline, 2014). These beliefs are often connected with religions, but are not necessarily equivalent, and individuals who have afterlife beliefs may not necessarily ascribe to them based on a specific religion (Draper et al., 2013). These beliefs can be seen from both a dichotomous and continuous perspective. Individuals may or may not have these beliefs and,

among those who do have them, the strength of these beliefs can vary (Carr & Sharp, 2013; Cohen et al., 2005; McClain-Jacobson et al., 2004).

Attachment. A strong, enduring emotional bond developed between one individual and another. Although it can be formed at any time in a person's life, the first attachment bond is believed to be formed often between an infant and caregiver (Ainsworth, 1969).

Attachment Anxiety. The degree of vigilance toward attachment-related concerns that individuals may exhibit (Fraley & Bonanno, 2004), likely due to fears that their partner will not be available in times of distress (Mikulincer & Shaver, 2008).

Attachment Avoidance. The degree to which individuals may attempt to maintain emotional and behavioral independence from others due to a lack of trust in their "relationship partners' goodwill" (Mikulincer & Shaver, 2008).

Attachment Security. The degree to which an individual is able to feel a sense of safety or security with attachment figures, enabling exploration and an internalized sense of safety (Ainsworth, Blehar, Waters, & Wall, 1978).

Attachment System. The mechanisms in human functioning to ensure that individuals maintain bonds with others, which is believed to have evolved to ensure that infants maintain proximity with caregivers for protection under threat or danger (Bowlby, 1977).

Bereavement. The objective state of having lost a significant person in one's life, no matter the actual individual reaction to the loss (Sanders, 1999).

Complicated Grief. Grief that has surpassed the cultural norm in either intensity, duration, or level of impairment (Stroebe et al., 2008). Numerous terms have been used to

classify this type of grief, including traumatic grief (Silverman et al., 2000), prolonged grief (Prigerson et al., 2009) and most recently persistent complex bereavement disorder (American Psychiatric Association, 2013). Older terms included pathological, atypical, neurotic, and unresolved grief (Melhem et al., 2001).

Continued Bonds. Also referred to as emotional bonds, these are the emotional attachments that individuals maintain with their deceased loved ones, developed after death through memories, emotions, or behaviors (Klass et al., 1996).

Externalized Continuing Bonds. Emotional bonds with the deceased which specifically involve the use of external objects (e.g., the deceased's possessions) or a sense of the deceased still being alive (e.g., illusions, hallucinations) as a means of connection (Field & Filanosky, 2010; Field et al., 2013).

Grief. The subjective and personal reactions an individual has to the death of a significant person in their life. Reactions to grief can include emotions such as anger and guilt, physical reactions and complaints, as well as negative cognitions and despair (Sanders, 1999).

Internalized Continuing Bonds. Emotional bonds with the deceased which involve a general sense of internal connection or security, such as holding fond memories or seeing the deceased as reference point in decision-making (Field & Filanosky, 2010; Field et al., 2013).

Mourning. The outward acts or social expressions of grief and loss that are determined by one's culture (Rosenblatt, Walsh, & Jackson, 1976).

Religion. Religion is often believed to related more to a formal or organized system of beliefs and behaviors taken on by a group of individuals, including rituals, scriptures, doctrines, rules, and other practices (Anderson & Worthen, 1997).

Spirituality. Understood to be a more personal and individual experience, it can be experienced either inside or outside a formal religious system (Walsh, 2008).

Spirituality refers to the “process through which people seek to discover, hold on to, and, when necessary, transform whatever they hold sacred in their lives,” whether this is related to a specific religion or not (Hill & Pargament, 2008, p. 4).

As this study is focused on specifically a belief in the afterlife, whether or not these are developed from individual spirituality or more organized religious structures, the text will not differentiate between religion and spirituality.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Most everyone, at one point or another, will be faced with the death of a loved one. Death, bereavement, and grief are truly universal experiences. Yet how each individual experiences grief can be strikingly unique. Individual factors, details relating to the death, and culture each can play a major role in a person's experience with death, grief, and mourning. One factor that has been linked to various grief experiences is the relationship, or bond, individuals feel toward their loved ones after they have passed away (Boelen, Stroebe, Schut, & Zijerveld, 2006). Over the past few decades, researchers in thanatology have been locked in a debate. Some researchers attest that the continuation of these bonds is natural, and therefore the presence of continued bonds (CB) is not indicative of complicated or severe grief symptomatology (Klass et al., 1996). Others, however, have noted the relationship between CB and more complicated or prolonged grief reactions (Stroebe et al., 2012). Still others point to a possibly more complex relationship between complicated grief and CB. Some theorize that perhaps there are certain types of CB that are more adaptive than others or that CB may be adaptive for some individuals but not others (Field et al., 2005).

This chapter reviews the theoretical and empirical foundations for the current study and its research questions, providing both historical roots and recent findings. It begins with an overview of the history of attachment theory. Next, a brief history of

extant grief literature is provided, including the conception of complicated grief (CG), relating grief and CG back to attachment. This chapter also defines CB and both theoretically and empirically connects this construct with CG and attachment. Following this discussion, the chapter reviews the psychological research on religion and spirituality, specifically discussing how afterlife beliefs may relate to the above constructs. Discussions of how each construct has been measured previously also are presented. Lastly, this chapter ends with a statement of purpose for this study, emphasizing the current gaps in the literature that this study hopes to fill.

Attachment

Attachment theory has been adapted and researched across many different areas of psychology, but was originally discussed by Bowlby (1969) in terms of the relationships that children have with their parental figures. The core idea of this theory is that children have an innate need for physical and emotional proximity to significant and caring others, particularly in times of stress. This attachment and felt safety allows the infant to separate from the caregiver and explore the world, with the knowledge that they have a secure base to return to when needed. In times of stress or danger, the attachment system is activated and children are motivated to seek out their attachment figures. However, Bowlby (1969) noted that the attachment figure must not just be there for the child, but must also be responsive to the child's needs. Only then will the child gain a sense of security and safety.

Unfortunately, this is not always the case. At times, the attachment figure may be unavailable or unresponsive. When children's attachment systems are activated and they are unable to receive comfort, they may experience extreme distress and anxiety while

desperately trying to re-establish contact. It is this pattern of distress, sought security, and response that is believed to establish the attachment relationship between child and caregiver (Bowlby, 1969).

It was in Ainsworth's seminal studies (Ainsworth, 1967; Ainsworth, Bell, & Stanton, 1971; Ainsworth et al., 1978) using the Strange Situation Test (STT) which she began examining and defining the exact differences in children's attachment styles. In the SST, the mother and child would be placed in a room under observation. Over the course of 20 minutes, the caregiver and a stranger leave and enter the room at various intervals. At different times, the infant is left alone in the room or with a stranger before the caregiver then returns again.

Looking at reunion behaviors of children (when contact with the mother was re-established after absence), Ainsworth identified three types of attachment. Type A, or anxious-avoidant children, appeared to be unaffected by the absence of their mothers, even actively ignoring them upon return. These children responded similarly to both the stranger and their mothers, even when being comforted by either adult. Type B children, or the securely attached, became distressed when their mothers left, but were easily comforted by the mother upon her return; these children treated the strangers in a distinctly different manner than they treated mothers. Type C children, or anxious-resistant type, were anxious and fussy even when their mother was present; upon her return, they were not easily comforted and showed anger and ambivalence when their mothers attempted to comfort them. Main and Solomon (1990) added a fourth category, Type D, to describe insecure-disorganized children who do not appear to fit into any of

Ainsworth's three categories; these children exhibit contradictory behaviors, interrupted or unfocused movements, stereotypies, and apprehension or confusion.

Attachment in Adults

Much of Bowlby's original work focused on children, as he believed that attachment was most vital during this time. He also believed, however, that attachment affected how individuals functioned "from the cradle to the grave" (Bowlby, 1979, p. 179). Researchers were quick to begin to connect childhood attachment to adult behaviors and relationships.

Weiss (1982) noted that, "certain relationships maintained by adults appear to possess the properties of childhood attachment" (p. 67). He posited that individuals in these relationships, perhaps between a mother and her adult daughter or between two spouses, exhibit the same need for access to an attachment figure as might be seen in a child toward a parent. These individuals may seek out their attachment figure in times of stress, leading to comfort when that individual is available, or perhaps heightened anxiety and discomfort in the absence of such proximity. Weiss (1982) noted that just as with children, the loss of an attachment figure in adulthood may lead to intense grief.

On the other hand, Hazan and Shaver (1994) contrasted adult attachments with the infant-parent relationship, noting some specific differences. One major difference is that adult attachment relationships are often reciprocal, as both members are tasked with receiving and providing comfort and support. Additionally, while infants may need physical contact to receive comfort, adults have the ability to feel secure without as much of a need for actual physical proximity, particularly as long as they have the belief or expectation that the attachment figure is available if needed.

Mikulincer and Shaver (2016) posited a control-system model consisting of three modules to understand how the attachment system functions in adult relationships. In the first module, individuals are constantly monitoring their external and internal worlds for potential threats. If a threat is detected, the attachment system is activated. Individuals move then to the second module and ask the question: “Is my attachment figure available and willing to respond to me?” If the answer is yes, then individuals feel a sense of safety, and security-related affect regulation strategies then are activated (e.g., feelings of self-efficacy, a trust in one’s ability to cope, trust in others). However, if the answer is no, then individuals now becoming distressed move into the third module and the question is asked, “Can I seek out my attachment figure?” If there is a belief that contact can be made, individuals will begin to engage in proximity-seeking behaviors or hyperactivating strategies until contact is achieved. These strategies, for example, could include clinging, crying, and hypervigilance, and may lead to extreme distress if the attachment figure remains unavailable or unresponsive. Individuals may believe, however, that seeking out contact or proximity will not be successful. In this case, deactivating strategies are engaged, as individuals attempt to shut down the attachment system to avoid distress. These strategies may include downplaying attachment needs, suppressing thoughts and emotions, and avoiding a sense of dependence on others.

Moving from Categorical Attachment to Dimensional Attachment

Overall, numerous researchers have used Bowlby’s and Ainsworth’s theories to better understand how adults function in relationships. In a follow-up to Ainsworth’s initial attachment categories, Bartholomew and Horowitz (1991) proposed a revised categorical system for measuring attachment style. It retained both the secure and

anxious-resistant (now renamed preoccupied) attachment styles while splitting the avoidant attachment style into two new categories: (a) dismissing and (b) fearful attachment styles. These categories were created based on how an individual fell on two orthogonal dimensions: dependence and avoidance.

Those individuals who were securely attached, according to Bartholomew and Horowitz (1991), fell low on both dependence and avoidance, being both comfortable with intimacy and autonomy. Looking back to Ainsworth's SST studies (Ainsworth, 1967; Ainsworth et al., 1971; Ainsworth et al., 1978), securely attached individuals were those children who were able to play while their mothers were in the room (autonomy), but who still were able to seek and receive comfort from their mothers after an absence (intimacy). In contrast, preoccupied individuals were low on avoidance but high on dependence, being overly worried (or preoccupied) with relationships and striving for acceptance and comfort from others. The first new avoidant category that Bartholomew and Horowitz (1991) added was fearful attachment style, with individuals being categorized as falling high both on avoidance and dependence. Bartholomew and Horowitz (1991) theorized that these individuals may see themselves as unlovable and others as rejecting, using avoidant tactics to protect themselves from being hurt or rejected. On the other hand, those individuals categorized as having dismissing attachment style, falling high on avoidance but low on dependence, may see themselves as distant from relationships and independent from attachments (Bartholomew & Horowitz, 1991).

Over time, much of the literature has embraced a more dimensional approach to measuring attachment based on these two orthogonal scales, often referred to as

avoidance and anxiety (in place of avoidance and dependence), that underlie many of the aforementioned categorical approaches. Specifically, these approaches look at how individuals fall on each of the two dimensions separately. An individual's attachment is measured using their two scores on attachment anxiety and attachment avoidance, rather than placing them into a single category based on the dichotomized scales (high and low). The avoidance dimension measures the degree to which individuals may use avoidant strategies as opposed to proximity-seeking behaviors when under stress. The anxiety dimension is a measure of an individual's vigilance toward attachment-related concerns, with higher vigilance leading to greater attachment anxiety (Fraley & Bonanno, 2004).

Measuring Attachment

There have been a large number of questionnaires, interviews, and measures proposed to measure attachment based on the various theories. The *Relationship Questionnaire* (RQ; Bartholomew & Horowitz, 1991) was proposed to measure attachment based on the four styles of attachment presented in their theory: secure, fearful, preoccupied, and dismissing. The RQ is a brief measure that presents individuals with four short statements describing each of the different styles that they rate on a scale from one to seven. In this way, the measure can be used to present either a categorical measure of attachment or a continuous score across the different domains (Mikulincer & Shaver, 2016). Reliability for the measure was shown to be a Cronbach's α of .88 (Bartholomew & Horowitz, 1991), while test-retest reliability ranged from $r = .49$ (dismissing) to $r = .71$ (secure) on the different subscales (Stein, Jacobs, Ferguson, Allen, & Fonagy, 1998).

Given the move away from more categorical models of attachment and the shift to measuring attachment continuously, the *Experiences in Close Relationships* (ECR; Brennan, Clark, & Shaver, 1998) was developed. The ECR is a total of 36 items with two 18-item subscales for (a) anxiety and (b) avoidance. An example of an item from the anxiety subscale is, “I need a lot of reassurance that I am loved by my partner,” and an example of an item from the avoidance subscale is, “I prefer not to be too close to romantic partners.” Items on the ECR are scored on a 7-point Likert scale from *strongly disagree* to *strongly agree*. There is no total score on the ECR, as each subscale is totaled separately. Originally developed as a measure of romantic attachment, the wording can be changed slightly to generalize to more global attachment styles or be used to assess attachment toward a specific individual (Mikulincer & Shaver, 2016). Brennan et al. (1998) found a Cronbach’s α of .91 for the Anxiety scale and .94 for the Avoidance scale. Additionally, they found the two scales to be largely orthogonal ($r = .11$). Wei, Shaffer, Young, and Zakalik (2005) found a Cronbach’s α of .93 for both subscales when used with a non-bereaved undergraduate student sample. Brennan, Shaver, and Clark (2000) found a 3-week, test-retest reliability of $r = .70$ for both scales.

The first revision of the ECR came from Fraley, Waller, and Brennan (2000) with the *Experiences in Close Relationships – Revised*. The measure was created using Item Response Theory and looked to improve the ECR’s ability in detecting the secure attachment style. Using the original pool of 323 items from Brennan et al. (1998), Fraley et al. (2000) created a 36-item measure. The ECR-R consists of two 18-item subscales: Anxiety and Avoidance. Scored on a 7-point Likert scale, the measure produces two

separate scores of Anxiety and Avoidance ranging from 0 to 126. Higher scores indicate higher anxious attachment and avoidant attachment, respectively.

Sibley, Fischer, and Liu (2005) found that the ECR-R did what it originally intended. It was able to differentiate individuals on the secure end of the attachment dimensions better than previous measures. Sibley and Liu (2004) found a Cronbach's α of .93 for the avoidance subscale and $\alpha = .94$ for the anxiety subscale on a non-bereaved sample of undergraduate students. Sibley et al. (2005) also found an $r = .9$ (anxiety) and $r = .92$ (avoidance) test-retest reliability over a three-week period. Still despite improve psychometrics, Mikulincer and Shaver (2016) have criticized the ECR-RS because its anxiety and avoidance scales are intercorrelated, a problem that the original ECR did not have. This intercorrelation is problematic given that the two dimensions of attachment are theoretically orthogonal, and therefore should be completely uncorrelated.

In an attempt to give the ECR and ECR-R more breadth in measuring attachment across various relationships, Fraley, Heffernan, Vicary, and Brumbaugh (2011) revised the measures to create the *Experiences in Close Relationships – Relationship Structures* (ECR-RS). They narrowed the items down to nine (originally ten) that could then be asked four times, pertaining to four different relationships (e.g., father figure, mother figure, friendship, romantic partner). Items cover both anxiety (e.g., “I’m afraid this person may abandon me”) and avoidance (e.g., “I find it easy to depend on this person [reverse scored]”). Items are scored on a 7-point Likert scale from *strongly disagree* to *strongly agree*. The measure produces two final scores: anxiety, ranging from 12 to 84, and avoidance ranging from 24 to 168. Higher scores indicate higher anxiety or avoidance, respectively. There is no total score on the ECR-RS.

Fraley et al. (2011) demonstrated convergent and discriminant validity of the ECR-RS. They found the ECR-RS subscales on romantic partners were correlated with relationship factors and distress measures. For example, the avoidant subscale was negatively correlated with commitment, satisfaction, and investment; it was positively correlated with the perceived desirability of alternative partners. Both anxious attachment and avoidant attachment on the ECR-RS were also correlated with depressive symptoms. Additionally, Fraley et al. (2011) found that while still somewhat associated with the Big Five personality trait measures, the ECR-RS scales were less correlated than the previous ECR-R, suggesting better discriminant validity. In terms of reliability, Currier et al. (2015) found a Cronbach's α of .86 to .90 for avoidance and $\alpha = .86$ to .93 for anxiety in a university sample.

Grief in Psychology

One major area of psychology that has been related to attachment throughout the literature is the study of bereavement and grief. The connection between grief and mental and physical health is not a new idea. In 1621, Robert Burton wrote *The anatomy of melancholy*, in which he examined the nature of what is now considered depression. Thought to be the first scientific examination of bereavement, Burton linked bereavement to depression (melancholy), physical health problems, and death by both suicide and natural causes (Parkes, 2006). Around this same time, Heberden's (1657) statistics from the city of London found "griefe" was listed as the cause of death for numerous individuals (Parkes, 2006). Vogther in Altdorf (1703) discussed the concept of pathological grief in his thesis, *De morbis moerentium*, or *Pathological grief reactions* (Parkes, 2006). In America, Benjamin Rush (1812) made connections between grief,

heart problems, and an increased risk of mortality through his autopsies; his treatment recommendations included removing the bereaved immediately from their deceased loved one's presence, preventing them from seeing their bodies again, and prescribing opium (Archer, 1999). It appears that throughout modern history, there was an understanding that bereavement (the objective state of losing a loved one) and grief (the subjective reaction to this loss) could lead to problems with mental and physical health.

Perhaps the most well-known discussion of grief in early psychology can be traced back to Freud's (1917/2005) seminal work *Traur und melancholie* or *Mourning and melancholia*. Freud theorized that in love, a person's libidinal energy attaches itself to a mental representation of the loved one, also known as the object (Stroebe, Gergen, Gergen, & Stroebe, 1992). He defined grief as the painful experience following the loss of a loved one in which the libido is forced to sever this bond with the deceased's mental representation in order to free the ego. The pain of this experience, he believed, came from the slow and agonizing process of the libido carefully detaching itself from each memory or expectation of the deceased until it was free. He considered this *grief work*. Only when the individual's libido had detached from the lost object and found a new object upon which to attach itself would the individual be recovered. To do otherwise—to remain attached—was to remain in a state of perpetual grief or melancholia (Freud, 1917/2005).

It was Lindemann (1944) who presented an account of acute grief syndrome, connecting the syndrome to psychosomatic disorders, preoccupation and visions of the deceased, problems with aggression, and behavior disorders. His accounts of grief came from a diverse sample of 101 bereaved individuals, including psychiatric patients,

relatives of patients, and relatives of individuals lost in the Coconut Grove nightclub fire of 1942. Some have noted that much of Lindemann's (1944) data relied heavily on the 13 participants related to the Coconut Grove fire victims (Gross, 2016). In his work Lindemann saw these symptoms as normally occurring in grief, but did wonder if there was a distinction between normal and pathological grief reactions. Using Freud's understanding of grief, Lindemann believed that problematic grief occurred when individuals were unwilling or unable to do the grief work required because it was simply too painful. He wrote that professionals working with these individuals may need to help the bereaved in "extricating [themselves] from the bondage to the deceased" (p. 198). Archer (1999) noted that Lindemann's accounts of grief, however, were based on a sample that included psychoneurotic patients and individuals who had lost loved ones in a traumatic fire in Boston. Still, he had clearly begun to make some connections between bereavement and more complex, pathological reactions.

Classic Theories of Grief

There are numerous theories addressing the grief process throughout the literature. Two classic types of theories that have been posited in the past are (a) stage-based theories and (b) task-based models. Both of these types of theories imply universal (or relatively universal) stages or tasks that individuals must complete and move through in order to move on from the grief. Not doing so may put individuals at risk for more complicated and severe grief reactions. While stage-based models imply a linear path through grieving, task based models are more flexible with the order in which tasks are worked on and completed (Hall, 2014).

Stage-based models. Perhaps the most well-known theory of grief is Kübler-Ross's (1969, 2014) Stage-Theory. Kübler-Ross originally developed her theory based on empirical work with individuals who were grieving their own anticipated deaths following a terminal diagnosis. The first stage of denial referred to individuals just having been diagnosed with a terminal illness, and their inability to initially accept that they are in fact dying. Second, in the anger stage, overwhelmed with emotion and thoughts of "Why me?," these individuals lash out at those around them. Third, the bargaining stage was when individuals, given these terminal diagnoses, then would attempt to bargain or negotiate somehow for an extension to their lives. When these negotiations failed, individuals would move into the fourth stage, depression, as they lost hope that the diagnosis would change. Finally, individuals reaching the fifth stage would begin to accept their diagnosis and their own deaths; "the pain had gone, the struggle is over" (Kübler-Ross, 2014, p. 110). Despite its original purpose, this model has been widely applied to anyone suffering a loss, not just those grieving their own upcoming deaths (Hall, 2014). Moreover, some have noted from Kübler-Ross's own quotes that she never intended to emphasize this as a rigid stage model through her book, as she believed that the stages were neither universal nor linear (Corr, 2015). Rather, Kübler-Ross (1969) discussed the stages as coping strategies and wrote, "these means will last for different periods of time and will replace each other or exist at times side by side" (p. 263). In other words, individuals did not necessarily move smoothly from one stage to another as their grief progressed. Later on, Kübler-Ross and Kessler (2005) addressed this further, noting:

[The five stages] are tools to help us frame and identify what we may be feeling.

But they are not stops on some linear timeline of grief. Not everyone goes through all of them or goes in a prescribed order. (p. 7)

Still, despite these misunderstandings and attempts to clear them up, her theory historically has been applied and used as one of the most common stage-based models of grief throughout the literature.

Bowlby (1980) created another stage-based model of grief, understanding the usefulness of his theory of attachment as it related to grief. In it, he drew a parallel between the loss of contact with an attachment figure to the ultimate loss of contact through death, theorizing that grief itself was a form of separation anxiety from the loss of an attachment figure. He created a four-stage model of grief, based on the three stages of children losing contact with a parental figure. In the initial numbing phase, individuals have not yet adjusted to the death and may not immediately react, although they may have sudden outbursts of anger or distress. After a few hours or even days, individuals then move into the protest stage, where they exhibit yearning and searching for their lost loved ones. According to Bowlby (1980), the protest stage can last months to years for some individuals. They then move into the third stage, where despair and disorganization finally hits, and the finality of the loss is recognized. In time, individuals enter the reorganization stage and begin to rebuild their lives without their loved ones. In his theory, Bowlby (1980) noted two variants of maladaptive grief: chronic mourning and prolonged absence of conscious grieving. He saw both types as extensions of either his first (prolonged absence) or second (chronic mourning) stage of grief.

Since his conception of loss and grief, many have argued over the exact nature of Bowlby's theories. Similar to Kübler-Ross's model, some have noted it may be a mischaracterization to call Bowlby's theory a stage-model. Stroebe, Schut, and Boerner (2017) noted that he likely did not see the process as linear or concrete. Yet, much of the literature still references the theory as one of the most well-known stage-models (Granek, 2010; Hall, 2014).

Task-based models. Freud (1917/2005) was perhaps the first to present a task-based theory of grief in his discussion of *grief work* and the need for the libido to detach from each memory or expectation of the deceased. This task of detachment and this language of letting go has run through many task-based theories of grief since (Walter & McCoyd, 2009). Once again following in Freud's footsteps, Lindemann (1944) presented his own task theory of grief, which similarly included this need to separate from the bond with the deceased, readjust to a world without the deceased, and the create new relationships. In these early task-based theories, detachment from the deceased was the key to recovery. More severe grief reactions were the direct result of not severing these bonds and therefore not allowing oneself to readjust without their loved one.

These early understandings of grief still can be seen in Worden's (2008) Four Tasks of Mourning model. Worden proposed four tasks involved in grief: (a) accepting the reality of the loss, (b) allowing oneself to experience the pain of grief, (c) adjusting to a world without the deceased, and (d) finding an enduring connection with the deceased as one moves forward in life. While some of the major tasks in this model are similar to earlier theories, it should be noted that Worden (2008) acknowledged the "enduring connection" to the deceased (p. 167). Worden also emphasized, as many other modern

theories do today, the contextual factors involved in grief, including one's attachment to the deceased, social mediators, and other factors related to the death (Hall, 2014).

Postmodern Theories of Grief

In some ways, task-based theories were developed in response to the apparent rigid nature of stage-based theories that many saw as prescribing a linear timeline for the grieving process (Hall, 2014). In comparison to stage-based theories, task-based theories imply less linearity and rigidity in the grief process. However, they still theorize that there are universal and specific tasks that individuals must pass through in order to recover from the grief. Another common thread among many of these theories, both stage-based and task-based, is the understanding that grief is *work*; it is an active process that takes energy and intentionality for the person to complete the stages or tasks (Stroebe, 1992-93).

Postmodern theories and newer research, in turn, have argued that there may not be a right path that all grief-stricken individuals must follow to recovery, and in fact, the process to recovery might not look the same for everyone (Gross, 2016; Walter & McCoyd, 2009). For example, some research has argued that the confrontation of grief and the forcing of grief work may not be functional for some, and avoidance may be a healthy piece of grieving (Neimeyer & Jordan, 2013; Stroebe, 1992-93).

The dual process model. In an attempt to view grief through a new postmodern lens, Stroebe and Schut (1999) built upon Bowlby's (1980) stages of disorganization and reorganization. Rather than considering these as two discrete stages that individuals move through in a relatively linear path, Stroebe and Schut (1999) envisioned the two stages more as orientations (loss and restoration) that grieving individuals cycle back and forth

through during the grieving process. In the loss orientation, individuals are primarily focused on the grief. This is the time that they may be doing the grief work, yearning for the deceased, and possibly ruminating about the deceased and death. The bereaved however do not stay in this orientation continually, but rather oscillate between this and the restoration orientation. In the restoration orientation, individuals may avoid thinking about the death, may be focused on other life changes that accompanied the loss, and may be working to develop new identities and roles. As time progresses, individuals move in and out of these two orientations; while at first the loss-orientation may dominate, gradually over time restoration-orientation becomes the focus (Stroebe & Schut, 1999). The notable assumptions of this model are (a) that avoidance of grief may be a necessary part of the process, and (b) restoration is not an outcome, but rather an ongoing process throughout one's grief. Using their theory, Stroebe and Schut (1999) suggested that maladaptive grief may occur when individuals become stuck in either orientation, rather than moving between the two smoothly. In this way, avoidance only is maladaptive when individuals become stuck using only this one orientation of coping.

Meaning making. Another recent movement in the grief literature has been due to Robert Neimeyer's work in meaning making and meaning reconstruction. According to Neimeyer's theory, death and bereavement challenges an individual's self-narrative—their basic understanding and organization of the world (Gillies, Neimeyer, & Milman, 2015). They then are faced with the need to either assimilate the loss into their pre-existing narrative or to accommodate the loss by expanding or deepening this narrative. While some may face these challenges and adapt with resilience, others may struggle to find such meaning and instead may suffer from more intense grief as a result (Neimeyer,

Burke, Mackay, & van Dyke Stringer, 2010). According to this theory then, individuals must find meaning in the death and reconstruct their personal narratives to fit with the new loss—making each individual’s end-goal of grief unique to them.

Continuing bonds. Another challenge to the grief work hypothesis came from Klass et al. (1996) when they noted that detachment from the emotional ties with the deceased may not be the end-goal for everyone. Instead, they wrote, “The constant message of these contributions [in this book] is that the resolution of grief involved continuing bonds that survivors maintain with the deceased and that these continuing bonds can be a healthy part of the survivor’s on-going life” (p. 22). This book and the research that followed helped to create a paradigm shift away from earlier theories of grief that were focused on detachment, and re-evaluated the goals of grief and recovery. This will be further discussed in this chapter’s later section on continuing bonds.

Complicated Grief

Psychology was always interested in the clinical reactions individuals have to bereavement, from Freud (1917/2005) and his discussion of melancholia to Bowlby (1980) and his chronic mourners. However, it was in the 1990s that researchers began to attempt to define, measure, and even diagnose these more problematic forms of grief. Prigerson et al. (1995) named the syndrome *complicated grief* (CG). Since this time, this construct has gone through multiple name changes (e.g., prolonged, persistent), but much of the literature has continued to use Prigerson’s terminology. As Shear et al. (2011) noted, not all prolonged or persistent grief may be complicated or maladaptive. Instead, they noted that “just as wound healing can be hindered by complications producing a prolonged period of inflammation and soreness,” so too can grief become complicated by

other factors (p. 109). Stroebe et al. (2008) attempted to define CG as “a clinically-significant deviation from the (cultural) norm in either (a) the time course or intensity of specific or general symptoms of grief and/or (b) the level of impairment in social occupational, or other important areas of functioning” (p. 7). This definition notes both the possibility of a prolonged time course of grief and of a higher intensity of symptoms. It also emphasizes the need for these symptoms to deviate from cultural norms of grief. Still, even with this definition of CG, it begs the question of what is a clinically-significant deviation from the norm?

Complicated Grief as a Separate Syndrome

With a definition and understanding of CG, researchers began differentiating CG from other syndromes and constructs. For one, the research has been able to differentiate CG from uncomplicated grief (UG), with studies showing that CG (not UG) uniquely predicts numerous adverse health effects, morbidities, and prolonged distress (Boelen & van den Bout, 2008; Boelen, van den Bout, De Keijser, & Hoiijtink, 2003; Chen et al., 1999; Melhem et al., 2004b; Ott, 2003; Prigerson et al., 1995; Silverman et al., 2000). For example, Boelen and van den Bout (2008) found that CG, but not UG, was correlated with anxiety and depression scores, lower social functioning, lower energy levels, and lower perceptions of one’s general health.

Additionally, much of the literature has differentiated CG from other similar mental health diagnoses, attempting to understand the overlaps and unique symptoms to inform research and a possible diagnosis. CG has been shown to be a separate construct from Major Depressive Disorder (MDD) in adults (Anderson, Arnold, Angus, & Bryce, 2008; Boelen & van den Bout, 2005; Bonanno et al., 2007; McDermott et al., 1997; Nam,

2015; Ogrodniczuk et al., 2003; Shear et al., 2011; Silverman et al., 2000; Simon et al., 2007), and children and adolescents (Dillen, Fontaine, & Verhofstadt-Denève, 2009; Melhem et al., 2007). It is also separate from bereavement-related anxiety in both adults (Anderson et al., 2008; Boelen & van den Bout, 2005) and children and adolescents (Dillen et al., 2009; Melhem et al., 2007). Shear et al. (2011) found the construct was distinct from Adjustment Disorder. Additionally, much of the research has differentiated CG from Posttraumatic Stress Disorder (PTSD) in adults (Bonanno et al., 2007; Shear, Jackson, Essock, Donahue, & Felton, 2006; Shear et al., 2011; Silverman et al., 2000; Simon et al., 2007) as well as children and adolescents (Melhem et al., 2007).

Despite this research, there is still contention around treating CG as a separate syndrome. Hogan, Worden, and Schmidt (2003-04) argued that the symptoms of CG, such as separation distress and despair, could not be properly distinguished from symptoms of depression or uncomplicated grief. Others have noted the sometimes-high rates of comorbidity in the literature between CG and these other syndromes (Melhem et al., 2001), which does not make understanding CG any easier. Some have argued that the comorbidity and overlap in symptoms with MDD makes the unique diagnosis of CG too difficult to consider as a separate construct (Schaal, Elbert, & Neuner, 2009). Similarly, O'Conner, Laggard, Shelving, and Guldin (2010) suggested that the overlap in symptoms with PTSD implies that CG is accounted for by the PTSD diagnosis.

However, as Prigerson, Vanderwerker, and Maciejewski (2008) noted, while there is overlap with PTSD and MDD, the symptoms of CG can be differentiated from those of other disorders. While MDD may have symptoms such as low self-esteem, psychomotor retardation, and depressed mood, CG is characterized by yearning, disbelief, feelings of

being stuck, bitterness, and emptiness related directly to the loss of the loved one (Prigerson et al., 1995). Similarly, while PTSD may be characterized by avoidance of threatening situations, physical arousal, and hypervigilance, avoidance in CG is directly related to avoiding reminders of the death. Lastly, separation distress, such as pining or yearning, appears to be unique to CG compared to other related disorders (Prigerson et al., 1995).

Measuring Normative and Complicated Grief

Numerous measures have been created and used to assess symptoms of grief and complicated grief to better studies these constructs. Some of these measures, such as the *Symptom Checklist* (SCL-90; Gillis, Moore, & Martinson, 1997), have been focused on general symptoms of distress. While the measures may capture some symptoms or experiences common in grief, these were not built with the specific purpose of examining grief.

Other measures have been created which focus specifically on grief and bereavement symptoms. The *Grief Experience Inventory* (GEI; Sanders, Mauger, & Strong, 1985) was created following interviews and a Q-sort in order to capture more normal grief symptoms. Similarly, the *Hogan Grief Reactions Checklist* (HGRC; Hogan, Greenfield, & Schmidt, 2001) was an empirically-created measure of normal grief experiences and symptoms (Boelen et al., 2003). The *Texas Revised Inventory of Grief* (TRIG; Faschingbauer, 1981) is another measure of common grief symptomatology. The measure consists of two separate subscales, one looking at past reactions to the death (13 items) and one looking at present symptoms (eight items). While originally created with the purpose of measuring unresolved or more complicated grief reactions, it since has

been re-conceptualized as a measure of normal grief reactions (Neimeyer, Hogan, & Laurie, 2008).

The *Inventory of Complicated Grief* (ICG; Prigerson et al., 1995) was a major attempt to differentiate the maladaptive symptoms of CG from UG or other issues (Boelen et al., 2003). The inventory consisted of 19 items on a 5-point Likert scale from *never* to *always* (e.g., “I feel myself longing and yearning for the person who died,” and “I feel disbelief over what happened”). It showed good internal consistency (Cronbach’s $\alpha = .94$) and six-month test-retest reliability ($r = .80$) on a sample of older (at least 60 years of age) widows (Prigerson et al., 1995).

Multiple versions of the original ICG have been created as researchers have worked to understand the specific symptoms that are both necessary and specific to the CG diagnosis. The first was a shortened screening version, the *Inventory of Complicated Grief Screen* (ICGS; Field & Filanosky, 2010). The ICGS included nine of the original 19 items, removing items that were theoretically overlapping with the construct of continuing bonds (e.g., “I see the person who died stand before me,” and “I hear the voice of the person who died speak to me”). The items were removed in order to allow for researchers to look at the relationship between CB and CG without confounding items. The newest version of the ICG, created by Prigerson et al. (2009) is a diagnostic scale, the *Prolonged Grief Disorder* (PG-13). The 13-item PG-13 is comprised of four items on a 5-point Likert scale from *not at all* to *several times a day*, including “In the past month, how often have you felt stunned, shocked, or dazed by your loss?” Another seven items fall on a 5-point Likert scale from *not at all* to *overwhelming*, including “Have you had trouble accepting the loss?” and “Do you feel bitter over your loss?” Additionally, it has

two yes or no items measuring if the symptoms have exceeded six months, and if they have significantly impacted functioning. These items are meant specifically to indicate if a diagnosis is warranted once the symptoms have been established. Although the scale has been used less often, as it is newer, it has shown reliability and validity in studies. Prigerson et al. (2009) found a Cronbach's α of .82 on a community sample of bereaved adults. Additionally, they found that the PG-13 score at 6-months was significantly associated with psychiatric diagnoses (MDD, PTSD, or GAD), suicidal ideation, and lower quality of life, suggesting predictive validity of the measure. Schaal et al. (2009) found a Cronbach's α of .76 on their sample of widows.

Perhaps the most commonly used version of the ICG was created by Prigerson and Jacobs (2001). It has been referred to as both the *Inventory of Complicated Grief-Revised* (ICG-R) and the *Inventory of Traumatic Grief* (ITG). The ICG-R expanded on the ICG, going from 19 items to 34 in the revised edition. Prigerson and Jacobs (2001) wished to better encompass what they saw as the two core symptoms of CG: traumatic distress and separation distress. The ICG-R covers the range of symptoms thought to be unique to CG, including bitterness, numbness, yearning, and disbelief over the death. The first 30 items are all scored on a 5-point Likert scale. While most of the Likert scales range from *almost never* (or less than once a month) to *always* (or several times every day), some items have unique anchor points. For example, item 10, "Ever since ____ died it is hard for me to trust people," has a scale ranging from *no difficulty trusting others* to *an overwhelming sense*. None of the items are reverse-scored. Scores for each item range from 1 (*almost never*) to 5 (*always*). These Likert scale items can be summed to create a

score of total complicated grief symptomatology (CGS; Currier et al., 2015; Delespaux et al., 2013).

The ICG-R can also be used to aid in the diagnosis of CG, based on Prigerson and Jacobs's (2001) criteria. There are four items at the end assessing the duration of symptoms, including an open-ended question pertaining to the change of symptoms over time. Additionally, the end of the measure categorizes and groups the items based on which criterion for the diagnosis of CG they fall under. For example, items 2, 3, 5, 6, and 22 fall under Criterion A2 (separation distress), and individuals must have a score of greater or equal to 4 on at least three of the five items to meet this criterion. For most research purposes, these items are not used (Currier et al., 2015; Delespaux et al., 2013; Laurie & Neimeyer, 2008).

The ICG-R has been translated across multiple countries and shown good reliability and validity in various samples. Prigerson and Jacobs (2001) reported a Cronbach's α of .95 for the ICG-R, and subsequent studies have found similar Cronbach's α levels (.94 to .96) on the English version (Meier et al., 2013), French version (Delespaux et al., 2013), and Dutch version (Boelen et al., 2003). Boelen et al. (2003) also found a test-retest reliability of $r = .92$ over the course of nine to 28 days. Additionally, studies on various versions of the measure have found a correlation between higher scores on the ICG-R and higher scores on the *Texas Revised Inventory of Grief* ($r = .71$; Faschingbauer, 1981), as well as correlations with some of the more serious mental and physical health consequences of bereavement thought to be linked to CG (Boelen et al., 2003; Ott, 2003; Prigerson et al., 1997). Boelen et al. (2003) noted that scores on the ICG-R were directly correlated with scores of anxiety, depression, somatic

problems, sleeping problems, and total distress, supporting concurrent validity of the ICG-R. This same study also suggested the ICG-R has discriminant validity, as it was able to differentiate between individuals who had lost loved ones to natural causes (e.g., medical problems) and those who had lost loved ones to unnatural causes (e.g., suicide, homicide, accident). Given the research that indicates the latter group should show more CGS severity, this difference was consistent with expectations (Boelen et al., 2003). Holland, Neimeyer, Boelen, and Prigerson (2009) also noted that the scores on the ICG-R are distributed along a continuum, allowing for an analysis of the full range of CGS severity. Although the PG-13 is a newer measure of CG, overall the ICG-R psychometrics are consistently higher and better researched.

Diagnosing Complicated Grief

When Prigerson et al. (1995) created the ICG to differentiate normalized grief reactions from CG, it was the first step in the literature to attempt to define the parameters of CG and to create a symptom criteria set for its diagnosis. The authors particularly noted that the symptoms of being “stunned or dazed” following the loss, being bitter, and being “preoccupied with thoughts of the deceased” were specifically well-suited for differentiating UG from CG (p. 76). Other symptoms they included were related more to post-traumatic reactions, including guilt, avoidance, detachment from others, and hallucinations.

Just a few years later Horowitz et al. (1997) proposed a revised set of criteria for CG in hopes of establishing a diagnosis in the then-upcoming DSM-IV (American Psychiatric Association, 1994) that could separate CG from MDD. Their final proposed set of criteria fell under two categories: (a) intrusive symptoms (e.g., unbidden memories

or fantasies, distressing yearning), and (b) avoidance and failure to adapt (e.g., avoiding reminders of the deceased, feelings of emptiness). Additionally, their criteria proposed a 14-month waiting period before CG could be diagnosed in an attempt to improve its specificity from normal grief reactions. However, despite the pushes from Horowitz and others, the DSM-IV did not include CG as a distinct mental health diagnosis.

Years later, as the fifth edition of the DSM was being written, many brought up the need to include a diagnosis for CG once again. Prigerson et al. (2009) convened a panel of experts to create a list of potential criteria that they later tested for psychometric validity. The final diagnostic criteria that they proposed reflected some of Prigerson et al.'s (1995) symptoms and consisted of separation distress (e.g., yearning). It required another five out of eight symptoms, including feelings of shock, bitterness, and difficulty moving on with life. Additionally, they proposed that CG could be diagnosed as early as six months post-loss. A few years later Shear et al. (2011) responded with their own set of CG criteria. Their study critiqued the Prigerson et al. (2009) criteria, stating it was based on a small, homogeneous sample and assumed a single factor structure of CG. In their own analysis, they found a six-factor structure. Basing their criteria off these six factors, they shifted Prigerson et al.'s (2009) symptoms around and added more specific symptoms such as suicidal ideation and rumination, which they believed were vital to the diagnosis of CG. They also added a criterion stating that the symptoms had to be present for at least a month.

However, when the DSM-5 (American Psychiatric Association, 2013) was finally published with a diagnosis proposed for further consideration for this construct, now called Persistent Complex Bereavement Disorder (PCBD), it was not readily accepted,

and in fact was accompanied by multiple controversies related to bereavement (see Bandini, 2015, Boelen & Prigerson, 2012, and Theileman & Cacciato, 2014 for further information). Specifically, the proposed disorder's criteria were a combination of the two different empirically-validated criteria sets: Prolonged Grief Disorder (Prigerson et al., 2009) and Complicated Grief (Shear et al., 2011), a decision which was criticized by many for its lack of empirical evidence or reasoning (Boelen & Prigerson, 2012; Jordan & Litz, 2014; Theileman & Cacciato, 2014). In addition, criteria without any previous empirical backing were added, including a 12-month time period before grief can be considered PCBD. Cozza et al. (2016) examined the performance of the three main diagnostic criteria for complicated grief reactions: PCBD (American Psychiatric Association, 2013), Complicated Grief (Shear et al., 2011), and Prolonged Grief Disorder (Prigerson et al., 2009). They took a sample of individuals who had lost family members to military service, and they split them into clinical and non-clinical samples using the ICG. Based on these samples, Cozza et al. (2016) then examined the three criteria sets to measure their levels of specificity and sensitivity. The authors reported that the PCBD criteria only captured 53% of clinical cases, while the PGD criteria (Prigerson et al., 2009) captured 59% and excluded 100% of non-clinical cases. On the other hand, Shear et al.'s (2011) criteria captured 90% of these cases, while still excluding 98% of non-clinical cases.

Rates of Complicated Grief

Given the debate between researchers on the exact symptomatology of CG including the timeframe of when it can be diagnosed, prevalence estimates are difficult to parse out. Bonanno (2004) estimated that 10 to 15% of all those who are bereaved will go

on to develop CG. Similarly, the Yale Bereavement Study (Barry, Kasl, & Prigerson, 2002) found that 10.7% of individuals who are bereaved go on to develop CG, as measured by the ICG-R. However, this study assessed for CG symptoms at an average of four months post-loss, sooner than either Prigerson et al. (2009) or Horowitz et al. (1997) proposed CG should be assessed. When they measured their sample again after an average of nine months post-loss (as opposed to four months), the same study found a rate of 8.2% of individuals with CG (Barry et al., 2002). Kersting, Brähler, Glaesmer, and Wagner (2011) found that at an average 9.8 years post-loss, 6.7% of bereaved individuals fit the criteria for CG.

To complicate things further, Fujisawa et al. (2010) pointed out that the actual diagnostic criteria used can affect prevalence estimates. For example, Forstmeier and Maercker (2007) used the two different criteria by Horowitz et al. (1997) and Prigerson et al. (1999) and found very different rates (4.2% and 0.9%, respectively) in a community sample in Switzerland. Overall, however, there does appear to be a pattern that while the majority of individuals who are bereaved will recover without problems or professional help, some individuals do struggle with the grief process. Fujisawa et al. (2010) estimated that 25.1% of all individuals who are bereaved may be at risk for CG, though only a small portion may go on to develop it.

Consequences of Complicated Grief

While bereavement itself has been long believed to lead to physical and mental health problems, the research has shown that individuals with CG are at a much higher risk for developing certain problems than are those with UG (Prigerson et al., 1997). Physical health problems such as cancer, high systolic blood pressure, and heart problems

all have been linked to CGS (Prigerson et al., 1997). These individuals also show significantly greater impairment in their occupational and social functioning (Monk et al., 2006; Simon et al., 2007). Additionally, individuals with CGS display worsening changes in their eating habits, smoking habits (Monk et al., 2006; Prigerson et al., 1997), and sleep patterns (Hardison, Neimeyer, & Lichstein, 2005; Prigerson et al., 1995), which in turn can lead to negative health consequences.

Beyond just the diagnosis of CG, these individuals also experience exacerbated, co-occurring mental health conditions and symptoms. As stated previously, there is a high co-occurrence rate between CG, PTSD, and MDD (Melhem et al., 2001). Additionally, a large body of research has linked CGS to suicidality in both adults (Latham & Prigerson, 2004; Mitchell, Kim, Prigerson, & Mortimer, 2005; Neria et al., 2007; Prigerson et al., 1997; Szanto, Prigerson, Houck, Ehrenpreis, & Reynolds, 1997; Szanto et al., 2006) and adolescents (Melhem et al., 2007). In fact, Latham and Prigerson (2004) found that individuals who met the diagnostic criteria for CG were more likely than bereaved individuals with UG to be at a high risk for suicidality. This high suicide risk remained when controlling for MDD and PTSD, indicating that CG uniquely predicted suicide risk.

Factors Affecting the Grief Response

Throughout the literature, there has been a focus on the specific factors that affect the course of grief, whether focusing on grief symptom severity in general or the actual syndrome of CG. The fact is, given the consequences of grief, complicated or not, it is important to understand why some bereaved individuals suffer more than others. Some of the factors that have been examined are directly related to circumstances around the

death, some to individual characteristics of the bereaved, and some to interpersonal factors.

Many studies have identified various contextual factors around the death that may negatively affect the course of grief. For one, a lack of preparation for the death is found to negatively affect grief (Barry et al., 2002; Jones et al., 2003). Additionally, there is an increased risk for more severe grief reactions if the death was sudden (Wiese et al., 2010), violent, or due to a natural disaster (Anderson et al., 2008; Johannesson et al., 2009; Pfefferbaum et al., 2001; Shear et al., 2006). Individuals who lose loved ones to cancer or other difficult medical issues may suffer greater grief severity (Chiu et al., 2010; Neria et al., 2007; Siegel, Hayes, Vanderwerker, Loseth, & Prigerson, 2008; Tomarken et al., 2008). Lastly, parents who lose a child (Neria et al., 2007), especially if the parents were unable to prepare or make sense of the death (Keesee, Currier, & Neimeyer, 2008; Meert, Thurston, & Thomas, 2001), may suffer from more severe grief symptoms. Overall, the more difficult the actual death, the more likely individuals are to develop complicated reactions.

Research has also shown that individual characteristics of the bereaved individual may affect the course of grief. Some of these characteristics are demographic in nature. For example, some studies have found that identifying as female (Hardison et al., 2005; Kersting et al., 2011; Melhem et al., 2004a; Neria et al., 2007) or African American (Goldsmith et al., 2008) may increase the likelihood of developing more severe grief symptoms. Prigerson et al. (2008), in their review of the literature, also noted that a rupture in the secure attachment of an individual might increase an individual's risk of developing severe grief reactions. For example, these attachment ruptures may include

maltreatment or neglect in childhood (Silverman, Johnson, & Prigerson, 2001), childhood separation anxiety (Vanderwerker, Jacobs, Parkes, & Prigerson, 2006), early loss or multiple losses (Shear & Shair, 2005; Silverman et al., 2001), and insecure attachment (Johnson, Zhang, Greer, & Prigerson, 2007; van Doorn, Kasl, Beery, Jacobs, & Prigerson, 1998).

Attachment and Complicated Grief

As stated previously, the connection between attachment and grief is not a new concept. From the conception of his theory, Bowlby (1980) understood that attachment and grief were interrelated. Fittingly, a majority of the research has shown that there is some relationship between one's attachment style and how they respond in bereavement. There appears to be agreement among the literature that possessing a secure attachment style is a protective factor following the death of a loved one. Numerous studies have found that securely attached individuals are less likely than insecurely attached individuals to develop CG and have lower overall grief reaction scores (Beverung & Jacobvitz, 2016; Cohen & Katz, 2015; Field et al., 2014; Pini et al., 2012; Uren & Wastell, 2002; Waskowic & Chartier, 2003). Additionally, studies have shown that following a death securely attached individuals are less likely to develop anxiety, depression, or PTSD (Scheidt et al., 2012). They also are more likely to exhibit post-traumatic growth (PTG) and flexibility (Cohen & Katz, 2015), seek out social support (Charles & Charles, 2006), and have higher self-esteem (Field et al., 2014) when compared to their insecure counterparts.

Conversely, however, there has not been as much agreement on the exact relationship between the insecure attachment styles and grief reactions. While one study

found no relationship between insecure attachment and grief (Nager & de Vries, 2004), some studies generally comparing insecure attachment and secure attachment have found that insecure attachment styles are correlated with more severe grief reactions (Meert et al., 2011; Waskowic & Chartier, 2003). Other studies that have examined the two distinct dimensions of attachment (avoidance and anxiety) have found them both to be generally related to more severe grief reactions (Boelen & van den Bout, 2010; Field & Filanosky, 2010; Wijngaards-de Meij et al., 2007a; Wijngaards-de Meij et al., 2007b; Xu, Fu, He, Shoebi, & Wang, 2015). Yet, numerous researchers examining the types of insecure attachments have found that attachment anxiety and attachment avoidance may affect grief in unique ways, as delineated below.

Anxious attachment and grief. A large number of studies have found that anxious attachment, in contrast to avoidant attachment, is correlated with negative grief reactions. Studies have shown that following the death of a loved one, anxious attachment uniquely predicts greater prolonged or severe grief reactions (Delespaux et al., 2013; Field et al., 2009; Field & Sundin, 2001; Jerga et al., 2011; Meier et al., 2013; Scheidt et al., 2012; Uren & Wastell, 2002). It has also been linked to general psychiatric symptoms (Field & Sundin, 2001; Meier et al., 2013; Scheidt et al., 2012), an inability to cope (Field & Sundin, 2001), non-acceptance of the death (Kho, Kane, Priddis, & Hudson, 2015), physical symptoms (Meier et al., 2013; Scheidt et al., 2012), and other psychological disorders such as anxiety, depression, and PTSD (Scheidt et al., 2012). On the other hand, one study by van der Houwen, Stroebe, Stroebe et al. (2010) found no relationship between attachment anxiety and grief.

Still, overall the research appears to support that greater attachment anxiety leads to worsening coping abilities, and therefore increasingly negative reactions to death, including the development of CG. However, Xu et al. (2015) linked anxious attachment to more severe grief reactions, as well as PTG. This relationship between anxious attachment and PTG makes sense due to the theory of PTG. The research has shown that individuals more affected and distressed by trauma are more likely to develop PTG following a traumatic event (Kashdan & Kane, 2011). Therefore, anxiously attached individuals may suffer more severe grief reactions. This, in turn, may lead to greater PTG in these individuals. On the other hand, it should be noted that Cohen and Katz (2015) found no relationship between anxious attachment style and PTG.

Mikulincer and Shaver (2008) offered an explanation on the theoretical connection between attachment anxiety and grief symptom severity. They noted that anxiously attached individuals have a tendency to be preoccupied with their attachment figures in general, often demanding attention as well as seeking out comfort and closeness at a high frequency. When these individuals lose an attachment figure to death, then it makes sense that they may struggle with higher amounts of bereavement-related distress than their securely attached counterparts. Mikulincer and Shaver (2008) pointed out these symptoms exhibited by anxiously attached individuals appear to be extremely similar to the core symptom presentation of CG. They also noted that anxiously attached individuals have trouble controlling intrusive thoughts and negative cognitions in general, which can become all the more detrimental in bereavement.

Avoidant attachment and grief. While the majority of research on anxious attachment has agreed that it is predictive of stronger grief reactions, the literature has

found a less consistent relationship between avoidant attachment and grief. Beyond the previously identified research that reported correlations between general insecure attachment and grief symptom severity (Beverung & Jacobvitz, 2016; Cohen & Katz, 2015; Field et al., 2014; Pini et al., 2012; Uren & Wastell, 2002; Waskowic & Chartier, 2003), further studies have found avoidant attachment to correlate with CG and more severe grief reactions (Boelen & Klugkist, 2011; Currier et al., 2015; van der Houwen, Stroebe, Schut et al., 2010; van der Houwen, Stroebe, Stroebe et al., 2010), as well as physical health problems following bereavement (Meier et al., 2013). In addition, avoidant attachment has been shown to negatively predict PTG following bereavement (Cohen & Katz, 2015; Xu et al., 2015). Similar to anxious attachment, there also have been a small number of studies that have found no relationship between grief symptom severity and avoidant attachment (Field et al., 2009; Field & Sundin, 2001; Meier et al., 2013).

Mikulincer and Shaver (2008) theorized that individuals with avoidant attachment may normally attempt to cope with relationship distress through detachment and avoidance. These individuals, then, may struggle during bereavement when these normal coping patterns fail to relieve the distress. Refusing to face the grief and, on the other hand, unable to properly avoid it, these individuals then may exhibit prolonged or problematic grief symptoms.

Conversely, a number of studies have actually suggested that bereaved individuals showing avoidant attachment may cope better than their anxious counterparts, showing even a positive relationship between avoidance and recovery. For example, Kho et al. (2015) found that individuals with avoidant attachment showed fewer emotional

problems and less non-acceptance following the death of a loved one compared their anxiously attached counterparts. Similarly, Mancini et al., (2009) noted individuals with avoidant attachment coped more effectively than individuals with other attachment styles with the loss of their spouse, as long as their marital satisfaction and quality had been good before death. Jerga et al. (2011) theorized that the relationship between avoidant attachment and grief might be more complicated, based on whether specific attachment to the individual or general attachment style is measured. The authors found that while having a general avoidant attachment style was positively related to more severe grief reactions, specific avoidant attachment to the deceased loved one actually led to better coping. Delespaux et al. (2013) found a similar result with specific avoidant attachment being positively related to improved coping. Mikulincer and Shaver (2008) proposed, in these cases “the absence of grieving may reflect a real absence of distress (relative to that experienced by other bereaved individuals)” (p. 103). These individuals may be able to better cope with grief through their usual pattern of avoidance.

A more complicated relationship. Other literature has addressed the complicated relationship between attachment and grief as well, noting how certain variables may moderate or mediate this relationship. These variables have included neuroticism (Boelen & Klugkist, 2011), anxious and depressive avoidance (Boelen & van den Bout, 2010), the Dual Process Model’s oscillation and appraisal phases (Delespaux et al., 2013), yearning thoughts (Kho et al., 2015), and rumination and threatening grief interpretations (van der Houwen, Stroebe, Schut et al., 2010). Other areas of the literature have noted that CB and religion may also play a role in how attachment interacts with grief (Brown, Nesse, House, & Utz, 2004; Currier et al., 2015; Granqvist, 2014; Yu et al., 2016).

Continuing Bonds

Since the field of psychology has been interested in how individuals grieve and move through the bereavement process, it has been fascinated with how one's relationships with the deceased end, change, or continue. Although bonds with the deceased have existed throughout history and across cultures, Freud's (1917/2005) presented one of the first and most influential examinations of bonds in his seminal book, *Mourning and melancholia*. In the book, Freud made the connection between grief work, breaking bonds, and recovery from grief. He believed that it was the severing of the bond from the libido which created the pain of grief, but also this detachment allowed the individual to move on from the death and return to healthier functioning. Although there are questions as to whether Freud's personal experiences with grief followed his writings (see Silverman & Klass, 1996), in the years that followed the publication of *Mourning and melancholia*, many continued to expand their research based on Freud's original concept of needing to sever the bonds (Silverman & Klass, 1996).

It was through Bowlby (1980) and Parkes's (2006) work that the literature began moving away from the belief that these bonds need to be severed. As Field (2008) noted, as psychoanalytic theory placed little to no emphasis on attachment, bonds were theorized as more expendable, making the idea of severing them easier to understand. Bowlby's (1969) attachment theory, however, placed an emphasis on these bonds, and severing these bonds was understood to be much more complicated than previously thought. Bowlby (1980) moved away from the word "detachment" and used "reorganization" to describe his final stage of grief. He acknowledged that research appeared to show that feelings of a continued presence of the deceased were relatively

common and related to more beneficial outcomes of grief, throwing Freud's (1917/2005) original statements on bonds into question. This acknowledgement was in part related to the findings of Glick, Weiss, and Parkes (1974), in which widows exhibited continuing bonds with their deceased husbands that did not dissipate with time. In their study, they acknowledged that these results were unanticipated and therefore could not yet be fully explored. However, it brought a new, research-based, understanding to how such bonds may function after death.

Even with this acknowledgment from Bowlby (1980), many have still argued his exact beliefs and understandings of continuing bonds (Peskin, 1993; Stroebe et al., 1992). Silverman and Klass (1996) argued that there was still ambivalence in the literature, including Bowlby's works, on whether bonds could be continued or needed to be relinquished. They noted, for example that Rando (1992), in a single presidential address, expressed both the need for research to acknowledge ongoing bonds as a part of recovery, as well as the fact that avoiding the relinquishment of bonds (and therefore keeping these ongoing bonds) could lead to CG.

Despite these small steps taken toward acknowledging ongoing bonds with the deceased, Klass et al.'s (1996) book is still credited as the first impactful argument for the normalization of CB as a part of healthy recovery from grief. This book, edited by the three researchers, is a collection of research studies and essays showing the normalcy of ongoing bonds across genders, cultures, and types of relationships to the deceased. Klass et al. (1996) posited that the final step in recovery was not the bereaved disengaging from their relationship with the deceased, but rather the bereaved could alter and therefore continue their bonds with the deceased long past the acute stages of mourning and that

this could be adaptive. As Silverman and Klass (1996) wrote, “the resolution of grief involves continuing bonds that survivors maintain with the deceased and that these continuing bonds can be a healthy part of the survivor’s ongoing life” (p. 22).

Although there is some controversy around the conclusions in Klass et al. (1996), particularly surrounding their interpretation of previous grief theories as promoting the complete severing of bonds with the deceased (see Gross, 2016), the book stimulated an uptick in research and attention on CB and their potential impact on the grieving process.

Measurement of Continuing Bonds

The Continuing Bonds Scale. The measurement of CB in the literature started with the use of a few specific items that were theorized to be demonstrative of CB—such as holding onto physical items and memories of the deceased (Field, Nichols, Holen, & Horowitz, 1999). Field et al. (2003) originally developed the *Continuing Bonds Scale* (CBS) to measure CB as a unitary construct. It consisted of 11 items on a 5-point Likert scale that covered a range of CB behaviors, including holding onto possessions (e.g., “I seek out things to remind me of my spouse”), fond memories (e.g., “I reminisce with others about my spouse”), and identification with the deceased (e.g., “I am aware of having taken on many of my spouse’s habits, values, or interests”).

Originally developed on a sample of widowed community members, Field et al. (2003) found a Cronbach’s α of .87 and justified a single summed score for CB. The study also found that scores on the CBS were directly related to a positive representation of the past relationship with the deceased and negatively related to anger toward the deceased. It has since been used with a wide range of samples, including university students in the United States (U.S.) with Cronbach’s $\alpha = .89$ (Currier et al., 2015; Laurie

& Neimeyer, 2008). Neimeyer, Baldwin, and Gillies (2006) found a Cronbach's α of .90 using the CBS on their university student sample when assessing broad bereavement (grief over the loss of any friend or relative). Perhaps because of its strong internal consistency scores in various samples, the scale is still being frequently used in the literature.

More recently, and in response to the conflicting research showing CB may be adaptive or maladaptive depending on the type of behavior, Field and Filanosky (2010) created a 16-item version of the *Continuing Bonds Scale* (CBS-R). The 16 items were whittled down from 47 items using a college-age sample of individuals suffering from a range of losses. It consists of two subscales: six items on externalized CB (ECB) expressions (e.g., "I actually felt the deceased's physical touch," and "I actually saw the deceased stand before me") and 10 items on internalized CB (ICB) expressions (e.g., "I thought about the deceased as a role model who I try to be like," and "I imagined sharing with the deceased something special that happened to me"). Each item is scored using a 4-point Likert scale and directed at behaviors in the last month. The score is summed for each subscale, with higher scores indicating higher use of CB. The ECB scores can range from 6 to 24 and the ICB from 10 to 40. There is no total score for the CBS-R.

Validating the CBS-R on a general community sample of bereaved adults, Field and Filanosky (2010) found a Cronbach's α of .92 for ICB and .73 for ECB. In another study using this measure on a community sample, Gassin and Lengel (2014) found that the ICB exhibited a Cronbach's $\alpha > .90$, while the ECB only showed a Cronbach's α of .58. Gassin and Lengel (2014) theorized that perhaps the extremely low consistency of the ECB was not indicative of a poor measure, but rather a diversity in how ECB are

perceived by people of different subcultures and people at different places in the grieving process. This suggests that ECB may just be more difficult to measure consistently with our current understanding and measures. A Chinese version of the CBS-R has also been used in studies, with subscales showing a Cronbach's α between .79 and .93, with the ECB reliability being consistently lower (Ho et al., 2013; Yu et al., 2016). Despite these lower reliability scores for the ECB subscale, the CBS-R is still the only instrument to measure ICB and ECB as separate constructs.

Other scales of continuing bonds. Other indirect measures have been used to measure CB in individuals. In order to measure CB, Epstein et al. (2006) used a subset of items off of the *Bereavement Experiences Index* (McKiernan, Spreadbury, Carr, & Waller, 2013). These included items that referenced an ongoing relationship with the deceased include, "I sometimes find myself looking for him in a crowd," and "I sometimes feel his presence even though he is dead." Using principal components analysis, they determined a three-factor structure of CB: sensing the presence of the deceased, communicating with the deceased and re-living the relationship, and dreaming of and yearning for the deceased. They did not confirm their results on a subsequent sample and did not report reliability scores in their study, however.

Another instrument referred to as *CB Coping* has also been used to measure this construct (Field & Friedrichs, 2004). *CB Coping* is meant to capture the common ways found in the literature that bereaved individuals attempt to maintain an ongoing relationship with the deceased. Participants are asked how often in the last three hours they used each of the common CB expressions (e.g., "used photos or [the deceased's] belongings to feel closer to [the deceased]"). The six items from the measure are rated on

a 5-point Likert scale from *not at all* to *constantly*. Field and Friedrichs (2004) reported a Cronbach's α of .85 in a widowed community sample.

The Qualitative Literature on Continuing Bonds

There has been a plethora of qualitative literature on CB and grief, across multiple continents and cultures, including the U.S., Europe, Asia, and the Middle East. Many of these studies have found that the presence of CB, even years after a death, is extremely common in individuals who have lost loved ones (Asai et al., 2010; Bell et al., 2015; Chan et al., 2005; Costello & Kendrick, 2000; Doran & Hansen, 2006; Foster et al., 2011; Ganzevoort & Falkenburg, 2012; Harper et al., 2011; Ho & Brotherson, 2007; Hussein & Oyeboode, 2009; Khosravan et al., 2010; Mangione et al., 2016; Suhail et al., 2011), including family pets (Packman, Carmack, & Ronen, 2011-12). For example, Foster et al. (2011), in their examination of families who had lost a child within the past two years (mothers, fathers, and siblings; $n = 99$), found that 97% of the participants in the study had maintained purposeful bonds with the deceased. These purposeful bonds included looking at photographs, talking or writing letters to the deceased, and keeping the personal belongings of the child or sibling. Although the time since death for Foster et al.'s (2011) study was relatively short ($M = 10.68$ months, $SD = 3.47$), another study by Harper et al. (2011) that had a mean time since death of 10 years, similarly found that most of the mothers in their study reported a CB with their deceased child.

Another theme in the qualitative research has been that CB can be both a comforting and positive experience for some individuals while being a more negative experience for others. In some cases, researchers found that nearly all of the participants who held CB toward their spouses, children, and other loved ones found them comforting

and positive experiences (Asai et al., 2010; Beischel et al., 2014-15; Chan et al., 2005; Costello & Kendrick, 2000; Doran & Hansen, 2006). Other studies have found more of a mix of positive and negative experiences (Foster et al., 2011; Parker, 2005; Wood, Byram, Gosling, & Stokes, 2012). For example, Foster et al. (2011) noted that 57% of mothers, fathers, and siblings of the deceased found their CBs to be comforting, with mothers and fathers particularly discussing their CB in this manner. On the other hand, 10% of this same sample found their CB to be particularly discomforting. Wood et al. (2012) examined a sample of young people (age eight to 15) who had lost a parent to suicide. Their study highlighted that for these individuals, CB expressions were sometimes distressing, with positive memories of the deceased sometimes triggering painful and negative emotions. On the other hand, some of the participants were able to reminisce, recalling both difficult and positive memories without overt distress. One qualitative study conducted with Iranian widows concluded that their CB expressions were indicative of perpetual grief, although no formal assessments of grief symptom severity or CGS has been completed (Khosravan et al., 2010).

The Quantitative Literature on Continuing Bonds

As Field et al. (2013) noted, over the years some discrepancies have been found between the qualitative and quantitative literature in how CB may be related to both UG and CG. Numerous quantitative studies have linked the presence of CBs to more intense and complicated grief reactions in individuals who have lost a spouse (Field & Friedrichs, 2004; Field et al., 2003; Ho et al., 2013; Mancini et al., 2015; Stroebe et al., 2012), a child (Cowchock et al., 2010), or other loved ones (Field & Filanosky, 2010). At first glance, this appears to go against much of the qualitative literature (e.g., Asai et al., 2010;

Chan et al., 2005; Costello & Kendrick, 2000; Doran & Hansen, 2006) where CB have been found to be extremely common and often comforting. Perhaps this speaks to how CB are measured in quantitative studies compared to qualitative studies and what questions are being asked. As Field et al. (2013) noted, the quantitative literature has focused on whether participants are using CB or not and their connection to objective measures of CG. Conversely, qualitative studies have rarely measured CG, but rather focus on the perceived usefulness of CB in coping with grief. Perhaps, CB could be perceived as comforting in grief, while still being related to CGS.

However, some agreement on this topic has occurred between the qualitative and quantitative literature. For example, there have been multiple quantitative studies that have also found that CB are relatively common in bereaved individuals, even years after the death of their loved one (Carnelley et al., 2006; Epstein et al., 2006; Jahn & Spencer-Thomas, 2014; Klugman, 2006; Packman, Field, Carmack, & Bonen, 2011; Russac et al., 2002; Scholtes & Browne, 2015). The average time since death in these studies ranged from about 16 months to 15 years, with Carnelley et al. (2006) showing that while frequency of CB behaviors decreased over time, attachment to deceased loved ones still was common. Additionally, more recent quantitative research has shown that some participants rate CB as comforting, including for those who have lost loved ones in a variety of ways (Sochos & Bone, 2012), and for those who have lost loved ones specifically to suicide (Jahn & Spencer-Thomas, 2014). Additionally, two studies have found that the strength of the relationship between CB and CG depended on how comforting the individuals rated the different types of CB (Field et al., 2013; Packman et al., 2011).

Further research has begun to explore more closely the link between CB and CG, trying to understand how CB can be both normal and comforting for some, yet linked to more persistent and severe grief reactions for others. In this, there has been a movement away from the dichotomy of CB as either all good or all bad (Field, 2008). Research has now turned its focus to two questions: (a) are certain types of CB expressions that are more adaptive than others, and (b) is the use of CB expressions adaptive for some individuals, but not others?

Types of Continuing Bonds

Some of the initial research attempting to determine if there were CB that were adaptive and CB that were maladaptive began by looking at specific CB behaviors in individuals. Field et al. (1999) determined that while holding on to the deceased's possessions was associated with exacerbated grief-specific symptoms over the course of 25 months, having a sense of presence of the deceased and seeking comfort through memories was not. All of these behaviors are considered CB; however, they did not appear to relate to CG in the same way. A later study by Boelen et al. (2006), however, contradicted some of these findings. They found that sensing the presence of the deceased and holding onto their possessions predicted greater concurrent grief symptoms, while seeking comfort through memories of the deceased did not. On the other hand, holding memories of the deceased did predict greater grief symptoms later on in the bereavement process (approximately 16 to 21 months post-loss), while sensing the presence of the deceased and holding onto their possessions did not predict later grief symptoms. Although it seems unclear as to what may explain these contradictory findings, it was clear that specific CB behaviors seemed to predict grief symptoms differently over time.

Field et al. (2005) proposed a theory of differentiating healthy from unhealthy CB, using Bowlby's theories on attachment and grief to understand the purpose and adaptiveness of the various CB. Examining Bowlby's (1980) four stage theory of grief, Field et al. (2005) noted that CB expressions may represent temporary attempts for relief during the earlier, more painful phases (e.g., protest and despair). Possessions therefore may act as transitional objects as individuals cope with, and move toward acceptance of, the loss. The assumption then being that as individuals move out of these phases and into reorganization, these types of CB should be relinquished. Field et al. (2005) distinguished another category of CB, however, which they theorized was more related to the reorganization stage of grief. This type of CB, which included evoking fond memories of the deceased, may create an internalized sense of security and connection that no longer requires more externalized forms of CB (e.g., the holding of possessions).

Further qualitative studies also suggested a difference between types of CB. There are those CB those that acknowledge the reality of the death and a need to change the relationship, and there are those CB that rely on physical expressions and allow less room for flexibility and adaptation to the death (Bennet, Gibbons, & Mackenzie-Smith, 2010; Harper et al., 2011; Rubin & Schechory-Stahl, 2012-13). Harper et al. (2011) in their study of bereaved mothers differentiated between these two types of CB. Those mothers who were struggling to adapt to the death, for example, reported the need to continue to care for their deceased children by caring for the grave. On the other hand, some mothers instead found connection to their deceased children through more symbolic means, such as a mother who felt her son's presence when she would see ladybirds (because of their connection to a memory with her son). While in both cases the mothers sought an

ongoing relationship with their children, Harper et al. (2011) believed there was a difference in how adaptive the types of CB expressions were.

Field and Filanosky (2010) quantitatively examined ECB versus ICB, looking to see if specific CB behaviors could be categorized and therefore differentiated. Specifically, they purported that ECB were any behaviors that appeared to involve, even if temporarily, a belief that the deceased was still alive, while ICB focused on the attachment to the deceased as merely a mental representation that acknowledged the permanence of the death and the “impossibility of regaining physical proximity” (p. 4). The results of their study supported a two-factor structure of CB. In line with one of their hypotheses ECB did indeed predict grief symptoms while ICB predicted PTG, which followed their belief that ECB represented maladaptive CB expressions and ICB more adaptive CB expressions. On the other hand, against their original hypothesis that ICB would represent adaptive coping, ICB was still predictive of CGS severity.

Subsequent studies have also found that ECB is related to grief symptom severity (Field et al., 2013; Gassin & Lengel, 2014; Ho et al., 2013; Scholtes & Browne, 2015). Further research has shown a positive relationship between ICB and CG (Gassin & Lengel, 2014; Ho et al., 2013), while also noting ICB is correlated with positive outcomes such as forgiveness (Gassin & Lengel, 2014). One study, Scholtes and Browne (2015), looked at the direct path between ICB and CG and found a negative relationship between the two, with ICB predicting less severe grief reactions. The same study found that ICB predicted PTG and ECB predicted CG. It appears that the relationship between ICB, ECB, and grief reactions is extremely complex and not yet understood. However,

studies do appear to agree that there is a difference between these two types of CB and that ICB appear to be slightly less maladaptive compared to ECB.

Attachment and Continuing Bonds

As Field et al. (2005) showed, there appears to be a clear theoretical connection between attachment and CB as they both represent continued attachments to the deceased after death. They noted that if attachment style affects how individuals interact within close relationships in life, it only follows that it would affect how they interact within them after death and how a bereaved individual might maintain their attachment with the deceased. They theorized that while anxious preoccupied individuals may cling to CB in an attempt to regain physical proximity to the deceased, avoidant dismissive individuals might not use CB even in adaptive attempts to cope with the death, leaving them without this coping mechanism altogether.

There has been some empirical research in this direction attempting to see how these constructs may interact. Supporting Field et al.'s (2005) study, Ho et al. (2013) found that ECB were correlated with an anxious attachment style, but not with an avoidant attachment style. Other studies have examined secure and insecure attachment styles more broadly, not differentiating between attachment anxiety or avoidance, as well as the types of CB. Sochos and Bone (2012) examined the perceptions of CB in non-bereaved individuals and found that insecurely attached individuals viewed detachment from the deceased as more adaptive than staying attached. On the other hand, Nager and de Vries (2004) conducted a qualitative study on daughters who had posted online memorials for their deceased mothers, considered to be a form of CB. They found a disproportionate amount of the daughters were insecurely attached, suggesting that there

may be a positive relationship between CB and insecure attachment. The research seems to suggest that the relationship between the various attachment styles and various types of CB is complicated and that the types of insecurity and CB may affect the relationship. It should be noted that Field and Filanosky (2010) found no relationship between ECB and anxious or avoidant attachment, as well as no relationship between ICB and the two insecure attachment styles.

Two recent studies, as of 2016, have examined the relationship between CB, attachment, and CG (Currier et al., 2015; Yu et al., 2016). Currier et al. (2015) examined if anxious attachment or avoidant attachment would moderate the relationship between CB and CG in a U.S. university bereaved student sample. They determined that while CB remained positively correlated with CG despite attachment style, for those students with high anxious attachment styles and/or low avoidant attachment styles, CB was less predictive of CG than for those students with low anxious attachment and/or high avoidant attachment styles. When avoidant attachment was high, CB was an even stronger predictor of CG. They theorized that congruence between a person's attachment style and the use of CB was key. Notably, they theorized that using CB expressions is an incongruent coping mechanism for an individual with avoidant attachment and therefore linked with distress. On the other hand, anxiously attached individuals, who use more proximity-seeking behaviors, are acting in a more congruent manner if they continue exhibit these behaviors through CB after a loved one dies and therefore are less likely to be distressed by them than their avoidant counterparts. This study did not, however, distinguish between ICB and ECB in their model, which may affect how these CB interact with attachment.

On a sample of bereaved Chinese community members, Yu et al. (2016) took a different direction, examining how CB may mediate the relationship between attachment and grief reactions. Specifically, they looked at whether ECB and ICB would mediate the relationship between attachment anxiety and PTG, whether they mediated the relationship between attachment avoidance and PTG, and whether they did the same for the relationships between attachment style and CG. The results indicated that ECB fully mediated the relationship between avoidant attachment and CG and partially mediated the relationship between anxious attachment and CG. On the other hand, ICB partially mediated the relationship between anxious attachment and PTG, while not doing so for avoidant attachment. Avoidant attachment was directly and negatively related to PTG. Their study showed a tentative conclusion that the relationship between attachment style and CGS severity was mediated by the type of CB these individuals exhibited.

While Currier et al. (2015) theorized that attachment style may change the relationship between CB and CG, Yu et al. (2016) proposed that the types of CB may explain the relationship between attachment and CG. Both studies produced tentative evidence in support of their respective theories. Still, the literature still shows a clear gap in our knowledge of how these variables interact. For example, it is still unclear if the best theory is that CB mediates the relationship between attachment and CG or if it is best to examine how attachment moderates the relationship between CB and CG. Clearly, more research is needed to determine how these variables specifically interact to affect grief outcomes.

Other Individual Factors and Complicated Grief

Attachment has not been the only personal factor shown to affect the relationship between CB and CG. Since Klass et al. (1996) published their book, culture has been a part of the discussion, as many have noted that culture can factor into how individuals cope with and understand death (Benore & Park, 2004). Lalande and Bonanno (2006), in their comparison of CB and grief reactions among individuals in the U.S. and those in the People's Republic of China (PRC), found that individuals in the PRC held higher levels of CB at four months post-loss than did the U.S. subjects. Additionally, individuals in the PRC with higher levels of CB were better adjusted at 18 months than those in PRC who originally held lower levels of CB. On the other hand, higher levels of CB in the U.S. predicted poorer outcomes in individuals.

There even appears to be differences in the use of CB and their relationship to grief symptom severity the U.S. across demographic groups and cultures. Laurie and Neimeyer (2008) found that African American individuals tended to hold stronger CB than their Caucasian counterparts. Additionally, the presence of these bonds was uncorrelated with grief symptom severity in this sample. Boulware and Bui (2016) conducted a study that contested these findings, having themselves found a relationship between CB and CG in the African American population. Although the current literature does not appear to agree on how, culture does appear to play a role in how the use of CB affects grief outcomes. Similar to this idea, religion—an important piece of culture for many—has been theorized to relate to grief, and specifically CB (Benore & Park, 2004). However, this relationship has been addressed only sparsely in the grief literature to date.

Religion and Afterlife Beliefs

The idea of examining religious beliefs is not new to psychology. In 1902, William James delivered his seminal speech, *The varieties of religious experience*, in which he explored religious beliefs and human experience (James, 1902/1985). In his speech, he argued for an openness to religious experiences from a more pragmatic position. He believed that whether or not religious beliefs could be proven with rationality, if they had a meaningful effect on individuals, then they were “true.”

This understanding of religion and its consequences stands in stark contrast with the ideas that Freud (1927/1975) put forth a few decades later in his book *The future of an illusion*. While James (1902/1985) argued for the usefulness and positive benefits of religion, Freud (1927/1975) focused on the roots of religious belief, believing them to be based in wish fulfillment. Freud (1927/1975) explored, in length, the idea that humans and civilization created God in an attempt to find protection from nature—a perfect and all-powerful father figure to protect humans from the ills of both life and death. Religious beliefs, then, were simply defense mechanisms.

As Pargament (2002) noted, starting from Freud and James, psychologists have continued to place themselves on both sides of this debate between religion as positive and true versus religion as a maladaptive or irrational belief system. Even in modern psychology this debate has continued, with Ellis (1986) making the assertion that religion was “opposed to the normal goals of mental health” (p. 42). It is likely that this belief that religion and spirituality are incongruent with the scientific study of psychology has been, in part, responsible for the dearth of research on spirituality and religion in the field. Miller and Thoresen (2003) noted that 20th century behavioral and health sciences were

“dominated by positivistic and naturalistic viewpoints” that viewed the study of spirituality or religion as “an improper topic for scientific investigation” (p. 24). Pargament (2002) also noted that as psychologists, especially recently, have been less religious than the general public (Shafranske, 1996), they may have simply overlooked religious ideas, not seeing them as influential. Consequently, very little research has focused on spiritual or religious constructs as the main research question (Miller & Thoresen, 2003). Multiple analyses over the last couple of decades have noted this dearth of publications on spirituality or religion in the mental health field (e.g., Larson, Pattison, Blazer, Omran, & Kaplan, 1986; Schlosser, Foley, Stein, & Holmwood, 2010).

Religion and Grief

The lack of psychological research on religion has even held true in the grief literature, despite what Benore and Park (2004) pointed out as an inherent connection between religion, spirituality, and death. All the same, while there has not been a major emphasis on religious or spiritual beliefs in the psychological and thanatological literature, some studies have explored these concepts.

Religion has not always come off positively in studies of bereavement and grief. Some research has suggested that religion can become a source of distress for bereaved individuals, as some bereaved people may feel bitterness, confusion, or anger toward God (Chapple, Swift, & Ziebland, 2011; Klaassen et al., 2015), others may see their beliefs as compromised, or reject religion as a “crutch” (Chapple et al., 2011, p. 9). Additionally, research on negative religious coping has connected it to increased grief reactions and CG (Boulware & Bui, 2016; Lee, Roberts, & Gibbons, 2013). Negative religious coping is perceived when individuals use religion to reframe life events in a negative light,

seeing these events (such as the death of a loved one) as the work of the devil, or abandonment by, or punishment from, God (Pargament, Smith, Koenig, & Perez, 1998). For these individuals, religion may become a source of anger and other negative emotional experiences when a loved one dies.

However, for the most part the relationship between religion and grief has been shown to be a beneficial one. In the literature, religion is seen to provide a means of coping with grief, allowing individuals to cognitively process the death and find great meaning through it (Chapple et al., 2011; Maple, Edwards, Minichiello, & Plummer, 2012; Matthews & Marwit, 2006). Many researchers, such as Neimeyer et al. (2006) have found this ability to find meaning to be related to more less severe grief reactions. On top of this, religion may provide a context and framework for rituals, which Cacciatore and Flint (2012) found might give the bereaved a sense of control. Brown et al. (2004) found that not only did bereavement generally increase religious beliefs held by widows, but this increase actually led to a decrease in grief symptoms. Similarly, Currier, Mallos, Martinez, Sandy, and Neimeyer (2013) found an increase in PTG following the death of a loved one for individuals who were more religious.

Theoretical Connections: Religion, Afterlife Beliefs, and Continuing Bonds

Just as one's culture as a whole can affect CB, religious beliefs specifically have been shown to directly affect how individuals continue their relationship with the deceased. As Klass (2014) noted, CB have long been a part of most religious belief systems. In fact, Benore and Park (2004) stated that CB might be better understood as a general belief system related to religious and afterlife beliefs, rather than a specific type

of coping during bereavement. Much of the research has noted that religion and CB are compatible constructs. Field et al. (2013) found that the use of CB appeared to be compatible with the belief in a soul, while multiple other studies have noted that CB are often understood through the framework of religion and religious beliefs (Klaassen et al., 2015; Shapiro, 1995). Parker (2005) wrote:

For some individuals with spiritual belief systems, experiences that continue to occur post grief resolution and within the context of continuing bonds reinforce the cognitive structure through which individuals not only conceptualize and assimilate death, but the framework through which they conceptualize and experience their unique spirituality. (p. 277)

This, she concluded, could help in the grieving process and lead to greater psychological wellbeing. Studies have also found that religion not only can help in understanding CB, but also can aid in the development and maintenance of CB, with religious systems providing belief structures and rituals that may allow for a continued connection to the deceased (Chapple et al., 2011; Doran & Hansen, 2006; Hussein & Oyeboode, 2009; Jahn & Spencer-Thomas, 2014). For example, Hussein and Oyeboode (2009) noted that doing actions that are believed to benefit the deceased, such as praying on the deceased's behalf and visiting the grave, is a common part of Islam. It is a belief in Islam that the deceased can continue to gather good deeds through the actions of their decedents, and many of Muslim participants in this study found comfort in this tradition. The research appears to agree that, whether or not CB are adaptive, they do appear to be related to religious belief systems. More research is needed to understand if these religious beliefs surrounding the afterlife may actually affect the adaptiveness of CB.

Fittingly, in many qualitative studies, when individuals are addressing their CB with their lost loved ones, religious and spiritual discussions often emerge in the conversation (DeGroot, 2012; Doran & Hansen, 2006; Ganzevoort & Falkenburg, 2012; Hussein & Oyeboode, 2009). Additionally, Cowchock et al. (2010) found that positive religious coping was directly related to the use of CB in individuals, while negative religious coping was unrelated.

Afterlife beliefs, specifically, are a vital piece to understanding the relationship between religion, CB, and grief. Afterlife beliefs are the beliefs that individuals hold about what happens after another individual dies, including the possibility of continued existence and reunion with loved ones after death (Lester et al., 2001-02). For example, Wood et al. (2012) found that nine out of 10 of their participants believed in “the possibility of the deceased existing externally” and being able to see or hear their living loved ones still (p. 885). While Benore and Park (2004) asserted that most religions throughout history have held some beliefs in an afterlife, Draper et al. (2013) found that afterlife beliefs across people are quite varied and sometimes unconnected to specific religious systems. Still, while the two constructs of religion and afterlife beliefs may not be equivalent, religion can have a major influence on afterlife beliefs in individuals (Sormanti & August, 1997). Sormanti and August (1997) also found that afterlife beliefs can have a major influence on how individuals understand and maintain CB. For example, studies have reported that afterlife beliefs for the bereaved often revolve around belief of a reunion with loved ones after death and the ability to have a lasting relationship with the deceased (Ganzevoort & Falkenburg, 2012; Krynska, Andriessen, & Corveleyn, 2014; Wood et al., 2012). These beliefs then must be separated from the

ECB that Field et al. (2005) found to be maladaptive, such as illusions and hallucinations. Field et al. (2013) and Mangione et al. (2016) both reported in their respective studies that there is likely a difference between those individuals who believe that their deceased loved ones are aware and those individuals who are unable to understand or accept the finality of the loss. That is to say that holding a belief in one's ability to speak with the dead or to hold an ongoing relationship with the deceased may not be maladaptive if this fits into the framework of those individuals' belief systems. As Root and Exline (2014) noted:

For individuals who believe in life after death, it seems possible that they may view their loved one not as "alive" (in the physical, earthly sense) but yet still continuing to exist in some form. Continuing bond expressions that may otherwise suggest unresolved loss may not necessarily indicate unresolved loss for individuals whose worldviews include beliefs in life after or death or in the possibility of mutual ongoing influence between the bereaved and deceased. (p. 6)

Measuring Afterlife Beliefs

There are not many instruments that examine the construct of afterlife beliefs, and most have been used in studies on death anxiety. Meaning, the samples these instruments were tested on were non-bereaved individuals being asked questions about future possibilities of an afterlife, rather than bereaved individuals being asked about their beliefs about their deceased loved ones' current afterlives. One instrument is the *Afterlife Expectation Scale* (AES; Rose & O'Sullivan, 2002). The AES was created to better measure the specific beliefs that individuals hold in regard to the afterlife. The scale includes items such as "I will experience eternal rest," "I will be subjected to judgment,"

and “I will remain on earth in spirit form.” The scale has not been regularly used in research since its original study. Cronbach’s α scores for subscales on the AES, which explored the content of afterlife beliefs (judgment, joy/reward, earth-based, surreal, extinction, and other), ranged from .68 to .86 in Rose and O’Sullivan’s (2002) study.

Similarly, the *After Death Belief Scale* (ADBS; Burris & Bailey, 2009) has been used infrequently as well since its development (e.g., Anglin, 2014). The ADBS was created in an attempt to measure the multiple varieties of afterlife beliefs and relate these to constructs such as death anxiety. It includes subscales on five types of afterlife beliefs: annihilation, disembodied spirit (e.g., “There will be no more ‘me,’ in the limited sense—only pure, eternal Consciousness”), spiritual embodiment (e.g., “I will continue to exist as a living person with a spiritual ‘body,’ not a physical body”), reincarnation, and bodily resurrection. A sixth subscale measures belief/behavior efficacy, or the degree to which individuals believe their behaviors and beliefs affect their fate in the afterlife (e.g., “What happens to me afterward is affected by what I believe now”). Although the measure showed adequate psychometric properties with subscales ranging from Cronbach’s $\alpha = .76$ to .95, it was designed to measure afterlife beliefs related to one’s own future, personal death. Burris and Bailey (2009) noted the difficulty in measuring afterlife beliefs, a complex construct, in such a way that is open to numerous belief systems, and they called most measures “unidimensional” and “implicit” (p. 173).

One scale that has been used relatively frequently is the *Belief in an Afterlife Scale* (BAS; Osarchuk & Tatz, 1973). Originally constructed to examine the relationship between belief in an afterlife and fear of death, the BAS measures general beliefs in the afterlife. The BAS was originally created with two equivalent versions. Osarchuk and

Tatz (1973) were conducting an experiment on death anxiety and needed to measure afterlife beliefs before an intervention and again afterward. These two versions have been combined in some studies (e.g., Bering, 2002), while others have chosen one version over the other. Cohen et al. (2005) noted that these decisions have not been well explained in the literature. Each version of the scale is 10 items long and is rated on an 11-point scale from *total disagreement* (1) to *total agreement* (11), with many of the items reverse-scored to indicate stronger beliefs as higher scores. Items included statements such as, “In the premature death of someone close some comfort may be found in knowing that in some way the deceased is still existing,” and “Humans die in the sense of ‘ceasing to exist.’” Cohen et al. (2005) noted that the scale has not been thoroughly studied for its reliability and validity. Some studies have reported on its reliability with Casebolt (1992) noting a Cronbach’s α of .89 for the scale and Cohen et al. (2005) finding a Cronbach’s α of .87 and a split-half correlation of $r = .78$.

Another approach to measuring afterlife beliefs has been to ask a single question. Harley and Firebaugh (1993), in their study on afterlife belief trends in America, asked participants, “Do you believe there is life after death?” a question based on the General Social Survey (p. 271). Another study by Higgins (2002) used a similar method, asking a question about participants’ belief in an afterlife and giving them two options: “that people stop existing after death or that there is an afterlife” (p. 194). However, Carr and Sharp (2013) pointed out it may take a more complicated understanding of afterlife beliefs in order to understand the relationship between grief and these beliefs. In their study, Carr and Sharp (2013) asked not only if participants believed in an afterlife—giving them a yes/no/I don’t know option—they also asked for opinions on two other

beliefs: “In the afterlife, you will be reunited with your loved ones,” and “People who suffer unjustly in this life will be rewarded in the afterlife” (p. 106). Through these items, Carr and Sharp (2013) found that the actual presence of afterlife beliefs was not correlated with grief outcomes, but the valence of those beliefs in fact was. It appears that it is important to measure if individuals’ afterlife beliefs are positive (e.g., I will be reunited with my loved ones) or more negative (I will not be reunited with my loved ones).

Empirical Studies: Afterlife Beliefs, Attachment, and Grief

There are a few studies specifically looking at how belief in an afterlife affects grief and bereavement. Sormanti and August (1997), for example, found that following the loss of a loved one, individuals’ afterlife beliefs tended to shift. For many bereaved individuals their beliefs became stronger, and other individuals in fact gained new beliefs in the afterlife. Additionally, Klaassen et al. (2015) reported that some individuals found comfort in their afterlife beliefs during bereavement—which may relate back to how religion can aid in recovery from grief. On the other hand, Carr and Sharp (2013) noted that the relationship between afterlife beliefs and grief may be more complicated than that. In their study on later-life widows and widowers, they found that it was not the presence or absence of a belief in the afterlife that affected grief symptoms, but rather the specifics of those beliefs. Individuals who held a belief in the afterlife but who did not believe in the possibility of reunion showed significantly greater psychological distress than those who held beliefs in eventual reunion with loved ones. This study, however, did not examine how these beliefs influenced CB or what role attachment may have played in these beliefs and bonds.

It is likely that attachment does play a role in the relationship between afterlife beliefs, CB, and CG. Studies have found that religion can become a significant protective factor for individuals' mental health when they are coping with problems related to the strained or lost relationship of an attachment figure, such as during bereavement (Granqvist, 2014). Moreover, Brown et al. (2004) found that widows exhibiting insecure attachment styles benefited more in grief from an increase in their religious beliefs—more so than for securely attached individuals. They theorized that this showed that these insecurely attached widows were able to use God as a “compensatory attachment figure” to regulate their distress and to better cope with their loss (p. 1172). While this study gave a new perspective on the relationship between attachment, religion, and grief, Brown et al. (2004) did not specifically look at afterlife beliefs, nor did they examine how CB may play a role in how attachment, religion, and grief interact.

Conclusion

Attachment and grief have been interwoven in the psychological literature since their conception. Bowlby (1980) in his exploration of attachment saw the connection between the separation from an attachment figure and the loss of a loved one through death. Through his work, he created a grief theory based around this connection. It was in this work that Bowlby began to move away from Freud's (1917/2005) original conception of grief recovery which pushed for a complete severing of the bond with the deceased. Instead, Bowlby recognized that a continued sense of presence appeared common in the bereaved even after recovery. It was Klass et al. (1996) that brought this idea to the forefront of the psychological and grief research. In their book, they noted that

CB could be a normal and adaptive part of the recovery process, challenging many long-held assumptions as well as some of the psychological literature.

Over the years, the literature has delved deeper into this theory, examining the adaptive or maladaptive nature of CB expressions. Many have noted the connection between CB and CG, pointing to this as proof of the maladaptive nature of CB (Field & Friedrichs, 2004; Ho et al., 2013; Stroebe et al., 2012). Others have noted how common and comforting CB are and questioned if all forms of CB expression could be maladaptive if this were the case (Asai et al., 2010; Bell et al., 2015; Field et al., 2005; Field et al., 2013; Packman et al., 2011). Moreover, research has connected back to attachment and attachment style to explain how CB may be more maladaptive for some individuals (e.g., those with avoidant attachment), but not others (Currier et al., 2015; Yu et al., 2016).

What has not been addressed in the empirical literature is the possible effect afterlife beliefs may have on CB expressions and their relationship to CG. The research has shown that there is a connection between afterlife beliefs and grief (Carr & Sharp, 2013; Klaassen et al., 2015). Additionally, qualitative literature has shown a clear link between how bereaved individuals experience and hold CB and their religious beliefs, including afterlife beliefs (Chapple et al., 2011; Jahn & Spencer-Thomas, 2014). Yet, despite calls to research (Root & Exline, 2014) and the theoretical connections that have been made (Benore & Park, 2004; Field et al., 2005), no quantitative research has looked specifically at how afterlife beliefs and attachment may moderate or mediate the relationship between CB and CGS. There is a clear gap in the literature and a need to fill it. Counseling psychologists are tasked with providing individually and culturally

competent treatment for individuals (Sue, 2001). This includes ensuring that afterlife beliefs and attachment are taken into account during treatment, particularly if these are shown to affect the adaptiveness of CB expressions or CGS.

CHAPTER III

METHODOLOGY

In this chapter, the research methodology of this study is discussed. This study examined how attachment style and belief in an afterlife affect the presence of continuing bonds (CB) in bereaved individuals, and in turn how CB impact complicated grief symptomatology (CGS). In order to answer the study's research questions, a non-experimental, cross-sectional survey research design using convenience and snowball sampling was employed. In this chapter, the following is described: the present study's (a) participants, (b) instrumentation, (c) procedures, (d) hypotheses, and (e) data analyses.

Participants

The target sample for this study included both undergraduate and graduate students. Inclusion criteria included individuals who were (a) at least 18 years of age, and (b) currently enrolled in a university or college; the sample also will be limited to (c) individuals who had lost a close human loved one (e.g., parent, parental figure, spouse, partner, sibling, child, or close friend) to death between six and 24 months ago. This range is based on Prigerson and Jacobs's (2001) research stating that CG can be detected best in this timeframe.

Participants were recruited through convenience and snowball sampling from three universities in the Rocky Mountain region. These universities were chosen to best ensure that a wide range of students with different religious affiliations, socioeconomic

statuses, and ethnicities have a chance to participate in the study. It was the intention of the researcher to obtain a sample that was heterogeneous in ethnicity, as the majority of grief literature on American university students has recruited Caucasian or African American samples (e.g., Currier et al., 2015; Gassin & Lengel, 2014; Laurie & Neimeyer, 2008).

Additionally, this study hoped to recruit individuals who believe in an afterlife and those who do not. Overall, religiously unaffiliated individuals in the U.S. are a minority (22.8%), with self-identified atheists only accounting for 3.1% of the population. However, young adults aged 18 to 29 hold one of the highest portions of unaffiliated individuals (35%; Pew Research Center [PRC], 2014). These individuals are also less likely to believe in heaven (68% believe) compared to older generations (71 to 74% believe), and also are less likely to believe in hell (56% believe) compared to 30 to 64-year-olds (59 to 60%; PRC, 2014). When looking specifically at college students 63% believe in heaven and only 48% believe in hell (PRC, 2014). This study was specifically recruiting from universities and colleges in order to ensure that both individuals who believe in an afterlife and those who do not were represented, given the overall lower numbers of non-believers in the general public and older generations. Additionally, students in social and physical science programs were targeted for recruitment at the universities. Research shows that students in these programs tend to be less religious overall compared to other students (Kimball, Mitchell, Thornton, & Young-Demarco, 2009), which fits with statistics on religiosity among professionals in these fields (Gross & Simmons, 2009; Kimball et al., 2009; PRC, 2009).

The necessary minimum sample size was determined using an a priori power analysis through G*Power 3 (Faul, Erdfelder, Buchner, & Lang, 2009). Following Cohen's (1988) standards, this power analysis was based on pre-specific levels of significance, power, and effect size. Cohen (1992) suggested using a power level of $\beta = .80$, leaving a 20% chance of committing a Type II error. This study will also adopt a medium effect size of $f^2 = .15$ (Cohen, 1992), and an α level of .05, which is a standard α level for behavioral research (Tabachnick & Fidell, 2007). Given these pre-specified levels and the 10 predictors of the study, G*Power 3 estimated a minimum sample size of $N = 118$ was needed for the desired power. Given that approximately 39% of college-aged students are bereaved at any given time (Balk, Walker, & Baker, 2010), the researcher needed to reach about 300 individuals. Additionally, given that Kaplowitz, Hadlock, and Levine (2004) found around a 20% response rate for emailed surveys, the researcher wanted to reach approximately 1,500 university students total.

Procedures

Prior to participant recruitment and data collection, approval was sought by each university's Institutional Review Board (IRB; See Appendix A). All data were collected online using Qualtrics, an online service specializing in the collection of research data through online surveys. Each university's respective protocols for recruitment were followed. An email was sent to professors and/or administrative assistants in select programs (see Appendix B) briefly describing the study and providing them with a link to the online survey. Additionally, paper fliers were created and handed out in classes where the researcher was invited to briefly present her study. The informed consent document (see Appendix C) and study measures were uploaded and formatted to work in Qualtrics.

Potential participants were provided with a direct link in the email or a QR code on the flier, which took them to Qualtrics and the informed consent.

The informed consent page explained the potential risks and benefits to participants of the study. It noted that mild discomfort due to the topics discussed may occur, and it stated that they could end their participation at any time during the study without repercussions. This page also listed contact information for the primary researcher, her research advisor, and the researcher's university's Institutional Review Board. All participants were informed that their completion of the survey would qualify them to enter into a drawing for one of four Visa gift cards worth \$20 each. The consent page also asked them to confirm that they were over 18, enrolled in a college or university, and had had a loved one die six to 24 months ago. To indicate their consent, participants chose an option stating, "I consent to participate in the study."

Those participants who did not consent or did not meet the inclusion criteria were directed to a page thanking them for their time. The participants who consented were first directed to some brief items regarding afterlife beliefs (see Appendix E). This was based on Ary, Jacobs, Sorensen, and Walker (2014), who suggested that the first items of a survey should be pertinent to the research topic in order to engage participants. On the other hand, given that one topic of this study is grief and loss, these items created a buffer before participants were asked more emotionally laden items. From there, the four remaining surveys were administered in a random order to ensure that fatigue did not systematically impact their responses. The last items completed were the demographic items (see Appendix F).

At the end of the study, participants were directed to short debriefing statement (see Appendix D), which reiterated the purpose of the study and thanked them for their time. They were provided with counseling and support resources. This information was found through online web searches and the university counseling center webpages. At this point participants were directed to click a link to a separate page if they wished to enter the drawing for the Visa gift cards. On the separate page, they were able to enter their email address. They were informed that their email addresses would be stored in a separate survey from the research data and that their email addresses would not be connected back to their survey responses.

All data from the survey responses were stored on the Qualtrics secure server. Following the completion of the data collection process, the data was downloaded and imported into the statistical software, IBM Statistical Product and Service Solutions (SPSS) 25 (IBM Corp, 2017) on the researcher's password-protected computer. The data stored on the Qualtrics server was password-protected and only accessible by the primary researcher and her research advisor.

Instrumentation

Participants in this study completed (a) items pertaining to afterlife beliefs, (b) a demographics questionnaire, and the four measures. These measures were (c) the *Belief in an Afterlife Scale* (BAS; Osarchuk & Tatz, 1973), (d) the *Experiences in Close Relationships - Relationship Structures* (ECR-RS; Fraley et al., 2000), (e) the *Continuing Bonds Scale-Revised* (CBS-R; Field & Filanosky, 2010), and (f) the *Inventory of Complicated Grief-Revised* (ICG-R; Prigerson & Jacobs, 2001).

Religious Beliefs

This study used items created and initially used by Carr and Sharp (2013) in order to measure the presence of a belief in the afterlife and the valence (positive or negative) of these beliefs (see Appendix E). The first item asked was, “Do you believe people stop existing after death or that there is an afterlife?” Participants answered either, “Yes, I believe in an afterlife,” “No, people stop existing after death,” or “I do not know.” Individuals who answered the first item with a “No” will be categorized as individual without an afterlife belief. Individuals who answered “Yes” will be categorized as having an afterlife belief. Individuals were then asked to rate the following two statements on a 5-point Likert scale from *strongly disagree* (1) to *strongly agree* (5): “I will be reunited with my loved ones in the afterlife,” and “People who suffer unjustly in this life will be rewarded in the afterlife.” The first item was used to differentiate between participants who hold a belief in an afterlife and those who do not. The continuous scores measuring valence of beliefs were collected and used for a post-hoc analysis that were beyond the main scope of this study. These one to three items took approximately 30 to 90 seconds to complete.

Demographics Questionnaire

The demographics questionnaire was created by the researcher specifically for this study (see Appendix F). This questionnaire asked participants to report their age, gender, ethnicity/race, nationality, religion, and college major. Additionally, it asked for information about their bereavement experience, including their relation to the individual, age of the deceased, months since death, cause of death, if the individual sought

counseling following the death, and if the individual is currently in counseling. This demographics questionnaire took approximately one to three minutes to complete.

Belief in an Afterlife Scale

The Belief in an Afterlife Scale (BAS; Osarchuk & Tatz, 1973) measures one's general beliefs in the afterlife (see Appendix G). The BAS was originally created with two equivalent versions to be used in a pretest-posttest experiment. These have been combined in some studies (e.g., Bering, 2002), while others have chosen one over the other. Cohen et al. (2005) noted that these choices have not been well explained in the literature. For this study, given little research to inform any decision, Form A was chosen by the researcher as the items are more concise. Form A consists of 10 items, each one rated on an 11-point scale from *total disagreement* (1) to *total agreement* (11). Many of the items are reverse-scored so that for the total score, higher scores indicate stronger afterlife beliefs. Scores could range from 1 to 110. Items include statements such as, "In the premature death of someone close, some comfort may be found in knowing that in some way the deceased is still existing," and "Humans die in the sense of 'ceasing to exist.'" Cohen et al. (2005) noted that while the BAS has not been thoroughly studied for its psychometric properties, some studies have reported on its reliability, such as Casebolt (1992) noting a Cronbach's α of .89 for the scale and Cohen et al. (2005) finding a Cronbach's α of .87 and a split-half correlation of $r = .78$. The BAS took approximately three to five minutes to complete. The researcher was unable to obtain permission for the BAS given that both authors are deceased, but researchers continue to use the measure in studies.

Experiences in Close Relationships – Relationship Structures

The Experiences in Close Relationships – Relationship Structures (ECR-RS; Fraley et al., 2000) is a 36-item measure of attachment anxiety and avoidance (see Appendix H). The measure consists of nine items that are asked four times, having participants answer each time based on a different relationship (i.e., father figure, mother figure, friendship, romantic partner). The ECR-RS includes two subscales, with three items on the anxiety subscale (e.g., “I’m afraid this person may abandon me”) and six items on the avoidance subscale (e.g., “I find it easy to depend on this person [reverse scored]”). Items are scored on a 7-point Likert scale from *strongly disagree* (1) to *strongly agree* (7). The ECR-RS produces two final subscale scores: anxiety, ranging from 12 to 84, and avoidance, ranging from 24 to 168. Higher scores indicate higher attachment anxiety or avoidance, respectively. There is no total score on the ECR-RS. This measure took approximately five to 10 minutes to complete. Permission for the use of the ECR-RS was granted by Dr. R. Chris Fraley (personal communication, February 25, 2017).

Many studies have reported on the ECR-RS’s psychometric properties. Fraley et al. (2011) demonstrated convergent and discriminant validity of the ECR-RS. They found the ECR-RS items directly asking participants about their attachment to their romantic partners were correlated with relationship factors and distress measures. For example, the items related to avoidant attachment with a romantic partner were negatively correlated with commitment, satisfaction, and investment; they also were positively correlated with the perceived desirability of alternative partners. Fraley et al. (2011) noted that these correlations should be expected and demonstrate convergent validity. Both anxious

attachment and avoidant attachment on the ECR-RS were also correlated with depressive symptoms. Additionally, Fraley et al. (2011) found that while still somewhat associated with the Big Five personality trait measures, the ECR-RS scales were less correlated than the previous ECR-R, suggesting better discriminant validity. In terms of reliability, Currier et al. (2015) found the ECR-RS to have a Cronbach's $\alpha = .86$ to $.90$ for avoidance and $\alpha = .86$ to $.93$ for anxiety in a university sample.

Continuing Bonds Scale – Revised

The Continuing Bonds Scale – Revised (CBS-R; Field & Filanosky, 2010) is a 16-item measure consisting of two separate scales: externalized CB and internalized CB, both expressed within the past month (see Appendix I). It includes six items on externalized CB expressions (e.g., “I actually felt the deceased’s physical touch,” and “I actually saw the deceased stand before me”) and 10 items on internalized CB expressions (e.g., “I thought about the deceased as a role model who I try to be like,” and “I imagined sharing with the deceased something special that happened to me”). Each item is scored on a 4-point Likert scale from *not at all* (1) to *often* (4). The score is summed for each subscale, with higher scores indicating higher use of each type of CB. The ECB scores can range from 6 to 24 and the ICB from 10 to 40. There is no total score used for the measure. This measure took approximately three to five minutes to complete. Permission to use the CBS-R was granted by Dr. Charles Filanosky (personal communication, March 28, 2017).

Validating the CBS-R on a general community sample, Field and Filanosky (2010) reported a Cronbach's α of $.92$ for ICB and $.73$ for ECB. In another study using this measure on a community population, Gassin and Lengel (2014) found the ICB

subscale exhibited a Cronbach's α above .9, while the ECB subscale only showed an $\alpha = .58$. A Chinese version of the CBS-R has also been used in studies. In these studies, the subscales have exhibited a Cronbach's α between .79 and .93, with the ECB subscale reliability being consistently lower (Ho et al., 2013; Yu et al., 2016). Despite these lower reliability scores for the ECB subscale, the CBS-R is still the only instrument to measure ICB and ECB as separate constructs. While both subscales were used in the data collection, due to the difficulties in ensuring reliability on the ECB, only the ICB was used in the main analyses. Post hoc analyses examined the reliability of the ECB, as well as its relationships with other constructs in this study.

Inventory of Complicated Grief – Revised

The Inventory of Complicated Grief-Revised (ICG-R; Prigerson & Jacobs, 2001) is a 34-item measure that covers the range of symptoms thought to be unique to CG, including bitterness, numbness, yearning, and disbelief over the death (see Appendix J). The first 30 items are all scored on a 5-point Likert scale from 1 to 5. Most of these Likert items range from *almost never* (1) to *always* (5). For these Likert scale there is a key at the top of the measure noting what each increment on the Likert scale indicates. For example, if they choose *almost never* this indicates that participants experience these symptoms less than once a month, while by choosing *always* they are indicating that they are experiencing them several times every day. Other items have unique anchor points. For example, Item 10, "Ever since ____ died it is hard for me to trust people," has a scale ranging from *no difficulty trusting others* (1) to *an overwhelming sense* (5). None of the items are reverse-scored. Four items at the end of the measure assess the duration of CG symptoms, including an open-ended item pertaining to the change of symptoms over

time. For the purposes of this study, the ICG-R will be used to produce a continuous score of CGS severity, with higher scores indicating more severe grief symptomatology. The ICG-R took approximately five to 10 minutes to complete. Permission for the use of the ICG-R was granted by Dr. Holly Prigerson (personal communication, February 25, 2017).

The ICG-R has shown itself to have strong psychometric properties in numerous studies. Prigerson and Jacobs (2001) reported a Cronbach's α of .95 for the ICG-R, and subsequent studies have found similar Cronbach's α levels (.94 to .96) on the English version (Meier et al., 2013), French version (Delespaux et al., 2013), and Dutch version (Boelen et al., 2003). Boelen et al. (2003) also found a test-retest reliability of $r = .92$ over the course of nine to 28 days. Barry et al. (2002) found that ICG-R detected CG with .93 sensitivity and .93 specificity. Boelen et al. (2003) found a direct correlation of $r = .71$ between scores on the ICG-R and scores on the Texas Revised Inventory of Grief (TRIG; Faschingbauer, 1981), indicating concurrent validity with the TRIG, a measure of uncomplicated grief. Additionally, several studies have found direct correlations between scores on the ICG-R and the presence of the more serious mental and physical health consequences of bereavement thought to be linked to CG, further indicating concurrent validity (Boelen et al., 2003; Ott, 2003; Prigerson et al., 1997).

In this study, three items were removed prior to the analysis. This was based on a previous study by Field et al. (2013), which noted the conceptual overlap in three items on the ICG-R and the construct of CB. These items were (6) "I feel drawn to places and things associated with __," (15) "I hear the voice of __ speak to me," and (16) "I see __ stand before me." In order to avoid the confounding nature of these overlapping

items, Field et al. (2013) simply removed these items following initial analyses. With these items removed, they found the ICG-R to have a Cronbach's α of .98. This study followed suit and summed the remaining 27 ICG-R items to create a total CGS score. This total score ranged from 27 to 135, with higher scores indicating more severe CGS.

Data Analysis

Data Cleaning and Preliminary Analyses

Preliminary analyses run prior to hypotheses testing included (a) a descriptive analysis, (b) an examination of means and standard deviations, frequencies, and assumption testing, and (c) internal consistency reliability estimations for each measure. Additionally, assumptions were tested prior to all analyses. These are further discussed in Chapter IV.

Research Questions

The following research questions were developed for this study.

- Q1 Does CGS severity differ between individuals who hold afterlife beliefs versus those who do not?
- Q2 Does the presence of ICB expressions differ between individuals who hold afterlife beliefs versus those who do not?
- Q3 Among those who believe in an afterlife, does attachment insecurity moderate the relationship between ICB and CGS?
- Q4 Among those who believe in an afterlife, does the strength of an individual's afterlife beliefs moderate the relationship between ICB and CGS?

Hypotheses and Analyses

The following hypotheses were created in order to address these research questions:

- Q1 Does CGS severity differ between individuals who hold afterlife beliefs versus those who do not?
- H1 According to the results from a MANCOVA, those individuals who hold afterlife beliefs will have significantly lower CGS severity scores (as measured by the ICG-R) than those who do not hold afterlife beliefs, when controlling for age, gender, and race.
- Q2 Does the presence of ICB expressions differ between individuals who hold afterlife beliefs versus those who do not?
- H2 According to the results from a MANCOVA, those individuals who hold afterlife beliefs will report significantly higher ICB expressions (as measured by the CBS-R) than those who do not hold afterlife beliefs, when controlling for age, gender, and race.
- Q3 Among those who believe in an afterlife, does attachment insecurity moderate the relationship between ICB and CGS?
- H3 According to the results of a hierarchical linear regression, for those who believe in an afterlife, attachment anxiety (as measured by the ECR-RS) will significantly moderate the relationship between ICB (as measured by the internalized scale of the CBS-R) and CGS (as measured by the ICG-R).
- H4 According to the results of a hierarchical linear regression, for those who believe in an afterlife, attachment avoidance (as measured by the ECR-RS) will significantly moderate the relationship between ICB (as measured by the internalized scale of the CBS-R) and CGS (as measured by the ICG-R).
- Q4 Among those who believe in an afterlife, does the strength of an individual's afterlife beliefs moderate the relationship between ICB and CGS?
- H5 According to the results of a hierarchical linear regression, for those that believe in an afterlife, the strength of an individual's afterlife beliefs (as measured by the BAS) will moderate the relationship between ICB (as measured by the internalized scale of the CBS-R) and CGS (as measured by the ICG-R).

To test Hypothesis 1 and Hypothesis 2, a single Multivariate Analysis of Covariance (MANCOVA) was conducted. To test Hypothesis 1, the dependent variable of interest was CGS severity scores, as measured by the ICG-R. The independent variable

of interest was the presence or absence of afterlife beliefs. Individuals were placed into one of two groups based on their answer to the item: “Do you believe people stop existing after death or that there is an afterlife?” Participants answered either: “Yes, I believe in an afterlife,” “No, people stop existing after death,” or “I do not know.” Those who answered “I do not know” were not used in the initial analysis. The researcher planned to have three control variables. Gender and race were to be placed into the MANCOVA as independent variables with two levels each (female and male, white and non-white). A third variable, age, was to be placed into the MANCOVA as a covariate. These variables were chosen as controls, as age and ethnicity have been shown to impact grief responses (Boulware & Bui, 2016; Goldsmith et al., 2008; Meier et al., 2013), and age, ethnicity, and gender have been shown to impact afterlife beliefs (Harley & Firebaugh, 1993; Lester et al., 2001-02). Unfortunately, due to limitations based on the sample of this study, all three control variables were not able to be used in the MANCOVA. Rather, individual MANOVAs and correlations were run to see which of the three variables was significantly related to either ICB or CGS and thus needed to be controlled for.

To test Hypothesis 2, the dependent variable of interest was a continuous score of ICB expression, as measured by the internalized scale of the CBS-R. The independent variable of interest was the presence or absence of afterlife beliefs. Once again, there were meant to be three control variables (gender, race/ethnicity, and age), but this had to be changed due to limitations with the sample.

A hierarchical multiple regression analysis with a total of seven independent variables and three control variables was run to test Hypothesis 3, Hypothesis 4, and

Hypothesis 5. For this analysis, attachment avoidance, attachment anxiety, ICB, and afterlife beliefs served as the predictor variables. Additionally, the interactions between (a) ICB and attachment anxiety, (b) ICB and attachment avoidance, and (c) ICB and afterlife beliefs were used as predictors. In step 1, age, gender, and race were entered as control variables. In step 2, the variables attachment avoidance, attachment anxiety, ICB, and afterlife beliefs were entered. In step 3, attachment anxiety x ICB, attachment avoidance x ICB, and afterlife beliefs x ICB were entered as the variables of interest. These variables were regressed onto CGS severity as the dependent variable.

To test Hypothesis 3, the interaction between attachment anxiety and ICB was examined as the independent variable of interest to see if a moderation effect was present. To test Hypothesis 4, the interaction between attachment avoidance and ICB was examined as the independent variable of interest to see if a moderation effect for attachment avoidance was present. To test Hypothesis 5, the interaction between afterlife beliefs and ICB was examined as the independent variable of interest.

Summary

This chapter described the methodology of this study. In order to explore the relationships between CB, attachment, afterlife beliefs, and CGS, students were recruited at two universities in the Rocky Mountain region. Participants completed online measures on attachment, CB, afterlife beliefs, and CGS. Attachment was measured in terms of anxiety and avoidance using the ECR-RS (Fraley et al., 2000). Presence of afterlife beliefs was measured by a dichotomous question, while strength of these beliefs was measured with the BAS (Osarchuk & Tatz, 1973). ICB was measured using the CBS-R

(Field & Filanosky, 2010), and CGS was measured using the ICG-R (Prigerson & Jacobs, 2001).

This study hypothesized that those individuals who hold afterlife beliefs would have significantly lower CGS severity scores than those who do not hold afterlife beliefs, when controlling for age, gender, and race. Additionally, this study hypothesized that those individuals who hold afterlife beliefs would report significantly higher ICB expressions than those who do not hold afterlife beliefs, when controlling for age, gender, and race. A MANCOVA was used to test these hypotheses. This study also hypothesized that for those who believe in an afterlife, attachment anxiety would significantly moderate the relationship between ICB and CGS. Similarly, for those who believe in an afterlife, attachment avoidance would significantly moderate the relationship between ICB and CGS. Lastly, the study hypothesized that for those who believe in an afterlife, the strength of an individual's afterlife beliefs would moderate the relationship between ICB and CGS. These three hypotheses were tested with a hierarchical linear regression. Results for each of these hypotheses are discussed in Chapter IV along with a description of participant demographics and a descriptive analysis for each measure used.

CHAPTER IV

RESULTS

This chapter discusses the statistical analyses conducted for the current study. The first section describes the demographics of the sample. The second section presents the descriptive and reliability statistics for each measure used. The third section reports all statistical analyses that were run to answer the research questions. The fourth section discusses some post hoc analyses that were run in order to further understand the data.

Descriptive Statistics for the Sample

Data collection occurred from November 2017 to November 2018. In total, 274 individuals began the survey for this study. Of those, 175 individuals were used in the final analyses. Among the initial 274, 73 individuals were excluded from the analyses for not meeting this study's inclusion criteria. Specifically, prior to taking the survey, 71 individuals initially agreed that their loss occurred from six to 24 months ago; however, they later indicated that their loss occurred less than six months prior to taking the survey. Five individuals later indicated their loss had occurred over 24 months prior, as well. Two individuals were excluded from the study as the loved one who had died was a pet, and therefore they did not fit the current study's criteria, as the deceased loved ones needed to be humans. Another 21 individuals began the survey but dropped out early, leaving at least one measure completely blank. These individuals were dropped from the final analyses due to large amounts of missing data ($> 10\%$). Additionally, because these

individuals dropped out before filling out the demographics survey, the researcher was unable to determine if they actually fit the inclusion criteria, which was particularly important given that 28.9% of the individuals who took the entire survey did not meet inclusion criteria. The demographics of these 21 individuals could not be assessed because they dropped out prior to finishing this portion of the survey, but 52.4% ($n = 11$) of these individuals expressed a belief in an afterlife, 14.3% ($n = 3$) expressed no such beliefs, and 19% ($n = 4$) stated they did not know. Three individuals (14.3%) dropped out before answering this item. These percentages were relatively consistent with the final sample's demographics (66.9% expressed afterlife beliefs, 6.3% acknowledged no afterlife belief, and 26.9% reported being unsure).

Of the remaining participants ($N = 175$), four participants lacked one item response each. These missing items included: "People who suffer unjustly in this life will be rewarded in the afterlife" and "How many months after your loss did these feelings begin?" on the ICG-R. With these missing data points, it was necessary to explore for the patterns of missing data. That is to say, the researcher needed to examine if these items were missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR), as this pattern could affect the generalizability and interpretation of the results (Schlomer, Bauman, & Card, 2010). Due to the small amount of missing data, a pattern could not be determined. However, as neither item was a part of the official analyses, they were left blank for the purposes of this study.

The demographics of the participants, including gender, race/ethnicity, nationality, and religion, are presented in Table 1 below. The average age of participants was $M = 21.59$ years ($SD = 6.88$ years). The majors most often represented were

Psychology (including masters and doctoral students in Counseling; $n = 30$, 17.1%), Business (including Business Marketing, Business Management, and Business Economics; $n = 23$, 12%), Nursing ($n = 22$, 11.4%), Sociology ($n = 10$, 5.7%), and Criminal Justice ($n = 10$, 5.7%). Another 4% ($n = 7$) were dual-majoring with at least one of the above majors.

Although nationality was assessed, there appeared to be some confusion among participants as to the meaning of this term. While the majority of individuals indicated that they were United States (U.S.) citizens, other participants reported nationalities such as “Mexican American” and “White.” In total, 79.4% ($n = 139$) of the sample identified as a citizen of the U.S., while 0.6% ($n = 1$) identified themselves as having dual citizenship with the U.S. and with another country. Of the rest, 8.6% ($n = 15$) identified as being a citizen of another country, and 11.4% ($n = 20$) did not self-report a nationality or reported an ethnicity instead of nationality (e.g., Mexican American, White).

Table 1

Participant Demographics (N = 175)

Variable	<i>n</i>	%
Gender		
Female	121	69.1
Male	52	29.7
Transgender	2	1.1
Race/Ethnicity		
Caucasian/European	122	69.7
Hispanic/Latinx/Chicanx	33	18.9
Asian American/Asian	7	4.0
African American/Black	6	3.4
Biracial/multiracial	6	3.4
Unknown	1	0.6
Nationality		
U.S.	139	79.4
Unknown/Not reported	20	11.4
Other country	15	8.6
Dual (U.S. + another country)	1	0.6
Religion		
Christian, Catholic	41	23.4
Christian, Other	40	22.9
Christian, Protestant	19	10.9
Agnostic or Atheist	32	18.3
Non-religious/Spiritual	30	17.1
Buddhist	3	1.7
Hindu	2	1.1
Muslim	2	1.1
Jewish	1	0.6
Other	5	2.9

Presented in Table 2 are the characteristics of the loved ones who had died, as reported by the participants. The average length of time since the death was $M = 13.69$ months ($SD = 6.1$ months), with the entire possible range (six to 24 months) represented

among the sample. The average age of the loved one who had died was $M = 55.84$ years ($SD = 28.09$ years), with a range from ages 15 to 102.

Table 2

Demographics of the Deceased Loved Ones as Reported by the Participants (N = 175)

Variable	<i>n</i>	%
Relationship of the Deceased to the Participant		
Grandparent/great-grandparent		
Friend	85	48.6
Aunt/Uncle	38	21.1
Parent/guardian	20	11.4
Cousin	12	6.9
Sibling	9	5.1
Spouse/partner/ex-partner	3	1.7
In-Law	3	1.7
Child	2	1.1
Multiple	1	0.6
Other	1	0.6
	2	1.1
Cause of Death		
Natural, anticipated	65	37.1
Natural, sudden	43	24.6
Accidental	25	14.3
Suicide	19	10.9
Homicide	3	1.7
Other/unknown	20	11.4

This study also assessed if individuals had received counseling since the death of their loved ones. Of those who completed the entire survey, 24.6% ($n = 43$) indicated that they had been to counseling following the death of their loved one. Of these individuals, 34.9% ($n = 15$) acknowledged that their counseling was in response to their loved one's death and 65.1% ($n = 28$) noted that the counseling was unrelated. Additionally, 25.6% ($n = 11$) of these individuals reported that they were still currently in counseling at the time of taking the survey. It should also be noted that five participants indicated both that they had not been to counseling following the death of their loved one and that they were

currently in counseling. This researcher is unsure as to why these individuals initially reported not having been to counseling since the death, but then stated in the next item that they were currently in counseling. However, this means that the total percentage of participants who acknowledged being currently in counseling was 9.1% ($n = 16$).

Lastly, participant responses to the initial items regarding afterlife beliefs were assessed. The majority expressed having a belief in the afterlife ($n = 117$, 66.9%). Among the remaining participants, 6.3% ($n = 11$) stated that they did not believe in an afterlife and 26.9% ($n = 47$) reported being unsure if they believed in an afterlife. Following this, individuals were asked to rate two items on a five-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*): “I will be reunited with my loved ones in the afterlife” and “People who suffer unjustly in this life will be rewarded in the afterlife.” These items were based on Carr and Sharp’s (2013) study exploring how the valence of afterlife beliefs impacts grief. In this study, valence referred to the extent to which an individual’s perception of the afterlife was positive (e.g., being rewarded for suffering) or not.

Descriptive Statistics and Reliability Analyses for the Measures

Descriptive statistics were calculated for all measures. Additionally, reliability analyses were conducted for all measures, including any main scales and subscales. The results of these analyses were compared to similar studies that also surveyed college students. To estimate internal consistency, Cronbach’s alpha was used. The tables below report the descriptive statistics. Skewness and kurtosis were considered acceptable if they fell within a range of ± 2 (Field, 2013).

Belief in an Afterlife Scale

The *Belief in an Afterlife Scale* (BAS; Osarchuk & Tatz, 1973; see Appendix F) was used to operationalize and obtain a continuous measure of strength of one's afterlife beliefs. A summary of the scores for this sample is presented in Table 3. For all useable participants ($n = 175$), scores covered the total possible range of scores for the BAS, from 10 to 110 ($M = 79.61$, $SD = 21.72$), and met acceptable criteria for both skewness (-0.76 , $SE = 0.18$) and kurtosis (0.43 , $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality of the scores, and these responses showed a non-normal distribution ($p < .001$).

For the current study, a Cronbach's alpha of .91 was estimated for scores on the BAS for all participants. This shows excellent reliability for the BAS among this study's sample. This reliability estimate was consistent with previous findings with university student samples examining death anxiety and mortality salience related to afterlife beliefs (Cohen et al., 2005; Lifshin, Greenberg, Soenke, Darrell, & Pyszczynski, 2018).

Table 3

Descriptive Analysis for the Belief in an Afterlife Scale (BAS) Scores (N = 175)

	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis	Cronbach's α
Total BAS Scores	79.61	21.72	10 to 110	-0.76	0.43	0.91

Notes: M = Mean. SD = Standard Deviation.

Experiences in Close Relationships – Relationship Structures

The Experiences in Close Relationships – Relationship Structures (ECR-RS; Fraley et al., 2000; see Appendix G) was used to produce continuous scores for each of its two subscales: attachment anxiety and attachment avoidance. A summary of each

subscales' scores for this sample is presented in Table 4. For all participants, scores for the attachment anxiety subscale ranged from 12 to 67 ($M = 28.41$, $SD = 13.65$) among a possible range of 12 to 84, and met acceptable criteria for both skewness (0.81, $SE = 0.18$) and kurtosis (-0.12, $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality of the scores, and these responses showed a non-normal distribution ($p < .001$). For the attachment avoidance subscale, participant scores ranged from 24 to 132 ($M = 62.7$, $SD = 23.7$) out of a possible 24 to 168, and met acceptable criteria for both skewness (0.36, $SE = .018$) and kurtosis (-0.42, $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality of the scores on this subscale, and these responses showed a non-normal distribution ($p = .003$) as well. For the hierarchical regression sample, descriptives were commensurate with the total sample.

The two subscales of the ECR-RS (anxiety and avoidance) were each examined for internal consistency with the current sample. A Cronbach's alpha of .86 was estimated for the anxiety subscale, showing good reliability for this subscale. A Cronbach's alpha of .90 was estimated for the avoidance subscale, which showed excellent reliability for this subscale. These reliability estimates are consistent with estimates in previous similar studies with college student samples (e.g., Currier et al., 2015).

Table 4

Descriptive Analysis of the Experiences in Close Relationships – Relationship Structures Subscales (N = 175)

Subscale	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis	Cronbach's α
Anxiety	28.41	13.65	12 to 67	0.81	-0.12	0.86
Avoidance	62.70	23.70	24 to 132	0.36	-0.42	0.90

Notes: *M* = Mean. *SD* = Standard Deviation.

Continuing Bonds Scale – Revised

The *Continuing Bonds Scale – Revised* (CBS-R; Field & Filanosky, 2010; see Appendix H) was used in this study to operationalize internalized continuing bonds (ICB) on a continuous scale. The CBS-R produces two subscales: ICB and externalized continuing bonds (ECB), with higher scores on each respective scale indicating stronger ICB or ECB. A summary of the scores for this sample is presented in Table 5. Participant ICB scores covered the entire possible range, from 10 to 40 ($M = 25.44$, $SD = 7.41$), and met acceptable criteria for both skewness (-0.06 , $SE = 0.18$) and kurtosis (-0.69 , $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality, and ICB scores were found to have a non-normal distribution ($p = .029$). For the ECB subscale, participant scores ranged from six to 20 ($M = 8.26$, $SD = 2.82$) out of a possible range of six to 24, and thus did not meet acceptable criteria for skewness (1.68 , $SE = 0.18$) or kurtosis (2.82 , $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality of the scores on this subscale, and these responses were deemed to be non-normally distributed across all samples ($p < .001$) as well. At this point, given the skewness and kurtosis of the ECB subscale, this variable was transformed using a recommended inverse transformation (Tabachnick & Fidell, 2007). While the Shapiro-Wilk test still showed non-normality (p

< .001) for this subscale, its skewness (-0.56, $SE = 0.23$) and kurtosis (-0.98, $SE = 0.45$) both now fell within an acceptable range. This transformed variable was used for all post hoc analyses containing ECB.

The internal consistency estimates for both subscales (ICB and ECB) of the CBS-R then were produced. The ICB subscale had an estimated Cronbach's alpha of .90. This is consistent with previous studies conducted with grieving community samples in the U.S. (Field & Filanosky, 2010; Gassin & Lengel, 2014). Although this ECB subscale was not used in the initial hypothesis testing, its reliability also was assessed. Previous studies have found poor reliability with this subscale. A Cronbach's alpha of .74 was produced for the current study, indicating adequate reliability for research purposes. This was consistent with previous grieving community samples used by Field and Filanosky (2010) rather than the poor reliability showed in Gassin and Lengel's (2014) sample.

Table 5

Descriptive Analysis of the Continuing Bonds Scale-Revised Subscales (N = 175)

Subscales	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis	Cronbach's α
ICB	25.44	7.41	10 to 40	-0.06	-0.69	0.90
ECB	8.26	2.82	6 to 20	1.68	2.82	0.74

Note: *M* = Mean. *SD* = Standard Deviation. ICB = Internalized Continuing Bonds. ECB = Externalized Continuing Bonds.

Inventory of Complicated Grief – Revised

The Inventory of Complicated Grief-Revised (ICG-R; Prigerson & Jacobs, 2001, see Appendix I) was used in this study to operationalize and obtain a total continuous score of complicated grief symptomatology (CGS). The continuous score used here was obtained from the first 30 items of the ICG-R. These are presented on a five-point Likert

scale, with higher scores indicating more severe CGS. Additionally, three of these items were removed prior to the multiple regression analysis in order to avoid overlap with similar items on the CBS-R. This decision was based on previous research by Field et al. (2013), which noticed an overlap with CGS for these three items on the CBS-R. Those researchers made the decision to remove these three ICG-R items as well. All descriptive and test statistics for this measure were run both prior to the removal of these three items and after. A summary of the scores for this sample is presented in Table 6. Participant scores for the full measure ranged from 30 to 121 ($M = 60.26$, $SD = 19.16$) out of the possible range of 30 to 150, and met acceptable criteria for both skewness (0.76 , $SE = 0.18$) and kurtosis (0.25 , $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality of the scores, and these responses showed a non-normal distribution ($p < .001$). After removing the three aforementioned items, participant scores now ranged from 27 to 112 ($M = 54.87$, $SD = 18.13$) among a total possible range of 27 to 135, and met acceptable criteria for both skewness (0.77 , $SE = 0.18$) and kurtosis (0.20 , $SE = 0.37$). The Shapiro-Wilk test was conducted to check for normality of the scores on this now-revised scale, and these responses were deemed to be non-normally distributed ($p < .001$) as well.

A Cronbach's alpha of .94 was found for the 30-item version of the ICG-R, indicating excellent reliability. This is consistent with other U.S. university samples in previous studies (Meier et al., 2013). After the three overlapping items were removed, a Cronbach's alpha of .94 also was found, which was consistent with Field et al.'s (2013) findings. All descriptives and reliability statistics are presented in Table 6.

Table 6

Descriptive Analysis of the Inventory of Complicated Grief-Revised (N = 175)

Version	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis	Cronbach's α
30-item	60.26	19.16	30 to 121	0.76	0.25	0.94
27-item	54.87	18.13	27 to 112	0.77	0.20	0.94

Notes: M = Mean. SD = Standard Deviation.

Statistical Analyses for the Research Questions and Hypotheses

All statistical analyses were conducted using SPSS Version 25.0 (IBM Corp., 2017). All analyses were tested at an $\alpha = .05$ level in order to decrease the risk of committing a Type I error. Prior to each analysis, all assumptions were tested.

Multivariate Analysis of Covariance

The first main analysis conducted was a MANCOVA. Independent variables in the MANCOVA originally were to include race/ethnicity, gender, and presence of afterlife beliefs. Age was a covariate. Due to the small number of participants in each demographic group, race/ethnicity was collapsed into two groups: white and non-white. However, with all three controls (race, gender, race/ethnicity) entered into the MANCOVA, the analysis was unable to run as one cell was left entirely empty (i.e., females of color who identified as not believing in an afterlife). As such, this researcher ran initial MANOVAs on each of the control variables to see if there were differences in afterlife beliefs or complicated grief scores for these groups in order to understand which control variables were necessary for the MANCOVA. These preliminary MANOVAs found that there were no significant differences in either ICB scores ($F [1,126] = 2.68, p = .104$) or ICG-R scores ($F [1,126] = 0.98, p = .324$)

according to gender. Additionally, correlations were run between age and (a) ICB scores and (b) ICG-R scores; neither of these was significant, with ICB showing an $r = -.07$ ($p = .457$) and ICG-R showing an $r = -.11$ ($p = .229$). There also was no significant difference in mean ICB scores according to race/ethnicity ($F [1,126] = 0.07, p = .792$). On the other hand, there was a significant difference in mean ICG-R scores for white and non-white participants ($F [1,126] = 5.051 p = .026$). As such, this binary measure of race/ethnicity was left controlled for in the main MANOVA. Two categories of afterlife belief were used: *Yes, I believe*, and *No, I don't believe*. Dependent variables were ICB subscale scores from the CBS-R, and ICG-R total scores. As CGS and ICB were not being directly being correlated in this analysis, the 30-item ICG-R was used. It should be emphasized here that due to participant demographic make-up, one cell in this MANOVA held only a single participant (non-white, non-believer). All results should be interpreted with hesitation due to this limitation.

The assumptions of a MANOVA were tested prior to conducting the final analysis. These included (a) test of outliers and influential cases, (b) multivariate normality, (c) linearity, and (d) homogeneity of regression (Tabachnick & Fidell, 2007). Multivariate outliers and influential cases were examined using Mahalanobis distance and box plots. Two cases were detected as possible outliers or influential cases, as they fell outside of the quartile ranges of the box plot for ICG-R. Each case was dropped separately and the MANOVA was run without these cases to determine if they were significantly influential to the analysis. It was determined that neither significantly impacted the results, and therefore they were left in the final analysis. Normality was also examined. The Shapiro-Wilk test produced a $p = .078$ for ICB, indicating adequate reliability. On the other hand,

for the ICG-R, the Shapiro-Wilk test produced $p < .001$, indicating that the null hypothesis was rejected and that normality was not supported. ICG-R scores then were transformed using a square root transformation, which produced normality ($p = .061$). Scatterplots for all combinations of the dependent variables and the covariate were produced and appeared to show linear relationships between all variables. Levene's Test was examined and indicated that the assumption of homogeneity of variance was met for (a) ICB ($p = .247$) and (b) the transformed ICG-R ($p = .075$).

Prior to answering the hypotheses derived from this study's research questions, control variables also were examined. These results and the results from Research Questions 1 and 2 can be seen in Table 7. Multivariate testing indicated that there were not significant multivariate effects for race/ethnicity (Wilks' $\Lambda = .995$, $F [2, 123] = 0.33$, $p = .717$). Additionally, multivariate testing indicated that there were not significant multivariate effects for afterlife beliefs (Wilks' $\Lambda = .965$, $F [2, 123] = 2.24$, $p = .111$). The results for this analysis are further examined under each hypothesis.

Table 7

Means, SEs, and MANOVA statistics for Afterlife Beliefs and Race/Ethnicity related to ICB and ICG-R scores (N = 128)

	Race/Ethnicity					Afterlife Beliefs				
	White		Non-White		<i>F</i> value	Yes		No		<i>F</i> value
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>		<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>	
ICB	24.39	1.23	21.36	3.71	0.60	26.60	0.74	19.15	3.84	3.64
ICG-R	7.42	0.19	7.05	0.56	0.38	7.76	0.11	6.71	0.58	3.09

Note: Inventory of Complicated Grief – Revised (ICG-R) was transformed using a square root transformation. *M* = Mean. *SE* = Standard Error. ICB = Internalized Continuing Bonds. No variables were significant in this model.

Research Question 1

- Q1 Does CGS severity differ between individuals who hold afterlife beliefs versus those who do not?

Hypothesis 1

The original hypothesis read:

- H1 According to the results from a MANCOVA, those individuals who hold afterlife beliefs will have significantly lower CGS severity scores (as measured by the ICG-R) than those who do not hold afterlife beliefs, when controlling for age, gender, and race.

A revised hypothesis was created to account for the sample limitations that led to dropping the control variables of gender and age from the analysis. This revised hypothesis was:

- H1 According to the results from a MANOVA, those individuals who hold afterlife beliefs will have significantly lower CGS severity scores (as measured by the ICG-R) than those who do not hold afterlife beliefs, when controlling for race/ethnicity.

To answer Hypothesis 1, the tests of between subject effects were examined. It was indicated that mean scores on the ICG-R did not differ significantly between individuals who do and do not hold afterlife beliefs ($F [1,124] = 3.09, p = .081$), when controlling for race/ethnicity. Therefore, Hypothesis 1 was not supported. For this sample, the severity of CGS did not appear to differ based on whether or not participants held afterlife beliefs. The adjusted mean for the transformed ICG-R scores for white participants who indicated having afterlife beliefs was $M = 7.49$ and for non-white participants was $M = 8.02$. The adjusted mean for the transformed ICG-R scores for white participants who indicated no belief in an afterlife was $M = 7.34$ and for non-white participants was $M = 6.08$.

Research Question 2

- Q2 Does the presence of ICB expressions differ between individuals who hold afterlife beliefs versus those who do not?

Hypothesis 2

The original hypothesis read:

- H2 According to the results from a MANCOVA, those individuals who hold afterlife beliefs will report significantly higher ICB expressions (as measured by the CBS-R) than those who do not hold afterlife beliefs, when controlling for age, gender, and race.

A revised hypothesis was created to account for the sample limitations that led to dropping the control variables of gender and age from the analysis. This revised hypothesis was:

- H2 According to the results from a MANOVA, those individuals who hold afterlife beliefs will report significantly higher ICB expressions (as measured by the CBS-R) than those who do not hold afterlife beliefs, when controlling for race/ethnicity.

To answer Hypothesis 2, the tests of between subject effects were examined. It was indicated that mean ICB scores did not differ significantly between individuals who do and do not hold afterlife beliefs ($F [1,124] = 3.64, p = .059$), when controlling for race/ethnicity. Hypothesis 2 was not supported. For these participants, the use of ICB did not differ according to whether or not they hold afterlife beliefs. The adjusted mean for ICB scores for white participants who indicated having afterlife beliefs was $M = 26.49$ and for non-white participants was $M = 26.71$. The adjusted mean for ICB scores for white participants who indicated no afterlife beliefs was $M = 22.30$ and for non-white participants was $M = 16.00$.

Hierarchical Regression

A hierarchical regression was conducted to test Hypotheses 3a, 3b, and 4 for Research Questions 3 and 4. For this, only participants who indicated having a belief in an afterlife were used. Prior to running the hierarchical regression, categorical variables were dummy-coded in order to allow their entry into the analysis. For gender, female was coded as 0 and male as 1, making females the comparison group. For race/ethnicity, non-white was coded as 0 and white was coded as 1.

Outliers and leverage cases were also examined. These were identified using Cook's D, Leverage, Mahalanobis distance, and residuals. Cases that were high across multiple statistics were considered of interest. These cases were dropped one at a time from the analyses in order to understand if specific cases were particularly influential to the results of the study based on multiple changes in significance levels and R^2 statistics. This was in an effort to ensure that no single individual would be responsible for the results of the study. Four cases were deemed of interest during these analyses. One case was dropped, as it impacted the significance level of two statistics (change in R^2 for Step 1, and Race/ethnicity).

All assumptions for regression were also tested prior to running the hierarchical regression. Normality was assessed by visually examining the residual scatterplot and normal probability scatterplot for ICG-R scores. Normality appeared to be supported. Linearity and homoscedasticity were also examined through the residual plots, which did not seem to suggest any violation of these assumptions. The assumption of independence was tested using the Durbin-Watson statistic, which was 2.23. This suggested no problems with autocorrelation and therefore supported the assumption of independence.

Variance Inflation Factor (VIF) values were examined to test for multicollinearity within the model. For the first two steps of the hierarchical regression, no VIF statistic rose above 1.66. This suggested no significant problems with multicollinearity. In the third step when interaction variables were placed in the model, the VIF ranged from 1.10 to 81.69. This suggested a problem with multicollinearity. However, this problem was expected given that interaction terms are inherently related to their main effects (Aiken & West, 1991). To reduce these inflated VIF statistics, interaction terms were centered. Following this, VIF statistics did not rise above 1.86 in the third step.

A correlation matrix was produced for all terms within the regression model. This can be seen in Table 8. Gender was significantly correlated with BAS scores ($r = -.19, p = .040$), with females showing slightly higher BAS scores on average. The avoidance subscale and anxiety subscale of the ECR-RS were significantly and positively correlated ($r = .60, p < .001$), which has been seen in previous studies as one of the weaknesses of this measure (Fraley et al., 2011). The avoidance subscale of the ECR-RS was also negatively correlated with BAS scores ($r = -.19, p = .040$). CGS, as based on ICG-R scores with the three items removed, was positively correlated with (a) the avoidance subscale of the ECR-RS ($r = .30, p = .001$), (b) the ECR-RS anxiety subscale ($r = .21, p = .025$), and (c) the ICB subscale of the CBS-R ($r = .40, p < .001$).

Table 8

Correlation Matrix for Multiple Linear Regression (N = 116)

Variable	1	2	3	4	5	6	7	8
Age	-	-.03	-.01	.04	-.10	.14	-.15	-.16
Gender		-	.07	.07	-.01	-.19*	-.16	-.07
Race/Ethnicity			-	-.16	-.14	.17	.01	-.07
Avoidance				-	.60***	-.19*	-.08	.30**
Anxiety					-	-.07	-.01	.21*
BAS						-	.11	-.09
ICB							-	.40***
ICG-R								-

Note: Beliefs in Afterlife Scale (BAS), Internalized Continuing Bonds (ICB), Inventory of Complicated Grief – Revised (ICG-R). 2-tailed test. * $p < .05$. ** $p < .01$. *** $p < .001$.

The dependent variable for the hierarchical regression was CGS scores. As previously noted, three specific items were dropped by the analysis due to conceptual overlap with CB. The output for this hierarchical regression can be seen in Table 9.

Table 9

Summary of Hierarchical Regression Analysis for Variables Predicting Complicated Grief Symptomatology (N = 116)

Variable	R^2	ΔR^2	B	SE B	β
Step 1	.059	.059			
Race/Ethnicity			-5.71	3.19	-0.16
Gender			-2.14	3.22	-0.06
Age			-0.39	0.22	-0.17
Step 2	.300	.242***			
ICB			0.93***	0.19***	0.41***
Attachment Anxiety			-0.00	0.13	-0.00
Attachment Avoidance			0.21**	0.07**	0.31**
BAS			-0.05	0.10	-0.05
Step 3	.313	.013			
ICB x Anxiety			0.00	0.02	0.00
ICB x Avoidance			0.01	0.01	0.12
ICB x BAS			0.00	0.02	0.02

Note: Dependent Variable: Inventory of Complicated Grief – Revised (ICG-R), with three items removed. ICB = Internalized Continuing Bonds. BAS = Belief in Afterlife Scale. All variables involved in the interactions were mean-centered prior to analysis. * $p < .05$, ** $p < .01$, *** $p < .001$

In Step 1, race/ethnicity, gender, and age each were entered as control variables. These variables accounted for 5.9% of the variance explained ($R^2 = .059$, $p = .077$). Individually, race/ethnicity ($p = .076$), gender ($p = .509$), and age ($p = .072$) did not explain a significant portion of variance in CGS scores.

In Step 2, main effects were entered into the model: ICB (based on the internalized subscale of the CBS-R), attachment anxiety (based on the anxiety subscale of the ECR-RS), attachment avoidance (based on the avoidance subscale of the ECR-RS), and strength of afterlife beliefs (BAS total scores). Combined, these variables accounted

for 24.2% of the variance explained above and beyond the demographic variables entered in Step 1 ($\Delta R^2 = .242, p < .001$). Individually, ICB ($p < .001$) and attachment avoidance ($p = .003$) respectively explained a significant portion of the variance in CGS scores. BAS scores ($p = .605$) and attachment anxiety ($p = .974$) each did not explain a significant portion of variance in CGS scores. However, given that interaction terms were entered in the next step, these main effects must be understood within the context of these interaction terms.

In Step 3, the following interaction terms were entered into the model: ICB x attachment anxiety, ICB x attachment avoidance, and ICB x BAS. Altogether, these interaction terms accounted for an additional 1.3% of the variance explained above and beyond the variables entered in Steps 1 and 2 ($\Delta R^2 = .013, p = .584$). The unique contributions of these interaction terms and how they relate to their respective hypotheses are discussed below.

Research Question 3

- Q3 Among those who believe in an afterlife, does attachment insecurity moderate the relationship between ICB and CGS?

Hypothesis 3a

- H3a According to the results of a hierarchical linear regression, for those who believe in an afterlife, attachment anxiety (as measured by the ECR-RS) will significantly moderate the relationship between ICB (as measured by the internalized scale of the CBS-R) and CGS (as measured by the ICG-R).

To test Hypothesis 3a, the interaction between ICB scores and attachment anxiety scores was examined in Step 3 of the hierarchical regression. This interaction did not explain a significant amount of variance in ICG-R scores ($\beta = 0.00, p = .987$), rejecting

Hypothesis 3a. Among this sample, attachment anxiety did not appear to moderate the relationship between the ICB subscale and ICG-R scores.

Hypothesis 3b

H3b According to the results of a hierarchical linear regression, for those who believe in an afterlife, attachment avoidance (as measured by the ECR-RS) will significantly moderate the relationship between ICB (as measured by the internalized scale of the CBS-R) and CGS (as measured by the ICG-R).

To test Hypothesis 3b, the interaction between ICB scores and attachment avoidance scores were examined in Step 3 of the hierarchical regression. This interaction term did not appear to explain a significant amount of variance in ICG-R scores ($\beta = 0.12, p = .272$). Hypothesis 3b was rejected; among this sample, attachment avoidance did not appear to moderate the relationship between the ICB subscale and ICG-R scores.

Research Question 4

Q4 Among those who believe in an afterlife, does the strength of an individual's afterlife beliefs moderate the relationship between ICB and CGS?

Hypothesis 4

H4 According to the results of a hierarchical linear regression, for those that believe in an afterlife, the strength of an individual's afterlife beliefs (as measured by the BAS) will moderate the relationship between ICB (as measured by the internalized scale of the CBS-R) and CGS (as measured by the ICG-R).

To test Hypothesis 4 for Research Question 4, the interaction between ICB scores and BAS scores was examined in the third step of the hierarchical regression. This interaction term did not appear to explain a significant amount of variance in ICG-R scores ($\beta = 0.02, p = .816$). Hypothesis 4 was rejected; among this sample, strength of

afterlife beliefs did not appear to moderate the relationship between the ICB subscale and ICG-R scores.

Post Hoc Analyses

Several post hoc analyses were conducted to further examine the data. These analyses were based on specific unanticipated concerns that came up during the data collection (e.g., honoring transgender participants' responses, the number of "unsure" responses when asking about afterlife beliefs), as well as information obtained from the data that was originally not anticipated. Specifically, there were enough Latinx participants to break race/ethnicity into three groups (Caucasian, Latinx, and Other), which allowed this researcher to examine if Latinx identity impacts CGS specifically. Additionally, during data analysis, this researcher found that normality for strength of afterlife beliefs was improved by using all participants regardless of belief. In fact, participants who expressed no afterlife beliefs or who were unsure provided a wide range of scores on the BAS (10 to 87 out of the possible range of 10 to 110). It was originally believed that these participants might improperly skew the BAS scores, and therefore they were not included in the original hierarchical regression analysis.

Reevaluated Variable Categorization

The first analysis that was done post hoc was a re-examination of the MANCOVA. This time, given the number of "unsure" responses to the preliminary afterlife beliefs item, these individuals were placed into the analysis as a third level of afterlife belief, along with the individuals who acknowledged either yes or no. This allowed for all participants to be included in the analysis. Additionally, this researcher

was able to examine if CGS or ICB differed according to any of the three levels of afterlife belief (Yes, No, I don't know).

Once again, preliminary MANOVAs and correlations were run to see which control variables should be left in the MANCOVA. For this sample, mean ICB and ICG-R scores did not differ significantly based on race/ethnicity. Once again, age also was not correlated with ICB or ICG-R scores. Binary gender, on the other hand, was significant and therefore was left in the MANOVA. Three categories of afterlife belief were used: *yes, I believe*; *no, I don't believe*; and *I don't know*. Dependent variables were ICB subscale scores and CGS scores. Once again, the entire ICG-R (all 30 items) was used for this analysis, since CGS and ICB were both dependent variable.

Prior to this analysis, the assumptions for a MANOVA were examined. All assumptions appeared to be supported. ICG-R scores remained transformed to produce normality.

Gender did not appear to be significant in the full MANOVA ($F [2, 166] = 0.68$; Wilks' $\Lambda = .992$; $p = .506$). Afterlife beliefs did appear to be significant in the full MANOVA ($F [4, 332] = 3.20$; Wilks' $\Lambda = .927$; $p = .014$).

Mean CGS scores ($F [2, 167] = 0.57$, $p = .568$) did not differ significantly according to afterlife beliefs (*yes*, *no*, and *unsure*), when controlling for gender. Bonferroni post hoc comparisons were not conducted, as the main test was not significant. However, mean ICB scores did differ significantly according to afterlife beliefs ($F [2, 167] = 5.62$, $p = .004$), when controlling for gender. Bonferroni post hoc comparisons were conducted to understand specifically how afterlife beliefs were related to ICB scores. The difference in mean ICB scores between those who indicated afterlife

beliefs and those who were unsure of their afterlife belief was significant (M difference = 3.22, $p = .031$), with individuals expressing concrete afterlife beliefs using significantly more ICB ($M = 25.99$) than those who were unsure of their afterlife beliefs ($M = 21.86$). Those who did not express a belief in an afterlife showed $M = 21.53$, but a significance was not found between these individuals and those who expressed a belief.

Given the imbalance in participants between those who expressed a belief in an afterlife and those who did not, this researcher decided to examine the question of how afterlife beliefs may impact the use of ICB from another perspective. Specifically, strength of afterlife beliefs was examined as a continuous variable rather than categorically. Using a hierarchical regression, it was examined if strength of afterlife beliefs would predict the use of ICB. Control variables were entered for Step 1, specifically race/ethnicity and gender, as these have been shown to significantly impact CB in previous studies (Lalande & Bonanno, 2006; Laurie & Neimeyer, 2008; Sochos & Bone, 2012). For race/ethnicity, dummy variables were created for Latinx-identified and Other-identified participants; Caucasian-identified participants were used as the comparison group. Gender was broken into binary constructs (male and female); therefore, the two transgender-identified participants were not included in this analysis. The predictor variable of strength of afterlife beliefs was entered as Step 2. The dependent variable was ICB scores. All other individuals regardless of stated afterlife beliefs were included in this analysis. Assumptions for regression were examined prior to analysis and were found to be met: normality, multicollinearity, linearity, and homoscedasticity. The results of this hierarchical regression are provided in Table 10.

Table 10

Summary of Post Hoc Hierarchical Regression Analysis for Afterlife Beliefs Predicting Internalized Continuing Bonds (N = 173)

Variable	R^2	ΔR^2	B	SE B	β
Step 1	.063*	.063*			
Gender			-3.28**	1.21**	-0.21**
Race/Ethnicity					
Latinx			-1.41	1.43	-0.75
Other Race			2.26	1.80	0.10
Step 2	.121**	.058**			
Afterlife Beliefs			0.08**	0.03**	0.25**

Note: Dependent Variable: Internalized Continuing Bonds (ICB). SE = Standard Error.

Race/Ethnicity: $F(2, 169) = 1.59, p = .207$.

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

In Step 1, gender and race/ethnicity were entered as control variables. Altogether, these control variables accounted for a significant portion of the variance explained for ICB ($\Delta R^2 = .063, p = .012$). Specifically, gender accounted for a significant portion of the variance explained ($\Delta R^2 = .044, p = .006$), while race/ethnicity did not ($\Delta R^2 = .018, p = .207$).

In Step 2, BAS scores were entered into the model. Strength of afterlife beliefs accounted for a significant portion of the variance explained ($\Delta R^2 = .058, p = .001$), above and beyond the variables entered in Step 1 and was a significant predictor of ICB ($\beta = 0.07, p = .001$).

Additionally, a separate post hoc hierarchical regression was conducted to examine if afterlife beliefs, attachment anxiety, and attachment avoidance each respectively moderated the relationship between ICB and CGS. However, this time all levels of beliefs were examined, including individuals who acknowledged having no afterlife beliefs and those that were unsure of their beliefs. Gender was not controlled in

order to allow for transgender participants ($n = 2$) to remain in the analysis, particularly because gender did not appear significant in the initial analysis. Race/ethnicity was dummy-coded into three categories: Caucasian, Latinx, and Other. This allowed for those who identified as Latinx to be specifically examined. This was important to the researcher, as the majority of studies on CGS and CB thus far have been conducted on samples that were predominately Caucasian or African American (e.g., Currier et al., 2015; Gassin & Lengel, 2014; Laurie & Neimeyer, 2008). Dummy variables were created for Latinx-identified and Other-identified participants. Caucasian-identified participants were used as the comparison group. As stated above, all participants, no matter their category of afterlife belief, were kept in this analysis. This was because it was found that even these participants who reported that they did not believe in an afterlife still provided a wide range of scores on the BAS (10 to 64, $M = 35.73$, $SD = 20.47$), as did participants who reported themselves to be unsure of their beliefs (32 to 87, $M = 61.66$, $SD = 11.06$). In fact, when examining assumptions, normality appeared to be stronger with all participants included in the data set, not just those who professed having a belief in an afterlife. The dependent variable was CGS, as measured by the modified 27-item ICG-R.

All assumptions for hierarchical regression were examined prior to conducting this post hoc analysis. No major violations were detected. Results for this hierarchical regression can be seen in Table 11.

Table 11

Summary of Post Hoc Hierarchical Regression Analysis for Variables Explaining Complicated Grief Symptomatology (N = 175)

Variable	R^2	ΔR^2	B	SE B	β
Step 1	.022	.022			
Age			-0.21	0.20	-0.08
Race/Ethnicity					
Latinx			5.20	3.56	0.11
Other Race			3.99	4.37	0.07
Step 2	.337	.341***			
ICB			1.35***	0.16***	0.55***
Attachment Anxiety			0.17	0.11	0.13
Attachment Avoidance			0.14*	0.06*	0.19*
BAS			-0.10	0.05	-0.12
Step 3	.366	.039*			
ICB x Anxiety			0.01	0.01	0.07
ICB x Avoidance			0.01	0.01	0.07
ICB x BAS			-0.02*	0.01*	-0.17*

Note: Dependent Variable: Inventory of Complicated Grief – Revised (ICG-R), with three items removed. ICB = Internalized Continuing Bonds. BAS = Belief in Afterlife Scale. All variables involved in the interactions were mean-centered prior to analysis. Race/Ethnicity: $F(2, 171) = 1.293, p = .277$.

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

In the Step 1, age and race/ethnicity were entered as control variables. These variables accounted for 2.2% of the variance explained ($R^2 = .022, p = .275$).

Specifically, being Latinx or another race explained 1.5% of the variance ($\Delta R^2 = .015, p = .277$) and age explained 0.6% of the variance ($\Delta R^2 = .006, p = .305$).

In Step 2, main effects were entered into the model: ICB scores, attachment anxiety scores, attachment avoidance scores, and BAS scores. Altogether, these variables accounted for 34.1% of the variance explained ($\Delta R^2 = .341, p < .001$), above and beyond the demographic variables entered in Step 1. Individually, ICB scores ($\beta = 0.55, p < .001$) and attachment avoidance scores ($\beta = 0.19, p = .02$) each explained a significant portion of the variance in CGS scores. Attachment anxiety scores ($\beta = 0.13, p = .114$) and BAS

scores ($\beta = -0.12, p = .078$) each individually did not explain a significant portion of the variance in CGS scores. However, given that interaction terms were entered in the next step, these main effects must be understood within the context of these interaction terms.

In Step 3, the following interaction terms were entered into the model: ICB x attachment anxiety, ICB x attachment avoidance, and ICB x BAS. These interaction terms accounted for 3.9% of the variance explained ($\Delta R^2 = .039, p = .015$), above and beyond the variables entered in Steps 1 and 2. The interaction between ICB scores and BAS scores appeared to explain a significant amount of variance in CGS scores ($\beta = -0.17, p = .011$). The interaction between ICB scores and both (a) attachment anxiety scores ($\beta = 0.07, p = .355$), and (b) attachment avoidance scores ($\beta = 0.07, p = .371$) did not appear to explain a significant amount of variance in CGS scores.

To better understand the interaction between ICB scores and BAS scores, further post hoc analyses were conducted. This was done by creating three separate regressions based on three different levels of strength of afterlife beliefs: *high*, *moderate*, and *low*. *High* and *low* strength of afterlife beliefs were determined based on either being one standard deviation ($SD = 21.72$) above or below the mean for BAS scores, respectively, while *moderate* was represented by mean strength of afterlife beliefs (centered at 0). Simple regressions were then run to examine the significance of each slope individually. The results from these three simple regressions are presented in Table 12.

Table 12

Simple Slope Analysis for Different Levels of Afterlife Beliefs on ICB (N = 175)

Variable Level	<i>B</i>	SE <i>B</i>	β
ICB for Low BAS	1.66	0.22	0.68***
ICB for Moderate BAS	1.27	0.16	0.52***
ICB for High BAS	0.88	0.23	0.36***

Note: Dependent Variable: Inventory of Complicated Grief – Revised (ICG-R), with three items removed. SE = Standard Error. ICB = Internalized Continuing Bonds. BAS = Belief in Afterlife Scale. All variables involved in the interaction were mean-centered prior to analyses. * $p < .05$, ** $p < .01$, *** $p < .001$

At every level of afterlife belief, ICB continued to explain a significant portion of the variance in CGS. Specifically, ICB explained a significant portion of the variance in CGS for those with low afterlife beliefs ($\beta = 0.68, p < .001$), moderate afterlife beliefs ($\beta = 0.52, p < .001$), and high afterlife beliefs ($\beta = 0.36, p < .001$). However, this relationship was weaker for individuals with higher afterlife beliefs. The three regression equations are charted in Figure 1 to better give a clearer picture of this difference.

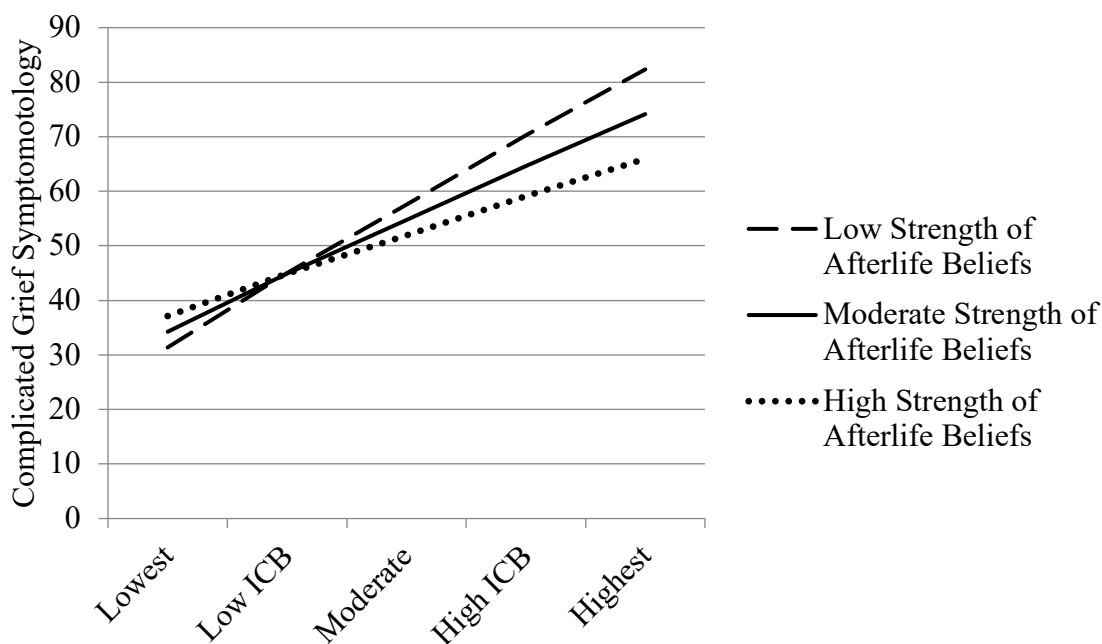


Figure 1. The Moderating Effect of Strength of Afterlife Beliefs on the Relationship between Internalized Continuing Bonds (ICB) and Complicated Grief Symptomatology (CGS) Based on Predicted Values

Externalized Continuing Bonds

The initial analyses of this study did not examine ECB as a construct. This was due to much of the previous literature finding low reliability for the ECB subscale of the CBS-R across various samples (e.g., Field & Filanosky, 2010, Gassin & Lengel, 2014). For the current study, a Cronbach's alpha of 0.74 was found for the ECB subscale within this sample. While not excellent, this reliability was deemed adequate enough to conduct some additional post hoc analyses to explore this construct's relationship with other variables in this study. As such, the MANCOVA and the hierarchical regression were run again, this time with ECB in place of ICB in all of the analyses. This was in order to examine if ECB differed according to afterlife beliefs, as well as understand if afterlife beliefs, attachment avoidance, and attachment anxiety individually moderate the

relationship between ECB and CGS. This seemed to be particularly of interest given that many of the previous theoretical connections between CB and afterlife beliefs have focused on specifically how ECB may relate to afterlife beliefs (Field et al., 2013; Field et al., 2005). Only the dependent variable of interest, ECB, was used for the ANCOVA. Two levels of race/ethnicity were examined (White and Non-white), since there were not enough participants to examine more specific groups.

Preliminary ANOVAs and correlations were conducted to see which control variables (gender, race/ethnicity, and age) should be left in the ANCOVA. Age was uncorrelated with ECB ($r = .002, p = .976$). ECB did not differ according gender ($F [1,171] = 1.95, p = .165$). On the other hand, mean ECB scores did differ significantly according to race/ethnicity ($F [1,173] = 6.18, p = .014$). Therefore, this control variable (race/ethnicity) was left into the model.

Additionally, all assumptions were run prior to both analyses. ECB was found to have unacceptable amounts of skewness and kurtosis. It then was transformed using an inverse equation ($1/ECB = \text{new ECB}$). This transformed variable then was used as the dependent variable for the ANOVA. Outliers and influential cases were also examined. While one outlier was found in the initial analysis, this case did not appear to have an influence on the results and thus was left in the final analysis.

In this ANOVA, mean ECB scores did not differ according to race/ethnicity ($F [1,169] = 0.15, p = .702$). Mean ECB scores also did not differ according to belief in an afterlife ($F [2,169] = 0.12, p = .883$) when controlling for race/ethnicity. Bonferroni post hoc comparisons were not conducted, as the main test was not significant.

A hierarchical regression then was conducted with ECB in place of ICB. This was in order to examine if afterlife beliefs, attachment anxiety, and attachment avoidance individually moderated the relationship between ECB and CGS. As was done previously in the initial hierarchical regression, all variables included in the interactions were centered. Outliers and influential cases then were examined. One case was found to be influential; when this case was removed, three significance levels changed. As such, this case was removed from the analysis. This was to ensure that a single case was not responsible for the results of the analysis. The output of this hierarchical regression is provided in Table 13.

Table 13

Summary of Post Hoc Hierarchical Regression Analysis for Variables Predicting Complicated Grief Symptomatology (N = 174)

Variable	R^2	ΔR^2	B	SE B	β
Step 1	.024	.024			
Age			-0.19	0.20	-0.07
Race/Ethnicity					
Latinx			5.53	3.53	0.12
Other Race			4.31	4.33	0.08
Step 2	.213	.189***			
ECB			2.28***	0.45***	0.36 ***
Attachment Anxiety			0.28*	0.12*	0.22*
Attachment Avoidance			0.01	0.07	0.01
BAS			0.02	0.06	0.02
Step 3	.267	.054**			
ECB x Anxiety			0.05	0.04	0.11
ECB x Avoidance			-0.06**	0.02**	-0.25**
ECB x BAS			-0.05*	0.02*	-0.17*

Note: Dependent Variable: Inventory of Complicated Grief – Revised (ICG-R), with three items removed. SE = Standard Deviation. ECB = Externalized Continuing Bonds. BAS = Belief in Afterlife Scale. All variables involved in the interactions were mean-centered prior to analysis. Race/Ethnicity: $F(2, 170) = 1.50, p = .227$.

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

In Step 1, age and race/ethnicity were entered as control variables. These variables accounted for 2.4% of the variance explained ($\Delta R^2 = .024, p = .244$). Specifically, being Latinx or another race explained 1.7% of the variance ($\Delta R^2 = .017, p = .227$) and age explained 0.5% of the variance ($\Delta R^2 = .005, p = .333$). In Step 2, main effects were entered into the model: ECB scores, attachment anxiety scores, attachment avoidance scores, and BAS scores. Altogether, these variables accounted for 18.9% of the variance explained, above and beyond the demographic variables entered in Step 1 ($\Delta R^2 = .189, p < .001$). Individually, ECB scores ($\beta = 0.36, p < .001$) and attachment anxiety scores ($\beta = 0.22, p = .02$) each explained a significant portion of the variance in CGS scores. Attachment avoidance scores ($\beta = 0.01, p = .880$) and BAS scores ($\beta = 0.02, p = .773$) each individually did not explain a significant portion of the variance in CGS scores. However, given that interaction terms were entered in the next step, these main effects must be understood within the context of these interaction terms.

In Step 3, the interaction terms were entered into the model: ECB x attachment anxiety, ECB x attachment avoidance, and ECB x BAS. Altogether, these variables accounted for 5.4% of the variance explained in the model, above and beyond the variables entered in Steps 1 and 2 ($\Delta R^2 = .054, p = .009$). The interaction between ECB scores and attachment anxiety scores did not appear to explain a significant amount of the variance in CGS scores ($\beta = 0.11, p = .225$). However, the interaction between ECB scores and attachment avoidance scores did appear to explain a significant amount of the variance in CGS R scores ($\beta = -0.25, p = .005$). Additionally, the interaction between ECB scores and BAS scores also appeared to explain a significant amount of the variance in CGS scores ($\beta = -0.17, p = .018$).

To better understand the significant interactions, post hoc analyses were conducted. The first was conducted for ECB x BAS. This was done by creating three separate regressions based on three different levels of BAS scores: *high*, *moderate*, and *low*. *High* and *low* BAS scores were determined based on either being one standard deviation ($SD = 21.72$) above or below the mean, respectively, while *moderate* was represented by mean BAS score (centered at 0). Simple regressions were then run to examine the significance of each slope individually. The results from these three regressions are presented in Table 14.

Table 14

Simple Slope Analysis for Different Levels of Afterlife Beliefs on ECB (N = 174)

Variable Level	<i>B</i>	SE <i>B</i>	β
ECB for Low BAS	3.49	0.64	0.54***
ECB for Moderate BAS	2.56	0.45	0.40***
ECB for High BAS	1.63	0.68	0.25*

Note: Dependent Variable: Inventory of Complicated Grief – Revised (ICG-R), with three items removed. SE = Standard Error. ECB = Externalized Continuing Bonds. BAS = Belief in Afterlife Scale. All variables involved in the interaction were mean-centered prior to analysis. * $p < .05$, ** $p < .01$, *** $p < .001$

At every level of afterlife belief, ECB continued to explain a significant portion of the variance in CGS. Specifically, ECB explained a significant portion of the variance in CGS for individuals with weaker afterlife beliefs ($\beta = 0.54$, $p < .001$), moderate afterlife beliefs ($\beta = 0.40$, $p < .001$), and stronger afterlife beliefs ($\beta = 0.25$, $p = .018$). However, this relationship was weaker for individuals with stronger afterlife beliefs. The three regression equations are charted in Figure 2 to better give a clearer picture of this difference.

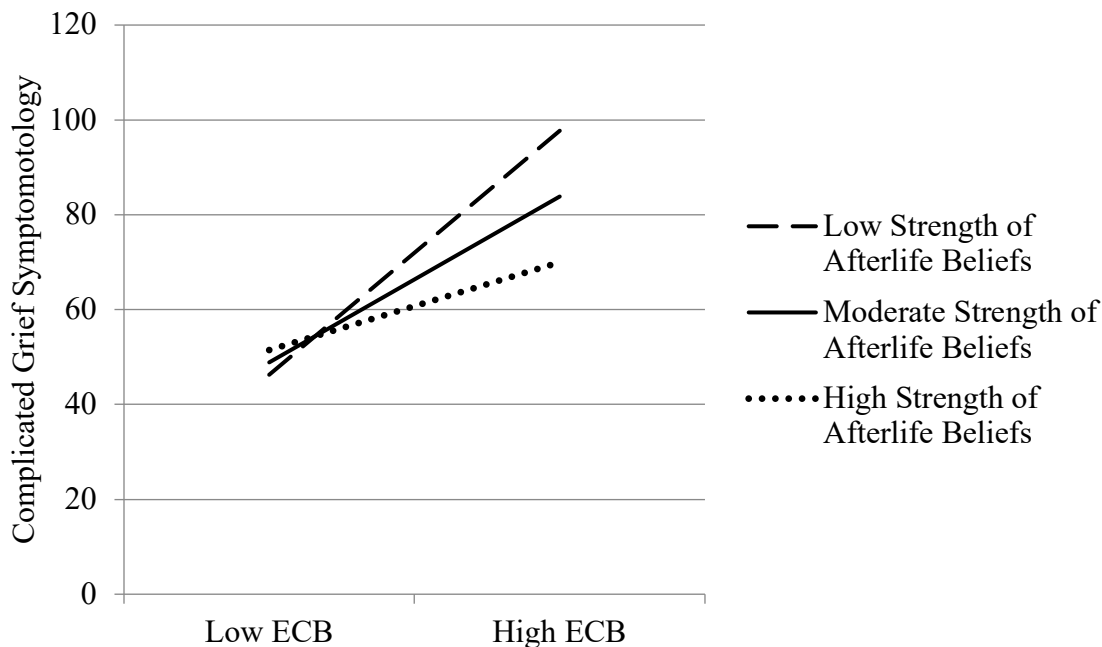


Figure 2. The Moderating Effect of Strength of Afterlife Beliefs on the Relationship between Externalized Continuing Bonds (ECB) and Complicated Grief Symptomatology (CGS) Based on Predicted Values

A similar post hoc analysis was conducted for ECB and attachment avoidance. Three separate regressions were created based on three different levels of attachment avoidance scores: *high*, *moderate*, and *low*. *High* and *low* attachment avoidance scores were determined based on either being one standard deviation ($SD = 23.70$) above or below the mean, respectively, while *moderate* was represented by mean attachment avoidance scores (centered at 0). Again, simple regressions were then run to examine the significance of each slope individually. The results from these three simple regressions are presented in Table 15.

Table 15

Simple Slope Analysis for Different Levels of Avoidant Attachment on ECB (N = 174)

Variable Level	<i>B</i>	SE <i>B</i>	β
ECB for Low Avoidance	3.15	0.65	0.49***
ECB for Moderate Avoidance	2.54	0.45	0.40***
ECB for High Avoidance	1.93	0.55	0.30**

Note: Dependent Variable: Inventory of Complicated Grief – Revised (ICG-R), with three items removed. SE = Standard Error. ECB = Externalized Continuing Bonds. All variables involved in the interaction were mean-centered prior to analysis. * $p < .05$, ** $p < .01$, *** $p < .001$

At every level of attachment avoidance, ECB continued to explain a significant portion of the variance in CGS. Specifically, ECB explained a significant portion of the variance in CGS for individuals with low attachment avoidance ($\beta = 0.49, p < .001$), moderate attachment avoidance ($\beta = 0.40, p < .001$), and high attachment avoidance ($\beta = 0.30, p = .001$). However, this relationship was weaker for individuals with higher attachment avoidance. The three regression equations are charted in Figure 3 to better give a clearer picture of this difference.

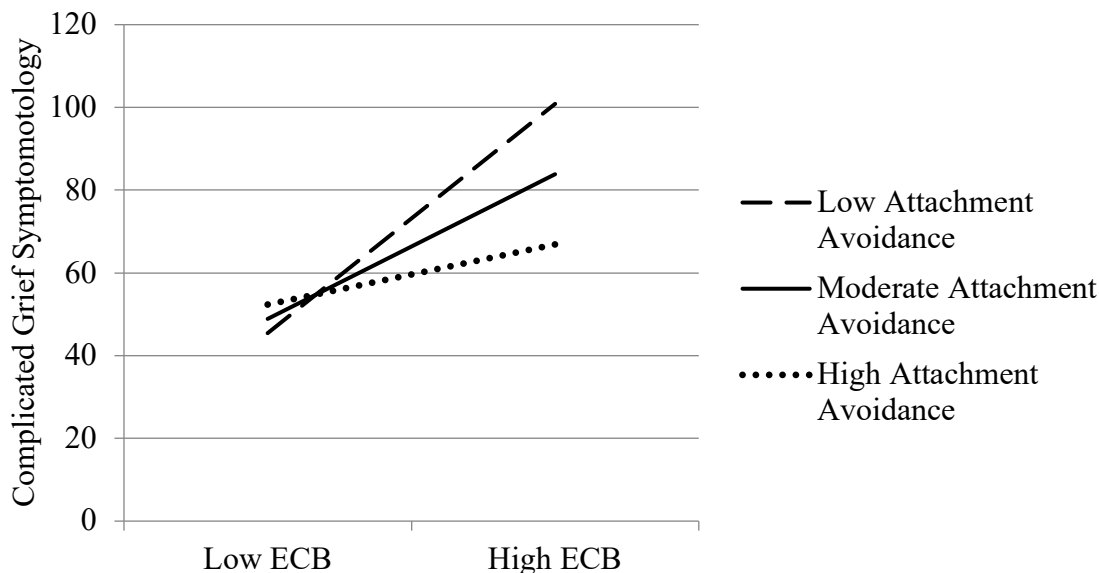


Figure 3. The Moderating Effect of Strength of Attachment Avoidance on the Relationship between Externalized Continuing Bonds (ECB) and Complicated Grief Symptomatology (CGS) Based on Predicted Values

Valence of Afterlife Beliefs

In Carr and Sharp's (2013) study on how individual views of the afterlife impact grieving, they asked participants not only about whether or not they believed in an afterlife, but also about the valence (positive or negative) of these beliefs. They found that the mere presence of afterlife beliefs did not protect against psychological distress following bereavement, but rather it was the content of these beliefs that did. This current study included many of these same items in an effort to determine the valence of afterlife beliefs in this sample. Participants answered two statements on a 5-point Likert scale from *strongly disagree* to *strongly agree*: "I will be reunited with my loved ones in the afterlife," and "People who suffer unjustly in this life will be rewarded in the afterlife." Overall, the mean of the "reunited" item was 3.63 ($SD = 1.24$) and the mean of the "suffering" item was 3.03 ($SD = 1.14$).

While Carr and Sharp (2013) previously had examined how valence of afterlife beliefs impacted CGS, they did not explore the impact that these beliefs may have on the use of CB. If afterlife beliefs are related to CB, it may make sense that the valence of these beliefs impact the use of CB. It was assumed that this relationship would be most prominent between CB and the “reunited” item.

As noted previously in the Descriptive Statistics of the Sample section, two participants left the “suffering” item blank. For the purposes of this post hoc, these individuals were dropped listwise. This is a limitation of the analysis.

A hierarchical regression was used to analyze whether scores on either valence items predicted the use of ICB. Control variables were entered in the Step 1, including race/ethnicity and gender, as these have been shown to significantly impact CB in previous studies (Lalande & Bonanno, 2006; Laurie & Neimeyer, 2008; Sochos & Bone, 2012). Dummy variables were created for Latinx-identified and Other-identified participants. Caucasian-identified participants were used as the comparison group. Gender was broken into binary constructs (male and female) and therefore the two transgender participants were not included in this analysis. The predictor variables, entered in Step 2, were the continuous scores on (a) the “reunited” item and (b) the “suffering” item. The dependent variable was ICB scores. All other individuals regardless of stated afterlife beliefs were used in this analysis. Assumptions for regression were examined prior to analysis and were found to be met, including normality, multicollinearity, linearity, and homoscedasticity. The results of the hierarchical regression can be seen in Table 16.

Table 16

Summary of Post Hoc Hierarchical Regression Analysis for Valence of Beliefs Predicting Internalized Continuing Bonds (N = 171)

Variable	R^2	ΔR^2	B	SE B	β
Step 1	.058*	.058*			
Gender			-3.25**	1.21**	-0.20**
Race/Ethnicity					
Latinx			-1.31	1.43	-0.70
Other Race			2.14	1.80	0.09
Step 2	.170***	.112***			
“Reunited”			1.46**	0.49**	0.25**
“Suffering”			0.93	0.55	0.14

Note: Dependent Variable: Internalized Continuing Bonds (ICB). SE = Standard Error.

Race/Ethnicity: $F(2, 167) = 1.367, p = .258$.

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

In Step 1, gender and race/ethnicity were entered as control variables. Altogether, these control variables accounted for a significant portion of the variance explained for ICB ($\Delta R^2 = .058, p = .019$). Specifically, gender accounted for a significant portion of the variance explained ($\Delta R^2 = .041, p = .008$), while race/ethnicity did not ($\Delta R^2 = .015, p = .258$).

In Step 2, the “reunited” score and “suffering” score were entered into the model. Altogether these two variables accounted for 11.2% of the variance explained ($\Delta R^2 = .112, p < .001$), above and beyond the variables entered in Step 1. Individually, “suffering” scores did not explain a significant portion of the variance in ICB ($\beta = 0.14, p = .093$), when controlling for gender and race/ethnicity. On the other hand, “reunited” scores did explain a significant portion of the variance in ICB ($\beta = 0.25, p = .003$), when controlling for gender and race/ethnicity.

Summary

This chapter presented the results of this study, including sample characteristics, descriptive statistics, reliability analyses, hypotheses testing, and post hoc analyses. The sample consisted of 175 university student participants, including 117 believers in an afterlife, 11 non-believers, and 47 individuals who were unsure of their afterlife beliefs. Participants had lost loved ones ranging from six to 24 months prior to taking the survey.

H1 and H2 were tested using a MANCOVA. Neither H1 nor H2 were supported. H3a, H3b, and H4 were tested using a hierarchical multiple regression. H3a and H3b were not supported. H4 was also not supported.

Post hoc analyses were run following the initial analyses. A MANOVA was run which allowed for all three levels of afterlife beliefs to be examined (*Yes, No, and I don't know*). This allowed the researcher to examine if CGS or ICB scores differed according to afterlife beliefs, including participants who were unsure of their beliefs. While mean CGS scores did not appear to differ according to afterlife beliefs, participants with afterlife beliefs had significantly higher mean ICB scores than those participants who were unsure about their afterlife beliefs. A post hoc regression following this found that strength of afterlife beliefs did predict the use of ICB.

Furthermore, a post hoc hierarchical regression was run that allowed all participants to be included in the regression, despite level of belief, in examining if afterlife beliefs, attachment anxiety, and attachment avoidance individually moderate the relationship between ICB and CGS. This regression showed that for individuals with higher afterlife beliefs, ICB explained less of the variance in CGS scores than for those

individuals with low afterlife beliefs. Additionally, in this regression, attachment avoidance scores explained a significant portion of variance in CGS.

Another set of post hoc analyses were conducted to examine if ECB interacted uniquely with the variables in this study, compared to ICB. An ANOVA was conducted to examine if ECB differed according to level of afterlife belief (*Yes, No, and I don't know*). No significant difference was found. Another hierarchical regression was conducted in order to examine if afterlife beliefs, attachment avoidance, and attachment anxiety moderated the relationship between ECB and CGS. Both strength of afterlife beliefs and attachment avoidance appeared to moderate the relationship between ECB and CGS. Specifically, individuals with higher afterlife beliefs, ECB explained less of the variance in CGS scores than for those individuals with low afterlife beliefs. Similarly, for individuals with higher attachment avoidance, ECB explained less of the variance in CGS scores than for those individuals with low attachment avoidance. Additionally, attachment anxiety scores explained a significant portion of variance in CGS scores.

Lastly, a post hoc analysis was conducted to examine how the valence, or positive nature, of afterlife beliefs impacted the use of ICB. It appeared that when controlling for gender and race/ethnicity, a belief that one would be reunited with his or her loved ones in the afterlife explained a significant portion of the variance in ICB.

Chapter V discusses all of these results further. It also presents clinical implications, limitations and future research recommendations, as well as conclusions based on these analyses.

CHAPTER V
DISCUSSION, IMPLICATIONS, AND
RECOMMENDATIONS FOR
FUTURE RESEARCH

To date, researchers have been unable to gain consensus about how continuing bonds (CB) may connect to complicated grief symptomatology (CGS). The qualitative literature continues to demonstrate that CB are both common and comforting for many individuals across cultures (Asai et al., 2010; Chan et al., 2005; Costello & Kendrick, 2000; Doran & Hansen, 2006; Jahn & Spencer-Thomas, 2014). Yet, quantitative studies continue to link CB directly with more severe CGS, indicating that the use of CB may increase the chance for developing CGS (Cowchock et al., 2010; Field & Filanosky, 2010; Field & Friedrichs, 2004; Field et al., 2003; Ho et al., 2013; Mancini et al., 2015; Stroebe et al., 2012). Some researchers have worked to better understand this discrepancy, investigating how the type of CB (internalized versus externalized) may impact this overall relationship between CB and CGS (e.g., Field et al., 2005). Others have examined how one's attachment style may impact the relationship between CB and CGS (e.g., Currier et al., 2015). But at present, little agreement still exists on these relationships and what they may mean.

Although it has been a point of discussion for many years among researchers, one area that has not been thoroughly examined yet quantitatively is the relationship between CB, afterlife beliefs, and CGS. Root and Exline (2014), along with many others, pointed out the inherent relationship between CB and afterlife beliefs. Field et al. (2005) noted

that the “sense of presence and hallucinatory CB experiences might be interpreted by those with pre-existing religious beliefs as evidence for the existence of the soul continuing on after death” (p. 293). Therefore, the presence and strength of afterlife beliefs may impact how individuals come to develop and then make meaning of CB. The current study explored for relationships between CB, attachment styles, afterlife beliefs, and CGS. Specifically, this researcher aimed to explore how attachment and afterlife beliefs may moderate the relationship between internalized continuing bonds (ICB) and CGS. This study was an expansion of the model used by Currier et al. (2015), by separating out the internalized form of CB (IBC) from general CB. While CB typically have been studied as a single construct, much of the research has shown that ECB and ICB are in fact quite unique constructs (Field & Filanosky, 2010). Additionally, afterlife beliefs, as an important part of religious and cultural identity, have not been well examined in the literature related to CB and CGS (Root & Exline, 2014), despite theoretical overlap (Benore & Park, 2004). This study also examined how afterlife beliefs may impact how ICB and externalized continuing bonds (ECB) relate to CGS, given this theoretical connection between the expression of CB and afterlife beliefs.

Although this study’s initial analyses did not produce significant results for its a priori hypotheses, further post hoc analyses did present some salient, yet tentative findings. Firstly, it appears that individuals with afterlife beliefs may hold more ICB expressions than those who are unsure of their afterlife beliefs. Furthermore, the strength of afterlife beliefs may moderate the impact of ICB on CGS when all levels of strength of afterlife beliefs are taken into account (no such beliefs to strong beliefs). Similarly, strength of afterlife beliefs appeared to moderate the relationship between ECB and CGS.

In both cases, for individuals with stronger afterlife beliefs, ECB and ICB explained less variance in CGS when compared to individuals with weaker afterlife beliefs. This appears to support the idea that for those with stronger afterlife beliefs, CB may not be as maladaptive or related to negative grief outcomes as for those with weak or no afterlife beliefs. Additionally, this study further supported the relationship between each of the two types of CB and CGS. Interestingly, attachment anxiety did not predict CGS when ICB was accounted for, nor did either attachment style moderate the relationship between ICB and CGS. On the other hand, when ECB was examined in the analysis, attachment anxiety significantly predicted CGS. Furthermore, attachment avoidance moderated the relationship between ECB and CGS. It appears that more must be done to understand the specific impacts that strength of afterlife beliefs, attachment styles, and the different types of CB have on CGS. Yet, this study does appear to suggest that each of these factors may significantly impact the grief reactions that individuals have following a loved one's death in some manner. What follows is a discussion of each hypothesis and the post hoc analyses for the present study.

Afterlife Beliefs and its Relationship with Complicated Grief Symptomatology

For Hypothesis 1 (H1) it was believed that individuals who hold afterlife beliefs would have significantly lower CGS severity scores, on average, than those who do not hold afterlife beliefs. This hypothesis was based on previous research conducted examining the relationship between religion and grief, the majority of which have found that those who believe in a religion may use these beliefs to aid in coping with the death of a loved one (Chapple et al., 2011; Maple et al., 2012; Matthews & Marwit, 2006). Having a religious belief system may allow individuals to gain a sense of control

(Cacciatore & Flint, 2012) and meaning (Neimeyer et al., 2006) in such circumstances. In the current sample, however there did not appear to be a difference in CGS for individuals who held afterlife beliefs compared to those who did not. This would suggest that afterlife beliefs may not protect bereaved individuals from grief symptoms.

There are numerous possibilities for why this relationship was not found. For example, it has been noted in the literature that the holding of afterlife beliefs does not necessarily equate to being religious (Draper et al., 2013). As such, a relationship between religion and CGS does not necessarily equate to a relationship between afterlife beliefs and CGS. Additionally, this analysis did not control for the valence of afterlife beliefs, nor did it account for negative versus positive religious coping (Pargament et al., 1998). Researchers have found that while religion overall does appear to reduce CGS and aid in coping with bereavement (e.g., Brown et al., 2004), negative religious coping can result in one's religion becoming a source of anger, leading to further negative reactions to bereavement (Boulware & Bui, 2016; Lee et al., 2013; Pargament et al., 1998). As such, the presence or absence of afterlife beliefs may not be as important as the valence of these beliefs or how they are used to make meaning of the death or to cope with one's grief.

It should be noted that another possible explanation for this result may be the imbalance in the groups used in the analysis. While the number of overall participants should have provided adequate power for this analysis, there were large discrepancies in the number of participants per cell. For example, there was only one participant who identified as a person of color who did not believe in an afterlife; however, there were 35 participants of color who identified as having afterlife beliefs and 92 white participants

who identified as having afterlife beliefs. This imbalance may have led to heterogeneity of variance and decreased power to detect differences in means (Tabachnick & Fidell, 2007). Future studies should focus on ensuring a more balanced sample in order to better address this limitation. This is further discussed in the *Limitations* section in this chapter.

Post Hoc Examination of Afterlife Beliefs and its Relationship with Complicated Grief Symptomatology

A post hoc MANOVA was also conducted to examine if CGS differed according to all three categories of afterlife belief (*Yes, No, and I don't know*). For this analysis, all participants were included in the data, including those who had been dropped in the initial analysis for stating that they were unsure of their beliefs (*I don't know*).

Here, it was theorized that CGS would differ according to afterlife beliefs, with individuals who held afterlife beliefs showing less severe CGS than those who did not hold beliefs or those who were unsure of their beliefs. This was based on previous literature showing that religious beliefs in general do aid in coping during bereavement and work to decrease CGS (Brown et al., 2004; Cacciatore & Flint, 2012; Maple et al., 2012; Neimeyer et al., 2006). Again, even with all three afterlife belief categories, CGS severity did not appear to differ among the groups. This may show that the mere presence of afterlife beliefs, or the specific lack thereof, may not aid in coping during bereavement as general religious beliefs have been shown to do (Brown et al., 2004; Cacciatore & Flint, 2012). The lack of significance may also be due to this study specifically not looking at other factors known to impact how religious beliefs relate to grief, such as positive versus negative religious coping (Boulware & Bui, 2016; Lee et al., 2013). As

post hoc analyses, these results and interpretations should be examined with care until further research validates them.

Afterlife Beliefs and its Relationship with Internalized Continuing Bonds

For Hypothesis 2 (H2), it was expected that those who identified as having afterlife beliefs, on average, would express significantly higher use of ICB than those who did not identify as having afterlife beliefs. Although this has not been previously studied, many researchers have conceptually connected afterlife beliefs and CB (e.g., Benore & Park, 2004; Field et al., 2005; Mangione et al., 2016). As Root and Exline (2014) noted, individuals with afterlife beliefs may hold onto a sense that their loved ones continue to exist in some manner beyond death, which may suggest that CB then are a part of the worldview for individuals who hold afterlife beliefs. In this study though, the initial analysis did not find a significant difference in mean ICB scores for individuals who hold afterlife beliefs and those who do not. It appears that having afterlife beliefs did not impact the likelihood of individuals using ICB expressions.

This would appear to refute the idea that CB necessarily are connected to afterlife beliefs. Benore and Park (2004) differentiated between these two concepts, noting that while both of them are death-specific religious beliefs, CB and afterlife beliefs are not necessary equivalent. For example, individuals may hold CB through memories and possessions without necessarily believing in the continuity of the soul or in the ability to hold a continued relationship with the deceased. Similarly, individuals may hold afterlife beliefs and believe in the continued existence of the soul, without necessarily believing that their relationships or bonds with the deceased should continue. Benore and Park (2004), also did not differentiate between the different types of CB (internalized and

externalized). It may be that ICB, specifically, do not connect to afterlife beliefs, as they theorized the general CB do.

Much of the theoretical literature connecting CB to religious beliefs or afterlife beliefs specifically has posited how *illusory CB expressions* (e.g., seeing or hearing the deceased loved one) may be based on religious beliefs (Field, 2006; Field et al., 2005). These types of CB are more reflective of ECB rather than ICB, which this analysis examined. It may be that afterlife beliefs are connected to the development and use of ECB, but not necessarily ICB. This may make sense given that ECB are related to experiencing the physical presence of the deceased, while ICB instead are more connected to using the mental representation of the deceased as a means of comfort and security.

Once again, it should be noted that while the overall sample size obtained should have provided adequate power for this analysis, there were large discrepancies in the number of participants per cell. This imbalance may have led to increased heterogeneity of variance and decreased power to detect differences in means. As such, these results may indicate an actual lack of difference, or they may be demonstrative of a lack of power in the analysis needed to detect a true difference (Tabachnick & Fidell, 2007).

Post Hoc Examination of Afterlife Beliefs and its Relationship with Internalized Continuing Bonds

Once again, the post hoc MANOVA examined if ICB differed according to all three categories of afterlife belief (*Yes, No, and I don't know*). All participants were included in the data, including those who had been dropped in the initial analysis for stating that they were unsure of their beliefs (*I don't know*).

It was theorized that use of ICB would differ according to afterlife beliefs, with individuals who hold afterlife beliefs having more ICB than those who do not hold such beliefs or those who are unsure of their afterlife beliefs. In this analysis, there did appear to be a significant difference in levels of ICB among these three groups. Specifically, individuals who were unsure of their afterlife beliefs appeared to express significantly less ICB than those who reported holding afterlife beliefs. This may suggest that the presence of afterlife beliefs could increase the use of ICB or that ICB are a part of afterlife beliefs, as previously theorized (Benore & Park, 2004; Field et al., 2005). It should be noted that mean ICB was slightly lower for those who did not hold afterlife beliefs ($M = 21.53$) than those who were unsure of their afterlife beliefs ($M = 21.86$). But the relationship between those who held afterlife beliefs and those that did not hold such beliefs was non-significant. Once again, the cells were quite uneven (five to 84), and a lack of significance here actually could indicate no difference, or it may indicate that there was not enough power to detect any difference (Pedhazur, 1997). Still, as these are post hoc analyses, these results must be interpreted with care until future studies are able to confirm these results.

Further post hoc analyses were conducted to examine if afterlife beliefs predicted the use of ICB. However, this time the BAS was used as continuous measure of afterlife beliefs rather than as a categorical indicator. This was attempted (a) due to uneven group numbers for the original MANOVA (e.g., 117 who believed in an afterlife versus 11 who did not) and (b) due to the fact that participants who denied or who were unsure about having afterlife beliefs nevertheless provided a wide range of scores on the BAS. Again, the post hoc results indicated that strength of afterlife beliefs did significantly and

directly predict the use of ICB. The strength of one's afterlife beliefs predicted an increased use of ICB during bereavement. This would seem to support the theoretical connections that others (e.g., Benore & Park, 2004; Field et al., 2005) have made between afterlife beliefs and CB, particularly ICB, in that these continued attachments with the deceased are a part of—or at least congruent with—afterlife beliefs. Some ICB may be developed through a belief in the afterlife, rather than as a coping mechanism for grief, which may impact the adaptive or maladaptive nature of these ICB. This may be important for mental health professionals to understand when working with religious clients with ICB post-bereavement.

Attachment Anxiety, Internalized Continuing Bonds, and Complicated Grief Symptomatology

For Hypothesis 3a (H3a) it was predicted that attachment anxiety would moderate the relationship between ICB and CGS. In other words, the degree to which ICB predicts CGS would depend on how much attachment anxiety an individual expressed. This hypothesis was based on the study by Currier et al. (2015), which found that attachment anxiety moderated the relationship between general CB and CGS. This study separated CB into its two constructs to examine if attachment anxiety moderated the relationship between, specifically, ICB and CGS. In this study, this initial analysis did not support this notion. ICB predicted CGS similarly for individuals along the entire spectrum of attachment anxiety. Specifically, this study appeared to find that one's level of attachment anxiety may not change how ICB, specifically, predicts increased CGS. Indicating the ICB remain just as maladaptive across all individuals, no matter the strength of their attachment anxiety.

While these findings may appear to contradict what Currier et al. (2015) reported in their study, it should be noted that they examined ICB along with ECB as a single construct whereas this study examined only ICB. Currier et al.'s (2015) definition of CB included the feeling of a sense of presence of the deceased, maintenance of an ongoing connection with the deceased through taking on their habits/traits, as well as a connection with reminders (physical and mental) of the deceased. Overall, CB was considered to consist of maintaining if not enhancing a general ongoing connection with the deceased. On the other hand, this study separated CB into its two sub-constructs, with ICB being focused on having an ongoing connection with the deceased through habits/traits and the feeling of a sense of their presence, while ECB was thought of as having a focus on various physical experiences of the deceased (e.g., hearing them, seeing them, etc.). Neither the ICB nor ECB subscales used in this study accounted for the use of objects as reminders or in reminiscing about the deceased as did Currier et al. (2015). It may be that ICB does not hold the same relationship with attachment anxiety and CGS as does the unified CB construct. As stated previously, research has suggested that ICB and ECB are highly disparate constructs that may interact differently with CGS and attachment (Field & Filanosky, 2010; Yu et al., 2016). These results may appear to support that theory.

It should be noted that in the current study, attachment anxiety was not found to be even directly related to CGS when ICB and afterlife beliefs were taken into account, which also seems to contradict much of the previous literature (Delespau et al., 2013; Meier et al., 2013). It appears that when afterlife beliefs and ICB are controlled for, attachment anxiety does not appear to impact CGS severity.

Post Hoc Analysis of Attachment Anxiety, Internalized Continuing Bonds, and Complicated Grief

A separate post hoc hierarchical regression was conducted to examine how attachment anxiety may moderate the relationship between ICB and CGS for all participants. This time all levels of afterlife beliefs were examined (*Yes, No, and I don't know*). This was done because it was found that participants across all categories of afterlife beliefs showed a wide range of afterlife belief scores.

Level of attachment anxiety did not appear to impact the relationship between ICB and CGS. Again, this would seem to contradict the model presented by Currier et al. (2015), which found that as attachment anxiety increased the CB became less predictive of CGS. This contradiction between this post hoc finding and Currier et al. (2015), still may be due to separating CB into two its different constructs and examining ICB specifically. It appears to suggest that an individual's level of attachment anxiety does not impact how predictive the use of ICB expressions are of severe grief reactions, with ICB being equally predictive of CGS across all levels of attachment anxiety. As these are post hoc analyses, these results and interpretations are only tentative unless future research confirms them.

Attachment Avoidance, Internalized Continuing Bonds, and Complicated Grief Symptomatology

For Hypothesis 3b (H3b), it was anticipated that attachment avoidance would moderate the relationship between ICB and CGS. This hypothesis also was based on the Currier et al. (2015) study, which found that attachment avoidance moderated the relationship between CB and CGS. In their analysis, as attachment avoidance decreased, the strength of the relationship between CB and CGS also decreased. In the current study,

it was found that attachment avoidance did not moderate the relationship between ICB and CGS. The use of ICB expressions continued to predict CGS the same across the entire range of attachment avoidance. Once again, this would seem to contradict the model presented by Currier et al. (2015). However, this again may be due to separating CB into two different constructs and examining ICB specifically. It appears that attachment may not moderate the relationship between ICB and CGS the same way that it may for CB as a unified construct. Once again, research has found that ICB and ECB are separate constructs that may interact uniquely with CGS and attachment (Field & Filanosky, 2010; Yu et al., 2016). This contradiction between the results from Currier et al. (2015) and this study appear to support the notion that ICB may be uniquely different from ECB, and from CB in general. This seems to suggest that attachment style (specifically an avoidant one) may not impact how strongly ICB predicts CGS. This may be explained by the fact that ICB are more focused on internal representations of the deceased (e.g., fond memories, taking on the deceased's values), rather than outward experiences with them. Yu et al. (2016) theorized that individuals with high levels of attachment avoidance simply may not use ICB, as ICB are seen as intentional processes of building connection. Their results supported this, showing no connection between attachment avoidance and ICB. The current study's results also appear to support the idea that attachment avoidance does not necessarily impact how ICB relates to CGS.

It should be noted that the current study did find that attachment avoidance directly impacted CGS. This finding supported previous literature suggesting that general avoidance attachment can lead to more severe grief reactions. As Mikulincer and Shaver (2008) theorized, this may be related to these individuals becoming distressed when their

normal coping strategy of avoiding and detaching do not work to decrease their grief feelings, but rather just prolong their distress as they struggle to address their bereavement experiences.

Post Hoc Analysis of Attachment Avoidance, Internalized Continuing Bonds, and Complicated Grief

The post hoc hierarchical regression also examined if attachment avoidance moderated the relationship between ICB and CGS for all participants. Again, this time all levels of afterlife beliefs were examined (*Yes, No, and I don't know*). This was done because it was found that participants across all categories of afterlife beliefs showed a wide range of afterlife belief scores.

This post hoc analysis found that level of attachment avoidance also did not appear to moderate the relationship between ICB and CGS. Once again, this contradicts Currier et al. (2015), who found that as attachment avoidance increases, the strength of the relationship between CB and CGS also increases. These contradictions between this study and Currier et al. (2015), again may be due to separating CB into two its different constructs and examining ICB specifically. It appears that attachment may not moderate the relationship between CB and CGS when only ICB are examined. Specifically, for individuals across the entire range of attachment avoidance, ICB equally predicts CGS. This seems to hold true for individuals along the entire spectrum of afterlife beliefs, including those with extremely strong afterlife beliefs and those with none. Again, as a post hoc findings, these can only be viewed as tentative until further research is conducted to confirm the results.

Afterlife Beliefs, Internalized Continuing Bonds, and Complicated Grief Symptomatology

For Hypothesis 4 (H4), it was predicted that the strength of afterlife beliefs as expressed by the participants would moderate the relationship between ICB and CGS. This hypothesis was based on the theoretical connection between CB and afterlife beliefs that has proposed that for those with afterlife beliefs, CB may represent a longstanding belief in life after death rather than a maladaptive coping strategy (Benore & Park, 2004). As such, CB may not be inherently connected to CGS for these individuals because rather than the CB expressions representing a maladaptive belief that their loved ones are not dead, their CB expressions may reflect religious or spiritual beliefs in the continued existence of the soul (Field et al., 2013). In the current study, the initial analysis did not find a significant moderation effect for afterlife beliefs on the relationship between ICB and CGS. This would suggest that the relationship between ICB and CGS does not change based on the strength of one's afterlife beliefs, at least for those individuals who hold such beliefs.

As noted previously, much of the literature connecting CB to afterlife beliefs has focused on *illusory CB expressions* (e.g., seeing or hearing the deceased loved one) or ECB (Field, 2006; Field et al., 2005). This analysis specifically examined the other type of CB—ICB—in potentially relating to afterlife beliefs and CGS. The lack of significance in these results may suggest that the strength of afterlife beliefs do not impact how ICB (or more internalized forms of CB), specifically, predict CGS. ICB appears to continue to predict increased CGS consistently for individuals across all strength of afterlife beliefs.

Another explanation for this lack of significance may be that this analysis only included individuals who expressed holding afterlife beliefs. It may be that for individuals who report afterlife beliefs, how strong these beliefs are may not change how strongly ICB predicts CGS. Other factors related to religiosity and religious coping, for example type of religious coping (positive versus negative), may be influence grief symptoms more than afterlife beliefs (Kelley & Chan, 2012; Lee et al., 2013)

Post Hoc Analysis of Afterlife Beliefs, Internalized Continuing Bonds, and Complicated Grief

The post hoc hierarchical regression, again, examined if strength of afterlife beliefs moderated the relationship between ICB and CGS for all participants. All levels of afterlife beliefs were examined (*Yes, No, and I don't know*), as it was found that participants across all categories of afterlife beliefs showed a wide range of afterlife belief scores.

Here, strength of afterlife beliefs did significantly moderate the relationship between ICB and CGS. Specifically, as the strength of one's afterlife beliefs increased, ICB became less predictive of CGS, although they still remained significantly predictive. This is to say that for individuals with weaker afterlife beliefs, ICB was more predictive of severe grief reactions than for those with stronger afterlife beliefs. This indicates that ICB may be less maladaptive for those individuals with stronger afterlife beliefs than for those with weaker afterlife beliefs.

This would appear to suggest that previous theories put forth by Benore and Park (2004) and Field et al. (2013) may be correct in considering that for individuals with stronger afterlife beliefs, ICB may be a reflection of religious or spiritual beliefs rather

than as a more maladaptive coping strategy. On the other hand, as strength of afterlife beliefs decreased, the relationship between ICB and CGS became stronger, with ICB being more predictive of CGS. It may be that for individuals with weaker afterlife beliefs who still hold and express ICB, these ICB may be more maladaptive, as they may not be directly connected to an afterlife belief. Therefore, this finding could suggest that ICB may not necessarily be interpreted as maladaptive if they are seen through the lens of someone's spiritual or religious belief system, as Field et al. (2013) and Mangione et al. (2016) previously have only theorized. This appears to hold true particularly when all levels of afterlife belief (from none to strong) are taken into account. It may be that among those who hold strong ICB with the deceased, those with strong afterlife beliefs may need to be understood differently than those with no afterlife beliefs. Particularly, the strength of one's afterlife beliefs should be taken into account when determining if their use of ICB is maladaptive—as, at least in part, these ICB expressions may be reflections of their belief systems and may not be as connected to CGS as they may be for others.

It should be noted that the above results were based solely on post hoc analyses and therefore should be interpreted with caution until future researchers are able to confirm the results. They still provided some interesting, tentative findings, however. All of these will be discussed further in the *Practice Implications of the Results* section of this chapter.

Post Hoc Examinations of Externalized Continuing Bonds

Although ECB were not explored as a part of the initial analyses due to concerns regarding reliability, this construct was examined in some post hoc analyses. It should be

noted that the internal consistency for the ECB subscale of the CBS-R for this sample was found to be .74, which is considered adequate for research purposes and commensurate with some previous studies (e.g., Field & Filanosky, 2010).

Because the initial analysis only examined ICB, a post hoc ANOVA was done to examine if ECB differed according to afterlife beliefs. Based on this analysis, use of ECB did not differ according to afterlife beliefs. In other words, individuals who expressed having afterlife beliefs were no more likely to use ECB in bereavement than those who did not express having afterlife beliefs or those who were unsure of their afterlife beliefs. This appears to contradict Field et al. (2013) who believed that ECB expressions may be related to a strong belief in the continuation of the soul (i.e., a belief that the deceased may continue to exist in some manner after death). This may suggest that having afterlife beliefs does not equate to a belief that one can continue to have a relationship with the deceased, or it may suggest that afterlife beliefs do not necessarily lead to the expression of more ECB as previously thought.

Next, a post hoc hierarchical regression also was conducted in order to examine if afterlife beliefs, attachment anxiety, and attachment avoidance each individually moderated the relationship between ECB and CGS. This also found that both attachment avoidance and strength of afterlife beliefs moderated the relationship between ECB and CGS.

Specifically, as attachment avoidance increased, the impact of ECB on CGS decreased. Although, ECB continued to explain a significant portion of the variance in CGS no matter the strength of one's attachment avoidance. This would appear to indicate that as one's attachment avoidance increases, the expression of ECB might not be as

influential on CGS—and therefore, in such instances ECB might not be as maladaptive. Perhaps highly avoidant individuals may not hold onto their ECB as tightly and inflexibility as do low-avoidant individuals, making their use of ECB more adaptive than those with low avoidance. On the other hand, perhaps individuals with higher attachment avoidance are able to detach from the distress caused by ECB more readily than those with low attachment avoidance (Field et al., 2005).

This contradicts the results and theory put forth by Currier et al. (2015), who found that an increase in attachment avoidance led to an increase in the impact of CB on CGS. They theorized that congruence between attachment and use of CB was important—in other words, individuals who were more avoidant experience less grief symptoms if they did not hold as strong CB with the deceased. This study, on the other hand, did not support this theory. Once again, this discrepancy might be explained by the separation of ICB and ECB from the general construct of CB. It may be that the unique constructs of CB relate differently to attachment and CGS. Again, Currier et al. (2015) defined CB as a general sense of connection with, and having ongoing memories of, the deceased. On the other hand, this study broke down CB into its two separate constructs: (a) a sense of ongoing connection with the deceased (ICB), and (b) the physical experiences with the deceased (ECB). This likely led to the contrasting finds between this study and Currier et al. (2015). In the future, it may be important to separate out these unique constructs of ICB and ECB when examining the impact of CB on grief. As noted previously in the literature, ICB and ECB are separate constructs, with ICB being focused on internalized representations of the deceased and ECB being focused on outward experiences with the deceased (Field & Filanosky, 2010; Yu et al., 2016). The results of

this study and others (e.g., Yu et al., 2016) appear to suggest that these constructs interact differently from each other and, as such, should not and cannot be combined into a single construct. In fact, to do so moving forward may be quite misleading.

In this same post hoc analysis, strength of afterlife beliefs also significantly moderated the relationship between ECB and CGS. As strength of afterlife beliefs increased, the ECB became less predictive of CGS—although they remained significantly predictive. This again indicated that for individuals who hold strong afterlife beliefs, ECB may be more indicative of their belief system rather than a maladaptive coping mechanism, and therefore, ECB may be less related to CGS than for those individuals with no or weak afterlife beliefs. This again supports the theories stated by Benore and Park (2004), Field et al. (2013), and others.

It should also be noted that in this post hoc regression, attachment anxiety was significantly and positively related to CGS. It appears that when ECB was accounted for in the regression, attachment anxiety was a significant predictor of CGS. In contrast, when the regression examined ICB, attachment anxiety was not a significant predictor of CGS. This again may suggest ICB and ECB are vastly different constructs, which would explain the differing results from previous studies only examining attachment and CB as a unified construct. If future studies also support the findings from this study, this again would strengthen the notion all the more that CB cannot be examined as a unified construct, but rather, the unique constructs of ICB and ECB should be assessed disparately. Again, if these constructs are acting in distinctive and oftentimes even opposing ways from each other, it does not make sense to combine them into a single

construct. Rather, future research should continue to examine how each of these factors uniquely interact with afterlife beliefs and attachment to predict CGS.

Again, it should be noted that the above results were based on post hoc analyses and therefore should be interpreted cautiously until future researchers are able to confirm the results of these analyses.

Results from the Valence Analysis

Lastly, a post hoc hierarchical regression was done to examine if valence—or the content—of afterlife beliefs explained the use of ICB. This analysis was based on the previous study by Carr and Sharp (2013) that found valence of afterlife beliefs to directly impact CGS. Their study showed that bereaved individuals with positive afterlife beliefs had less severe CGS. Using the two items created by Carr and Sharp (2013), it was found that the belief that suffering would be rewarded in the afterlife did not explain a significant portion of the variance in ICB. Next, the belief that one would be reunited with their loved ones following death explained a significant portion of variance in ICB when controlling for both gender and race/ethnicity. This finding reaffirms the theory that ICB may be more of a marker of one's belief system for individuals with afterlife beliefs rather than indicative of a maladaptive coping strategy. Specifically, the belief that one will be reunited with their deceased loved ones following their own death may increase the use of ICB for individuals while in bereavement. Again, these findings and their subsequent interpretations are based on post hoc analyses and should be interpreted with caution until further research can confirm them.

Summary of Results and Additional Theoretical Implications

The results of this study indicate that afterlife beliefs may be an important factor to examine when looking at the relationship between CB and CGS. Although Field et al. (2005) and Benore and Park (2004) both had suggested that this may be the case, this is one of the first studies to directly assess for this relationship quantitatively. Post hoc analyses found that the strength of afterlife beliefs may in fact moderate the relationship between ICB and CGS as well as between ECB and CGS. More specifically, as afterlife beliefs become stronger, both ICB and ECB become less predictive of CGS, although still significant. On the other hand, as afterlife beliefs weaken, ICB and ECB become more predictive of CGS. Therefore, at least in part, both ICB and ECB may represent a less harmful belief system for those with afterlife beliefs rather than purely maladaptive coping mechanisms. This was further supported by the additional finding that the comforting belief that one will be reunited with their loved ones in the afterlife was related to higher use of ICB. Additionally, post hoc, individuals with afterlife beliefs were found to hold significantly more ICB than those who were unsure of their afterlife beliefs. As Field et al. (2013) and Mangione et al. (2016) both suggested, maladaptive forms of CB may need to be separated from the expressions of CB that represent an individual's religious belief system. An ongoing connection with the deceased may be less maladaptive for individuals with strong afterlife belief systems that support the concept of these relationships as ongoing. Of course, once again these conclusions are based on post hoc analyses and need to be considered as tentative until future research is able to validate them.

The results from this study appear to indicate that, as a construct, afterlife beliefs perhaps is more effectively operationalized through a more complex and continuous measure (e.g., the Belief in an Afterlife Scale; BAS) versus through more categorical means. While many participants responded initially that they did not believe in an afterlife, they later responded in ways considered to be much more congruent with actually having such beliefs (e.g., “In the premature death of someone close some comfort may be found in knowing that in some way the deceased is still existing.”) when they were able to provide a more nuanced answer via a 11-point Likert scale rather than with a trinomial response.

Along these lines, it should be noted that the a priori decision to include only those who reported having afterlife beliefs in the initial hierarchical regressions may have been short-sighted. It may be that removing the participants who expressed no or unsure afterlife beliefs greatly reduced the variance in BAS scores. Without a large enough variance in these scores, it may have been all the more difficult to detect a moderating effect if in fact that effect actually existed. Additionally, when all groups were included into the analysis post hoc, this provided a more normal distribution of BAS scores rather than the previously skewed distribution. Future studies may want to measure afterlife beliefs continuously and across the entire range of beliefs – from those who claim to have no afterlife beliefs to those who report having extremely strong afterlife beliefs.

This study also added to the literature on the impact of attachment anxiety and attachment avoidance on CGS as well as the relationship between attachment, CB, and CGS. Specifically, the Currier et al. (2015) model was tested, with CB now being separated into two constructs (ECB and ICB). This study found that attachment anxiety

did not moderate the relationship between neither ICB and CGS nor between ECB and CGS. Additionally, attachment avoidance did not moderate the relationship between ICB and CGS. On the other hand, attachment avoidance did moderate the relationship between ECB and CGS. Specifically, as attachment avoidance increased, ECB became less predictive of CGS, which contradicts Currier et al.'s (2015) findings. Not only does this present implications for how attachment may moderate the relationship between the two types of CB and CGS, but also furthers the research showing that attachment anxiety and attachment avoidance may function separately related to CB (Field et al., 2005; Ho et al., 2013) and CGS (Boelen & Klugkist, 2011; Currier et al., 2015; Delespaux et al., 2013; Jerga et al., 2011). Further research should be done to see if these post hoc results are replicated. Also, given the separate findings for the regression using ICB and the one using ECB, this study also emphasizes the need to separate these two constructs when examining CGS, for example, by using the CBS-R versus the CBS, which measures CB as a single construct.

This study also continues to support the findings that both ICB and ECB are positively predictive of CGS, even when controlling for attachment and afterlife beliefs. Previous studies have continued to find this relationship as well (Field & Filanosky, 2010), even when accounting for moderating variables (Currier et al., 2015). It appears that, similarly, afterlife beliefs do not completely mitigate the impact CB expressions have on increased CGS.

Practice Implications from the Results

The results of this study offer up some important clinical implications for counseling psychologists and other mental health workers treating bereaved and grieving

clients. As the *American Psychological Association's Multicultural Guidelines* (2018) dictate, psychologists must be increasingly aware of their own “attitudes and beliefs that can influence their perceptions of and interactions with others” (p. 47). Religious and death-specific beliefs, such as afterlife beliefs, can be a part of an individual’s identity and culture and thus, being aware and being willing to work with clients around these different beliefs is one aspect of providing competent multicultural counseling services (Sue, 2001). The reality is that 77% of individuals in the U.S. consider religion to be either very important or somewhat important in their lives (Pew Research Center, 2014). It is likely then, that the vast majority of clients that we will see will consider their religion to be important to them. When working with bereaved clients, it may be imperative for us to explore their afterlife beliefs and how these beliefs may be impacting their grieving process. Specifically, discussing how afterlife beliefs may facilitate the expression of ICB and ECB for clients may be vital during the course of treatment, and to avoid such explorations could in fact be harmful for them at worst.

To add, these results tentatively suggest that ICB are connected to strong afterlife beliefs and that CB facilitated by afterlife beliefs are less maladaptive than those CB that are not connected to afterlife beliefs. Moreover, Klaassen et al. (2015) noted the difficulty of separating out faith, CB, and grief for individuals. Oftentimes, how individuals express their grief and CB is through the framework of their religious beliefs and identity. While tentative, these post hoc findings do appear to suggest that the strength of one’s afterlife beliefs may impact just how they form and hold bonds with their deceased loved ones and, in turn, how they might cope with their grief. Clients with strong afterlife beliefs may be more likely to express having continuing relationships with their deceased loved

ones; these continued relationships may not necessarily be maladaptive, but rather simply be a part of their belief system. Counseling psychologists working with the bereaved should be open to discussing their clients' afterlife beliefs and other death-specific religious beliefs in order to better understand the impacts of these beliefs on the individual's grieving process. Additionally, as Dossey (2014) noted, this exploration must be done without mental health professionals placing their own biases and beliefs regarding the afterlife and potential continuity of the soul onto their clients. Mental health professionals can gain more competence in this area through trainings or additional readings (e.g., Griffith & Griffith, 2002; Koenig, King, & Carson, 2012; Pargament, 2007). Furthermore, training programs should more explicitly address spirituality and religious diversity in multicultural training to better prepare their students in working with their clients (Crook-Lyon et al., 2012), the majority of whom will likely be religious in some form or fashion (Pew Research Center, 2014) and thus who may hold certain such differing views.

Additionally, the relationship between afterlife beliefs and CB may not depend simply on whether or not someone holds afterlife beliefs, but rather the strength of and valence of one's afterlife beliefs. It should be noted that simply holding afterlife beliefs may not mean that any CB that individuals hold are necessarily healthy, just as not holding afterlife beliefs does not indicate that any CB expressed are maladaptive. As Field (2006) noted, there may be differences between CB found intentionally through religious rituals (speaking to the dead through prayer) and "unbidden illusions" or involuntary visions that a person may find distressing and unconnected to their religious beliefs (p. 752). One way that he theorized in order to differentiate these was to explore

the extent to which bereaved individuals understood that the relationship or bond that they have with the deceased was “qualitatively different” than before the death (p. 751). In other words, is the bereaved able to articulate that his or her loved one is dead and the relationship has, necessarily, changed (e.g., talking through prayer versus just being able to talk to them). Counseling psychologists may want to further explore their clients’ understanding of these bonds and how they may have changed with the death, as well as through what—if any—religious or spiritual beliefs the CB are understood or held. For example, if individuals believe in visitations from the dead or the ability to speak to the dead through rituals, such as prayer, this may be important to know in assessing if a client’s behaviors are maladaptive or not. Through a thorough discussion of these factors, it can then be assessed if an individual’s CB are more problematic and thus should be treated as a symptom or if they are a part of a belief system and can be encouraged as potentially adaptive.

Beyond simply exploring afterlife beliefs, it also appears that assessing for one’s attachment style upon entering treatment, particularly then for grief-related concerns, may also be important. Even beyond this study, numerous researchers have highlighted the important roles that attachment style plays in both grieving and the expression of CB (Currier et al., 2015; Ho et al., 2013; Schenck et al., 2016). As Currier et al. (2015) noted, bond-enhancing interventions (e.g., legacy projects, life imprints, and imaginal conversations; Neimeyer, 2012) may be more or less helpful for grieving individuals based on attachment style. This study further supports this, with the additional caveat of the type of CB (ICB or ECB) also interacting with attachment style. For example, for someone with a more avoidant attachment style, the use of ECB specifically may not be

as maladaptive or predictive of CGS. On the other hand, avoidant attachment style did not decrease how much ICB predicted CGS. Therefore, ICB may still be just as maladaptive no matter one's attachment style. Schenck et al. (2016) suggested the use of attachment assessments, such as the Adult Attachment Interview (George, Kaplan, & Main, 1985) at the beginning of treatment to better ensure that counseling psychologists are attending to the needs of the client. CB with the deceased may need to be viewed differently for individuals with avoidant versus anxious attachment style. For example, for an individual with a more avoidant attachment style, their expression of continued relationships, such as illusory CB, may not need to be challenged in the same way they would be an individual with low avoidance—where such CB more strongly predict worse grief outcomes.

There are many ways in which these implications can be integrated into grief treatment through different theoretical lenses. Ho et al. (2013) suggested using the dual-process model to understand if individuals who are expressing CB may be “stuck” in the loss-oriented mode of grief (primarily focusing on the grief and loss) and therefore could be encouraged in treatment to take restoration-oriented actions (e.g., developing new identities and roles). They indicated that how individuals approach these tasks may be impacted by their attachment styles. For example, anxiously attached individuals may struggle to move out of loss-orientation due to an inability to let go of their attachments to the deceased, and this staying stuck in their grief and becoming overly focused on their deceased loved one. Furthermore, it may be important for clinicians to better understand how clients' afterlife beliefs may impact how loss-orientation and restoration-orientation may manifest for them. For example, speaking to the deceased through prayer or rituals

may be a restoration-oriented task for individuals with strong religious beliefs. It is important, then, to openly discuss these individual beliefs in assessing and aiding individuals in treatment. It also may be important for counseling psychologists to help more anxiously-attached clients to become more flexible in their attachments with the deceased and move toward restoration-orientation, through activities focused on adapting to life changes and developing a new identity post-bereavement. On the other hand, more avoidantly-attached clients may need encouragement to focus on loss-orientation, being encouraged to face their grief and emotions in the counseling room and learned ways to cope with, rather than avoid, these strong reactions.

Another popular post-modern grief theory that may be applicable here is presented by Neimeyer's meaning reconstruction theory (Neimeyer et al., 2010). This theory proposes that individuals who struggle to find meaning in their grief may be unable to reconstruct their narratives and, instead, suffer intense grief symptoms. Much of the qualitative research on grief and CB has shown that spiritual and religious beliefs are inherent to many individuals' grief narratives and their CB expressions (Chapple et al., 2011; Maple et al., 2012). Therefore, it is important for counseling psychologists to be open to integrating their clients' beliefs into their narratives as they help clients to seek out sense in their bereavement, find benefits, and adapt their identities. This may include counseling psychologists assessing clients' spiritual resources, for example religious communities, meditation, or prayer; it may also include discussing spiritual struggles, such as anger toward God (Vieten et al., 2013). Either way, counseling psychologists and other mental health professionals must be comfortable having explicit conversations regarding religious and spiritual beliefs with their clients, as warranted.

Lastly, it should be stated that counseling psychologists should continue to ensure that they are adhering to their own respective competency levels when working with religious and spiritual issues. While exploring religious and spiritual beliefs should be considered a part of engaging in multiculturally competent counseling (Sue, 2001), counseling psychologists may benefit from further training in working within this framework and in understanding when to refer clients to specific religious or spiritual treatments, such as pastoral counseling (Walker, Gorsuch, & Tan, 2004). For example, if a Christian client's grief has led to questions regarding God or their beliefs, this may be a time to refer clients to a clergy member within their denomination (Vieten et al., 2013). As the religious and spiritual aspect of culture becomes more widely accepted in counseling psychology (Vieten et al., 2013), hopefully training will be more readily available and integrated into training programs. Even before this time, counseling psychologists can work to learn about various religious belief systems, ethical concerns regarding bringing spirituality into counseling, and gain competency on spiritual and religious issues—for example through using Vieten et al.'s (2013) proposed criteria. These criteria present sixteen competencies across attitude, knowledge, and skills that psychologists can work toward in spiritual and religious competency. These include viewing spirituality and religious diversity as important, knowing the basics of religious and spiritual identity growth, and being able to identify and assess various spiritual or religious problems in practice with clients. Within the realm of grief work, these competencies would also encompass having a basic understanding of afterlife beliefs and other death-specific beliefs across various religions and knowing common ways grief can impact a client's religious or spiritual beliefs. For example grief may strengthen a client's

beliefs (Brown et al., 2004) or lead to anger toward God (Cowchock et al., 2010).

Knowing that the vast majority of U.S. citizens believe in a god (Pew Research Center, 2014), counseling psychologists should have an understanding of how to work within this realm of diversity.

Directions for Future Research

Many of the significant results in this study were determined through post hoc analyses. Although very salient theoretical underpinnings helped to determine how these analyses were run, future studies should re-examine these questions a priori to confirm the results of the present study because post hoc analyses may be unintentionally biased by a researcher's own desires regard the outcomes of the study (Delgado-Rodriguez & Llorca, 2004). Confirming these results, then, would provide more clear evidence for the accuracy of the results, as well as the interpretations that were made and implications that are discussed.

Future research could also delve deeper into the various religious beliefs that are related to CB. In other words, what specific afterlife beliefs and religious beliefs mostly commonly connect to CB? For example, it was found that a belief that one would be reunited with their loved ones explained the expression of ICB in this study. Are there are specific religious beliefs that may more readily connect to the use of CB during bereavement. For example, would clients who believe the living can still participate in actions to benefit the dead (see Suhail et al., 2011), hold more ICB than those who do not believe such things. This would, again, impact how counseling psychologists assess and discuss the adaptiveness of ICB for clients with various religious beliefs.

Other factors should also be examined in order to more effectively understand their impact on CGS, as well as the constructs of CB, attachment, and afterlife beliefs. For example, previous research (e.g., Currier et al., 2015) has discussed the impact of specific type of death on the grieving process. Future research could examine this factor closer, in relation to afterlife beliefs, ICB, and ECB, perhaps controlling for the type of death. Another variable which may be important that was not specifically addressed in this study was social support. It is possible that social support may play a role in how adaptive or maladaptive CB are for individuals in bereavement. For example, someone with strong social support who also continues their attachment to the deceased may adapt better to their CB and grief symptoms than might someone else who is carrying on this bond with little other attachments or support from the living. Additionally, much of the research has found that active involvement in one's religious community (e.g., regular church attendance) also can serve as a strong source of social support overall and particularly during bereavement (Chapple et al., 2011; McIntosh, Silver, & Wortman, 1993). Such different mechanisms of social support need to be accounted for in future similar studies.

As noted throughout this study, the CBS-R (Field & Filanosky, 2010) was used to measure CB, but only the ICB subscale was used for the initial analyses. This was due to the lower reliability scores often found with the ECB subscale in previous studies (Gassin & Lengel, 2014; Ho et al., 2013). This study again found a lower reliability score for the ECB subscale with this sample of university students ($\alpha = .74$), which was comparable to Field and Filanosky (2010). Still, much of the research to date has theorized that specifically ECB (e.g., seeing or hearing the dead) may represent an individual's belief in

the continued existence of the soul after death rather simply be a coping strategy individuals develop in their grief to cope with the disbelief that their loved one has died (Field et al., 2013; Mangione et al., 2016). For the post hoc analyses using the ECB, this study did find that attachment avoidance and strength of afterlife beliefs each moderated the relationship between ECB and CGS. Specifically, as afterlife beliefs or attachment avoidance increased, ECB became less predictive of CGS. These results should be studied further, given the post hoc nature of the current studies results and the possibility of bias (Delgado-Rodriguez & Llorca, 2004). Additionally, more research could expand these findings to be more generalizable. For example, this study only sampled from U.S. university students. Future studies could examine if this pattern holds true for community samples, who may look different than university students in terms of grief and afterlife beliefs. Further research could also examine if specific types of afterlife beliefs (e.g., regarding heaven, hell, resurrection) might impact the relationship between ECB and CGS in unique ways. Additionally, it may be time to reexamine the psychometric properties of the ECB subscale of the CBS-R in an effort to increase its reliability, as thus far it is the only well-known measure of this construct. A more reliable scale could allow for an expansion in the literature examining the unique impact of ECB on CGS, as well as the unique relationships between ECB and both attachment avoidance and afterlife beliefs. More research analyzing the relationship between ECB and afterlife beliefs may also uncover better mechanisms for differentiating between CB that are belief-based and CB that is based more around coping with grief. This would perhaps better differentiate between those CB that are common and comforting and those that appear to predict CGS, allowing mental health professionals to differentiate in the room with clients which CB

may be helpful and comforting and which may be maladaptive or lead to increase distressed. Given how common CB are and the general belief that they are comforting (Asai et al., 2010; Chan et al., 2005; Doran & Hansen, 2006), it is important for counseling psychologists to know which CB may be encouraged or used in the room with clients, and which may need to be addressed as a negative symptom of grief.

This study primarily examined for relationships between CB and CGS. However, previous studies have also shown how posttraumatic growth (PTG) may be related to these constructs, particularly anxious attachment and ICB (e.g., Yu et al., 2016). Further research also may want to examine if and how afterlife beliefs may impact PTG directly, or the relationship between CB and PTG. This may help researchers to further understand the relationships between afterlife beliefs and CB in how individuals cope with loss, and if, for example, stronger afterlife beliefs may increase the relationship between CB and PTG. Counseling psychologists would then want to encourage these CB if they resulted in more positive outcomes for individuals with stronger afterlife beliefs.

Additionally, following this study, it is still unclear whether Yu et al. (2016) or Currier et al. (2015) had the most accurate model to explain how CB and attachment style impact CGS. This study did not fully support the findings of Currier et al. (2015), who found that anxious attachment and avoidant attachment each individually moderated the relationship between CB and CG. For their U.S. sample, an increase in attachment anxiety led CB being less predictive of CGS, while an increase in attachment avoidance led to an increase in CB predicting CGS. This study found no moderation effect for anxious attachment on ICB or ECB and CGS. Additionally, it found a contradictory relationship for attachment avoidance (with higher avoidance, rather than lower

avoidance, leading to ICB being less predictive of CGS). While this study was not a complete replication of Currier et al. (2015), it does suggest that their model may need to be adjusted, particularly in split up CB into its two constructs (internalized and externalized). Yu et al. (2016), on the other hand, theorized a mediation model. Their study found that the impact of attachment avoidance on CG was fully mediated by ECB, while the impact of attachment anxiety on CG was only partially mediated by ECB. They also found that ICB mediated the impact of attachment anxiety on PTG. More research should be done to continue to examine these two models and determine which best explains the relationship between attachment, CB, and CGS. A more concrete understanding of the impact of these constructs on grief would allow counseling psychologists and other mental health professionals working with bereaved clients best approach and assess their clients and what aspects of their grief may be best to treat.

Limitations

A major limitation in this study—and any study examining CG to date—was the current lack of consensus for the field to universally define a set of criteria for the syndrome of complicated grief (CG). Numerous researchers have created CG measures and sets of diagnostic criteria (Horowitz et al., 1997; Prigerson et al., 1995; Prigerson et al., 2009; Shear et al., 2011). Additionally, the American Psychiatric Association (2013) offered up their own set of proposed criteria for Persistent Complex Bereavement Disorder when they published the 5th edition of the *Diagnostic and statistical manual of mental disorders* (DSM 5) to much criticism (Bandini, 2015; Boelen & Prigerson, 2012; Theileman & Cacciatore, 2014). These disagreements across the literature on the exact definition of CG have made it difficult for researchers to define and measure CG as a

construct. This study chose to operationalize CG based on one set of criteria (Prigerson & Jacobs, 2001), which has been heavily researched and widely accepted (Theileman & Cacciatore, 2014). Arguably, the lack of consensus here at present made it difficult for this researcher to choose a definition of CG and be consistent with other studies, as the definition remains in flux. More research must be done in the field to reach a consensus on the symptom criteria and measurement of CG. If the accepted definition or symptom criteria of CG change, particularly as the DSM 5 definition becomes more researched, it is possible the findings of this study will need to be reassessed using the new definition of CG.

Another limitation of this study was the measurement of afterlife beliefs. It became apparent during the course of this study was that operationalizing afterlife beliefs in a binomial manner (i.e., yes/no) did not appear to be appropriate for this sample. While it was presumed that using a continuous measure of afterlife beliefs likely would produce skewed results if individuals who did not believe in an afterlife were kept in the analysis, normality of the data actually improved in this circumstance. Thus, applying a more complex operationalization of afterlife beliefs may be most effective. This also seemed apparent here given the large number of individuals who answered, “I don’t know” and even “no” to this categorical afterlife belief item, but then who provided a wide range of scores on the BAS. Future researchers may wish to measure afterlife beliefs using continuous measures such as the BAS (Osarchuk & Tatz, 1973), in order to best assess the full range of afterlife beliefs from very strong to none and how this range impacts grief, CB, attachment, and other factors.

Another limitation of this study was that it recruited entirely from the Rocky Mountain region of the United States and thus had a higher proportion of Christian and Caucasian individuals compared to other religions (e.g., Judaism, Islam) and ethnicities (e.g., Asian American). Thus, these findings may not be fully generalizable to more diverse populations. As the U.S. becomes more diverse (Colby & Ortman, 2015), so will the clients who counseling psychologists serve. Research must push to better understand how findings on predominately white and Christian samples compare to those from other ethnic or religious groups. More research that specifically elicits responses from individuals of a wide array of various religions and ethnic identities would be important for expanding the knowledge around afterlife beliefs and their impact on CGS and CB. Although afterlife beliefs are not always directly related to religion (Draper et al., 2013), they are influenced by religious context and can vary subsequently between different religious groups (Benore & Park, 2004). Additionally, religious beliefs and practices can differ greatly between racial and ethnic groups (Pew Research Center, 2014). How afterlife beliefs aid in the creation of or expression of CB may look vastly different for a Caucasian Catholic individual in the U.S., a Latinx Catholic individual in Guatemala, and a Asian Muslim in India. How counseling psychologists may want to address afterlife beliefs and CB with their clients will likely differ between different groups—for example encouraging individuals to visit their loved one’s grave stone may be an adaptive coping strategy for some, but out of the cultural norms for another client. Only through understanding these differences and similarities are mental health professionals best able to serve their clients. Future researchers should focus on recruiting participants from other areas of the U.S., or different countries altogether, to gain a broader sample.

The recruiting of college-aged participants in particular also may have presented some other unique limitations for this study. Specifically, the majority of participants arguably were in a major developmental period of their lives, one in which one's religious beliefs and practices oftentimes may be in flux (Hartley, 2004). It may be that recruiting participants from this specific developmental period may have influenced how individuals answered items regarding their religious and afterlife beliefs. Additionally, due to sampling from this age range, nearly half of the participants' deceased loved ones were their grandparents or great-grandparents. This means that at least half of the participants specifically referred to having lost a second or third degree relative—many due to natural causes. While this study asked participants to indicate the categorical relationship with their deceased loved one (e.g., parent, grandparent), it did not assess for the qualitative nature of the relationship or how close one felt to the deceased. Closeness to the deceased (Holland & Neimeyer, 2011), relationship quality (Mancini et al., 2009), and cause of death (Currier et al., 2015) have all been shown to impact CGS. As such, future studies may want to control for one or all of these factors when assessing how afterlife beliefs or attachment moderate the impact of CB on CGS, particularly if assessed among a broader community sample.

As this was not a random sample, those who volunteered to complete the survey were not necessarily representative of the population at large. As Stroebe et al. (2003) pointed out, self-selection is a salient issue in grief research, as those who are struggling to cope or those who are coping through avoidance may not be willing or able to respond. This sample consisted of university students from one region of the U.S., and as such, the results are only somewhat generalizable to this group of individuals. Additionally, while

this researcher originally sought to recruit from three universities, professors and administration from one of these universities did not respond to multiple requests for participants. The second university did officially approve this researcher's recruitment request, but the third university disproportionately contributed to the sample in this study. Access to a more national—or international—sample through online recruitment may aid in reaching more diverse and general populations. Other possible recruitment strategies that could help in the future is contacting universities or community organizations across the country in order to gain a broader sample.

Another limitation in the study may have been the disproportionate response rate of believers versus non-believers represented within the sample. Previous research has estimated that approximately 72% of the general public believes in heaven (21% do not), whereas 58% believe in hell and 34% do not (Pew Research Center, 2014). In the current sample, 66.9% expressed having a belief in an afterlife and a further 26.9% were unsure of their beliefs, leaving just 6.3% of participants who indicated having no afterlife beliefs. These disproportionate numbers may have negatively impacted the power of the MANOVA to detect differences between believers and non-believers. This was after this researcher specifically attempted to recruit from majors (e.g., Chemistry, Biology, Psychology) known to have higher proportions of non-religious individuals (Kimball et al., 2009). This unexpected number of participants who acknowledged having an afterlife belief may have been due to the survey item asking about a general belief in an afterlife, rather than a more specific belief in “heaven” and “hell.” Future researchers again may want to focus on recruiting from regions or organizations where a higher proportion of

non-believers are believed to be, such as in New England (Norman, 2018) or in other more urban areas in the U.S. (Lyons, 2003).

Furthermore, given the high response rate of individuals who indicated having afterlife beliefs or who were unsure about their afterlife beliefs in comparison to those who claimed having no afterlife beliefs, it is also possible that the title of the survey itself biased participant responses. Although it was made clear that the study hoped to recruit individuals both with and without afterlife beliefs, it is possible that only those who somehow related to the title of the survey in the email actually participated. Additionally, the first item in the survey was regarding afterlife beliefs, which may have increased the potential for drop out for those who would have indicated having no afterlife beliefs. It may be more effective for future researchers to engage in more in-person recruitment exercises for similar studies in order to increase the likelihood for those who do not believe in an afterlife to still respond to the research items. Additionally, it may be better to start the survey with items not related directly to afterlife beliefs.

Lastly, the measures in this study were self-report. While this is a common and effective way to gather information from a large sample of individuals (Stroebe et al., 2003), there are inherent limitations to these types of measures. Individuals must be trusted to answer the items truthfully and thoughtfully, having understood each item (Remler & Van Ryzin, 2011). This was also a non-experimental and cross-sectional design and thus this researcher was not able to determine exact direction of relationships between the variables given this methodology (Pedhazur, 1997). For example, the study was not able to determine if the use of CB expressions predicts CGS severity or rather if CGS severity predicts the use of CB expressions.

Conclusion

Virtually everyone will experience the loss of a loved one at one point in their lives. While CG is definitely not inevitable, it is estimated that between one to 15% of bereaved individuals may end up suffering from it (Bonanno, 2004; Forstmeier & Maercker, 2007), potentially leading to an increased risk for suicidal ideation (Latham & Prigerson, 2004), social and occupational impairment (Monk et al., 2006), physical health problems (Prigerson et al., 1997), and other mental health concerns (Melhem et al., 2001).

For those in bereavement, holding CB appears to be relatively common and comforting (Asai et al., 2010; Jahn & Spencer-Thomas, 2014), yet despite this, CB has been directly connected to CGS through numerous quantitative studies (Cowchock et al., 2010; Field & Filanosky, 2010). Researchers have tried to explain this discrepancy through the exploration of one's attachment style (Currier et al., 2015; Yu et al., 2016), differentiating between the different types of CB (Field & Filanosky, 2010; Gassin & Lengel, 2014), and theorizing how afterlife beliefs also may play a role in the use of expression of CB (Benore & Park, 2004). This was the first study of its kind to attempt to integrate these various factors into a single study by examining the moderating impact of attachment style and afterlife beliefs on the relationship between ICB and CGS, as well as on the relationship between ECB and CGS post hoc.

This study did appear to suggest that afterlife beliefs do in fact seem to play a role in how both ICB and ECB may impact CGS. Specifically, it appears that for individuals with strong afterlife beliefs, CB may not be as maladaptive than for those with weaker afterlife beliefs. Additionally, while this study did not fully support Currier et al. (2015)

with their moderation model of attachment and CB, the results of this study did suggest that the different attachment styles may interact with ECB and ICB in unique ways. This study opens the door for further research examining these factors. Future research can also examine if ICB and ECB play unique roles in the relationship between afterlife beliefs and PTG.

This study provides numerous clinical implications for counseling psychologists who work with bereaved individuals. Furthering the American Psychological Association's push for multicultural counseling competency (American Psychological Association, 2018), this study provides some preliminary suggestions for how afterlife beliefs can be approached and integrated into treatment for grief and CG. Additionally, this study furthers prior research in pushing for a better assessment of attachment style when working with the bereaved to better ensure that grief treatment be more tailored to individual needs (Currier et al., 2015; Ho et al., 2013; Schenck et al., 2016). It is hoped that the results from this study will continue to be expanded upon to further psychology's understanding of the roles of both attachment and spiritual beliefs in grief so that counseling psychologists can be all the more prepared to work with individuals suffering from CG and other related disorders.

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications.
- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore, MD: Johns Hopkins University Press.
- Ainsworth, M. D. S. (1969). Objective relations, dependency, and attachment: A theoretical review of infant-mother relationship. *Child Development, 40*, 969-1025.
- Ainsworth, M. D. S., Bell, S. M. V., & Stanton, D. J. (1971). Individual differences in Strange Situation behaviour in one-year-olds. In H. R. Schaffer (Ed.), *The Origins of human social relations* (pp. 17-52). New York, NY: Academic Press.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- American Psychiatric Association. (1994). *Diagnostic statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association.
- American Psychological Association (2018). APA adopts new multicultural guidelines. *Monitor on Psychology, 49*, 47.

- Anderson, D. A., & Worthen, D. (1997). Exploring a fourth dimension: Spirituality as a resource for the couple therapist. *Journal of Marital and Family Therapy*, 23, 3-12. doi: 10.1111/j.1752-0606.1997.tb00227.x
- Anderson, W. G., Arnold, R. M., Angus, D. C., & Bryce, C. L. (2008). Posttraumatic stress and complicated grief in family members of patients in the intensive care unit. *Journal of General Internal Medicine*, 23, 1871-1876. doi: 10.1007/s11606-008-0770-2
- Anglin, S. M. (2014). I think, therefore I am? Examine conceptions of the self, soul, and mind. *Consciousness and Cognition*, 29, 105-116.
<http://dx.doi.org/10.1016/j.concog.2014.08.014>
- Archer, J. (1999). *The nature of grief: The evolution and psychology of reactions to loss*. New York, NY: Routledge.
- Ary, D., Jacobs, L. C., Sorensen, C., & Walker, D. A. (2014). *Introduction to research in education* (9th ed.). Belmont, CA: Wadsworth.
- Asai, M., Fujimori, M., Akizuki, N., Inagaki, M., Matsui, Y., & Uchitomi, Y. (2010). Psychological states and coping strategies after bereavement among the spouses of cancer patients: A qualitative study. *Psycho-Oncology*, 19, 38-45. doi: 10.1002/pon.1444
- Balk, D. E., Walker, A. C., & Baker, A. (2010). Prevalence and severity of college student bereavement examined in a randomly selected sample. *Death Studies*, 34, 459-468. doi: 10.1080/07481180903251810
- Bandini, J. (2015). The medicalization of bereavement: (Ab)normal grief in the DSM-5. *Death Studies*, 39, 347-352. doi: 10.1080/07481187.2014.951498

- Barry, L. C., Kasl, S. V., & Prigerson, H. G. (2002). Psychiatric disorders among bereaved persons: The role of perceived circumstances of death and preparedness for death. *American Journal of Geriatric Psychiatry, 10*, 447-457. doi: 10.1176/appi.ajgp.10.4.447
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226-244. doi: 10.1037//0022-3514.61.2.226
- Beischel, J., Mosher, C., & Boccuzzi, M. (2014-15). The possible effects on bereavement of assisted after-death communication during readings with psychic mediums: A continuing bonds perspective. *Omega: Journal of Death and Dying, 70*, 169-194. doi: <http://dx.doi.org/10.2190/OM.70.2.b>
- Bell, J., Bailey, L., & Kennedy, D. (2015). 'We do it to keep him alive': Bereaved individuals' experiences of online suicide memorials and continuing bonds. *Mortality, 20*, 375-389. <http://dx.doi.org/10.1080/13576275.2015.1083693>
- Bennet, K. M., Gibbons, K., & Mackenzie-Smith, S. (2010). Loss and restoration in later life: An examination of Dual Process Model of coping with bereavement. *Omega: Journal of Death and Dying, 61*, 315-332. doi: 10.2190/OM.61.4.d
- Benore, E. R., & Park, C. L. (2004). Death-specific religious beliefs and bereavement: Belief in an afterlife and continued attachment. *The International Journal for the Psychology of Religion, 14*, 1-22. doi: 10.1207/s15327582ijpr1401_1
- Bering, J. M. (2002). Agents' minds: The natural foundations of afterlife beliefs as phenomenological boundary. *Journal of Cognition and Culture, 2*, 263-308.

- Beverung, L. M., & Jacobvitz, D. (2016). Women's retrospective experience of bereavement: Predicting unresolved attachment. *Omega: Journal of Death and Dying, 73*, 126-140. doi: 10.1177/0030222815575897
- Boelen, P. A., & Klugkist, I. (2011). Cognitive behavioral variables mediate the associations of neuroticism and attachment insecurity with Prolonged Grief Disorder severity. *Anxiety, Stress, & Coping, 24*, 291-307.
<http://dx.doi.org/10.1080/10615806.2010.527335>
- Boelen, P. A., & Prigerson, H. G. (2012). Commentary on the inclusion of persistent complex bereavement-related disorder in DSM-5. *Death Studies, 36*, 771-794.
doi: 10.1080/07481187.2012.706982
- Boelen, P. A., Stroebe, M. S., Schut, H. A., & Zijerveld, A. M. (2006). Continuing bonds and grief: A prospective analysis. *Death Studies, 30*, 767-776.
<http://dx.doi.org/10.1080/07481180600852936>
- Boelen, P. A., & van den Bout, J. (2005). Complicated grief, depression, and anxiety as distinct post loss syndromes: A confirmatory factor analysis study. *American Journal of Psychiatry, 162*, 2175-2177. doi: 10.1176/appi.ajp.162.11.2175
- Boelen, P. A., & van den Bout, J. (2008). Complicated grief and uncomplicated grief are distinguishable constructs. *Psychiatry Research, 157*, 311-314. doi: 10.1016/j.psychres.2007.05.013
- Boelen, P. A., & van den Bout, J. (2010). Anxious and depressive avoidance and symptoms of prolonged grief, depression, and post-traumatic stress disorder. *Psychologica Belgica, 50*, 49-67. <http://dx.doi.org/10.5334/pb-50-1-2-49>

- Boelen, P. A., van den Bout, J., De Keijser, J., & Hoijtink, H. (2003). Reliability and validity of the Dutch version of the Inventory of Traumatic Grief. *Death Studies, 27*, 227-247. doi: 10.1080/07481180302889
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59*, 20-28. doi: 10.1037/0003-066X.59.1.20
- Bonanno, G. A., Neria, Y., Mancini, A., Coffman, K. G., Litz, B., & Insel, B. (2007). Is there more to complicated grief than depression and posttraumatic stress disorder? A test of incremental validity. *Journal of Abnormal Psychology, 116*, 342-351. doi: 10.1037/0021-843x.116.2.342
- Boulware, D. L., & Bui, N. H. (2016). Bereaved African Americans adults: The role of social support, religious coping, and continuing bonds. *Journal of Loss and Trauma, 21*, 192-202. <http://dx.doi.org/10.1080/15325024.2015.1057455>
- Bowlby, J. (1969). *Attachment and loss: Vol. I. Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1977). The making and breaking of affectional bonds. II. Some principles of psychotherapy. The fiftieth Maudsley Lecture. *The British Journal of Psychiatry, 130*, 421-431. doi: 10.1192/bjp.130.5.421
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Bowlby, J. (1980). *Attachment and loss. Vol. III. Loss, sadness, and depression*. New York, NY: Basic Books.

- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measure of adult attachment: An integrative overview. From J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York, NY: Guilford Press.
- Brennan, K. A., Shaver, P. R., & Clark, C. A. (2000). Specifying some mediators of attachment-related anxiety and avoidance. *Unpublished manuscript, State University of New York, Brockport.*
- Brown, S. L., Nesse, R. M., House, J. S., & Utz, R. L. (2004). Religion and emotional compensation: Results from a prospective study of widowhood. *Personality and Social Psychology Bulletin, 30*, 1165-1174. doi: 10.1177/0146167204263752
- Burris, C. T., & Bailey, K. (2009). What lies beyond: Theory and measurement of aftermath beliefs. *The International Journal for the Psychology of Religion, 19*, 173-186. <http://dx.doi.org/10.1080/10508610902879982>
- Cacciatore, J., & Flint, M. (2012). Mediating grief: Postmortem ritualization after child death. *Journal of Loss and Trauma, 17*, 158-172. doi: 10.1080/15325024.2011.595299
- Carnelley, K. B., Wortman, C. B., Bolger, N., & Burke, C. T. (2006). The time course of grief reactions to spousal loss: Evidence from a national probability sample. *Journal of Personality and Social Psychology, 91*, 476-492. doi: 10.1037/0022-3514.91.3.476
- Carr, D., & Sharp, S. (2013). Do afterlife beliefs affect psychological adjustment to late-life spousal loss? *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 69*, 103-112, doi: 10.1093/geronb/gbt063

- Casebolt, J. (1992). The effect of terror management and the threatening or bolstering of after beliefs on attributional derogation of AIDS victims. In P. Hill & R. Wood (Eds.), *Measures of Religiosity* (pp. 430-434). Birmingham, AL: Religious Education Press.
- Chan, C. L. W., Chow, A. Y. M., Ho, S. M. Y., Tsui, Y. K. Y., Tin, A. F., Koo, B. W. K., & Koo, E. W. K. (2005). The experience of Chinese bereaved persons: A preliminary study of meaning making and continuing bonds. *Death Studies, 29*, 923-947. <http://dx.doi.org/10.1080/07481180500299287>
- Chapple, A., Swift, C., & Ziebland, S. (2011). The role of spirituality and religion for those bereaved due to a traumatic death. *Mortality, 16*, 1-19. doi: 10.1080/13576275.2011.535998
- Charles, D. R., & Charles, M. (2006). Sibling loss and attachment style. *Psychoanalytic Psychology, 23*, 72-90. doi: 10.1037/0736-9735.23.1.72
- Chen, J. H., Bierhals, A. J., Prigerson, H. G., Kasl, S. V., Mazure, C. M., & Jacobs, S. (1999). Gender differences in the effects of bereavement-related psychological distress in health outcomes. *Psychological Medicine, 29*, 367-380. doi: 10.1017/s0033291798008137
- Chiu, Y. W., Huang, C. T., Yin, S. M., Huang, Y. C., Chien, C. H., & Chuang, H. Y. (2010). Determinants of complicated grief in caregivers who cared for terminal cancer patients. *Support Care Cancer, 18*, 1321-1327. doi: 10.1007/s00520-009-0756-6

- Cohen, A. B., Pierce, J. D., Chambers, J., Meade, R., Corvine, B. J., & Koenig, H. G. (2005). Intrinsic and extrinsic religiosity, belief in the afterlife, death anxiety, and life satisfaction in young Catholics and Protestants. *Journal of Research in Personality, 39*, 307-324. doi: 10.1016/j.jrp.2004.02.005
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, J. (1992). A power primer. *Quantitative Methods in Psychology, 112*, 155-159.
- Cohen, O., & Katz, M. (2015). Grief and growth of bereaved siblings as related to attachment style and flexibility. *Death Studies, 39*, 158-164. doi: 10.1037/0736-9735.23.1.72
- Colby, S. L., & Ortman, J. M. (2015). Projections of the size and composition of the U.S. population: 2014 to 2060. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>
- Corr, C. A. (2015) Let's stop "staging" persons who are coping with loss. *Illness, Crisis & Loss, 23*, 226-241. doi: 10.1177/1054137315585423
- Costello, J., & Kendrick, K. (2000). Grief and older people: The making or breaking of emotional bonds following partner loss in later life. *Journal of Advanced Nursing, 32*, 1374-1382. doi: 10.1046/j.1365-2648.2000.01625.x
- Cowchock, F. S., Lasker, J. N., Toedter, L. J., Skumanich, S. A., & Koenig, H. G. (2010). Religious beliefs affect grieving after pregnancy loss. *Journal of Religion and Health, 39*, 485-497. doi: 10.1007/s10943-009-9277-3

- Cozza, S. J., Fisher, J. E., Mauro, C., Zhou, J., Ortiz, C. D., Skritskaya, N., ... Shear, M. K. (2016). Performance of DSM-5 persistent complex bereavement disorder criteria in a community sample of bereaved military family members. *The American Journal of Psychiatry*. Advanced online publication.
<http://dx.doi.org/10.1176/appi.ajp.2016.15111442>
- Crook-Lyon, R. E., O'Grady, K. A., Smith, T. B., Jensen, D. R., Golightly, T., & Potkar, K. A. (2012). Addressing religious and spiritual diversity in graduate training and multicultural education for professional psychologists. *Psychology of Religion and Spirituality*, 4, 169–181. <http://dx.doi.org/10.1037/a0026403>
- Currier, J. M., Irish, J. E. F., Neimeyer, R. A., & Foster, J. D. (2015). Attachment, continuing bonds, and complicated grief following violent loss: Testing a moderated model. *Death Studies*, 39, 201-210.
<http://dx.doi.org/10.1080/07481187.2014.975869>
- Currier, J. M., Mallos, J., Martinez, T. E., Sandy, C., & Neimeyer, R. A. (2013). Bereavement, religion, and post traumatic growth: A matched control group investigation. *Psychology of Religion and Spirituality*, 5, 69-77. doi: 10.1037/a0027708
- Degroot, J. M. (2012). Maintaining relational continuity with the deceased on Facebook. *Omega: Journal of Death and Dying*, 65, 195-212. doi: <http://dx.doi.org/10.2190/OM.65.3.c>

- Delespaux, E., Ryckebosch-Dayez, A.-S., Heeren, A., & Zech, E. (2013). Attachment and severity of grief: The mediating role of negative appraisal and inflexible coping. *Omega: Journal of Death and Dying, 67*, 269-289.
<http://dx.doi.org/10.2190/OM.67.3.b>
- Delgado-Rodriguez, M., & Llorca, J. (2004). Bias. *Journal of Epidemiology & Community Health, 58*, 635-641. doi: 10.1136/jech.2003.008466
- Dillen, L., Fontaine, J. R. J., & Verhofstadt-Denève, L. (2009). Confirming the distinctiveness of complicated grief from depression and anxiety among adolescents. *Death Studies, 33*, 437-461.
<http://dx.doi.org/10.1080/07481180902805673>
- Doran, G., & Hansen, N. D. (2006). Constructions of Mexican American family grief after the death of a child: An exploratory study. *Cultural Diversity and Ethnic Minority Psychology, 12*, 199-211. doi: 10.1037/1099-9809.12.2.199
- Dossey, L. (2014). Should clinicians honor immortality? Reflections on the continuity of consciousness. *Spirituality in Clinical Practice, 1*, 184-188.
<http://dx.doi.org/10.1037/scp0000026>
- Draper, P., Holloway, M., & Adamson, S. (2013). A qualitative study of recently bereaved people's beliefs about death: Implications for bereavement care. *Journal of Clinical Nursing, 23*, 1300-1308. doi: 10.1111/jocn.12326
- Ellis, A. (1986). *The case against religion: A psychotherapist's view and the case against religiosity*. Austin, TX: American Atheist Press.

- Epstein, R., Kalus, C., & Berger, M. (2006). The continuing bond of the bereaved towards the deceased and adjustment to loss. *Mortality, 11*, 253-269.
<http://dx.doi.org/10.1080/13576270600774935>
- Faschingbauer, T. R. (1981). *Texas Revised Inventory of Grief*. Houston, TX: Honeycomb Publishing.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.
- Field, A. P. (2013). *Discovering statistics using IBM SPSS Statistics* (4th edition). London: Sage Publications.
- Field, N. P. (2006). Unresolved grief and continuing bonds: An attachment perspective. *Death Studies, 30*, 739-756. doi: 10.1080/07481180600850518
- Field, N. P. (2008). Whether to relinquish or maintain a bond with the deceased. In M S. Stroebe, R. O. Hansson, H. Schut, & W. Stroebe (Eds.), *Handbook of bereavement research and practice: Advances in theory and intervention* (pp. 113-132). Washington, DC: American Psychological Association.
- Field, N. P., & Filanosky, C. (2010). Continuing bonds, risk factors for complicated grief, and adjustment to bereavement. *Death Studies, 34*, 1-29.
<http://dx.doi.org/10.1080/07481180903372269>
- Field, N. P., & Friedrichs, M. (2004). Continuing bonds in coping with the death of a husband. *Death Studies, 28*, 597-620.
<http://dx.doi.org/10.1080/07481180490476425>

- Field, N. P., Gal-Oz, E., & Bonanno, G. A. (2003). Continuing bonds and adjustment at five years after death of a spouse. *Journal of Consulting and Clinical Psychology, 71*, 110-117. doi: 10.1037/0022-006X.71.1.110
- Field, N. P., Gao, B., & Paderna, L. (2005). Continuing bonds in bereavement: An attachment theory based perspective. *Death Studies, 29*, 277-299. doi: 10.1080/07481180590923689
- Field, N. P., Nichols, C., Holen, A., & Horowitz, M. J. (1999). The relation of continuing attachment to adjustment in conjugal bereavement. *Journal of Consulting and Clinical Psychology, 67*, 212-218. doi: 10.1037//0022-006x.67.2.212
- Field, N. P., Orsini, L., Gavish, R., & Packman, W. (2009). Role of attachment in response to pet loss. *Death Studies, 33*, 334-355.
<http://dx.doi.org/10.1080/07481180802705783>
- Field, N. P., Packman, W., Ronen, R., Pries, A., Davies, B., & Kramer, R. (2013). Type of continuing bonds expression and its comforting versus distressing nature: Implications for adjustment among bereaved mothers. *Death Studies, 37*, 889-912. doi: 10.1080/07481187.2012.692458
- Field, N. P., & Sundin, E. C. (2001). Attachment style in adjustment to conjugal bereavement. *Journal of Social and Personal Relationships, 18*, 347-361. doi: 10.1177/0265407501183003
- Field, N. P., Tzadikario, E., Pel, D., & Ret, T. (2014). Attachment and mother-child communication in adjustment to the death of a father among Cambodian adolescents. *Journal of Loss and Trauma, 19*, 314-330.
<http://dx.doi.org/10.1080/15325024.2013.780411>

- Forstmeier, S., & Maercker, A. (2007). Comparison of two diagnostic systems for Complicated Grief. *Journal of Affective Disorders, 99*, 203-211. doi: 10.1016/j.jad.2006.09.013
- Foster, T. L., Gilmer, M. J., Davies, B., Dietrich, M. S., Barrera, M., Fairclough, D. L., ... Gerhardt, C. A. (2011). Comparison of continuing bonds reported by parents and siblings after a child's death from cancer. *Death Studies, 35*, 420-440. <http://dx.doi.org/10.1080/07481187.2011.553308>
- Fraley, R. C., & Bonanno, G. A. (2004). Attachment and loss: A test of three competing models on the association between attachment-related avoidance and adaptation to bereavement. *Personality and Social Psychology Bulletin, 30*, 878-890. doi: 10.1177/0146167204264289
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment, 23*, 615-625. doi: 10.1037/a0022898
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*, 350-365. doi: 10.1037//0022-3514.78.2.350
- Freud, S. (1975). *The future of an illusion*. (J. Strachey, Trans.). New York, NY: W. W. Norton & Company. (Original work published in 1927).
- Freud, S. (2005). On mourning and melancholia. In A. Phillips (Ed.), *On murder, mourning and melancholia*. (S. Whiteside, Trans.). London: Penguin. (Original work published in 1917).

- Fujisawa, D., Miyashita, M., Nakajima, S., Ito, M., Kato, M., & Kim, Y. (2010). Prevalence and determinants of complicated grief in general population. *Journal of Affective Disorders, 127*, 352-358. doi: 10.1016/j.jad.2010.06.008
- Ganzevoort, R. R., & Falkenburg, N. (2012). Stories beyond life and death: Spiritual experiences of continuity and discontinuity among parents who lose a child. *Journal of Empirical Theology, 25*, 189-204. doi: 0.1163/15709256-12341249
- Gassin, E. A., & Lengel, G. J. (2014). Let me hear of your mercy in the mourning: Forgiveness, grief, and continuing bonds. *Death Studies, 38*, 465-475. <http://dx.doi.org/10.1080/07481187.2013.792661>
- George, C., Kaplan, N., & Main, M. (1985). *The adult attachment interview*. Unpublished manuscript, Berkeley: University of California.
- Gillies, J. M., Neimeyer, R. A., & Milman, E. (2015). The Grief and Meaning Reconstruction Inventory (GMRI): Initial validation of a new measure. *Death Studies, 39*, 61-74. <http://dx.doi.org/10.1080/07481187.2014.907089>
- Gillis, C. L., Moore, I. M., & Martinson, I. M. (1997). Measuring parental grief after childhood cancer: potential use of the SCL-90R. *Death Studies, 21*, 277-287.
- Glick, I. O., Weiss, R. S., & Parkes, C. M. (1974). *The first year of bereavement*. New York, NY: John Wiley, Interscience.
- Goldsmith, B., Morrison, R. S., Vanderwerker, L. C., & Prigerson, H. G. (2008). Elevated rates of prolonged grief disorder in African Americans. *Death Studies, 32*, 352-365. doi: 10.1080/07481180801929012
- Granek, L. (2010). Grief as pathology: The evolution of grief theory in psychology from Freud to the present. *History of Psychology, 13*, 46-73. doi: 10.1037/a0016991

- Granqvist, P. (2014). Mental health and religion from an attachment viewpoint: Overview with implications for future research. *Mental Health, Religion, & Culture, 17*, 777-793. <http://dx.doi.org/10.1080/13674676.2014.908513>
- Griffith, J. L., & Griffith, M. E. (2002). *Encountering the sacred in psychotherapy: How to talk with people about their spiritual lives*. New York: Guilford.
- Gross, N., & Simmons, S. (2009). The religiosity of American college and university professors. *Sociology of Religion, 70*, 101-129. <https://doi.org/10.1093/socrel/srp026>
- Gross, R. (2016). *Understandings grief: An introduction*. New York, NY: Routledge.
- Hall, C. (2014). Bereavement theory: Recent developments in our understandings of grief and bereavement. *Bereavement Care, 33*, 7-12. <http://dx.doi.org/10.1080/02682621.2014.902610>
- Hardison, H. G., Neimeyer, R. A., & Lichstein, K. L. (2005). Insomnia and complicated grief symptoms in bereaved college students. *Behavioral Sleep Medicine, 3*, 99-111. doi: 10.1207/s15402010bsm0302_4
- Harley, B., & Firebaugh, G. (1993). Americans' belief in an afterlife: Trends over the past two decades. *Journal for the Scientific Study of Religion, 32*, 269-278. doi: 10.2307/1386665
- Harper, M., O'Connor, R., Dickson, A., & O'Carroll, R. (2011). Mothers continuing bonds and ambivalence to personal mortality after the death of their child: An interpretative phenomenological analysis. *Psychology, Health & Medicine, 16*, 203-214. doi: 10.1080/13548506.2010.532558

- Hartley, H. V. (2004). How college affects students' religious faith and practice: A review of research. *College of Student Affairs Journal, 23*, 111-129.
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5*, 1-22. doi: 10.1207/s15327965pli0501_1
- Higgins, M. P. (2002). Parental bereavement and religious factors. *Omega: Journal of Death and Dying, 45*, 187-207. doi: 10.2190/raut-e0rx-tle5-au8y
- Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality. *Psychology of Religion and Spirituality, S*, 3-17. <http://dx.doi.org/10.1037/1941-1022.S.1.3>
- Ho, S., & Brotherson, S. E. (2007). Cultural influences on parental bereavement in Chinese families. *Omega: Journal of Death and Dying, 55*, 1-25. doi: 10.2190/4293-2021-5475-2161
- Ho, S. M. Y., Chan, I. S. F., Ma, E. P. W., & Field, N. P. (2013). Continuing bonds, attachment style, and adjustment in the conjugal bereavement among Hong Kong Chinese. *Death Studies, 37*, 248-268. doi: 10.1080/07481187.2011.634086
- Hogan, N. S., Greenfield, D. B., & Schmidt, L. A. (2001). Development and validation of the Hogan Grief Reaction Checklist. *Death Studies, 25*, 1-32. <http://dx.doi.org/10.1080/07481180125831>
- Hogan, N. S., Worden, J. W., & Schmidt, L. A. (2003-04). An empirical study of the proposed complicated grief disorder criteria. *Omega: Journal of Death and Dying, 48*, 263-277. doi: 10.2190/gx7h-h05n-a4dn-rlu9

- Holland, J. M., & Neimeyer, R. A. (2011). Separation and traumatic distress in prolonged grief: The role of cause of death and relationship to the deceased. *Journal of Psychopathological Behavior Assessment*, *33*, 254-263. doi: 10.1007/s10862-010-9214-5
- Holland, J. M., Neimeyer, R. A., Boelen, P. A., & Prigerson, H. G. (2009). The underlying structure of grief: A taxometric investigation of prolonged and normal reactions to loss. *Journal of Psychopathology and Behavioral Assessment*, *31*, 190-201. doi: 10.1007/s10862-008-9113-1
- Horowitz, M. J., Siegel, B., Holen, A., Bonanno, G. A., Milbrath, C., & Stinson, C. H. (1997). Diagnostic criteria for complicated grief disorder. *American Journal of Psychiatry*, *154*, 904-910. doi: 10.1176/foc.1.3.290
- Hussein, H., & Oyeboode, J. R. (2009). Influences of religion and culture on continuing bonds in a sample of British Muslims of Pakistani origin. *Death Studies*, *33*, 890-912. doi: 10.1080/07481180903251554
- IBM Corp. (2017). IBM SPSS Statistics for Windows (Version 25.0) [Software]. Armonk, NY: IBM Corp.
- Jahn, D. R., & Spencer-Thomas, S. (2014). Continuing bonds through after-death spiritual experiences in individuals bereaved by suicide. *Journal of Spirituality in Mental Health*, *16*, 311-324. <http://dx.doi.org/10.1080/19349637.2015.957612>
- James, W. (1985). *The works of William James: The varieties of religious experiences*. Cambridge, MA: Harvard University Press. (Original work published in 1902).

- Jerga, A. M., Shaver, P. R., & Wilkinson, R. B. (2011). Attachment insecurities and identification of at-risk individuals following the death of a loved one. *Journal of Social and Personal Relationships, 28*, 891-914. doi: 10.1177/0265407510397987
- Johannesson, K. B., Lundin, T., Hultman, C. M., Lindam, A., Dyster-Aas, J., Arnberg, F., & Michel, P. O. (2009). The effect of traumatic bereavement on tsunami-exposed survivors. *Journal of Traumatic Stress, 22*, 497-504. doi: 10.1002/jts.20467
- Johnson, J. G., Zhang, B., Greer, J. A., & Prigerson, H. G. (2007). Parental control, partner dependency, and complicated grief among widowed adults in the community. *Journal of Nervous & Mental Disease, 195*, 26-30. doi: 10.1097/01.nmd.0000252009.45915.b2
- Jones, D., Harvey, J., Giza, D., Rodican, C., Berreira, P. J., & Macias, C. (2003). Parental death in the lives of people with serious mental illness. *Journal of Loss and Trauma, 8*, 307-322. doi: 10.1080/15325020305883
- Jordan, A. H., & Litz, B. T. (2014). Prolonged Grief Disorder: Diagnostic, assessment, and treatment considerations. *Psychology, Research, and Practice, 45*, 180-187. <http://dx.doi.org/10.1037/a0036836>
- Jordan, A. R., & Neimeyer, R. A. (2003). Does grief counseling work? *Death Studies, 27*, 765-786. doi: 10.1080/713842360
- Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly, 68*, 94-101. doi: 10.1093/poq/nfh006

- Kashdan, T. B., & Kane, J. Q. (2011). Post-traumatic distress and the presence of post-traumatic growth and meaning in life: Experiential avoidance as a moderator. *Personality and Individual Differences, 50*, 84-89. doi: 10.1016/j.paid.2010.08.028
- Keesee, N. J., Currier, J. M., & Neimeyer, R. A. (2008). Predictors of grief following the death of one's child: the contribution of finding meaning. *Journal of Clinical Psychology, 64*, 1145-1163. doi: 10.1002/jclp.20502
- Kelley, M. M., & Chan, K. T. (2012). Assessing the role of attachment to God, meaning, and religious coping as mediators in the grief experience. *Death Studies, 36*, 199-227. doi: 10.1080/07481187.2011.553317
- Kersting, A., Brähler, E., Glaesmer, H., & Wagner, B. (2011). Prevalence of complicated grief in representative population-based sample. *Journal of Affective Disorders, 131*, 339-343. doi: 10.1016/j.jad.2010.11.032
- Kho, Y., Kane, R. T., Priddis, L., & Hudson, J. (2015). The nature of attachment relationships and grief responses in older adults: An attachment path model of grief. *PLOS ONE, 10*, 1-11. doi: 10.1371/journal.pone.0133703
- Khosravan, S., Salehi, S., Ahmadi, F., Sharif, F., & Zamani, A. (2010). Experiences of widows with children: A qualitative study about spousal death in Iran. *Nursing and Health Sciences, 12*, 205-211. doi: 10.1111/j.1442-2018.2010.00522.x
- Kimball, M. S., Mitchell, C. M., Thornton, A. D., & Young-Demarco, L. C. (2009). Empirics on the origins of preferences: The case of college major and religiosity. *National Bureau of Economic Research*. Retrieved from <http://www.nber.org/papers/w15182.pdf>

- Klaassen, D. W., Young, R. A., & James, S. (2015). Relational and spiritual dimensions of parental grieving. *Canadian Journal of Counseling and Psychotherapy, 49*, 79-95.
- Klass, D. (2014). Grief, consolation, and religions: A conceptual framework. *Omega: Journal of Death and Dying, 69*, 1-18. <http://dx.doi.org/10.2190/OM.69.1.a>
- Klass, D., Silverman, P. R., & Nickman, S. L. (Eds.). (1996). *Continuing bonds: New understandings of grief*. New York, NY: Routledge.
- Klugman, C. G. (2006). Dead men talking: Evidence of post death contact and continuing bonds. *Omega: Journal of Death and Dying, 53*, 249-262. doi: 10.2190/40up-pkc5-d4rv-e1qv
- Koenig, H. G., King, D., & Carson, V. (2012). *Handbook of religion and health* (2nd ed.). New York: Oxford.
- Krysinska, K., Andriessen, K., & Corveleyn, J. (2014). Religion and spirituality in online suicide bereavement: An analysis of online memorials. *Crisis, 35*, 349-356. doi: 10.1027/0227-5910/a000270
- Kübler-Ross, E. (1969). *On death and dying: What the dying have to teach doctors, nurses, clergy & their own families*. New York, NY: Macmillan.
- Kübler-Ross, E. (2014). *On death and dying: What the dying have to teach doctors, nurses, clergy, & their own families* (Anniversary ed.). New York, NY: Scribner.
- Kübler-Ross, E., & Kessler, D. (2005). *On grief & grieving: Finding the meaning of grief through the five stages of loss*. New York, NY: Scribner.
- Lalande, K. M., & Bonanno, G. A. (2006). Culture and continuing bonds: A prospective comparison of bereavement in the United States and the People's Republic of China. *Death Studies, 30*, 303-324. doi: 10.1080/07481180500544708

- Larson, D. B., Pattison, E. M., Blazer, D. G., Omran, A. R., & Kaplan, B. H. (1986). Systematic analysis of research on religious variables in four major psychiatric journals, 1978–1982. *American Journal of Psychiatry, 143*, 329–334.
- Latham, A. E., & Prigerson, H. G. (2004). Suicidality and bereavement: Complicated grief as psychiatric disorder presenting greatest risk for suicidality. *Suicide and Life-Threatening Behavior, 34*, 350-362. doi: 10.1521/suli.34.4.350.53737
- Laurie, A., & Neimeyer, R. A. (2008). African Americans in bereavement: Grief as a function of ethnicity. *Omega: Journal of Death and Dying, 57*, 173-193. doi: 10.2190/OM.57.2.d
- Lee, S. A., Roberts, L. B., & Gibbons, J. A. (2013). When religion makes grief worse: Negative religious coping as associated with maladaptive emotional responding patterns. *Mental Health, Religion, & Culture, 16*, 291-305.
<http://dx.doi.org/10.1080/13674676.2012.659242>
- Lester, D., Aldridge, M., Aspenberg, C., Boyle, K., Radsniak, P., & Waldron, C. (2001-02). Hatis the afterlife like? Undergraduate beliefs about the afterlife. *Omega: Journal of Death of Dying, 44*, 113-126. doi: 10.2190/RNFN-F7XR-3C18-CAHX
- Lifshin, U., Greenberg, J., Soenke, M., Darrell, A., & Pyszczynski, T. (2018). Mortality salience, religiosity, and indefinite life extensions: Evidence of a reciprocal relationship between afterlife beliefs and support for forestalling death. *Religion, Brain, & Behavior, 8*, 31-43. doi: 10.1080/2153599x.2016.1238841
- Lindemann, E. (1944). The symptomatology and management of acute grief. *American Journal of Psychiatry, 101*, 155-160. doi: 10.1176/ajp.101.2.141

- Lyons, L. (2003). Age, religiosity, and rural America. Retrieved from <https://news.gallup.com/poll/7960/age-religiosity-rural-america.aspx>
- Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121-160). Chicago, IL: University of Chicago Press.
- Mancini, A. D., Robinaugh, D., Shear, K., & Bonanno, G. A. (2009). Does attachment avoidance help people cope with loss? The moderating effects of relationship quality. *Journal of Clinical Psychology, 65*, 1127-1136. doi: 10.1002/jclp.20601
- Mancini, A. D., Sinan, B., & Bonanno, G. A. (2015). Predictors of prolonged grief, resilience, and recovery among bereaved spouses. *Journal of Clinical Psychology, 71*, 1245-1258. doi: 10.1002/jclp.22224
- Mangione, L., Lyons, M., & DiCello, D. (2016). Spirituality and religion in experiences of Italian American daughters grieving their fathers. *Psychology of Religion and Spirituality, 8*, 253-262. <http://dx.doi.org/10.1037/rel0000056>
- Maple, M., Edwards, H. E., Minichiello, V., & Plummer, D. (2012). Still part of the family: The importance of physical, emotional and spiritual memorial places and spaces for parents bereaved through the suicide death of their son or daughter. *Mortality: Promoting the Interdisciplinary Study of Death and Dying, 18*, 54-71. <http://dx.doi.org/10.1080/13576275.2012.755158>

- Matthews, L. T., & Marwit, S. J. (2006). Meaning reconstruction in the context of religious coping: Rebuilding the shattered assumptive world. *Omega: Journal of Death and Dying, 53*, 87-104. doi: 10.2190/dkmm-b7kq-6mpd-ljna
- McClain-Jacobson, C., Rosenfeld, B., Kosinski, A., Pessin, H., Cimino, J. E., & Breitbart, W. (2004). Belief in an afterlife, spiritual well-being and end-of-life despair in patients with advanced cancer. *General Hospital Psychiatry, 26*, 484-486. <https://doi.org/10.1016/j.genhosppsy.2004.08.002>
- McDermott, O. D., Prigerson, H. G., Reynolds, C. F., Houck, P. R., Dew, M. A., Hall, M., ... Kupfer, D. J. (1997). Sleep in the wake of complicated grief symptoms: An exploratory study. *Biological Psychiatry, 41*, 710-716. doi: 10.1016/s0006-3223(96)00118-7
- McIntosh, D. N., Silver, R. C., & Wortman, C. B. (1993). Religion's role in adjustment to a negative life event: Coping with the loss of a child. *Journal of Personality and Social Psychology, 65*, 812-821. doi: 10.1037//0022-3514.65.4.812
- McKiernan, F., Spreadbury, J., Carr, T., & Waller, G. (2013). Psychological aspects of bereavement in adults: Preliminary development and validation of the Bereavement Experiences Index. *Journal of Social Work in End-of-Life & Palliative Care, 9*, 7-26. doi: 10.1080/15524256.2012.758603
- Meert, K. L., Shear, K., Newth, C. J. L., Harrison, R., Berger, J., Zimmerman, J., ... Nicholson, C. (2011). Follow-up study of complicated grief among parents eighteen months after a child's death in the pediatric intensive care unit. *Journal of Palliative Medicine, 14*, 207-214. doi: 10.1089/jpm.2010.0291

- Meert, K. L., Thurston, C. S., & Thomas, R. (2001). Parental coping and bereavement outcome after the death of a child in the pediatric intensive care unit. *Pediatric Critical Care Medicine, 2*, 324-328. doi: 10.1097/00130478-200110000-00007
- Meier, A. M., Carr, D. R., Currier, J. M., & Neimeyer, R. A. (2013). Attachment anxiety and avoidance in coping with bereavement: Two studies. *Journal of Social and Clinical Psychology, 32*, 315-334. doi: 10.1521/jscp.2013.32.3.315
- Melhem, N., Day, N., Shear, K., Day, R., Reynolds, C. F., & Brent, D. A. (2004a). Predictors of complicated grief among adolescents exposed to a peer's suicide. *Journal of Loss & Trauma, 9*, 21-34. doi: 10.1080/1532502490255287
- Melhem, N. M., Day, N., Shear, M. K., Day, R., Reynolds, C. F., & Brent, D. (2004b). Traumatic grief among adolescents exposed to a peer's suicide. *American Journal of Psychiatry, 161*, 1411-1416. doi: 10.1176/appi.ajp.161.8.1411
- Melhem, N. M., Moritz, G., Walker, M., Shear, M. K., & Brent, D. (2007). Phenomenology and correlates of complicated grief in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*, 493-499. doi: 10.1097/chi.0b013e31803062a9
- Melhem, N. M., Rosales, C., Karageorge, J., Reynolds, C. F., Frank, E., & Shear, M. K. (2001). Comorbidity of axis I disorders in patients with traumatic grief. *Journal of Clinical Psychiatry, 62*, 884-887. doi: 10.4088/jcp.v62n1108
- Mikulincer, M., & Shaver, P. (2008) Adult attachment and affect regulation. In M S. Stroebe, R. O. Hansson, H. Schut, & W. Stroebe (Eds.), *Handbook of bereavement research and practice: Advances in theory and intervention* (pp. 503-531). Washington, DC: American Psychological Association.

- Mikulincer, M., & Shaver, P. (2016). *Attachment in adulthood: Structure, dynamics, and change* (2nd ed.). New York, NY: Guilford Press.
- Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, *58*, 24-35. doi: 10.1037/0003-066X.58.1.24
- Mitchell, A. M., Kim, Y., Prigerson, H. G., & Mortimer, M. K. (2005). Complicated grief and suicidal ideation in adult survivors of suicide. *Suicide and Life-Threatening Behavior*, *35*, 498-506. doi: 10.1521/suli.2005.35.5.498
- Monk, T. H., Houck, P. R., & Shear, K. (2006). The daily life of complicated grief patients—what gets missed, what gets added? *Death Studies*, *30*, 77-85.
<http://dx.doi.org/10.1080/07481180500348860>
- Nager, E. A., & de Vries, B. (2004). Memorializing on the world wide web: Patterns of grief and attachment in adult daughters of deceased mothers. *Omega: Journal of Death and Dying*, *49*, 43-56. doi: 10.2190/wa9e-ak5l-2p2g-1qp1
- Nam, I. (2015). Trajectories of complicated grief. *European Journal of Psychiatry*, *29*, 173-182. doi: 10.4321/s0213-61632015000300002
- Neimeyer, R. A. (Ed.). (2012). *Techniques of grief therapy: Creative practices for counseling the bereaved*. New York, NY: Routledge.
- Neimeyer, R. A., Baldwin, S. A., & Gillies, J. (2006). Continuing bonds and reconstructing meaning: Mitigating complications in bereavement. *Death Studies*, *30*, 715-738. doi: 10.1080/07481180600848322

- Neimeyer, R. A., Burke, L. A., Mackay, M. M., & van Dyke Stringer, J. G. (2010). Grief therapy and the reconstruction of meaning: From principles to practice. *Journal of Contemporary Psychotherapy, 40*, 73-83. doi: 10.1007/s10879-009-9135-3
- Neimeyer, R. A., Hogan, N. S., & Laurie, A. (2008). The measurement of grief: psychometric considerations in the assessment of reactions to bereavement. In M. S. Stroebe et al. (Eds.), *Handbook of bereavement research and practice: 21st century perspectives* (pp. 133-161). Washington, DC: American Psychological Association Press.
- Neimeyer, R. A., & Jordan, J. R. (2013). Historical and contemporary perspective on assessment and intervention. In D. K. Meagher & D. E. Balk (Eds.), *Handbook of thanatology: The essential body of knowledge for the study of death, dying, and bereavement* (2nd ed.) (pp. 219-238). New York, NY: Routledge.
- Neimeyer, R. A., Prigerson, H. G., & Davies, B. (2002). Mourning and meaning. *American Behavioral Scientist, 46*, 235-251. doi: 10.1177/000276402236676
- Neria, Y., Gross, R., Litz, B., Magen, S., Insel, B., Seirmarco, G., ... Marshall, R. D. (2007). Prevalence and psychological correlates of complicated grief among bereaved adults 2.5-3.5 years after September 11th Attacks. *Journal of Traumatic Stress, 20*, 251-262. doi: 10.1002/jts.20223
- Norman, J. (2018). The religious regions of the U.S. Retrieved from <https://news.gallup.com/poll/232223/religious-regions.aspx>

- O'Conner, M., Laggard, M., Shelving, M., & Guldin, M. (2010). A confirmatory factor analysis of combined models of the Harvard Trauma Questionnaire and the Inventory of Complicated Grief-Revised: Are we measuring complicated grief or posttraumatic stress? *Journal of Anxiety Disorders, 24*, 672-679. doi: 10.1016/j.janxdis.2010.04.009
- Ogrodniczuk, J. S., Piper, W. E., Joyce, A. S., Weideman, R., McCallum, M., Azim, H. F., & Rosie, J. S. (2003). Differentiating symptoms of complicated grief and depression among psychiatric outpatients. *Canadian Journal of Psychiatry, 48*, 87-93. doi: 10.1177/070674370304800204
- Osarchuk, M., & Tatz, S. J. (1973). Effect of induced feat of death on belief in afterlife. *Journal of Personality and Social Psychology, 27*, 256-260. doi: 10.1037/h0034769
- Ott, C. H. (2003). The impact of complicated grief on mental and physical health at various points in the bereavement process. *Death Studies, 27*, 249-272. doi: 10.1080/07481180302887
- Packman, W., Carmack, B. J., & Ronen, R. (2011-12). Therapeutic implications of continuing bonds expressions following the death of a pet. *Omega: Journal of Death and Dying, 64*, 335-356. doi: <http://dx.doi.org/10.2190/OM.64.4.d>
- Packman, W., Field, N. P., Carmack, B. J., & Bonen, R. (2011). Continuing bonds and psychosocial adjustment in pet loss. *Journal of Loss and Trauma, 16*, 341-357. <http://dx.doi.org/10.1080/15325024.2011.572046>

- Pargament, K. I. (2002). Target article: The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry, 13*, 168-181.
http://dx.doi.org/10.1207/S15327965PLI1303_02
- Pargament, K. (2007). *Spiritually Integrated Psychotherapy: Understanding and Addressing the Sacred*. New York, New York: Guilford Press.
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*, 710-725. doi: 10.2307/1388152
- Parker, J. S. (2005). Extraordinary experiences of the bereaved and adaptive outcomes of grief. *Omega: Journal of Death and Dying, 51*, 257-283. doi: 10.2190/fm7m-314b-u3rt-e2cb
- Parkes, C. M. (2006). *Love and loss: The roots of grief and its complications*. London: Routledge.
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research* (3rd ed.). Orlando, FL: Harcourt Brace.
- Peskin, H. (1993). Neither broken hearts nor broken bonds. *American Psychologist, 48*, 990-991. <http://dx.doi.org/10.1037/0003-066X.48.9.990>
- Pew Research Center. (2009). *Religion and science in the United States*. Retrieved from <http://www.pewforum.org/2009/11/05/scientists-and-belief/>
- Pew Research Center. (2014). *Religious landscape study (RLS-II)*. Retrieved from <http://www.pewforum.org/religious-landscape-study/>

- Pfefferbaum, B., Call, J. A., Lensgraf, S. J., Miller, P. D., Flynn, B. W., Doughty, D. E., ... Dickson, W. L. (2001). Traumatic grief in a convenience sample of victims seeking support services after a terrorist incident. *Annals of Clinical Psychiatry, 13*, 19-24. doi: 10.3109/10401230109147125
- Pini, S., Gesi, C., Abelli, M., Muti, M., Lari, L., Cardini, A., ... Shear, K. M. (2012). The relationships between adult separation anxiety disorder and complicated grief in a cohort of 454 outpatients with mood and anxiety disorders. *Journal of Affective Disorders, 143*, 64-68. <http://dx.doi.org/10.1016/j.jad.2012.05.026>
- Prigerson, H. G., Bierhals, A. J., Kasl, S. V., Reynolds, C. F., Shear, M. K., Day, N., ... Jacobs, S. (1997). Traumatic grief as a risk factor for mental and physical morbidity. *American Journal of Psychiatry, 154*, 616-623.
- Prigerson, H. G., Bridge, J., Maciejewski, P. K., Beery, L. C., Rosenheck, R. A., Jacobs, S. C., ... Brent, D. A. (1999). Influence of traumatic grief on suicidal ideation among young adults. *American Journal of Psychiatry, 156*, 1994-1995.
- Prigerson, H. G., Horowitz, M. J., Jacobs, S. C., Parkes, C. M., Aslan, M., Goodkin, K., . . . Maciejewski, P. K. (2009). Prolonged Grief Disorder: Psychometric validation of criteria proposed for DSM-V and ICD-11. *PLoS Medicine, 6*, 1-12.
doi:10.1371/journal.pmed.1000121
- Prigerson, H., & Jacobs, S. (2001). Traumatic grief as a distinct disorder: A rationale, consensus criteria, and a preliminary empirical test. In M. S. Stroebe, W. Stroebe, & R. O. Hansson (Eds.), *Handbook of Bereavement Research* (pp. 613-645). Washington, DC: American Psychological Association.

- Prigerson, H. G., Maciejewski, P. K., Reynolds, C. F., Bierhals, A. J., Newsom, J. T., Fasiczka, A., ...Miller, M., (1995). Inventory of complicated grief: A scale to measure maladaptive symptoms of loss. *Psychiatry Research*, *59*, 65-79. doi: 10.1016/0165-1781(95)02757-2
- Prigerson, H. G., Vanderwerker, L. C., & Maciejewski, P. K. (2008). A case for inclusion of prolonged grief disorder in DSM-V. In M S. Stroebe, R. O. Hansson, H. Schut, & W. Stroebe (Eds.), *Handbook of bereavement research and practice: Advances in theory and intervention* (pp. 165-186). Washington, DC: American Psychological Association.
- Rando, T. A. (1992). The increasing prevalence of complicated mourning: the onslaught is just beginning. *Omega: Journal of Death and Dying*, *26*, 43-59. doi: 10.2190/7mdl-rjtf-na2d-npqf
- Remler, D. K., & Van Ryzin, G. G. (2011). *Research methods in practice: Strategies for description and causation*. Thousand Oaks, CA: Sage Publications.
- Root, B. L., & Exline, J. J. (2014). The role of continuing bonds in coping with grief: Overview and future directions. *Death Studies*, *38*, 1-8. doi: 10.1080/07481187.2012.712608
- Rose, B. M., & O'Sullivan, M. J. (2002). Afterlife beliefs and death anxiety: An exploration of the relationship between afterlife expectations and fear of death in an undergraduate population. *Omega: Journal of Death and Dying*, *45*, 229-243. doi: 10.2190/rv40-6nbr-66gf-ujmu
- Rosenblatt, P. C., Walsh, R. P., & Jackson, D. A. (1976). *Grief and mourning in cross-cultural perspective*. New Haven, CT: HRAF press.

- Rubin, S. S., & Schechory-Stahl, M. (2012-13). The continuing bonds of bereaved parents: A ten-year follow-up study with the two-track model of bereavement. *Omega: Journal of Death and Dying*, *66*, 365-384.
<http://dx.doi.org/10.2190/OM.66.4.f>
- Russac, R. J., Steighner, N. S., & Canto, A. I. (2002). Grief work versus continuing bonds: A call for paradigm integration or replacement? *Death Studies*, *26*, 462-478. <http://dx.doi.org/10.1080/074811802760138996>
- Sanders, C. (1999). *Grief. The mourning after: Dealing with adult bereavement*. New York, NY: John Wiley & Sons.
- Sanders, C. M., Mauger, P. A., & Strong, P. N. (1985). *The grief experience inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Schaal, S., Elbert, T., & Neuner, F. (2009). Prolonged grief disorder and depression in widows due to the Rwandan genocide. *Omega: Journal of Death and Dying*, *59*, 203-219. doi: 10.2190/om.59.3.b
- Scheidt, C. E., Hasenburger, A., Kunze, M., Waller, E., Pfeifer, R., Zimmermann, P., ... Waller, N. (2012). Are individual differences of attachment predicting bereavement outcome after perinatal loss? A prospective cohort study. *Journal of Psychosomatic Research*, *73*, 375-382.
<http://dx.doi.org/10.1016/j.jpsychores.2012.08.017>
- Schenck, L. K., Eberle, K. M., & Rings, J. A. (2016). Insecure attachment styles and complicated grief severity: Applying what we know to inform future directions. *Omega: Journal of Death and Dying*, *73*, 231-249. doi: 10.1177/0030222815576124

- Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*, 1-10. doi: 10.1037/a0018082
- Schlosser, L. Z., Foley, P. F., Stein, E. P., & Holmwood, J. R. (2010). Why does counseling psychology exclude religion? A content analysis and methodological critique. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of Multicultural Counseling* (pp. 453-465). Los Angeles, CA: Sage.
- Scholtes, D., & Browne, M. (2015). Internalized and externalized continuing bonds in bereaved parents: Their relationship with grief intensity and personal growth. *Death Studies, 39*, 75-83. <http://dx.doi.org/10.1080/07481187.2014.890680>
- Shafranske, E. P. (1996). Religious beliefs, affiliations, and practices of clinical psychologists. In E. P. Shafranske (Ed.), *Religion and the practice of clinical psychology* (pp. 149–164). Washington, DC: American Psychological Association.
- Shapiro, E. R. (1995). Grief in family and cultural context: Learning form Latino families. *Cultural Diversity and Mental Health, 1*, 159-176. doi: 10.1037//1099-9809.1.2.159
- Shear, K. M., Jackson, C. T., Essock, S. M., Donahue, S. A., & Felton, C. J. (2006). Screening for complicated grief among Project Liberty service recipients 18 months after September 11, 2001. *Psychiatric Services, 57*, 1291-1297. doi: 10.1176/ps.2006.57.9.1291
- Shear, K., & Shair, H. (2005). Attachment, loss, and complicated grief. *Developing Psychobiology, 47*, 253-267. doi: 10.1002/dev.20091

- Shear, M. K., Simon, N., Wall, M., Zisook, S., Neimeyer, R., Duan, N., ... Keshaviah, A. (2011). Complicated grief and related bereavement issues for DSM-5. *Depression and Anxiety, 28*, 103-117. doi: 10.1002/da.20780
- Sibley, C. G., Fischer, R., & Liu, J. H. (2005). Reliability and validity of the revised Experiences in Close Relationships (ECR-R) self-report measure of adult romantic attachment. *Personality and Social Psychology Bulletin, 31*, 1524-1536. doi: 10.1177/0146167205276865
- Sibley, C. G., & Liu, J. H. (2004). Short-term temporal stability and factor structure of the revised experiences in close relationships (ECR-R) measure of adult attachment. *Personality and Individual Differences, 36*, 969-975. doi: 10.1016/s0191-8869(03)00165-x
- Siegel, M. D., Hayes, E., Vanderwerker, L. C., Loseth, D. B., & Prigerson, H. G. (2008). Psychiatric illness in the next of kin of patients who die in the intensive care unit. *Critical Care Medicine, 36*, 1722-1728. doi: 10.1097/ccm.0b013e318174da72
- Silverman, G. K., Jacobs, S. C., Kasl, S. V., Shear, M. K., Maciejewski, P. K., Noaghiul, F. S., & Prigerson, H. G. (2000). Quality of life impairments associated with diagnostic criteria for traumatic grief. *Psychological Medicine, 30*, 857-862. doi: 10.1017/s0033291799002524
- Silverman, G. K., Johnson, J. G., & Prigerson, H. G. (2001). Preliminary explorations of the effects of prior trauma and loss on risk of psychiatric disorders in recently widowed people. *Israel Journal of Psychiatry and Related Sciences, 38*, 202-215.

- Silverman, P. R., & Klass, D. (1996). Introduction: What's the problem? In. D. Klass, P. R. Silverman, & S. L. Nickman (Eds.), *Continuing bonds: New understandings of grief* (pp. 3-30). New York, NY: Routledge.
- Simon, N. M., Shear, K. M., Thompson, E. H., Zalta, A. K., Perlman, C., Reynolds, C. F., ... Silowash, R. (2007). The prevalence and correlates of psychiatric comorbidity in individuals with complicated grief. *Comprehensive Psychiatry*, *48*, 395-399. doi: 10.1016/j.comppsy.2007.05.002
- Sochos, A., & Bone, A. (2012). Attitudes towards continuing bonds, attachment vulnerability, and the moderating effects of gender. *Journal of Loss and Trauma*, *17*, 260-270. doi: 10.1080/15325024.2011.616834
- Sormanti, M., & August, J. (1997). Parental bereavement: Spiritual connections with deceased children. *American Journal of Orthopsychiatry*, *6*, 460-469. doi: 10.1037/h0080247
- Stein, H., Jacobs, N. J., Ferguson, K. S., Allen, J. G., & Fonagy, P. (1998). What do adult attachment scales measure? *Bulletin Of The Menninger Clinic*, *62*, 33-48.
- Stroebe, M. (1992-93). Coping with bereavement: A review of the grief work hypothesis. *Omega: Journal of Death and Dying*, *26*, 19-42. doi: 10.2190/tb6u-4qqc-hr3m-v9ft
- Stroebe, M. S., Abakoumkin, G., Stroebe, W., & Schut, H. (2012). Continuing bonds in adjustment to bereavement: Impact of abrupt versus gradual separation. *Personal Relationships*, *19*, 255-266. doi: 10.1111/j.1475-6811.2011.01352.x

- Stroebe, M., Gergen, M. M., Gergen, K. J., & Stroebe, W. (1992). Broken hearts or broken bonds: Love and death in historical perspective. *American Psychologist*, *47*, 1205-1212. doi: 10.1037//0003-066x.47.10.1205
- Stroebe, M. S., Hansson, R. O., Schut, H., & Stroebe, W. (2008). Bereavement research: Contemporaries perspectives. In M. S. Stroebe, R. O. Hansson, H. Schut, & W. Stroebe (eds.), *Handbook of Bereavement Research and Practice: Advances in Theory and Intervention*. Washington, DC: American Psychological Association.
- Stroebe, M., & Schut, H. (1999). The dual process model of coping with bereavement: Rationale and description. *Death Studies*, *23*, 197-224. doi: 10.1080/074811899201046
- Stroebe, M., Schut, H., & Boerner, K. (2017). Cautioning health-care professionals: Bereaved persons are misguided through the stages of grief. *Omega: Journal of Death and Dying*, *74*, 455-473. doi: 10.1177/0030222817691870
- Stroebe, M., Stroebe, W., & Schut, H. (2003). Bereavement research: Methodological issues and ethical concerns. *Palliative medicine*, *17*, 235-240. doi: 10.1191/0269216303pm768rr
- Sue, D. W. (2001). Multidimensional facets of cultural competence. *The Counseling Psychologist*, *29*, 790-821.
- Suhail, K., Jamil, N., Owebode, J., & Ajmal, M. A. (2011). Continuing bonds in bereaved Pakistani Muslims: Effects of culture and religion. *Death Studies*, *35*, 22-41. doi: 10.1080/07481181003765592

- Szanto, K., Prigerson, H., Houck, P., Ehrenpreis, L., & Reynolds, C. F. (1997). Suicidal ideation in elderly bereaved: The role of complicated grief. *Suicide and Life-Threatening Behavior, 27*, 194-207.
- Szanto, K., Shear, M. K., Houck, P. R., Reynolds, C. F., Frank, E., Caroff, K., & Silowash, R. (2006). Indirect self-destructive behavior and overt suicidality in patients with complicated grief. *Journal of Clinical Psychiatry, 67*, 233-239. doi: 10.4088/JCP.v67n0209
- Tabachnick, B. C., & Fidell, L. S. (2007). *Using multivariate statistic* (5th ed.). Boston, MA: Pearson.
- Theileman, K., & Cacciatore, J. (2014). When a child dies: A critical analysis of grief-related controversies in DSM-5. *Research on Social Work Practice, 24*, 114-122. doi: 10.1177/1049731512474695
- Tomarken, A., Holland, J., Schachter, S., Vanderwerker, L., Zuckerman, E., Nelson, C., ... Prigerson, H. (2008). Factors of complicated grief pre-death in caregivers of cancer patients. *Psycho-Oncology, 17*, 105-111. doi: 10.1002/pon.1188
- Uren, T. H., & Wastell, C. A. (2002). Attachment and meaning-making in perinatal bereavement. *Death Studies, 26*, 279-308.
<http://dx.doi.org/10.1080/074811802753594682>
- van der Houwen, K., Stroebe, M., Schut, H., Stroebe, W., & van den Bout, J. (2010). Mediating processes in bereavement: The role of rumination, threatening grief interpretations, and deliberate grief avoidance. *Social Science & Medicine, 71*, 1669-1676. doi:10.1016/j.socscimed.2010.06.047

- van der Houwen, K., Stroebe, M., Stroebe, W., Schut, H., van den Bout, J., & Wijngaards-de Meij, L. (2010). Risk factors for bereavement outcome: A multivariate approach. *Death Studies, 34*, 195-220.
<http://dx.doi.org/10.1080/07481180903559196>
- Vanderwerker, L. C., Jacobs, S. C., Parkes, C. M., & Prigerson, H. G. (2006). An exploration of associations between separation anxiety in childhood and complicated grief in later life. *Journal of Nervous & Mental Disorders, 194*, 121-123. doi: 10.1097/01.nmd.0000198146.28182.d5
- van Doorn, C., Kasl, S. V., Beery, L. C., Jacobs, S. C., & Prigerson, H. G. (1998). The influence of marital quality and attachment styles on traumatic grief and depressive symptoms. *Journal of Nervous & Mental Disease, 186*, 566-573. doi: 10.1097/00005053-199809000-00008
- Vieten, C., Scammell, S., Pilato, R., Ammondson, I., Pargament, K. I., & Lukoff, D. (2013). Spiritual and religious competencies for psychologists. *Psychology of Religion and Spirituality, 5*, 129-144. <http://dx.doi.org/10.1037/a0032699>
- Walker, D. F., Gorsuch, R. L., & Tan, S. (2004). Therapists' integration of religion and spirituality in counseling: A meta-analysis. *Counseling and Values, 49*, 69-80. doi: 10.1002/j.2161-007x.2004.tb00254.x
- Walsh, F. (2008). Religion, spirituality, and the family: Multifaith perspectives. In Walsh, F. (Ed.). (2008). *Spiritual resources in family therapy* (2nd ed.) (pp. 3-30). New York, NY: Guilford Press.
- Walter, C. A., & McCoyd, J. L. M. (2009). *Grief and loss across the lifespan: A biopsychosocial perspective*. New York, NY: Springer.

- Waskowic, T. D., & Chartier, B. M. (2003). Attachment and the experience of grief following the loss of a spouse. *Omega: Journal of Death and Dying, 47*, 77-91. doi: 10.2190/0cmc-gyp5-n3qh-weh4
- Wei, M., Shaffer, P. A., Young, S. K., & Zakalik, R. A. (2005). Adult attachment, shame, depression, and loneliness: The mediation role of basic psychological needs satisfaction. *Journal of Counseling Psychology, 52*, 591-601. doi: 10.1037/0022-0167.52.4.591
- Weiss, R. S. (1982). Attachment in adult life. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior* (pp. 171-184). New York, NY: Basic Books.
- Wiese, C. H., Morgenthal, H. C., Bartels, U. E., Voßen-Wellmann, A., Graf, B. M., & Hanekop, G. G. (2010). Post-mortal bereavement of family caregivers in Germany: a prospective interview-based investigation. *Wiener klinische Wochenschrift, 122*, 384-389. doi: 10.1007/s00508-010-1396-z
- Wijngaards-de Meij, L., Stroebe, M., Schut, H., Stroebe, W., van den Bout, J., van der Heijden, P. G. M., & Dijkstra, I. (2007a). Patterns of attachment and parents' adjustment to the death of their child. *Personality and Social Psychology Bulletin, 33*, 537-548. doi: 10.1177/0146167206297400
- Wijngaards-de Meij, L., Stroebe, M., Schut, H., Stroebe, W., van den Bout, J., van der Heijden, P. G. M., & Dijkstra, I. (2007b). Neuroticism and attachment insecurity as predictors of bereavement outcome. *Journal of Research in Personality, 41*, 498-505. doi: 10.1016/j.jrp.2006.06.001

- Wood, L., Byram, V., Gosling, A. S., & Stokes, J. (2012). Continuing bonds after suicide bereavement in childhood. *Death Studies, 36*, 873-898. doi: 10.1080/07481187.2011.584025
- Worden, J. W. (2008). *Grief counseling and grief therapy: A handbook for the mental health practitioner*. New York, NY: Springer Publishing Company.
- Xu, W., Fu, Z., He, L., Shoebi, D., & Wang, J. (2015). Growing in times of grief: Attachment modulates bereaved adults' posttraumatic growth after losing a family member to cancer. *Psychiatry Research, 230*, 108-115. <http://dx.doi.org/10.1016/j.psychres.2015.08.035>
- Yu, W., He, L., Xu, W., Wang, J., & Prigerson, H. G. (2016). How do attachment dimensions affect bereavement adjustment? A mediation model of continuing bonds. *Psychiatry Research, 238*, 93-99. <http://dx.doi.org/10.1016/j.psychres.2016.02.030>

APPENDIX A

IRB APPROVAL LETTERS



Institutional Review Board

DATE: May 8, 2017

TO: Kiersten Eberle
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1067346-1] Afterlife Beliefs, Attachment, and Continuing Bonds in Predicting Complicated Grief
SUBMISSION TYPE: New Project

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE: May 6, 2017
EXPIRATION DATE: May 6, 2021

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Hello Kiersten,

I am the reviewer of your IRB application. I found your application to be excellent and thoroughly prepared and your research question fascinating. It was determined that your research fell within the guidelines for Exempt Review and I found all areas to be carefully described and explained. Your IRB application is approved and good luck with the study.

Sincerely,

Nancy White, PhD, IRB Reviewer

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.



Institutional Review Board

DATE: February 26, 2018

TO: Kiersten Eberle
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1067346-2] Afterlife Beliefs, Attachment, and Continuing Bonds in Predicting Complicated Grief
SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS
DECISION DATE: February 22, 2018
EXPIRATION DATE: May 6, 2021

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Northern Colorado (UNCO) IRB's records.

Hi Kiersten,

The decision was to approve, with the understanding that there is a counseling referral in the recruitment memo to students and specific information in the debrief.

I apologize again for the very delayed response. Best of luck with your study and let me know if you have any questions!

Thank you,

Mike Heathcote

Human Subject Protection Program Manager (HSPP)

Office: (303) 605-5282

mheathco@msudenver.edu



APPENDIX B
RECRUITMENT EMAIL

Dear Interested Professor/Instructor/Faculty Member,

My name is Kiersten Eberle, and I am a Ph.D. student in Counseling Psychology at the University of Northern Colorado (UNC). I am working on my dissertation, examining how attachment style and afterlife beliefs affect one's relationship with their deceased loved ones and how those relationships, in turn, effect grief symptoms. I am seeking college and university age students who have lost a close loved one in the last 6 to 24 months. **I am seeking individuals who both hold a belief in an afterlife and those who do not, regardless of religious affiliation.**

The purpose of this study is to add to the literature on complicated grief as it related to afterlife beliefs and attachment. The results of this study could improve the care of bereaved individuals who seek mental health treatment for grief related symptoms. I am specifically seeking out university students in your program because of the proportion of non-believers to believers in this age range and academic program.

Those that choose to participate will be asked to fill out a demographics questionnaire and four measures on belief in an afterlife, experiences in close relationships, continuing bonds with the deceased, and complicated grief symptoms. The survey requires approximately **20 to 35 minutes** to complete. It will not ask any identifying data (e.g., name, address), and I will work to maintain my participants' confidentiality to the best of my abilities through the process. The survey can be reached through a link in the email below.

I would greatly appreciate if you could forward the email below to your students. If you have any questions about the project, survey, or my choice to recruit from your students please contact me at eber1865@bears.unco.edu or my dissertation chair at jeffrey.rings@unco.edu.

Thank you so much for your time and consideration.

Best,
Kiersten Eberle, B. A.
Ph.D. Graduate Student
University of Northern Colorado
eber1865@bears.unco.edu

Jeffrey Rings, Ph.D.
Dissertation Chair
University of Northern Colorado
jeffrey.rings@unco.edu

Dear Interested Participant,

My name is Kiersten Eberle, and I am a Ph.D. student in Counseling Psychology at the University of Northern Colorado (UNC). I am working on my dissertation, examining how attachment style and afterlife beliefs affect one's relationship with their deceased loved ones and how those relationships, in turn, effect grief symptoms. I am contacting you to request you consider participating in my study.

I am looking for individuals, over the age of 18, willing to fill out a brief online survey. If you are interested and have lost a close loved one, whether this was a spouse/partner, parental figure, child, sibling or close friend, in the past 6 to 24 months, you are eligible to participate. **I am seeking individuals who both hold a belief in an afterlife and those who do not, regardless of religious affiliation.** If you meet these criteria and are interested in participating please continue reading below.

The survey can be taken online, following the link below. Those that choose to participate will be asked to fill out a demographics questionnaire and four measures on belief in an afterlife, experiences in close relationships, continuing bonds with the deceased, and complicated grief symptoms. The survey requires approximately **20 to 35 minutes** to complete. The survey will not ask any identifying data (e.g., name, address), and I will work to maintain your confidentiality to the best of my abilities through the process. The results of this study could improve the care of bereaved individuals who seek mental health treatment for grief related symptoms.

To participate, please follow this link:

[link](#)

Thank you so much for your time.

Best,
Kiersten Eberle, B. A.
Ph.D. Graduate Student
University of Northern Colorado
eber1865@bears.unco.edu

Jeffrey Rings, Ph.D.
Dissertation Chair
University of Northern Colorado
jeffrey.rings@unco.edu

APPENDIX C
INFORMED CONSENT

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

Project Title: Afterlife Beliefs, Attachment, and Continuing Bonds: Using Moderation to Predict Complicated Grief

Researcher: Kiersten Eberle, B.A., Doctoral student in Counseling Psychology

Research Chair: Jeffrey Rings, Ph.D.

Phone Number: Kiersten (970) 970-1645; Dr. Rings (970) 351-1639

I am researching how attachment style and afterlife beliefs impact the relationship or emotional bonds individual have with loved ones after they have passed away, and in turn how these relationships affect grief symptoms. You will be asked to fill out a survey through Qualtrics online. Qualtrics.com is a private and secure research software company. The survey can be accessed at any time, but in order to participate, you must fill out the survey by ____/____/____.

The online survey will take approximately 20 to 35 minutes. You will be asked to answer questions about your general demographics, your experience(s) with bereavement, and your personal beliefs related to the possibility of an afterlife. Additionally, you will be asked to complete four scales: the *Belief in an Afterlife Scale* (BAS), the *Experiences in Close Relationships-Relationship Structures* (ECR-RS), the *Continuing Bonds Scale-Revised* (CBS-R), and the *Inventory of Complicated Grief-Revised* (ICG-R).

Some of the questions are of a sensitive nature and risks associated with the procedures described may include feelings of discomfort in answering questions related to the circumstances surrounding a loved one's death, your relationship with this individual, and symptoms of grief. Benefits to participants include reflecting on your relationship with your loved one. Additionally, participants will aid in growing the knowledge and understanding of the mental health field in regards to grief, religion, and individual differences in recovery. This will improve the treatment of individuals who seek help related to these issues.

You will not be asked your name or any other identifying data during the survey. Only the primary researcher and her dissertation committee will examine individual responses. The survey responses will be recorded in Excel and analyzed using Statistical Packages for the Social Sciences (SPSS). Although steps will be taken to protect your privacy, including steps taken by Qualtrics.com, confidentiality cannot be guaranteed with data collected online.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your

selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Please confirm that you meet the following criteria.

I am at least 18 years old

I am currently enrolled in a college or university

I have lost a close loved one to death within the last 6 to 24 months

Having read the above document and confirmed that I meet the criteria:

I consent to participate in the study

I do not consent to participate in the study

APPENDIX D
DEBRIEFING STATEMENT

Thank you for your participation!

The purpose of this study is to better understand the relationship between continuing bonds and complicated grief, particularly examining how attachment and afterlife beliefs may affect this relationship. Currently, much of the research has found that continuing bonds are related to more complicated and severe grief symptoms. Tentative research has noted the possibility that attachment may affect this relationship. On the other hand, this relationship has not been examined in the context of afterlife beliefs. Specifically, little empirical research has examined how continuing bonds relate to afterlife beliefs. It is the hopes of this researcher that this study will help psychologists and counselors improve their treatment of individuals suffering from complicated grief, particularly in the context of individual and cultural factors.

If you have any questions about the study or would like to be informed about the eventual results, please contact that head researcher at eber1865@bears.unco.edu.

If you are struggling with the death of your loved one or other non-related issues, please know that counseling is an option. Many universities provide low-cost or free options for students. Below is a list of local resources for counseling.

Denver

Metropolitan State University of Denver Counseling Center

303-556-3132

Tivoli Building, Suite 651

Provides counseling for MSU students.

Professional Psychology Clinic at the University of Denver

303-871-3626

2460 S. Vine St., Denver, CO

Provides counseling services to community members on a sliding fee scale.

The CU Denver Student and Community Counseling Center

303-556-4372

Tivoli 454

Provides counseling services to community members on a sliding fee scale.

Community Reach Center

303-853-3500

multiple locations

Provides counseling services to community members on a sliding fee scale.

Boulder

Counseling and Psychiatric Services (CAPS) at University of Colorado, Boulder

303-492-2277

C4C S440, UCB Campus

1st floor Wardenburg, UCB Campus

Provides counseling for UCB students. Some sessions are covered by student fees.

Raimy Clinic

303-492-5177

Muenzinger Psychology Building D232, UCB Campus

Provides counseling for community members, as well as students on a sliding fee scale.

Office of Victims Assistance (OVA)

303-492-8855

C4C S440, UCB Campus

Provides counseling and advocacy for UCB students affected by a traumatic event.

Greeley

University of Northern Colorado Counseling Center

970-351-2496

2nd floor Cassidy Hall, UNC Campus

Provides free counseling for UNC students

Psychological Services Clinic

970-351-1645

McKee Hall 247, UNC Campus

Provides low-cost counseling for community members, as well as students

Northrange Behavioral Health Crisis Center

970-347-2120

928 12th St. Greeley, CO

An always-open crisis center, including walk-in services.

APPENDIX E
AFTERLIFE BELIEF ITEMS

APPENDIX F

DEMOGRAPHICS QUESTIONNAIRE

Age: _____

Gender:

- a) Female
- b) Male
- c) Transgender
- d) Genderqueer/Genderfluid
- e) Other: _____

Ethnicity/Race:

- a) African American, Black
- b) Asian American, Pacific Islander, Asian
- c) Caucasian, European American, European
- d) Latino/a/x American, Hispanic, Chicano/a/x
- e) Native American
- f) Biracial/multiracial
- g) Other: _____

Nationality: _____

Major: _____

Religion:

- a) Agnostic/Atheist
- b) Buddhism
- c) Christian, Catholic
- d) Christian, Protestant
- e) Christian, Other
- f) Hindu
- g) Muslim
- h) Non-Religious, Spiritual
- i) Other: _____

The individual who passed away was my:

- a) Child
- b) Grandparent
- c) Friend
- d) Parent
- e) Sibling
- f) Spouse/Partner
- g) Other relative: _____

Age of deceased: _____

Cause of death:

- a) Accidental
- b) Homicide
- c) Natural, anticipated
- d) Natural, sudden
- e) Suicide
- f) Other

Number of months since death: _____

Have you received counseling following the death?

- a) Yes, related to my bereavement
- b) Yes, unrelated to my bereavement
- c) No

If yes, are you still in counseling?

- a) Yes
- b) No

APPENDIX G

BELIEF IN AN AFTERLIFE SCALE

Rate the following items on the scale:

Total disagreement ----- Total agreement
 1 2 3 4 5 6 7 8 9 10 11

1. Earthly existence is the only existence we have.
2. In the premature death of someone close some comfort may be found in knowing that in some way the deceased is still existing.
3. Humans die in the sense of "ceasing to exist."
4. The idea of there existing somewhere some sort of afterlife is beyond my comprehension.
5. We will never be united with those deceased whom we knew and loved.
6. There must be an afterlife of some sort.
7. Some existentialists claim that when man dies he ceases to exist: I agree.
8. The following statement is true: "There is no such thing as a life after death."
9. Millions of people believe in a life after death: they are correct in so believing.
10. Enjoy yourself on earth, for death signals the end of all existence.

APPENDIX H

**EXPERIENCES IN CLOSE RELATIONSHIPS –
RELATIONSHIP STRUCTURES**

Instructions for the ECR–RS were printed separately for each relationship domain:

“Please answer the following 9 questions about your mother or a mother-like figure,”

“Please answer the following 9 questions about your father or a father-like figure,”

“Please answer the following 9 questions about your dating or marital partner,”

“Please answer the following 9 questions about your best friend.”

Strongly disagree ----- Strongly agree
 1 2 3 4 5 6 7

1. I usually discuss my problems and concerns with this person.
2. I talk things over with this person.
3. It helps to turn to this person in times of need.
4. I find it easy to depend on this person.
5. I prefer not to show this person how I feel deep down.
6. I don't feel comfortable opening up to this person.
7. I'm afraid this person may abandon me.
8. I worry that this person won't care about me as much as I care about him or her.
9. I often worry that this person doesn't really care for me.

APPENDIX I

CONTINUING BONDS SCALE – REVISED

Individuals often report a continuing connection to the deceased following the death of a loved one. The items below describe different ways in which this is expressed. Please rate how often during the past **month** you experienced each of the following ways of having a connection with the deceased loved one who you identified on the previous page. Indicate your answer by inserting the number in the space to the left of each item that best describes your experience.

- 1 Not at all = never during the past month
- 2 Rarely = once or twice during the past month
- 3 Sometimes = on average, once a week during the past month
- 4 Often = almost every day during the past month

1. I thought about the positive influence of the deceased on who I am today.
2. I was aware of how I try to live my life the way the deceased would have wanted me to live.
3. I thought about the deceased as a role model who I try to be like.
4. I imagined the deceased as guiding me or watching over me as if invisibly present.
5. When making important decisions, I thought about what the deceased might have done and used this in helping me make my decision.
6. I was aware of attempting to carry out the deceased's wishes.
7. I experienced the deceased as continuing to live on through his or her impact on who I am today.
8. I thought about how the deceased would have enjoyed something I saw or did.
9. I imagined sharing with the deceased something special that happened to me.
10. I imagined the deceased's voice encouraging me to keep going.
11. I actually heard the voice of the deceased speak to me.
12. I briefly acted as though the deceased were not dead—such as calling out loud his or her name or preparing the table for two.
13. Even if only momentarily, I have mistaken other people for the deceased.
14. I actually felt the deceased's physical touch.
15. I imagined that the deceased might suddenly appear as though still alive.
16. I actually saw the deceased stand before me.

APPENDIX J

INVENTORY OF COMPLICATED GRIEF – REVISED

Please mark the box next to the answer that best describes how you have been feeling over the past month. The blanks refer to the deceased person over whom you are grieving.

Almost never = Less than once a month
 Rarely = Once a month or more, less than once a week
 Sometimes = Once a week or more, less than once a day
 Often = Once everyday
 Always = Several times every day

1. The death of _____ feels overwhelming or devastating.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

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

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

3. Memories of _____ upset me.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

4. I feel that I have trouble accepting the death.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

5. I feel myself longing and yearning for _____.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

6. I feel drawn to places and things associated with _____.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
7. I can't help feeling angry about _____'s death.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
8. I feel disbelief over _____'s death.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
9. I feel stunned, dazed, or shocked over _____'s death.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
10. Ever since _____ died it is hard for me to trust people.
- 1 – No difficulty trusting others
 - 2 – A slight sense of difficulty
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense
11. 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.
- 1 – No difficulty feeling close or connected to others
 - 2 – A slight sense of detachment
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense

12. 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 _____.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

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

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

14. I feel that life is empty or meaningless without _____.

- 1 – No sense of emptiness or meaninglessness
- 2 – A slight sense of emptiness or meaninglessness
- 3 – Some sense
- 4 – A marked sense
- 5 – An overwhelming sense

15. I hear the voice of _____ speak to me.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

16. I see _____ stand before me.

- 1 – Almost never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

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

- 1 – No sense of numbness
- 2 – A slight sense of numbness
- 3 – Some sense
- 4 – A marked sense
- 5 – An overwhelming sense

18. I feel that it is unfair that I should live when _____ died.
- 1 – No sense of guilt over surviving the deceased
 - 2 – A slight sense of guilt
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense
9. I am bitter over _____'s death.
- 1 – No sense of bitterness
 - 2 – A slight sense of bitterness
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense
20. I feel envious of others who have not lost someone close.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
21. I feel like the future holds no meaning or purpose without _____.
- 1 – No sense that the future holds no purpose
 - 2 – A slight sense that the future holds no purpose
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense
22. I feel lonely ever since _____ died.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
23. I feel unable to imagine life being fulfilling without _____.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always

24. I feel that a part of myself died along with the deceased.
- 1 – Almost never
 - 2 – Rarely
 - 3 – Sometimes
 - 4 – Often
 - 5 – Always
25. I feel that the death has changed my view of the world.
- 1 – No sense of a changed world view
 - 2 – A slight sense of a changed world view
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense
26. I have lost my sense of security or safety since the death of _____.
- 1 – No change in feelings of security
 - 2 – A slight sense of insecurity
 - 3 – Some sense
 - 4 – A marked sense
 - 5 – An overwhelming sense
27. I have lost my sense of control since the death of _____.
- 1 – No change in feelings of being in control
 - 2 – A slight sense of being out of control
 - 3 – Some sense of being out of control
 - 4 – A marked sense
 - 5 – An overwhelming sense
28. I believe that my grief has resulted in significant impairment in my social, occupational or other areas of functioning.
- 1 – No functional impairment
 - 2 – Mild functional impairment
 - 3 – Moderate
 - 4 – Severe
 - 5 – Extreme
29. I have felt on edge, jumpy, or easily startled since the death.
- 1 – No change in feelings of being on edge
 - 2 – A slight sense of feeling on edge
 - 3 – Some sense of being out of control
 - 4 – A marked sense
 - 5 – An overwhelming sense

30. Since the death, my sleep has been . . .

- 1 – Basically
- 2 – Slightly disturbed
- 3 – Moderately disturbed
- 4 – Very disturbed
- 5 – Extremely disturbed

31. How many months after your loss did these feelings begin? _____ months

32. How many months have you been experiencing these feelings? _____ months (0 = never)

33. Have there been times when you did not have pangs of grief and then these feelings began to bother you again?

- 1 – Yes
- 2 – No

34. Can you describe how your feelings of grief have changed over time?
