

THE RELATIONSHIP OF ATTACHMENT AND
SPIRITUALITY WITH POSTTRAUMATIC
GROWTH FOLLOWING A DEATH
LOSS FOR COLLEGE STUDENTS

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DEDICATION

I would like to dedicate this work in loving memory to my brother, Todd Robert Bratkovich, to “Baby Jantz” Hughes Kinzer Jr, and to Eleanor Hilliard Sorocco. To my brother, I am so very fortunate to have been able to spend the time that we had with you and to call you my brother. Your life and love continue to inspire me to believe in the impossible and to strive to do better each day. Finally, thank you for teaching me that love has no limits.

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TABLE OF CONTENTS

| Chapter | Page |
|---|------|
| I. INTRODUCTION | 1 |
| Grief and Bereavement..... | 1 |
| Post-traumatic Growth..... | 3 |
| Spirituality..... | 5 |
| Attachment..... | 7 |
| Purpose of Study..... | 10 |
| II. REVIEW OF THE LITERATURE..... | 14 |
| The Experience of grief and loss..... | 15 |
| Posttraumatic Growth..... | 17 |
| Spirituality..... | 20 |
| Religiousness and Posttraumatic Growth | 22 |
| Spirituality, Coping, and Growth in Caregivers of Patients with HIV/AIDS..... | 23 |
| Religiousness and Posttraumatic Growth in College Students | 26 |
| Attachment..... | 31 |
| Attachment and Bereavement..... | 35 |
| Attachment and Posttraumatic Growth..... | 36 |
| Attachment and Spirituality..... | 37 |
| III. METHODOLOGY | 41 |
| Participants..... | 41 |
| Procedure..... | 43 |
| Measures..... | 44 |
| Post-traumatic Growth Inventory | 44 |
| Spiritual Involvement and Beliefs Scale..... | 47 |
| Hogan Grief Reaction Checklist | 48 |
| Relationship Questionnaire..... | 50 |
| Demographic Sheet..... | 51 |

| Chapter | Page |
|---|------|
| IV. FINDINGS..... | 52 |
| V. CONCLUSION..... | 55 |
| Limitations of the Study..... | 60 |
| Implications for future research..... | 62 |
| Implications for theory and practice..... | 63 |
| Summary..... | 65 |
| REFERENCES..... | 67 |
| APPENDICES..... | 73 |

LIST OF TABLES

| Table | Page |
|--|------|
| 1. Demographics of the Sample | 75 |
| 2. Religious Affiliation, Relationship of Participant to Loved One Who Died, Time Since Loved One's Death, Cause of Death, and Emotional Closeness to Loved One Who Died | 77 |
| 3. Correlation Matrix of SIBS Total, PTGI Total, and RQ scales..... | 79 |
| 4. Multiple Regressions of Secure, Fearful, Preoccupied, and Dismissive Attachment, SIBS Total and Posttraumatic Growth Total | 81 |
| 5. Multiple Regression of Secure, Fearful, Preoccupied, and Dismissive Attachment, and SIBS Total with Grief Distress..... | 82 |

CHAPTER I

THE RELATIONSHIP OF ATTACHMENT AND SPIRITUALITY WITH
POSTTRAUMATIC GROWTH
FOLLOWING A DEATH LOSS FOR COLLEGE STUDENTS

Grief and Bereavement

At some point in time, everyone will experience losing a loved one to death. This experience can be very traumatic for some individuals and not so traumatic for others. The grief experience is one of great complexity and it includes affective responses such as depression (Nolen-Hoeksema, McBride, & Larson, 1997), anxiety (Raphael, 1982), and anger (Hogan, 1999); cognitive responses including issues with memory and concentration (Hogan, 1999; Raphael, 1982); and behavioral responses for instance, social withdrawal and crying (Parkes & Weiss, 1983).

A variety of factors can affect the experience of grief. For example, age of the bereaved (Sanders, 1999; Stoebe, Stroebe & Schut, 2001) can influence the bereavement process. Younger people have a more difficult time with grief than older people (e.g., Ball, 1977; Shanfield & Swain, 1993) given the added demands of navigating through developmental transitions, developing identity, and forming intimate relationships (Balk, 1998).

Men and women also differ in their experience of grief. In particular, men

experience prolonged suffering and more distress than women (e.g., Carmer, 1993; Lee, Willets, & Seccombe, 1998). For example, men have higher rates of death during the first year of bereavement after their spouses' death than women (Parkes, 1996). However, Parkes (2002) found that women are more expressive regarding their grief compared to men and are more likely to seek psychiatric help during the first year of bereavement.

The cause of death and time since death can also influence the bereavement process. In particular, sudden causes of death are more difficult for people to deal with than a gradual death. Also, people tend to experience less grief over time.

The kinship relationship between the bereaved and the deceased is also an important consideration in the grief process. The loss of family members can often be more difficult to deal with than the loss of a friend or an acquaintance (Middleton, Raphael, Burnett, & Marinek, 1997; Parkes & Weiss, 1983; Shaefer & Moos, 2001).

In addition to emotional, cognitive, and behavioral responses to grief, bereavement can be a very existential process for survivors. The search for meaning is a common experience following the death of a loved one (Balk, 1999; Becker, 1973; Doka, 1993; Marrone, 1999). Loss can provoke individuals to create new meanings, or narratives, of the world and oneself to combat the experience of loss (Neimeyer, 2002; Neimeyer, Prigerson, & Davies, 2002). People often apply these new meanings to the interpersonal, physical, and social aspects of their life (Attig, 2004). Making meaning helps individuals construct their place in the world while confronting and integrating the inevitability of death (Attig, 2004).

As mentioned previously, there are a number of different ways that people can grieve. In addition, grief has been significantly associated with a number of biopsychosocial issues including depression (Clayton, 1990), post-traumatic stress disorder (Zisook, Schneider, & Schuchter, 1990), substance abuse, physical illness, and death (Stroebe, Schut, Finkenauer, 2001).

While much of the research on grief has focused on widows (e.g., Bowlby & Parkes, 1970) and widowers (e.g., Zisook et al., 1998), little is known about the bereavement experiences of college students and how they grow from death loss experiences, which is the primary focus of this study. It is estimated that approximately 22% to 30% of college students experience the death of a family member or friend during their college years (Balk, 2001). In another study (Hardison, Neimeyer, & Lichstein, 2005), 49% of college undergraduate students had experienced a death loss of a family member or friend within the last two years. Therefore, it is clear that grief and loss experiences are common for college students. However, little is known about how college students grow from bereavement experiences and the specific factors that facilitate post-traumatic growth following a death loss for college students, which is the focus of this present study.

Post-traumatic Growth

Tedeschi and Calhoun (1995) found that after experiencing the death of a loved one, some individuals experience greater distress as a result of their trauma, including post-traumatic stress disorder (PTSD), while others may experience post-traumatic growth (PTG). PTG refers to the beneficial psychological changes that can occur following a traumatic event, in particular, changing one's feelings and views about the

world (based on person-environment interactions) that can be positively reinforced by active thinking and experiencing, social support, and cultural influences.

Posttraumatic growth includes five major domains of experience which include 1) life philosophy and appreciation of life; 2) increased intimacy in relationships; 3) increased sense of personal strength; 4) recognition of new opportunities for one's life; and 5) spiritual development (Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 2004).

Post-traumatic growth has been associated with emotional distress as well as social support (Calhoun & Tedeschi, 2006) as well as bereavement in caregivers of HIV/AIDS patients (Folkman, 1997; Caddell, 2007; Cadell, Regehr, & Hemsworth, 2003). Of interest, the majority of researchers have focused primarily on post-traumatic growth among caregivers of HIV/AIDS patients (Folkman, 1997; Caddell, 2007; Cadell, Regehr, & Hemsworth, 2003) and veterans (Salo et al., 2005), and their loved ones following their return from service abroad (Dekel, 2007).

Calhoun and Tedeschi (1998) theorized that when people experience traumatic events, they experience distress as well as potential growth from those events. The Post-traumatic Growth Inventory was initially developed for use with college students. In one college student study, post-traumatic growth was positively related to level of distress (Taku, Calhoun, Cann & Tedeschi, 2008). These findings suggest that despite the distress associated with trauma in general, college students can also grow positively from such experiences. However, the researchers in this study (Taku et al., 2008) measured trauma broadly and did not specifically explore death loss as a traumatic experience, which is the focus on the present study.

Only one group of researchers have explored post-traumatic growth and bereavement in college students (Ho, Chu, & Yiu, 2008), specifically the cognitive explanatory styles of college students who experienced a loss of a loved one over the past six years. College students who attributed the loss experience as internal, global, and stable factors experienced more post-traumatic growth, as opposed to college students who attributed the loss experience to external, specific, and unstable factors.

More research is needed to better understand college students' experience of grief as a result of death loss and how they may grow from these experiences. In this study, spiritual beliefs and practices as well as the quality and nature of college students' relationships with others will be explored in relation to their bereavement and post-traumatic growth from the loss of a loved one.

Spirituality

Spirituality is defined as a sense of connection among all living things and refers to a search for transcendence, meaning, and purpose in life. Spirituality plays a significant role in the worldview of many college age people (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000; Emmons, Cheung, & Tehrani, 1998; Pargament, 1997; Plante & Sherman, 2001; Standard, Sandu, & Painter, 2000). While spirituality, faith, and religion are sometimes used interchangeably, Angell, Dennis, and Dumain (1998) differentiated between these terms. They defined spirituality as an innate need of humans to find meaning and purpose in life, as well as to have a relationship with something outside of, and greater than, oneself. Faith was identified as the ability to maintain hope concerning matters that are unknowable. Religion refers to expressing ones faith and spirituality through organized belief systems (Angell, Dennis, and Dumain; 1998).

Spirituality has been associated with a number of variables including coping (Calhoun et al., 2000), social support (Cadell, Regehr, & Hemsowrth, 2003), search for meaning (Folkman, 1997), and stress (Winterowd et al., 2005, Carlozzi et al., under review; and Cadell, Regehr, & Hemsworth, 2003).

Spirituality as well as religion and religiousness have been investigated in relation to post-traumatic growth, which will be discussed next.

Spirituality and post-traumatic growth. The relationship between spirituality and post-traumatic growth has been studied primarily among bereaved caregivers of HIV/AIDS individuals (Folkman, 1997; Caddell, 2007; Cadell, Regehr, & Hemsworth, 2003). Bereaved caregivers who reported higher levels of spirituality also reported more affective distress as well as higher levels of post-traumatic growth from death losses. Higher levels of spiritual beliefs and practices were associated with more distress as well as more active coping including positive reappraisal, problem-solving, and a confrontational style of coping. Individuals who experience greater distress may be more aware of their grief, and therefore, allow themselves to experience it as well as turn to their spiritual beliefs and practices for coping. Conversely, one's spiritual beliefs and practices may increase their awareness of their grief distress and how they should cope with it. Of interest, there is no research to date exploring spirituality and post-traumatic growth in college students.

Religion/religiousness and post-traumatic growth. Some researchers have found that religion/religiousness may be a protective factor in dealing with emotional distress/traumatic experiences, while other researchers have found that religion/spirituality may foster distress. The relationship between religious variables and

post-traumatic growth has been explored in a couple of studies with college students (Calhoun, Cann, Tedeschi, & McMillian, 2000; Park, Cohen, Murch, 1996). In one study (Park, Cohen, & Herb, 1990), intrinsic religiousness was indirectly related to experiencing personal growth, but directly related to experiencing event-related distress. Therefore, individuals whose religious beliefs provide the framework for the way they live their lives can serve as a facilitator to allow themselves to experience grief and to grow from the loss of a loved one.

While religion/religiousness has been explored in college student samples, few researchers have explored correlates of spirituality in college students. At this point, we know that spirituality has been associated with stress (Winterowd et al., 2005), anger (Winterowd et al., 2005), and coping (Schafer, 1997). College students who experience higher levels of stress and anger also engage in spiritual beliefs and practices. This could indicate that students turn to their spiritual beliefs to cope with their anger and stress. However, it also may indicate that their experiences do not fit with their spiritual beliefs, resulting in the experience of stress and anger.

In summary, there is some evidence for religion and religiousness as a protective factor in dealing with the emotional distress associated with traumatic experiences. However, less is known about spirituality and how it is related to well-being in college students. Only one study to date has been conducted to explore that issue. To date, no researchers have explored spirituality and post-traumatic growth following a death loss among college students.

In addition to spiritual beliefs and practices, the quality and nature of our relationships with others may also serve as a protective factor in dealing with grief and has been related to post-traumatic growth, which will be discussed next.

Attachment

Attachment is defined by Bowlby (1977) as “the propensity of human beings to make strong affectional bonds to particular others” (p. 201). Attachment theory was originated by Bowlby in 1969, in which parent-infant attachments were explored. Attachment theory has been applied to parent-infant/parent-child relationships, peer relationships, romantic relationships, and relationships with God or a higher power. Attachment has been associated with spirituality and religiosity (Kirkpatrick & Shaver, 1990), PTSD (Bloom, 1997) as well as bereavement (Stroebe, Shut, & Stroebe, 2005).

Attachment styles. Bartholomew and Horowitz (1991) extended Bowlby’s work and identified four adult attachment styles: secure, fearful, preoccupied, and dismissing. Individuals with “Secure” attachment had positive views of both self and others in adult relationships. These individuals typically believe that they are worthy of love and close relationships and that others will accept them. Individuals with a “Preoccupied” attachment were proposed to have negative views of self, yet positive view of others. These individuals likely maintain a belief that they are unworthy of love, while desiring the validation, closeness, and acceptance of others. Individuals with “Fearful” attachment are said to hold negative views of themselves and others. These individuals tend to believe that they are not worthy of love and view others as being rejecting of them or not being trustworthy. The “Dismissing” attachment is said to consist of a positive view of themselves, yet negative view of others and the world. These individuals might

have a greater sense of self-love and self-reliance and a feeling of indifference towards intimate relationships. While these individuals may unconsciously yearn for close relationships, they tend to remain aloof and self-reliant in an attempt to protect themselves.

Attachment and religion/religiousness. Attachment styles have been associated with religious affiliations, religiousness, and one's views of God (Granqvist, 1998; Kirkpatrick, 1998; Kirkpatrick & Shaver, 1992). In one study, individuals with secure attachment styles appear to view God as more loving, less controlling, and yet more distant than those with insecure attachment styles. While individuals with avoidant attachment styles had higher rates of identifying as agnostic and individuals with ambivalent attachment styles had higher rates of identifying as atheist (Kirkpatrick & Shaver, 1992). In another study, there was a significant positive relationship between parents' religiousness and one's own level of religiousness among individuals who reported secure early attachments with their parents (Granqvist, 1998). Kirkpatrick (1998) found that individuals with insecure attachment styles seem to develop a new relationship with God over time whereas individuals with secure attachment styles appear to view God in more consistent ways (Kirkpatrick, 1998). While attachment has been associated with spirituality and religiosity (Kirkpatrick & Shaver, 1990), little is known about the relationship of attachment and spirituality.

Attachment and post-traumatic growth. Only two groups of researchers to date have explored the relationship between attachment and post-traumatic growth, primarily with veterans and wives of prisoners of war. In one study, Salo et al. (2005) found that veterans with secure attachment styles experienced post-traumatic growth after being

exposed to torture. However, in another study (Dekel, 2007), wives of prisoners of war with avoidant and anxious attachment styles reported more emotional distress but also more growth from this traumatic experience. It appears that who grows from traumatic experiences and how they grow may depend not only on their attachment style but also whether one is the direct (e.g., tortured person) or the indirect victim of such traumatic experiences (i.e., spouse/partner of those tortured).

Attachment and bereavement. Bowlby (1980) theorized that one's attachment style may affect her or his adaptation to bereavement. Therefore, understanding the relationship between attachment and bereavement can give us a better understanding of this complex experience and help guide our interventions for those who are grieving.

Bowlby (1980) theorized that individuals with secure attachment styles would experience an intense period of grief that would subside as the individual was able to accept the reality of the death. Individuals with anxious-ambivalent attachment styles may experience more chronic grief, with higher levels of distress that do not dissipate over time. Individuals with avoidant attachment styles may experience delayed or absent grief experiences. In fact, individuals with avoidant attachment styles do not experience emotional distress because they are able to disengage from their attachment systems (Fraley & Shaver, 1997). However, the active avoidance of affective reactions to bereavement may lead to increased levels of somatic complaints (Mikulincer et al., 1993; Pennebaker & Beall, 1986; Wayment & Vierthaler, 2002).

While Bowlby (1980) theorized the importance of the affectional bonds in relation to bereavement and grief, no researchers to date has put Bowlby's theory to the

test. One of the purposes of the present study is to address the relationship between attachment and grief distress in college students.

Purpose of the Study

In summary, a significant number of college students, from 22% to 30% (Balk, 2001) and upwards to 49% (Hardison, Neimeyer, & Lichstein, 2005), experience grief and loss during their college years. Little research has been conducted to explore bereavement in college students as well as post-traumatic growth following death losses. While we do know that college students can experience emotional distress as well as post-traumatic growth in dealing with traumatic events (Taku, Calhoun, Cann & Tedeschi, 2008), this has not been specifically explored with regard to bereavement following a death loss. While there is some support for the relationship between religion and religiousness with post-traumatic growth in general among college students (Calhoun, Cann, Tedeschi, & McMillian, 2000; Park, Cohen, Murch, 1996), no researchers to date have explored spiritual beliefs and practices in relation to growth experiences among college students, particularly when losing a loved one.

Enduring affectional bonds have been theorized to be related to the process of grief and bereavement (Bowlby, 1980). However, no researchers to date have tested this theory. In the present study, college students' general attachment styles to people in their lives will be explored in relation to their grief and post-traumatic growth following the loss of a loved one.

In summary, the purposes of the present study are to explore the relationships of college students' general spiritual beliefs and practices and the quality and nature of their relationships with others (i.e., general attachment: secure, preoccupied, dismissive,

fearful), with their bereavement (i.e., grief symptoms) and post-traumatic growth following the loss of a loved one.

The research questions for this study are as follows: (1) What is the relationship between and among bereavement, spirituality, attachment, and post-traumatic growth? (2) What is the relationship of spirituality and attachment styles with post-traumatic growth? (3) What is the relationship of spirituality and attachment styles with grief among college students?

CHAPTER II

REVIEW OF LITERATURE

As psychologists, we work with clients who have many different yet difficult personal, interpersonal, and life issues to address. Clients often experience a myriad of emotions in response to life stressors, including grief and loss. The death loss of a loved one can be a very traumatic experience for people and can provoke feelings of emotional distress (Freud, 1917; Lindemann, 1994; Raphael, 1982; Stroebe & Schut, 1999). Other negative impacts of losing a loved one to death include issues with memory and concentration (Hogan, 1999; Raphael, 1982), as well as, social withdrawal and crying (Parkes & Weiss, 1983). However, grief and loss experiences can also create opportunities for growth and positive change in people, for example, positive changes in self-perception, interpersonal relationships and life philosophies (Hogan, 2001; Nolen-Hoeksema, 2001; Tedeschi & Calhoun, 1989-1990; Yalom & Liberman, 1991).

The focus of the present study is to explore resilient aspects of well-being in response to bereavement including how one's affectional bonds and relationships with others as well as spiritual beliefs and practices relate to post-traumatic growth from a death loss. In this literature review, I will explore individual reactions to grief and loss as well as how people grow from losses and other traumatic experiences (i.e., post-traumatic growth), following by an exploration of the nature and quality of people's relationships

with others (otherwise known as attachment) including their relationship with their lost loved one, as well as the role of spirituality and religion in coping with grief and loss experiences.

The Experience of Grief and Loss

The experience of grief impacts individuals in numerous ways, including affective responses such as depression (Nolen-Hoeksema, McBride, & Larson, 1997), anxiety (Raphael, 1982), and anger (Hogan, 1999); cognitive responses including issues with memory and concentration (Hogan, 1999; Raphael, 1982), and behavioral responses for instance, social withdrawal and crying (Parkes & Weiss, 1983).

Personal and contextual factors can affect one's experience of grief and loss. Personal factors significantly related to individual differences in grief responses include age and gender of the bereaved (Sanders, 1999; Stoebe, Stroebe & Schut, 2001). In particular, men experience prolonged suffering and more distress than women (e.g., Carmer, 1993; Lee, Willets, & Seccombe, 1998). Furthermore, younger individuals suffer more than older individuals (e.g., Ball, 1977; Shanfield & Swain, 1993) in that younger individuals have the added demands of navigating through developmental transitions, developing their identity, and forming intimate relationships (Balk, 1998). Contextual variables that affect the grief response are cause of loved one's death, time since death, and the kinship relationship between the bereaved and deceased (Middleton, Raphael, Burnett, & Marinek, 1997; Parkes & Weiss, 1983; Shaefer & Moos, 2001). Accidental and unanticipated deaths are associated with more grief distress than chronic illnesses and anticipated deaths (Gamino et al., 1998). The typical grief trajectory shows a reduction in grief distress after one year (Sanders, 1997). However, grief can endure

for years (Raphael, 1982). Research findings indicate that the loss of a child produces more grief distress than the loss of a parent, spouse, or sibling (Cleiren, 1991; Gamino, Sewell, & Easterling, 1998; Klass & Marwit, 1988-1989; Sanders, 1980).

One common personal experience is a search for meaning following the death of a loved one (Balk, 1999; Becker, 1973; Doka, 1993; Marrone, 1999). Loss can provoke individuals to create new meanings, or narratives, of the world and oneself to combat the experience of loss (Neimeyer, 2002; Neimeyer, Prigerson, & Davies, 2002). People often apply these new meanings to the interpersonal, physical, and social aspects of their life (Attig, 2004). Making meaning helps individuals construct their place in the world while confronting and integrating the inevitability of death (Attig, 2004).

After experiencing the death of a loved one, some individuals experience greater distress as a result of their trauma, including post-traumatic stress (PTSD) while others experience growth, otherwise known as posttraumatic growth (Tedeschi & Calhoun, 1995).

PTSD has been associated with personal injuries, life-threats (e.g. Fontana, Rosenheck, & Brett, 1992), and bereavement (e.g. Joseph, Yule, Williams, & Hodgkinson, 1994). PTSD is a psychological experience wherein individuals experience a threat to their own life or other's lives or to the physical integrity of oneself or others (APA, 1980) and involves the re-experiencing of symptoms (i.e., flashbacks and nightmares), active avoidance (i.e., emotional numbing, cognitive and behavioral avoidance), and tremendous arousal symptoms (i.e., irritability and hypervigilance). Women are twice as likely as men to experience PTSD in their lifetime (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Rates of PTSD in the general population

range from 25-30% after exposure to a traumatic event. Protective factors, including social support (e.g., King et al., 1999), an internal locus of control (e.g., Regehr, Cadell, & Jansen, 1999), and an internal style for a positive perspective of events (e.g., Mikulincer & Solomon, 1988), can help deter the development of PTSD reactions to traumatic events.

Posttraumatic Growth

Posttraumatic growth is defined as the profound beneficial changes in emotion, cognition, and behavior that emerge from traumatic experiences (Tedeschi & Calhoun, 1998).

The process of posttraumatic growth involves a number of important elements including the characteristics of the person (i.e., rumination, self-disclosure, management of emotional distress) and of the challenging circumstances including societal and community/cultural influences on narrative development and life wisdom (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 2004; Calhoun & Tedeschi, 2006). In particular, the more distressing and disturbing the circumstance, the greater potential for posttraumatic growth being experienced including but not limited to emotional arousal, rumination (i.e., repeated thinking to problem solve, create meaning and to reminisce; Martin & Tesser, 1996) and a change in worldview (Calhoun & Tedeschi 1998, 2004, 2006; Janoff-Bulman, 2006).

Deliberate ruminations attempt to repair, rebuild, or restructure the individual's assumptive world (Epstein, 1990; Janoff-Bulman, 1992; Calhoun & Tedeschi, 2006). Research has indicated that the amount of cognitive activity is significantly related to the amount of growth (Linley & Joseph, 2004; Manne et al., 2004).

Self-disclosure is positively related to posttraumatic growth when the disclosure is received by significant others in accepting and affirming and growth-related ways. Primary support groups or proximate cultures that subscribe to narratives with growth themes will likely promote higher levels of post-traumatic growth in individuals who disclose to them (Calhoun & Tedeschi, 2006).

Posttraumatic growth includes five major domains of experience including 1) life philosophy and appreciation of life; 2) increased intimacy in relationships; 3) increased sense of personal strength; 4) recognition of new opportunities for one's life; and 5) spiritual development (Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 2004).

Life philosophy and appreciation of life. People can change their life philosophy and appreciate life more as a result of a traumatic event, including the death of a loved one. For individuals dealing with a crisis, they tend to change their sense of priorities, develop a greater appreciation for life as well as experience a greater appreciation for what one has (Calhoun & Tedeschi, 2006).

Increased intimacy in relationships. Changes in relating to others following a death loss do occur. Over time, people who experience traumatic events often report increased closeness, intimacy, sense of freedom to be oneself, and disclosure of oneself and one's experience that prior to the death loss people would not have disclosed (Calhoun & Tedeschi, 2006). On the experimental level, individuals who experience a tragedy or loss report feeling a greater connection with other people, especially an increased sense of compassion for others who suffer.

Increased sense of personal strength. The experience of a major life challenge can disrupt how one's thinks and the beliefs they held about the world which leads to changes

in self-perception. Common experiences of those who have experienced a major life challenge are viewing the world as more unpredictable, dangerous, and one's own vulnerability is apparent and significant. At the same time, facing a major life crisis can give one the sense that he or she has survived the worst and through this experience views oneself as strong (Calhoun & Tedeschi, 2006). "I am more vulnerable than I thought, but much stronger than I ever imagined" (Calhoun & Tedeschi, 2006, p. 5).

Recognition of new opportunities for one's life. Some individuals who have experienced a traumatic event state that they view life as having new possibilities. These new possibilities have been identified as developing new interests, engaging in new activities, and even choosing a new life path (Calhoun & Tedeschi, 2006).

Spiritual development. When people experience traumatic experiences, including a death loss, they tend to deal with existential issues as well as their spirituality and the meaning of religion in their lives. Tragedy and loss can result in the loss of faith and significant existential despair. Questions regarding life's purpose appear to be significant and an area where many report positive change in coping with major life crises (Calhoun & Tedeschi, 2006). Over time, people experience an increased sense of purpose and meaning in life, increased satisfaction, and possibly find answers to some existential questions (Calhoun & Tedeschi, 2006).

There is significant research that documents the positive changes that occur in posttraumatic growth; however, the specific variables that lead to the growth experiences after a trauma are not known (Tedeschi, Park, & Calhoun, 1998).

In summary, posttraumatic growth refers to the beneficial psychological changes following a traumatic event and involves a person-environment interaction in changing

one's feelings and views about the world that can be positively reinforced via active thinking and experiencing, social support, and cultural influences. Posttraumatic growth includes five major domains of experience including life philosophy and appreciation of life, intimacy in relationships, sense of personal strength, opportunities for one's life; and spiritual development.

While spiritual development is one component of posttraumatic growth, the spiritual beliefs and experiences of people in relation to grief and loss needs to be explored in more depth.

Spirituality

Spirituality is defined as a sense of connection among all living things and refers to a search for transcendence, meaning, and purpose in life. Spirituality plays a significant role in the worldview of many college age people (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000; Emmons, Cheung, & Tehrani, 1998; Pargament, 1997; Plante & Sherman, 2001; Standard, Sandu, & Painter, 2000). Spirituality has been associated with a number of variables including coping (Calhoun et al., 2000), social support (Cadell, Regehr, & Hemsowrth, 2003), search for meaning (Folkman, 1997), and stress (Winterowd et al., 2005, Carlozzi et al., in press, and Cadell Regehr, & Hemsworth, 2003).

While spirituality, faith, and religion are sometimes used interchangeably, Angell, Dennis, and Dumain (1998) differentiated between these terms. They defined spirituality as an innate need of humans to find meaning and purpose in life, as well as to have a relationship with something outside of, and greater than, oneself. Faith was identified as the ability to maintain hope concerning matters that are unknowable. Religion refers to

expressing ones faith and spirituality through organized belief systems (Angell, Dennis, and Dumain; 1998).

Spirituality and spiritual practices may assist in the bereavement process by providing sources of comfort and support and a framework in which people can understand and attribute meaning to losing someone in their lives (e.g. Cadell, Regehr, & Hemsworth, 2003; Park & Folkman, 1997). It seems plausible that college age individuals would likely turn to spiritual beliefs and practices as a resource for coping with the loss of a loved one.

Scholars in Thanatology and gerontology assert that a common response to loss (i.e., loss of a parent, child, sibling, spouse, or partner), as well as, facing one's own death provokes spiritual exploration (Balk, 1999; Doka, 1993; Marrone, 1999). Marrone (1999) identified two components of spiritual experiences after the death of a loved one or the impending death of oneself: (1) the person identified as being connected to something larger than the self; and (2) the person became cognizant of a higher power, purpose, order, or structure in the universe that was beyond the control of the self. Therefore, the loss of a loved one can result in deep questioning regarding the justice and goodness of the world, which translates as a search for meaning (Moremen; 2004-2005).

For some, life experiences do not fit within their spiritual framework, such as the loss of child does not follow the natural sequence of life, and therefore, provoke people to question their beliefs in an attempt to make sense of their experience. This conflict between one's view of the world and their experience that does not fit in that view is what Douglas (2004) referred to as a conflict with the bereaved individual's assumptive world.

In summery, spiritual exploration is often provoked by traumatic experiences, such as one's own impending death or the death of a loved one. PTG is a variable that has gained much attention recently and has been widely explored. In the next section, the relationship between spirituality and PTG will be explored.

Of interest, many researchers have focused on aspects of one's religiousness rather than spirituality in relation to post-traumatic growth. Therefore, this research will be summarized first.

Religiousness and Post-traumatic growth. The role that religiousness plays in his or her grief experience has been a recent focus of those trying to gain a better understanding of what factors contribute to growth after a trauma (Park & Cohen, 1993; Park, Cohen, & Herb, 1990). Park and Cohen (1993) studied individuals who have experienced the death of a close friend and their religious and nonreligious coping mechanisms. Results indicated that intrinsic religiousness was indirectly related to experiencing personal growth, but directly related to experiencing event-related distress. Therefore, individuals whose religious beliefs provide the framework for the way they live their lives can serve as a facilitator of growth, while also exacerbating the distress they experience. Furthermore, Park, Cohen, and Herb (1990) investigated the role of intrinsic religiousness and religious coping as mitigating factors for life stress. Results indicated that religious coping served a protective function for Catholics as Protestants.

While religious coping was investigated in relation to coping, spirituality has been investigated in relation to coping and growth in caregivers of patients with HIV/AIDS. The next section will summarize this research.

Spirituality, Coping, and Growth in Caregivers of Patients with HIV/AIDS.

Several researchers have explored spirituality and coping as well as posttraumatic growth in caregivers of men who have HIV or AIDS (Folkman, 1997; Caddell, 2007; Cadell, Regehr, & Hemsworth, 2003). Folkman (1997) conducted a longitudinal study that looked at how spiritual beliefs and practices were associated with positive psychological states in bereaved caregivers of a partner who died of AIDS. This investigation included both qualitative and quantitative approaches to obtain a more complete view of how strategies for coping with severe stress relate to positive psychological states. The sample included 273 gay/bisexual partners of men diagnosed with AIDS. Measures utilized in this study were the Centers for Epidemiological Studies-Depression measure (CES-D) (Radloff, 1977), the Positive States of Mind (PSOM) scale (Horowitz et al., 1988), the Bradburn Affect Balance scale (Bradburn, 1969), and Ways of Coping (Folkman & Lazarus, 1994) as well as others. Results indicated that both positive and negative psychological states were experienced during caregiving and bereavement. The frequency of positive affect was at least equal to the frequency of negative affect for both individuals whose partner died during the two year period and those whose partner did not die. Four coping processes were associated with positive psychological states: goal-directed problem-focused coping, positive reappraisal, spiritual beliefs and practices, and “the infusion of ordinary events with positive meaning” (p. 1212). Folkman identified the underlying theme of these coping processes as searching for meaning. Furthermore, qualitative analyses found that spiritual themes were present during bereavement stages. Those who indicated spiritual beliefs and practices were associated with more positive reappraisal, problem-solving, and a confrontational style of coping, as well as, greater

distress. Possible explanations for these results are that individuals who experience greater distress turn to their spiritual beliefs and practices. Conversely, another explanation may be that one's spiritual beliefs and practices may increase the distress experienced by individual. A limitation of this study is that it looks at early bereavement and does not explore the impact of spirituality on the middle and later stages of grief.

In summary, Folkman (1997) investigated the association between spiritual beliefs and practices with positive psychological states in 273 gay/bisexual bereaved caregivers of a partner who died of AIDS. Participants completed the CES-D, PSOM, the Bradburn Affect Balance Scale, and the Ways of Coping scale. While both positive and negative psychological states were associated with bereavement, Folkman identified searching for meaning as the underlying theme in the positive coping processes.

Furthermore, spiritual beliefs and practices were associated with more positive reappraisal, problem-solving, confrontational style of coping, and greater distress.

Possible explanations for these findings are that individuals who experience distress may turn to their spiritual beliefs as a way of coping. On the other hand, one's spiritual beliefs may cause increased distress. A limitation of this study is that it only looks at the early stages of grief and does not explore the middle and latter stages of grief and how one's spirituality affects the individual's psychological states.

Cadell, Regehr, and Hemsworth (2003) investigated the factors that foster growth after a traumatic event and utilized structural equation modeling in order to test a model for understanding posttraumatic growth. The sample consisted of 174 (51.7% men, 46% women, 2.3% transgendered) bereaved caregivers of an HIV/AIDS individual.

Participants ages ranged from 19 to 79 (mean age = 40.5 years). Time since bereavement

ranged from 1 month to 18 years. This study utilized the Spiritual Involvement and Beliefs Scale (SIBS; Hatch, Burg, Naberhaus, & Hellmich, 1998), the SSQ Material and SSQ Emotional subscales from the Social Support Questionnaire (SSQ; O'Brien, Wortman, Kessler, & Joseph, 1993), the PSR Family and PSR Friends subscale of the Provision of Social relations (PSR; Turner, Frankel, & Levin, 1983), the IES Intrusion and IES Avoidance from the impact of Events Scale (IES; Horowitz, Wilner, & Alvarez), the Beck Depression Inventory (BDI; Beck, 1967), the Stress-Related Growth Scale (SRGS; Park et al., 1996), and the Post Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). Results found that spirituality had a significant direct positive effect on levels of PTG. These results suggest that individuals who are more spiritual will experience greater levels of posttraumatic growth. Furthermore, this study found that individuals who reported higher levels of social support and stressors reported greater levels of PTG. Caution should be exercised when interpreting these results due to a small sample size.

In summary, Cadell, Regehr, and Hemsworth (2003) investigated the factors that foster growth after a traumatic event through structural equation modeling. The sample included 174 bereaved caregivers of an HIV/AIDS individual, who completed the SIBS, SSQ, PSR, IES, SRGS, BDI, and PTGI. Results indicated a significant direct positive relationship between spirituality and PTG. Furthermore, individuals who are report higher levels of spirituality, social support, and stressors report higher levels of PTG. Implications of these results indicate that spirituality and social support are significant coping tools for individuals experiencing higher levels of stress. However, the results of this study should be interpreted with caution due to the small sample size.

Only a few studies have been conducted exploring religiousness and/or spirituality with well-being and/or posttraumatic growth in college students (Calhoun, Cann, Tedeschi, & McMillian, 2000; Park, Cohen, Murch, 1996).

Religiousness and Posttraumatic Growth in College Students. Calhoun, Cann, Tedeschi, and McMillian (2000) explored the relationship between rumination, a Quest orientation to religion, and religious involvement on posttraumatic growth in the college student population. This study used a sample of 54 college students, 35 female and 19 male, who had experienced a major traumatic experience within three years of the study. The mean age was 22.5 years with 80% Caucasian, 13% African American, and 7% Asian or Native American. The major traumatic experiences of this sample included motor vehicle accident that resulted in serious injury (n = 12), sudden death of a loved one due to accident, homicide, or suicide (n = 10), being a victim of a serious crime (e.g., robbery, mugging, n = 4), injury or major property loss from a disaster (n = 2), home evacuation due to serious hazard (n = 1), with the largest number of participants writing in their own events (e.g., being in combat, in an earthquake, or involved in a gang related shootout n = 18). The Quest scale was used to measure religiousness. This scale is made up of 12-items, with three factors that look at readiness to face existential questions, a perception of religious doubt as positive, and openness to religious change. The Posttraumatic Growth Inventory was used to measure the amount of positive changes experienced after the traumatic event. A multiple regression analysis was utilized with the total score on the PTGI as the dependent variable. Results indicated that the degree of openness to change was significantly related to PTG, meanwhile religious participation was not related to PTG in this study. While this study provides a significant contribution

to the literature the sample size is small, which could translate to a lack of power in interpreting significant results. Other limitations relate to the focus of the study, which looks at religiousness and its impact on posttraumatic. This gives a narrow view and leaves out the broader components of spirituality. Exploring spirituality may give a more comprehensive view of how spiritual and religious beliefs impact posttraumatic growth.

In summary, Calhoun, Cann, Tedeschi, and McMillian (2000) explored the relationship between rumination and religious involvement on posttraumatic growth in the college student population. The participants, which included 54 college students, completed the following measures, the Quest orientation to religion, the Traumatic Stress Schedule, and the Posttraumatic Growth Inventory. Results indicated spirituality was related in coping, specifically, that a higher level of openness to change was significantly related to higher levels of PTG. Therefore, individuals who are more open to thinking about the traumatic event and its possible meaning in relation to their religious beliefs will likely experience posttraumatic growth. Future studies can expand on this study by exploring individuals' spiritual beliefs in relation to posttraumatic growth. Furthermore, the results of this study should be interpreted with caution due to the small number of participants.

Park, Cohen, and Murch (1996) conducted a series of studies with college students. These studies examined the development of the Stress-Related Growth Scale (SRGS) as it relates to a study looking at the determinants of stress-related positive outcomes in college students. The third study which included 256 students (173 female, 83 male) in an introductory psychology class. Over 90% of the participants of the study were Caucasian and in their first year of college. The measures utilized in this study

were the SRGS, Life Orientation Test (LOT; Scheier & Carver, 1985), Gorsuch and McPherson's (1989) scale of intrinsic religiousness, the Social Support Questionnaire-Expanded Form (PANA-X; Watson & Clark, 1991), College Student Life Events Schedule (CSLES; Sandler & Lakey, 1982), and the COPE scale (Carver, Scheier, & Weintraub, 1989). Correlational analyses between two time trials, T-tests, ANOVA's were conducted. This study found that measures of intrinsic religious commitment and religious coping were significantly associated with greater growth.

In summary, Park, Cohen, and Murch (1996) examined the development of the Stress-Related Growth Scale (SRGS) as it relates to a study looking at the determinants of stress-related positive outcomes in college students. Participants included 256 students who completed the SRGS, LOT, PANA-X, CSLES, and COPE scales. Results indicated a significant association between intrinsic religious commitment and religious coping and greater growth experienced.

While religiousness has been explored in relation to posttraumatic growth or stress-related growth in general in college students, few researchers have explored college students' experiences with spirituality and emotional being or with posttraumatic growth following the loss of someone important in their lives, specifically. It seems plausible that college age individuals would likely turn to spiritual beliefs and practices as a resource for coping with the loss of a loved one.

Spirituality has been explored in relation to stress and anger in college students (Winterowd, Harrist, Thompson, Worth, & Carlozzi, 2005), but not specifically with grief. Winterowd et al., explored the relationship between spiritual beliefs and involvement with anger and stress in the college student population. This study included

222 college students (143 female, 79 male) and consisted of primarily Caucasian (80.6%) participants from a Southwestern college. The average age of participants was 21-years old ($M = 21.68$, and mode = 20). Measures utilized in this study included the Spiritual Involvement and Beliefs Scale (SIBS; Hatch et al., 1998), the State-Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999), the Perceived Stress Scale (PSS; Cohen & Williamson, 1988). This study utilized Pearson correlational analyses and regression analyses. The results indicated that higher levels of spirituality were related to higher levels of anger and stress. Therefore, these results could imply that college students were turning to their spiritual beliefs to cope with their anger and stress. Another explanation for these results is that these students' spiritual beliefs exacerbated their levels of anger and stress. This study was comprised of primarily Caucasian students and therefore, caution should be utilized when generalizing these results to college students who are culturally diverse.

In summary, Winterowd et al., (2005) explored the relationship between spiritual beliefs and involvement with anger and stress in college students. Participants included 222 students at a Midwestern university, who completed the SIBS, STAXI-2, and PSS. Results indicated that higher levels of spirituality were related to higher levels of anger and stress. Possible explanations for these results include: (1) students who are dealing with anger and stress are turning to their spiritual beliefs to help them cope, (2) students spiritual beliefs are exacerbating their experiences of anger and stress. While this study utilized reliable measures, caution should be exercised when generalizing these results to diverse populations.

Of interest, similar results were found in a separate study with mid-high school students (Carlozzi, Winterowd, Harrist, & Bratkovich, under review). The purpose of this study was similar to the preceding study, to explore the relationship between spiritual beliefs and practices and stress and anger in early adolescents. This study consisted of 53 participants (girls = 29, boys = 24) from a Southwestern state. This sample was comprised of a predominately Caucasian students (n = 44), who ranged in age from 13 to 15 years old, with the average age being 14 (mode = 14). Participants completed a demographic sheet, the Spiritual Involvement and Beliefs Scale (SIBS; Hatch et al., 1998), the State-Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999), the Perceived Stress Scale (PSS; Cohen & Williamson, 1988). This study utilized Pearson Correlation analyses. Results from these analyses indicated that higher levels of anger and stress were positively correlated with higher levels of spirituality. Similar to the previous study, some possible explanations of these results may be that adolescents turn to their spiritual beliefs and practices to cope with their anger and stress. Alternatively, it may be that one's spiritual beliefs exacerbate his/her experience of stress and anger. However, this discussion does not exhaust the possible explanations for these results. The implications of this study suggest that psychologists or counselors working with adolescents should be aware of the relationships between their experience of anger, stress, and their spiritual beliefs and whether their spiritual beliefs are a source of coping or a source of greater distress. This study utilized reliable measures; however caution should be exercised when generalizing to diverse populations.

In summary, Carlozzi et al., (under review) explored the relationship between spiritual involvement and beliefs and anger and stress in adolescents. Participants

included 53 eighth and ninth graders who were predominately Caucasian (n = 44). Participants completed a demographic sheet, the SIBS, STAXI-2, and PSS. Results indicated that higher levels of spirituality were positively correlated with levels of anger and stress. A possible explanation for these results is that adolescents who experience anger and stress turn to their spiritual beliefs to cope. Alternatively, it may be that spiritual beliefs exacerbate one's experience of stress and anger. However, this does not exhaust the list of possible explanations for these findings. While this study utilized reliable measure, caution should be exercised when generalizing these results to diverse populations.

In addition to spirituality which involves developing attachments to something greater than oneself, including a higher power or purpose in life, college students may develop meaningful attachments with other people which may influence how they grow from bereavement experiences.

Attachment

Attachment is defined by Bowlby (1977) as “the propensity of human beings to make strong affectional bonds to particular others” (p. 201). Attachment theory was originated by Bowlby in 1969, in which parent-infant attachment was explored.

Attachment theory is based on two main premises. The first is that childhood experiences of dependability or a lack of dependability and the consequential security or insecurity that results will persist and influence the formation, maintenance, and relinquishing of relationships now and in the future (Bowlby, 1969). The second is that a child incorporates their experiences in relationships with self and others into a working

model (which potentially could include positive and/or negative images of self and others) which will influence how future relationships will be guided (Bowlby, 1980).

Bowlby (1980) proposed three different parent-infant attachment styles: secure, anxious-ambivalent, and avoidant. A secure parent-infant attachment style is established by the caregiver providing care when the child is stressed. This care provides the child with a sense of security, which will enable the infant to explore his or her environment while feeling safe and protected, as well as engage in healthy emotional relationships with others. An avoidant parent-infant attachment style may develop in response to caregivers who are rejecting of the infant. The infant may develop a distrust of others and actively avoid emotional relationships with others. An anxious-ambivalent parent-infant attachment style may arise due to the inconsistent behavior of the caregiver. Caregivers are perceived as inconsistent and unpredictable. The infant may become anxious or ambivalent when placed in a social situation (Bowlby, 1982) and thus may not know whether or not his/her emotional needs will be met in relationships.

Ainsworth (1969) was also instrumental in the development of attachment theory. She is well-known for developing the experimental procedure called the “Strange Situation,” which advanced our understanding of the role of attachment in children. In the “Strange Situation” experiment, she was able to utilize in vivo observations to examine 12-month old child’s behavior when the attachment figure abruptly left and then re-entered the room. The child would be left alone for several minutes before the caregiver would re-enter the room. These observations were augmented by parents’ self-reports of both themselves and the child’s behavior at home.

Ainsworth identified parent-child attachment behavior patterns as either “secure”, “avoidant”, and “anxious” based on the data gathered from the “Strange Situation” experiment. According to Ainsworth et al., (1978) “secure” attachment behavior was identified as initial distress when the caregiver left the room, but then these children quickly and joyfully recovered when they were reunited with their caregiver and were able to resume exploring their environment. Infants and toddlers with “Avoidant” attachment behavior expressed little desire to explore their environment during the study. Furthermore, these infants were relatively unaffected by the absence of their caregiver and in fact, avoided their caregiver when she/he returned to the room. “Anxious” attachment behavior was identified as children becoming very distressed when the caregiver left the room. These children displayed conflicted reactions such as, clinging to the caregiver upon her/his return and then rejected the caregiver subsequently.

Attachment theory was further expanded by Armsden and Greenberg (1987), who explored parental and peer attachments in adolescents. Their research resulted in the development of their measure, the *Inventory of Parent and Peer Attachment*. They found that the quality of parent and peer attachments in adolescence to be highly related to well-being, specifically to self-esteem and overall life-satisfaction. Adolescents who were securely attached tended to communicate openly with their parents and peers and were better adjusted in general.

Hazen and Shaver (1987) and Bartholomew (1990) expanded attachment theory to adults, specifically exploring romantic relationships. Hazen and Shaver (1987) theorized that romantic attachments would operate similar to the way infants and children bond with their parents. In order to test this hypothesis, they developed a self-report

measure which enabled them to classify individuals into three different categories based on their attachment behavior in romantic relationships: secure, anxious, and avoidant. They found that adult romantic attachment patterns were very similar to their childhood attachment styles. Furthermore, they found support for their three categories of attachment patterns. Individuals who identified as having a “secure” attachment style indicated having happy, friendly, trusting, and longer lasting love experiences. They also reported being able to accept and support their partner despite their faults. Participants who identified as having “avoidant” attachment styles indicated having a significant fear of intimacy and were less likely to experience trust and happiness in their relationships. Those who identified as having an “anxious” attachment style tended to experience more emotional highs and lows, higher levels of jealousy, extreme sexual attraction, and obsessive love as compared to individuals who identified as having a “secure” or “anxious” attachment style (Hazen & Shaver, 1987).

Bartholomew and Horowitz (1991) expanded Hazen and Shaver’s (1987) three-category model (i.e., secure, anxious, and avoidant attachment styles into a four-category model of adult romantic attachment that consisted of secure, fearful, preoccupied, and dismissive styles. They proposed that individuals with “Secure” attachment had positive views of both self and others in romantic relationships. These individuals typically believe that they are worthy of love and close relationships and that others will accept them. Individuals with a “Preoccupied” attachment were proposed to have negative views of self, yet positive view of others. These individuals likely maintain a belief that they are unworthy of love, while desiring the validation, closeness, and acceptance of others. Individuals with “Fearful” attachment are said to hold negative views of themselves and

others. These individuals tend to believe that they are not worthy of love and view others as being rejecting of them or not being trustworthy. The “Dismissing” attachment is said to consist of a positive view of themselves, yet negative view of others and the world. These individuals might have a greater sense of self-love and self-reliance and a feeling of indifference towards intimate relationships. While these individuals may unconsciously yearn for close relationships, they tend to remain aloof and self-reliant in an attempt to protect themselves.

Attachment and Bereavement. Parkes, a colleague of Bowlby, was the first to extend attachment theory to bereavement experiences, in which Bowlby followed shortly thereafter.

Bowlby (1980) theorized that one’s attachment style affects her/his adaptation to bereavement. Therefore, understanding the relationship between attachment and bereavement can give us a better understanding of this complex experience and help guide our interventions for those who are bereaved.

Secure attachment styles are characterized by positive mental models of being valued and worthy of others concern, affection, and support. Bowlby theorized that individuals would experience an intense period of grief that would subside as the individual was able to accept the reality of the death.

The anxious-ambivalent attachment style is characterized by fear of being misunderstood and underappreciated. These individuals see significant others as being undependable, unwilling, or unable to commit to intimate relationships (Collins & Feeney, 2000). According to Bowlby, these individuals would experience more chronic grief, with higher levels of distress that do not dissipate over time.

The avoidant attachment style is characterized by individuals who are emotionally distant and view significant others as being unreliable and/or they may desire too much intimacy. These individuals likely experienced caregivers who did not respond to or rejected their attachment needs. Bowlby theorized that individuals with this attachment style may experience delayed or absent grief experiences. In fact, individuals with avoidant attachment styles do not experience emotional distress because they are able to disengage from their attachment systems (Fraley & Shaver, 1997). The active avoidance of affective reactions to bereavement may lead to increased levels of somatic complaints (Mikulincer et al., 1993; Pennebaker & Beall, 1986; Wayment & Vierthaler, 2002).

While these theories of attachment and bereavement have been developed, no researchers to date have explored the relationship between attachment styles and grief reactions including symptoms and the process of grieving. One of the purposes of this study is to address this relationship.

However, some researchers have explored attachment in relation to growth from traumatic experiences. This literature review will be presented next.

Attachment and Post-traumatic Growth

The use of attachment theory in understanding post-traumatic growth is a new endeavor (Salo et al., 2005; Dekel, 2007). Some researchers explored the moderating effect of adult attachment style in relation to exposure to torture and ill-treatment and positive growth from such traumas. Secure attachment in men has been positively associated with posttraumatic growth in exposure to ill-treatment and exposure (Salo et al., 2005). For these men, their experiences strengthened their core beliefs in human virtue and their trust in their fellow-men. Highly negative emotions were associated with

insecure-avoidant attachment styles of men who were exposed to severe trauma. Men with avoidant attachment styles were found to minimize and belittle their painful experiences, while denying and numbing the emotions that were evoked (Salo et al.,; Collins, 1996; Mikulincer, 1998).

However, in another study (Dekel, 2007) exploring posttraumatic growth in wives of prisoners of war, wives with avoidant and anxious attachment styles reported more emotional distress but also more growth from this traumatic experience. It appears that who grows from traumatic experiences and how may depend not only on their attachment style but also whether one is the direct (e.g., tortured person) or the indirect victim of such traumatic experiences (i.e., spouse/partner of those tortured).

As mentioned earlier, no researchers have explored the relationship of attachment styles of growth from trauma/loss experiences in college students. Losing a loved one during a very important life transition, such as college, can have a major impact on college students. Understanding the factors that influence their grief process and how they grow from these loss experiences is very important for college students' future as persons and professionals.

Attachment and Spirituality

While Bowlby pioneered the use of attachment theory to understand the bereavement process, Kirkpatrick and Shaver (1990) have recently expanded the utility of attachment theory to understand the psychology of religion. They theorized that individual differences in religiosity and spirituality (i.e. concepts of God, conversion, and prayer) could be related to early attachment experiences. Furthermore, they suggested that religion may serve the role of an attachment relationship in and of itself. Kirkpatrick

(1992) posited that during times of difficulty, people may “emotionally compensate” and turn to a higher power or God to serve as a secure attachment in their lives. Therefore, individuals may compensate for not having a secure attachment with someone in their life by having God serve as their secure attachment figure during times of distress.

Only three sets of researchers to date have explored the relationship between attachment styles and religion, including religious beliefs, behaviors, religiousness, and religious change (Kirkpatrick & Shaver, 1992).

The relationship between adult attachment style, religious beliefs, and behavior was investigated by Kirkpatrick and Shaver (1992). This study was comprised of 213 participants (84.9% female, 15.1% male) of whom 97.6% were Caucasian. Collins and Read’s (1990) Adult Attachment Scale, Allport and Ross’s (1967) Intrinsic and Extrinsic Religious Orientation Scale, Benson and Spilka’s (1973) Loving God and Controlling God Scale, and filler items were the measures used in this study. The results indicated that individuals with secure attachment styles, in comparison with insecure attachment styles, viewed God as more loving, less controlling, and more distant. Individuals who identified with avoidant attachment styles most highly identified as agnostic; while individuals who identified with ambivalent attachment style had the highest number of people who identified as atheist.

Granqvist (1998) explored the possible relationships between adult religiousness and childhood attachment. A sample of 203 Swedish University students was surveyed utilizing measures of parental religiousness, respondents’ religiousness, religious conversion, and belief in God. Results indicated that religiousness, positive relationship with God, and religious change were significantly predicted by paternal religiousness and

paternal attachment. Individuals with secure attachments had positive correlations between religiousness and parental level of religiousness. However, individual's level of religiousness, with insecure attachments, was independent of parental religiousness. A limitation of this study is that it was conducted with a sample of participants from Christian groups associated with a University in Sweden. The generalizability of this study may be limited by the fact that 90% of the Swedish population is members of the Lutheran State Church of Sweden. These results may not generalize to other Christian or non-Christian religions.

A longitudinal study was conducted to explore the relationship of attachment style to religious change over time (Kirkpatrick, 1998). Surveys containing questions regarding adult attachment, images of God, relationship with God, and beliefs about God were administered in the Fall and Spring semesters to students. Results of 297 participants indicated that individuals with insecure attachment styles had a greater likelihood to develop a new relationship with God over time. Kirkpatrick hypothesized that individuals with more secure models of self would have the greatest ability to turn to God, while those with insecure models of self would have the greatest motivation to use God as a replacement attachment figure.

In summary, individuals with secure attachment styles appear to view God as more loving, less controlling, and yet more distant than those with insecure attachment styles. While individuals with avoidant attachment styles had higher rates of identifying as agnostic and individuals with ambivalent attachment styles had higher rates of identifying as atheist. Furthermore, people with secure attachments had higher rates of positive correlations between their own level of religiousness and their parents' level of

religiousness. Finally, individuals with insecure attachment styles seem to develop a new relationship with God over time, while individuals with secure attachment styles appear to view God in more consistent ways.

Summary

PTG is a relatively new concept that we are in the process of learning more about. At this point we understand PTG to be a component of resilience; however resilience does not mean growth. Attachment theory has been used in relation to bereavement, spirituality, and now PTG. While spirituality has been shown to have a positive relationship with PTG, the components of spirituality that are helpful are less understood at this point. It is the purpose of this study to utilize the constructs of attachment style and spirituality to gain a deeper understanding of what leads to PTG after the death of a loved one.

CHAPTER III

METHODOLOGY

Participants

During the data collection phase, 139 participants completed the surveys. Eight participants were excluded from the final analyses of this study either due to significant incomplete data or due to being an outlier in terms of age. The final sample included 131 college students. The demographics of this sample including race, age, gender, sexual orientation, year in college, and income level are presented in Table 1.

There were (73; 55.7%) college women and (58, 44.3%) college men who participated in this study. The sample was primarily composed of white, non-Hispanic individuals (108; 82.4%), followed by African Americans (12; 9.2%), American Indians/Native Americans (9; 6.9%), Hispanic/Latino(a) (3; 2.3%), Asian/Asian-American (2; 1.5%), and other (1; .8%). The average age of the participants was 20.1 (sd = 1.2), with a range of 18 to 24 years. Twenty year olds (43; 32.8%) were the largest group, followed by 19 year olds (40; 30.5%), 21 year olds (22; 16.8%), 22 year olds (14; 10.7%), 18 year olds (7, 5.3%), 23 year olds (4, 3.1%), and 24 year olds (1, .8%).

In terms of academic class, the majority of participants were freshman students (48; 36.6%), followed by sophomores (40; 30.5%), juniors (23; 17.6%), and seniors (20;

15.3%).

One-hundred and twenty-seven (96.9%) participants identified as heterosexual, while (2; 1.5%) identified as gay/lesbian, and (2; 1.5%) identified as bisexual.

Fifty-one (38.9%) participants stated their family income was between \$51,000 and \$100,000, followed by (39; 29.8%) participants in the \$100,000 or above range, (37; 28.2%) in the \$10,001 to \$50,000, and (4; 3.1%) in the below \$10,000 range.

Participants were asked to identify their religious affiliation. The majority of the sample identified as Baptist (36; 27.5%), followed by Non-Denominational (33; 25.2%), Catholic (20; 15.3%), and Methodist (18; 13.7%). See Table 2.

Participants were asked to describe their relationship (i.e., father) to their lost loved one, the time since their loved one's death, the cause of death, and how emotionally close they were to their loved based on a 7-point Likert scale, (1 = not at all close to 7 = very close). The majority of the participants described their lost loved one as a friend (51; 38.9%), grandparent (46; 35.1%), and 12 (12; 9.2%), or cousin (9; 6.9%).

Participants reported the time since their loved one's death as follows: 30 participants reported 1-2 years (25.6%), 21 participants reported 3-4 years (17.9%), 19 participants reported 2-3 years (16.2%), 16 participants reported less than 1 year (13.7%), 16 participants reported 5 or more years (13.7%), and 15 participants reported 4-5 years (12.8%). There were 14 participants who did not report this information. The cause of death was identified as illness (71; 54.2%), accidents (38; 28%), suicide (6; 4.6%), and old age (5; 3.8%). Most of the participants indicated that they were "moderately close" (49; 37.4%) or "very close" (40; 30.5%) to the person who died. Some participants indicated they were "somewhat close" (28; 21.4%) to the person who died.

Procedure

College students were invited to participate in an on-line study exploring grief and loss issues among college students, in particular, their relationships with others, their spiritual beliefs, and their experiences with the death of a loved one. For the purposes of this study, the term, “loved one”, was operationally defined as someone in their life who died in the last few years including immediate or extended family members (i.e., parent/guardian, sibling, grandparent), a close friend, and their significant other/partner/spouse. Participants were not excluded from the study based on the cause of death for the loved one (i.e., whether it was accidentally, sudden, or chronic).

Participation in this study was completely voluntary. If participants chose to participate, they completed the five questionnaires in this study. There was no penalty for not participating and participants had the right to withdraw their consent and participation at any time. Participants earned extra course credit for their participation (1/2 credit). If participants chose not to participate in this study, they were able to choose to participate in another study or another alternative as designated by their instructors. Those who participated were directed to a separate webpage with counseling resources if they were interested.

All information collected in this study was strictly confidential and anonymous. No individual participants were identified. Instructors did not know the individual responses of their students to the questionnaires. However, their participation in this research project will be indicated by assigning the participant research credit in the on-line database.

Possible benefits for participating in the study include gaining a better understanding of how they dealt with the loss of a loved one. The only possible risk for participating in this study is remembering that grief and loss. Participation in this study was completely voluntary. Participants could stop their participation in the study at any point in time. A resource list of counseling services was provided to all participants in case they wanted to seek counseling for support.

Measures

Participants completed an on-line survey including a demographic sheet, the Hogan Grief Reaction Checklist (Hogan, 2001), the Post-Traumatic Growth Inventory (Tedeschi & Calhoun, 1996), the Spirituality Involvement and Beliefs Scale (Hatch, Burg, Naberhaus, & Hellmich; 1999), and the Relationships Questionnaire (Bartholomew and Horowitz, 1991).

Post-Traumatic Growth Inventory (PTGI, Tedeschi & Calhoun; 1996). The PTGI is a 21-item self-report measure of perceived growth from trauma. Participants respond to each item using a six-point Likert scale (i.e., 0 = I did not experience this change as a result of my crisis, 3 = I experienced this change to a moderate degree as a result of my crisis, 5 = I experienced this change to a very great degree as a result of my crisis; Tedeschi & Calhoun, 1996). The PTGI was developed to assess the perceived benefits that result from trauma in the three general domains of self-perception, interpersonal relationships, and philosophy towards life.

The PTGI sub-scales represent the five factors of posttraumatic growth including New Possibilities (5 items), Relating to Others (7 items), Personal Strength (4 items), Appreciation of Life (3 items), and Spiritual Change (2 items). The New Possibilities

sub-scale is intended to measure how much an individual views life as having potential for a future after a trauma (e.g. “I developed new interests”); the Relating to Others sub-scale measures the impact of trauma on relationships with others (e.g. “A sense of closeness with others”); the Personal Strength sub-scale assesses the self-reliance an individual may develop following a traumatic event (e.g. “A feeling of self-reliance”); the Appreciation of Life sub-scale assesses how much people value existence after a trauma (e.g. “My priorities about what is important in life”). The Spiritual Change sub-scale measures the impact on their spirituality after a trauma (e.g. “I have a stronger religious faith”). Higher scores indicated more post-traumatic growth. Given the analyses planned for the present study, only the total score was used and not the subscale scores.

For the purposes of this study, the PTGI directions were adapted to assess participants’ experience of growth (i.e., new possibilities, relating to others, personal strength, appreciation of life, and spiritual change) following a death loss. The PTGI is worded to have respondents’ rate items in response to their “crisis”. Adapting the wording of this measure to assess participants’ experience of growth “following a death loss” will increase the validity of this study due to well defined instructions that indicate what experience they are to respond to the questionnaire.

The original PTGI was tested on 604 undergraduate students in the United States (Tedeschi & Calhoun, 1996). The 2-month test-retest reliability estimate of the total PTGI score was .71. The internal consistency reliability estimates for the five subscales ranged from .67 to .85 (i.e., New Possibilities = .84; Relating to Others = .85; Personal Strength = .72; Appreciation of Life = .67; Spiritual Change = .85). The total internal

consistency reliability of 21-item score was .90. The internal consistency reliability of the PTGI total score was .95 for the present sample of college students.

Construct validity was established by comparing individuals who had experienced a severe trauma with individuals experiencing no trauma. Results found that individuals who had experienced severe trauma scored higher on the New Possibilities factor ($F(1,113) = 6.54, p < .05$), the Relating to Others factor ($F(1,113) = 4.95, p < .05$), the Personal Strength factor ($F(1,113) = 9.23, p < .01$), and the Appreciation of Life factor ($F(1,113) = 17.58, p < .001$), but the Spiritual Change factor ($F(1,113) = 1.12, n.s.$)

Convergent validity for the PTGI was established through comparing the PTGI with the Marlowe-Crowne Social Desirability Scale (M-C; Crowne & Marlowe, 1960), the Life Orientation Test (LOT; Scheier & Carver, 1985), and the NEO Personality Inventory (NEO; Costa & McCrae, 1985). The Relating to Others subscale correlated with the LOT (.14), the NEO Extraversion subscale (.28) and Agreeable subscale (.18). The New Possibilities subscale correlated with the LOT (.22) and the NEO Extraversion subscale (.16) and Openness subscale (.25). The Personal Strength subscale correlated with the LOT (.22), the NEO Extraversion subscale (.15), the Openness subscale (.25), and the Conscientiousness subscale (.15). The Spiritual Change subscale correlated with the LOT (.17), the Religious Participation (.50 at $p < .001$), and the NEO Extraversion (.26). The Appreciation of Life subscale correlated with the M-C (-.15), the LOT (.15), and the NEO Extraversion (.16). The Total PTGI correlated with the LOT (.23), the Religious Participation (.25), the NEO Extraversion (.29), the NEO Openness (.21), the NEO Agreeable (.18), and the NEO Conscientiousness (.16).

The Spiritual Involvement and Beliefs Scale (SIBS; Hatch, Burg, Naberhaus, & Hellmich, 1999).

The SIBS is a 26-item measure of spiritual beliefs and level of involvement in spiritual activities. The first 23 items are rated on a five-point Likert-type scale (i.e., 1 = never, 5 = always; 1 = 0 times, 5 = 10 or more times for the last three items). The four factors/subscales of the SIBS are: External/Ritual, Internal/Fluid, Existential/Meditative, and Humility/Personal Application. The External/Ritual subscale measures an individual's participation or involvement in spiritual activities/rituals as well as beliefs in a power greater than oneself (e.g., "Spiritual activities have not helped me become closer to other people."). The Internal/Fluid subscale assesses an individual's personal growth and internal spiritual beliefs (e.g., "I can find meaning in times of hardship."). The Existential/Meditative subscale evaluates an individual's reflection on purpose or meaning in life (e.g., "My life has a purpose."). The Humility/Personal Application subscale assesses an individual's daily application of spirituality and humility (e.g., "When I wrong someone, I make an effort to apologize."); Hatch et al., 1999).

The SIBS is a reliable and valid measure of spiritual beliefs and involvement (Hatch et al., 1999). The SIBS items demonstrate good internal consistency reliability (Cronbach alpha of .92 for the overall score) and good test-re-test reliability estimated at .92 over a 7- to 9-month interval. The internal consistency reliability estimates for each of the SIBS subscales for this sample were: .92 for the overall score, .98 for External/Ritual, .74 for Internal/Fluid, .70 for Existential/Meditative, and .51 for Humility/Personal Application. The internal consistency reliability of the SIBS total

score was .92 for the present sample of college students; therefore, the total score of the SIBS was used in the analyses of this study.

Convergent validity is evident in that the SIBS was significantly and positively correlated with other measures of spirituality (e.g., $r = .80$ with the Spiritual Well-Being Scale).

The Hogan Grief Reaction Checklist (HGRC; Hogan, 1991)

The HGRC is a 61-item checklist designed to measure specific experiences associated with the bereavement process. Items are answered on a five point Likert-type scale (1 = Does not Describe me, 3 = Describes me fairly well, 5 = Describes me very well). Originally, the HGRC was developed empirically through interview and anecdotal data obtained from 586 bereaved adults. Participants were recruited through support groups including Compassionate Friends, Parents of Murdered Children, Survivors of Suicide, and widow support groups. The content of the data was analyzed and divided into six theoretical categories from which 100 items were developed. These items were analyzed through a series of focus groups. Focus groups were based on the cause of death (illness, accident, homicide, and suicide), relationship to the deceased (parent, sibling, spouse, and child), as well as a “panel of experts,” which consisted of 36 graduate nursing students.

Through factor analysis, six factors emerged from the HGRC: Despair, Panic Behavior, Blame/Anger, Detachment, Disorganization, and Personal Growth (Hogan, 1991). The Despair subscale consists of 13 items and measures hopelessness, sadness, and loneliness. The Panic Behavior subscale consists of 14 items and measures fear, panic, and somatic symptoms. The Blame-Anger subscale consists of 7 items and

measures irritation, anger, and feelings of injustice. The Detachment subscale consists of 8 items and measures avoidance of intimacy and a feeling of being detached from a change in one's identity and others. The Disorganization subscale consists of 8 items and measures difficulty concentrating and problems with remembering new information, as well as, formerly remembered information. The Personal Growth subscale consists of 11 items and measures having a sense of becoming more compassionate, tolerant, forgiving, and hopeful.

The internal consistency reliability estimates for the HGRC subscales are as follows: Despair (.89); Panic Behavior (.90); Blame/Anger (.79); Detachment (.87); Disorganization (.84); and Personal Growth (.82); the overall internal consistency was (.90); (Hogan, 2001). For the purposes of the present study, the total score of the HGRC was used instead of the subscale scores. The internal consistency reliability of the HGRC total score was .95 for the present sample of college students; therefore, the total score of the HGRC was used in the analyses of this study.

The HGRC subscales test-retest reliability scores over a 4-week interval are as follows: Despair (.84); Panic Behavior (.79); Personal Growth (.81); Blame and Anger (.56); Detachment (.77); and Disorganization (.85). These results were significant at $p < .001$.

Convergent and divergent validity was examined by comparing the HGRC with the Texas Revised Inventory of Grief (TRIG; Faschingbauer, 1981), the Impact of Event Scale, (IES; Horowitz et al., 1985), and the Grief Experience Inventory (Sanders et al., 1985). The HGRC Despair subscale was positively correlated with the GEI Despair subscale (.60) and the IES Intrusion subscale (.62). The Panic Behavior subscale

positively correlated with the GEI Despair (.56) and Somatization (.48) subscales, as well as the IES Intrusion subscale (.48). The HGRC Personal Growth subscale negatively correlated to each of the other HGRC subscales, as well as all of the TRIG, GEI, and IES subscales. The HGRC Blame and Anger subscale was positively correlated with the GEI Anger and Hostility subscale (.57). The HGRC Detachment subscale was positively correlated with two GEI subscales Despair (.63) and Social Isolation (.52), as well as the IES Intrusion subscale (.54). The HGRC Disorganization subscale correlated with the GEI Depersonalization (.49). These correlations indicate evidence of convergent and discriminant validity of the HGRC (Hogan et al., 2001).

Relationships Questionnaire (RQ; Bartholomew & Horowitz, 1991)

The RQ is a four-item measure of adult attachment. In particular, the RQ assesses an individual's level of endorsement of four adult attachment styles: secure, fearful, preoccupied, and dismissing (Bartholomew and Horowitz, 1991). Each item of the RQ includes a short paragraph to explain the attachment style. Individuals rate how closely this statement relates to how they feel in relationships with others on a 7-point Likert scale (i.e., 1= Not at all like me, 4= Neutral, 7= Very much like me).

The RQ can be worded in terms of general orientations to close relationships, orientations to romantic relationships, or orientations to a specific relationship. The RQ has been used to categorize participants into their best fitting attachment pattern (Bartholomew & Horowitz, 1991).

The first paragraph measures the individual's level of "secure" attachment (e.g. "I don't worry about being alone or having others not accept me."). The second paragraph measures the individual's level of "fearful" attachment (e.g. "I worry that I will be hurt if

I allow myself to become too close to others.”). The third paragraph measures the individual’s level of “preoccupied” attachment (e.g. “I am uncomfortable being without close relationships, but I sometimes worry that others don’t value me as much as I value them.”). The fourth paragraph measures the individual’s level of “dismissing” attachment (e.g. “I am comfortable without close emotional relationships.”).

No internal consistency reliability estimates were calculated for the RQ items because they represent one item for each attachment style. In comparison with the Adult Attachment Interview, there is evidence of both convergent validity and discriminant validity. The convergent validity is .34, whereas the discriminant validity is .09 (Bartholomew & Horowitz, 1991).

Bartholomew and Horowitz (1991) as well as Brennan et al., (1998) revealed high validity and reliability ratings for this measure.

Demographic Sheet

Participants completed a demographic sheet to collect information about participants’ age, gender, and race, and sexual orientation, year in college, family income, and religious affiliation. Also, they provided information about the person in their life who died (i.e., type of kinship relationship), the cause of the person’s death, and the number of months since the death of their loved one.

CHAPTER IV

FINDINGS

For this sample, the mean SIBS score was 66.52 with a standard deviation of 17.01, and a range of 79. The mean PTGI score was 68.66 with a standard deviation of 18.09, and a range of 80. For the HGRC the mean score was 133.06 with a standard deviation of 33.23, and a range of 166. The mean scores (and standard deviations) for the RQ scales were as follows: secure = 3.48 (sd = 1.07), fearful = 2.64 (sd = 1.25), preoccupied = 2.76 (sd = 1.11), dismissive = 2.88 (sd = 1.17). All four scales had a range of 4.

What is the relationship between and among bereavement, spirituality, attachment, and post-traumatic growth?

Pearson correlation analyses (two-tailed) were conducted to explore the bivariate relationships among bereavement, spirituality, attachment, and post-traumatic growth. Spirituality and posttraumatic growth were positively correlated. College students who reported being more spiritual in nature (lower SIBS overall scores) reported experiencing more posttraumatic growth (higher PTGI overall score; $r = .35, p < .01$). There was a significant negative correlation between the amount of distress due to grief (HGRC overall score) and level of spirituality (SIBS overall score; $r = .26, p < .01$). College

students who reported higher levels of spirituality reported lower levels of distress due to grief; those who were less spiritual tended to experience more grief distress.

Attachment experiences were also related to grief and post-traumatic growth. Fearful attachment to others in general was positively correlated with grief distress ($r = .30, p < .01$) and posttraumatic growth ($r = .18, p < .05$). Secure attachment was positively correlated with posttraumatic growth ($r = .23, p < .01$). College students who reported more negative views of themselves and others (i.e., more fearful attachment style on RQ) also tended to report more grief distress as well as more posttraumatic growth. College students who reported more positive views of self and others (i.e., more secure attachment style on RQ) tended to report more posttraumatic growth. Therefore, higher levels of spiritual involvement, more secure attachments as well as more fearful attachments with others (negative view of self and others) contributed to posttraumatic growth.

What is the relationship of spirituality and attachment style levels with post-traumatic growth?

A multiple regression was conducted to explore the linear relationship of spirituality and general attachment styles with posttraumatic growth. The model was statistically significant, $F(5, 123) = 8.45, p < .001$. Spirituality and general attachment styles accounted for 25.6% of the variance in posttraumatic growth scores. The effect size = .34, which is considered a medium effect size. See Table 4.

What is the relationship of spirituality and attachment style levels with grief among college students?

A multiple regression was conducted to explore the linear relationship of spirituality and general attachment styles (i.e., secure, fearful, dismissive, and preoccupied attachment) with grief distress. The model was statistically significant, $F(5,118) = 4.77, p < .001$. Spirituality and general attachment styles accounted for 16.8% of the variance in grief distress scores. The effect size = .20, which is considered a small effect size. See Table 5.

CHAPTER V

CONCLUSION

This study was conducted to explore the relationships of spirituality, attachment style, and posttraumatic growth after a death loss in college students. This study was exploratory in nature given the lack of research examining the links between spirituality, attachment style and posttraumatic growth. Several theorists have argued that there is some support for the relationship between religion and religiousness with post-traumatic growth in general among college students (Calhoun, Cann, Tedeschi, & McMillian, 2000; Park, Cohen, Murch, 1996). Furthermore, Bowlby (1980) theorized that enduring bonds may be related to the process of grief and bereavement; however, no researchers to date have tested this theory. Due to the significant number of college students who experience grief and loss during their college years (22% to 30%; Balk, 2001; up to 49%; Hardison, Neimeyer, & Lichstein, 2005), it is important to explore factors that contribute to posttraumatic growth in order to better facilitate, promote, and understand the growth process in these college students.

Results of the present study indicated that spirituality was positively related to posttraumatic growth and negatively related to grief distress. In terms of general attachment styles with others, secure attachments were positively related to posttraumatic growth, yet negatively related to grief distress. Fearful attachments with others were

positively related to posttraumatic growth as well as grief distress. Preoccupied and dismissive attachments with others were not related to grief distress or posttraumatic growth. In addition, grief distress and posttraumatic growth were not related to one another.

Spirituality and general attachment styles were found to be significant predictors of posttraumatic growth in college students who had experienced a death loss. In combination, attachment style and spirituality accounted for 25.6% of the variance in posttraumatic growth in this sample of college students.

Furthermore, spirituality and general attachment styles were found to be significant predictors of grief distress in college students. In combination attachment style and spirituality accounted for 16.8% of the variance in grief distress. Next, the results of these analyses will be interpreted.

The results of this study suggest that college students who experience a death loss and who have higher levels of spirituality may experience lower levels of grief distress. Previous researchers have found that spirituality has been associated with coping (Calhoun et al., 2000), social support (Cadell, Regehr, & Hemsworth, 2003), and a search for meaning (Folkman, 1997). Many theorists have noted a common personal experience following a death loss of a loved one is a search for meaning (Balk, 1999; Becker, 1973; Doka, 1993; Marrone, 1999).

A possible explanation for the results of this study is that college students who have higher levels of spirituality already have a framework in which they can put their death loss experience into and help them to make meaning from this experience. Attig (2004) suggested that making meaning is important in being able to confront the

inevitability of death. It is possible that a student who engages in spiritual activities and beliefs may have already created a framework that includes death as an inevitable experience, therefore, making experiences of death losses less distressing, due to this experience coinciding with his/her previous belief system.

Another possible explanation for higher levels of spirituality to be associated with lower levels of grief distress is that spirituality is recognized as a form of coping (Calhoun et al., 2000). Therefore, these students may be employing spirituality as a coping mechanism consequently decreasing the level of grief distress they are experiencing.

Also, higher levels of spirituality are associated with social support (Cadell, Regehr, & Hemsworth, 2003). Therefore, when a student experiences a death loss, he/she already has a support system of people who can provide support rather than becoming socially isolated, therefore, increasing his/her level of distress.

A finding from this study that was not anticipated was that level of grief distress was not related to post-traumatic growth. Previously, Calhoun and Tedeschi (2006) found that post-traumatic growth to be associated with emotional distress. A possible explanation for this finding may be that the level of grief distress an individual experiences is not as strongly associated with posttraumatic growth as other factors, such as level of spirituality and attachment style. In addition, it is possible that college students can grow from death loss experiences regardless of their level of grief distress.

In the present study, college students with more of a fearful attachment style tend to experience greater levels of grief distress. According to Bartholomew and Horowitz (1991), individuals with “Fearful” attachment are said to hold negative views of

themselves and others. These individuals tend to believe that they are not worthy of love and view others as being rejecting of them or not being trustworthy. The results of this study can be understood as individuals who experience a death loss who possess a fearful attachment style, may interpret their loss as a form of rejection. Therefore, reinforcing their belief structure that they are not worthy of love and increasing their level of grief distress. Another explanation for these results is individuals with a fearful attachment style perceive others as undependable and not able to consistently meet their needs. When a loved one dies, this confirms their belief that their needs will not be met by their loved one and hence, increasing their level of distress in response to the death of their loved one. The results of this study, specifically the connection between attachment style and level of grief distress increases support for Bowlby's (1980) theory that enduring bonds are related to the bereavement process.

While college students who endorsed higher levels of a fearful attachment style experienced higher levels of grief distress, these individuals also experienced higher levels of posttraumatic growth. A possible explanation for these results is that higher levels of distress for individuals who endorse a higher fearful attachment style may experience higher levels of PTG, which confirms part of the PTG theory. Calhoun and Tedeschi (2006) proposed that individuals that experience higher levels of distress, experience greater levels of PTG. Furthermore, college students who endorse a higher fearful attachment style may come to the conclusion that their approach to relationships and life is not helping them meet their needs or get their needs met; therefore, they may be more open to new approaches to their experiences that promote growth.

Results of this study indicate that college students who experience the death of a loved one but who are more likely to grow from these experiences (PTG) tend to be more secure in their attachments with others and tend to report being more spiritual in their beliefs and involvement. While PTG is understood as positive changes in one's feelings and views about the world, factors that may facilitate PTG are active thinking and experiencing of the traumatic event, social support, and cultural influences. In this study, spirituality and secure attachment styles were associated with PTG after a death loss for college students. A possible explanation for this may be that individuals with a secure attachment style have a positive view of themselves and others, which enables them to experience events, such as the death of a loved one, with a sense of security knowing they are capable of developing fulfilling relationships with others and will be able to do so in the future. Specifically, while they have lost a significant person in their life and are experiencing grief, they may feel more able to cope because they feel more confident that they can rely on their support system and that their support system will meet their emotional needs.

Many have indicated the significant role that spirituality plays in the worldview of many college students (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000; Emmons, Cheung, & Tehrani, 1998; Pargament, 1997; Plante & Sherman, 2001; Standard, Sandu, & Painter, 2000). With this in mind, college students may be more inclined to utilize their spiritual beliefs as a coping mechanism during their experience of grief. Another explanation may be that college students who endorse higher levels of spirituality have a framework in which to understand their experiences, resulting in less grief distress. This process of working to understand their experiences may allow them

to confront existential issues and deepen their sense of purpose and their ability to overcome adversity, therefore, resulting in PTG. Also, individuals with higher levels of spirituality may have a support system in which to share their struggles, express their feelings, come to new understandings of their experiences, as well as, build and deepen their relationships.

Furthermore, these factors taken in combination may provide individuals with both a secure attachment style and who experience higher levels of spirituality have the ability to build relationships that meet their emotional needs, feel positive about their ability to manage new experiences, have a framework in which to understand their experiences, and a built-in support network. This combination of resources may play a role in enabling college students who experience the death loss of a loved one to grow from their traumatic event.

The results of this study indicate that attachment style and level of spirituality are predictive of PTG, as well as, grief distress. These results provide vital information in for increasing our understanding of factors that play a role in the grief process, and specific factors that lead to PTG in the college population.

Limitations of the study

The purpose of this study was to examine the relationships of spirituality and attachment styles with posttraumatic growth after a death loss in college students. A limitation of this study is that the focus of this study was addressing the college age population; hence, caution should be exercised when applying these results to individuals of different age groups. These results are not necessarily representative of the general population. Furthermore, the participants of this study received credit for their

participation in this study for their courses; therefore, this may have been their motivation for participating in this study as opposed to being interested in this particular topic. Also, this sample was not recruited from a clinical setting; it is likely that the participants of this study did not exhibit clinically significant levels of grief distress in response to their experience of a death loss of a loved one. Due to this, it is possible that the relationship between spirituality, attachment style, and posttraumatic growth may be stronger in clinical samples. Also, this study was comprised of primarily Caucasian students and therefore, caution should be utilized when generalizing these results to college students who are culturally diverse. Finally, the instruments utilized in this study were on-line self-report measures; therefore, results were based upon the participant's perceptions of their spirituality, attachment styles, grief distress, and post-traumatic growth. Participants may or may not have reported with complete honesty, which could have affected the results. Another set of limitations related to the study involves the variables studied and analysis conducted. This study was limited to attachment style and spirituality. These variables accounted for approximately 25% of the variance in posttraumatic growth scores and 17% of the variance in grief distress scores, which means that there are other correlates and/or contributors to posttraumatic growth, as well as, grief distress that were not explored in this study. Also, correlational and multiple regression analyses were conducted, and these analyses are not able to determine causality. The results can only indicate a relationship between spirituality and attachment styles with posttraumatic growth, and grief distress, and the extent to which spirituality and attachment styles can predict posttraumatic growth, as well as, grief distress. It could not be determined whether or not one of the independent variables actually caused posttraumatic growth.

Implications for future research

Future research is needed to better understand the grief process, as well as, factors that lead to PTG after a death loss. Longitudinal studies in this area would add significant information that would further increase our understanding of this experience. Furthermore, conducting research with a more heterogeneous population would increase generalizability of these results.

One suggestion would be for future researchers to look at a more clinical population, which might provide for a more representative sample of posttraumatic growth after a distressing death loss of a loved one. While there are several limitations of this study, one limitation of the current study is the use of self-report measures. While these measures did provide the needed information, participants may or may not have been completely honest in their responses, and may or may not have ulterior motives for their participation. Future research may be used to examine posttraumatic growth through clinical interviews or direct observations through qualitative methods using a more clinical population than the college sample used in this study.

Also, the addition of other variables may be helpful in determining other predictors of posttraumatic growth. Furthermore, the analyses used for this study only included correlational analyses and regression analyses, which cannot explain causality.

A final consideration for future research is a focus on the attachment styles and how the nature of one's relationships affects college students' experience of grief distress and posttraumatic growth. Research is needed in order to specifically tease out what it is about one's attachment style that may predict posttraumatic growth and grief distress in order to promote growth experiences in college students. Also, future research could be

instrumental in determining protective factors that may decrease the amount of distress experienced after a death loss, through further examination of attachment styles and their level of spirituality. While the findings in this study suggest that one's attachment style and level of spirituality predicts increased levels of posttraumatic growth, the results do not explain what it is about one's level of spirituality and attachment style that predicts posttraumatic growth. Future research could be particularly important in this area to tease out what it is about these variables that promotes growth after traumatic experiences. Further research would not just help to identify effective programs or interventions for college students who have experienced a significant death loss to help decrease the amount of distress experienced, but also promote growth experiences in response to the death loss they experienced.

Implications for Theory and Practice

In summary, the level of spirituality and attachment style of college students may play an important role in his/her experience of posttraumatic growth, as well as grief and distress. Given that a significant number of college students, 22% to 30% (Balk, 2001) and upwards to 49% (Hardison, Neimeyer, & Lichstein, 2005) experience grief and loss during their college years, exploring the attachment styles and level of spirituality appear to be particularly important for those in the mental health fields who are assisting and counseling college students who experience the death loss during their college years. One interesting and important area to explore with those who have experienced a death loss may be the quality and nature of college students' relationships. This has both implications for practice and theory. An implication for practice may be that therapists focus more attention on college students' attachment style and how he/she is coping with

any issues related to the grief he/she is experiencing. It may be that college students who hold negative views of themselves and others or college students who hold positive views of both self and others may benefit from being involved in therapy that addresses the student's level of spirituality and incorporates his/her beliefs in therapy to not only help the student to work through his/her grief issues, but may promote growth experiences as well.

Another important finding for practice would be a possible better understanding of factors that contribute to development during the college years. The findings suggest one's level of spirituality may contribute to positive coping and growth in times of distress. This finding suggests that developing workshops that address grief experiences, as well as, factors that contribute to posttraumatic growth. These workshops could serve to inform students, educators, and mental health providers of importance of utilizing one's spiritual beliefs in order to cope with distressing experiences. Furthermore, educators, mental health professionals, and others involved with college students who experience a death loss may seek ways to help these students form more healthy relationships. This may mean helping the college student to find activities in school or the community in which they feel a connection with a higher power. A final implication for practice may be emphasizing the therapeutic relationship in therapy as a way of modeling a supportive relationship where healthy relationships can be modeled, and growth can be fostered. This could be achieved by a very supportive and empathic relationship in which the college student is able to feel a sense of mutuality, care, and learning how to meet their own needs and find ways to get their needs met through their relationships. Additionally, therapy that is aimed at helping college students who

experience a death loss understand their style of relating and connecting with others, may be extremely beneficial in helping them cope with their grief loss. Understanding this may provide understanding in factors that may inhibit them from being able to get their needs met through their relationships, as well as, enhance their ability to be able to better utilize their support network to be able to meet their needs, especially during the grieving process. More research could determine specifically which forms of therapy would be most effective in doing this, but it would seem that any supportive relationship in which the college student is allowed to explore their style of connecting and relating to others, develop a healthy connection with another person, and learn more healthy coping mechanisms would be beneficial.

PTG theorists suggest that the greater the level of distress, the greater the opportunity, but the results from this study indicate that PTG can occur regardless the level of distress, and that one's attachment style and level of spirituality are important factors in predicting PTG. Another important finding that contributes to PTG theory is the increased support for spirituality being a contributing factor to PTG. Furthermore, the results from this study suggest that it is not only a matter of whether the individual believes in a higher power, but how they relate and develop relationships with others that further contribute to their experience of PTG.

Summary

In summary, the purpose of the present study is to explore the relationship of college students' general spiritual beliefs and practices (i.e., extrinsic, intrinsic, existential, humility/personal application) and the quality and nature of their relationships with others (i.e., general attachment: secure, preoccupied, dismissive, fearful), with their

bereavement (i.e., grief symptoms) and post-traumatic growth following the loss of a loved one. Variables were chosen based on attachment theory, PTG theory. Results indicated that spirituality and posttraumatic growth were positively correlated. There was a significant negative correlation between the amount of distress due to grief and level of spirituality. Fearful attachment to others in general was positively correlated with grief distress and was positively correlated with posttraumatic growth. Secure attachment was positively correlated with posttraumatic growth. A multiple regression found that spirituality and general attachment styles accounted for 25.6% of the variance in posttraumatic growth scores. A multiple regression found that spirituality and general attachment styles accounted for 16.8% of the variance in grief distress scores. Future research may be used to determine causality, the influence of other variables in understanding PTG, the importance of studying the attachment styles in clinical samples of college students, including use of clinical interviews and behavioral observations. Implications for practice include helping college students to utilize their spiritual beliefs and interpersonal styles in order to help them cope with grief experiences, as well as, facilitate growth experiences. Additionally, educating the community, schools, and mental health professionals on the potential benefits of utilizing one's spiritual beliefs, as well as, their attachment style could help to both decrease distressing grief experiences and promote growth experiences

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APPENDICES

APPENDIX A

Tables

Table 1

Demographics of the Sample (n=131)

| Age | m= 20.1 | sd= 1.2 |
|---------------------------------|---------|---------|
| | n | % |
| 18 years old | 7 | (5.3%) |
| 19 years old | 40 | (30.5%) |
| 20 years old | 43 | (32.8%) |
| 21 years old | 22 | (16.8%) |
| 22 years old | 14 | (10.7%) |
| 23 years old | 4 | (3.1%) |
| 24 years old | 1 | (.8%) |
| Sex | n | % |
| Male | 58 | (44.3%) |
| Female | 73 | (55.7%) |
| Year in College | n | % |
| Freshman | 48 | (36.6%) |
| Sophomore | 40 | (30.5%) |
| Junior | 23 | (17.6%) |
| Senior | 20 | (15.5%) |
| Race | n | % |
| African American | 12 | (9.2%) |
| Hispanic/Latino(a) | 3 | (2.3%) |
| American Indian/Native American | 9 | (6.9%) |
| White, Non-Hispanic | 108 | (82.4%) |
| Asian/Asian-American | 2 | (1.5%) |
| Other | 1 | (.8%) |
| Sexual Orientation | n | % |
| Heterosexual | 127 | (96.9%) |
| Gay/Lesbian | 2 | (1.5%) |
| Bisexual | 2 | (1.5%) |
| Year in College | n | % |
| Freshman | 48 | (36.6%) |
| Sophomore | 40 | (30.5%) |
| Junior | 23 | (17.6%) |
| Senior | 20 | (15.5%) |

Table 1 (Continued)

| Income Level | n | % |
|----------------------|----|---------|
| Below \$10,000 | 4 | (3.1%) |
| \$10,001 – \$50,000 | 37 | (28.2%) |
| \$50,001 - \$100,000 | 51 | (38.9%) |
| \$101,000 – Above | 39 | (29.8%) |

Table 2

Religious Affiliation, Relationship of Participant to Loved One Who Died, Time Since Loved One's Death, Cause of Death, and Emotional Closeness to Loved One Who Died
(N=131)

| <u>Religious Affiliation</u> | <u>n</u> | <u>%</u> |
|------------------------------|----------|----------|
| Agnostic | 2 | (1.5%) |
| Atheist | 5 | (3.8%) |
| Baptist | 36 | (27.5%) |
| Catholic | 20 | (15.3%) |
| Christian | 2 | (1.5%) |
| Church of Christ | 4 | (3.1%) |
| Lutheran | 2 | (1.5%) |
| Methodist | 18 | (13.7%) |
| Non-denominational | 33 | (25.2%) |
| Pentecostal | 1 | (.8%) |
| Presbyterian | 3 | (2.3%) |
| Protestant | 1 | (.8%) |

| <u>Loved One Who Died</u> | <u>n</u> | <u>%</u> |
|----------------------------------|----------|----------|
| Father | 4 | (3.1%) |
| Grandparent | 46 | (35.1%) |
| Aunt/Uncle | 12 | (9.2%) |
| Cousin | 9 | (6.9%) |
| Friend | 51 | (38.9%) |
| Significant Other/Partner/Spouse | 3 | (2.3%) |
| Great Grandparent | 2 | (1.5%) |
| Stepmother | 1 | (.8%) |
| Dog | 1 | (.8%) |

| <u>Time Since Loved One's Death</u> | <u>n</u> | <u>%</u> |
|-------------------------------------|----------|----------|
| Less than 1 year | 16 | (13.7%) |
| 1-2 years | 30 | (25.6%) |
| 2-3 years | 19 | (16.2%) |
| 3-4 years | 21 | (17.9%) |
| 4-5 years | 15 | (12.8%) |
| 5 or more years | 16 | (13.7%) |

| <u>Cause of Death</u> | <u>n</u> | <u>%</u> |
|-----------------------|----------|----------|
| Accident | 12 | (29%) |
| Illness | 71 | (54.2%) |

| | | |
|---------------------|---|--------|
| Suicide | 6 | (4.6%) |
| Drug Overdose | 2 | (4.6%) |
| Table 2 (Continued) | | |
| Heart Attack | 2 | (1.5%) |
| Electrocution | 1 | (.8%) |
| Massive Seizure | 1 | (.8%) |
| Military | 1 | (.8%) |
| Homicide | 1 | (.8%) |
| Old Age | 5 | (3.8%) |
| Stroke | 2 | (1.5%) |

| Emotional Closeness | n | % |
|---------------------|----|---------|
| 1-Not at all Close | 2 | (1.5%) |
| 2-Not Very Close | 3 | (2.3%) |
| 3-Not Close | 1 | (.8%) |
| 4-Neutral | 8 | (6.1%) |
| 5-Somewhat Close | 28 | (21.4%) |
| 6-Moderately Close | 49 | (37.4%) |
| 7-Very Close | 40 | (30.5%) |

Table 3

Correlation Matrix (N=131)

| | Grief | PTGI | SIBS | Secure | Fearful | Preoccupied | Dismissive |
|-------------|-------|------|---------------|--------------|---------------|-------------|--------------|
| Grief Tot. | 1.0 | -.06 | .26** | -.21* | .30** | .17 | -.01 |
| PGI Tot. | | 1.0 | -.35** | .23** | .18* | .09 | .11 |
| SIBS Tot. | | | 1.0 | -.13 | .09 | .04 | .16 |
| Secure | | | | 1.0 | -.33** | -.03 | -.01 |
| Fearful | | | | | 1.0 | .19* | .23** |
| Preoccupied | | | | | | 1.0 | -.19* |
| Dismissive | | | | | | | 1.0 |

* p < .05 ** p < .01

Grief = Grief distress

PTGI = Post-traumatic growth

SIBS = Spirituality

Secure = Secure attachment style

Fearful = Fearful attachment style

Preoccupied = Preoccupied attachment style

Dismissive = Dismissive attachment style

Table 4

Multiple Regression Findings for Spirituality and Attachment Styles as Predictors of Posttraumatic Growth (N=131)

| Predictors | R | R square | F | r |
|-------------|------|----------|--------|--------|
| SIBS total | .506 | .256 | 8.45** | -.35** |
| Secure | | | | .23** |
| Fearful | | | | .18* |
| Preoccupied | | | | .09 |
| Dismissive | | | | .11 |

*p < .05 **p < .01

r = correlation coefficient

SIBS = Spirituality

Secure = Secure Attachment

Fearful = Fearful Attachment

Dismissive = Dismissive Attachment

Preoccupied = Preoccupied attachment

Table 5

Multiple Regression Findings for Spirituality and Attachment Styles as Predictors of Grief Reaction (N=131)

| Predictors | R | R square | F | r |
|-------------|------|----------|--------|-------|
| SIBS total | .410 | .168 | 4.77** | .26** |
| Secure | | | | -.21* |
| Fearful | | | | .30** |
| Preoccupied | | | | .17 |
| Dismissive | | | | -.01 |

*p < .05 **p < .01

r = correlation coefficient

SIBS = Spirituality

Secure = Secure Attachment

Fearful = Fearful Attachment

Dismissive = Dismissive Attachment

Preoccupied = Preoccupied attachment

APPENDIX B
Informed Consent Form

Informed Consent Form

You are invited to participate in a study to explore the grief and loss experiences of college students including your relationships with others and your spiritual beliefs and practices. Participation in this study would involve completing a demographic sheet and four questionnaires which should take you no more than 30-45 minutes of your time.

The potential benefit of participating in this study is an awareness of how you grieve, the nature of your relationships with others, as well as your spiritual beliefs and practices. There are no foreseeable risks in participating in this study. However, you may become more aware of your grief than you were before. A list of counseling services will be provided to you at the end of this study.

To participate, you must have lost a loved one, a family member or friend, within the past five years. If you have not had this experience or are not interested in participating in this study, your instructor will give you the opportunity to participate in an alternative research project or class assignment so you can receive one extra credit point as well.

Your participation in this study is completely voluntary. If you choose to participate, please complete the five questionnaires and then seal them shut in the packet. There is no penalty for not participating and you have the right to withdraw your consent and participation at any time. Participants will earn one extra credit point for their participation, if all questionnaires have been completed.

All information collected in this study is strictly confidential. Please do not write your name anywhere on the questionnaires. There will be no way to connect your identity with your questionnaires responses. Your instructor will not know your individual responses to the questionnaires. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored securely and only researchers and individuals responsible for research oversight will have access to the records. Your participation in this study is greatly appreciated. If you have any questions concerning this study, please feel free to contact Kristi Bratkovich, M.S., or Carrie Winterowd, Ph.D. (405) 744-9446. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kenison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, (405) 744-1676 or irb@okstate.edu.

APPENDIX C

Script

Script

Hello! My name is Kristi Bratkovich and I am a doctoral student in Counseling Psychology in the College of Education at OSU.

I would like to invite you to participate in a study to explore the grief and loss experiences of college students including your relationships with others and your spiritual beliefs and practices.

Participation in this study would involve completing a demographic sheet and four questionnaires which should take you no more than 30-45 minutes of your time.

To participate, you must have lost a loved one—a family member or friend—within the past five years. If you have not had this experience or are not interested in this study, your instructor will give you the opportunity to participate in an alternative research project or class assignment so that all of you can receive one extra credit point.

It is up to you to decide whether you want to participate or not. This decision will not affect your class grade in any way. If you chose to participate, you will earn one extra credit point for their participation.

You will not write your name anywhere on the questionnaires, so there will be no way to connect your identity with your questionnaires responses.

Your participation in this study is greatly appreciated.

Thank you for your time.

APPENDIX D

Demographic Information Sheet

Demographic Information

Please mark the answers that best describe you.

1. Age: _____

2. Gender: _____ Male _____ Female

3. Race (Mark all that apply):

African-American/Black _____

Hispanic/Latino(a) _____

American Indian/Native American _____

White, Non-Hispanic _____

Asian/Asian American _____

Other _____

4. Sexual Orientation:

Heterosexual _____

Gay/Lesbian _____

Bisexual _____

5. Year in College:

Freshman _____

Sophomore _____

Junior _____

Senior _____

6. Family Income:

Less than 10,000 _____

50,001 to 60,000 _____

100,001 to 110,000 _____

10,001 to 15,000 _____

60,001 to 70,000 _____

110,001 to 120,000 _____

15,001 to 20,000 _____

70,001 to 80,000 _____

120,001 to 130,000 _____

20,001 to 30,000 _____

80,001 to 90,000 _____

130,001 to 140,000 _____

30,001 to 40,000 _____

90,001 to 100,000 _____

140,001 to 150,000 _____

40,001 to 50,000 _____

100,001 to 110,000 _____

150,001 or higher _____

7. Religious Affiliation

Atheist _____ Catholic _____ Methodist _____ Other _____
Baptist _____ Jehovah's Witness _____ Mormon _____ Presbyterian _____
Buddhist _____ Jewish _____ Non-Denominational _____

8. Think of the loved one in your life who died (within the past five years). If you lost more than one family member or friend within the past five years, please consider the person you were closest to emotionally.

How long ago did they die? _____ years _____ months

9. How did they die?

Accident _____ Suicide _____
Illness _____ Other _____
Homicide _____

10. What was their relationship to you?

Mother _____ Aunt/Uncle _____
Father _____ Cousin _____
Sister _____ Friend _____
Brother _____ Significant Other/Partner/Spouse _____
Grandparent _____ Other _____ Explain: _____

11. How emotionally close were you to that person? 1.....2.....3.....4.....5.....6.....7

HGRC

This questionnaire consists of a list of thoughts and feelings that you may have had since your loved one died. Please read each statement carefully, and choose the number that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement that best describes you. While you may refuse to answer any question, it is preferred that you not skip any items.

1 – does not describe me at all 2 – does not quite describe me

3 – describes me fairly well 4 – describes me well 5 – describes me very well

- | | | | | | |
|--|---|---|---|---|---|
| 1. My hope are shattered | 1 | 2 | 3 | 4 | 5 |
| 2. I have learned to cope better with life | 1 | 2 | 3 | 4 | 5 |
| 3. I have little control over my sadness | 1 | 2 | 3 | 4 | 5 |
| 4. I worry excessively | 1 | 2 | 3 | 4 | 5 |
| 5. I frequently feel better | 1 | 2 | 3 | 4 | 5 |
| 6. I feel like I am in shock | 1 | 2 | 3 | 4 | 5 |
| 7. Sometimes my heart beats faster than it normally does for no reason | 1 | 2 | 3 | 4 | 5 |
| 8. I am resentful | 1 | 2 | 3 | 4 | 5 |
| 9. I am preoccupied | 1 | 2 | 3 | 4 | 5 |
| 10. I feel as though I am a better person | 1 | 2 | 3 | 4 | 5 |
| 11. I believe I should have died and he or she should have lived | 1 | 2 | 3 | 4 | 5 |
| 12. I have a better outlook on life | 1 | 2 | 3 | 4 | 5 |
| 13. I often have headaches | 1 | 2 | 3 | 4 | 5 |
| 14. I feel a heaviness in my heart | 1 | 2 | 3 | 4 | 5 |
| 15. I feel revengeful | 1 | 2 | 3 | 4 | 5 |
| 16. I have burning in my stomach | 1 | 2 | 3 | 4 | 5 |
| 17. I want to die to be with him or her | 1 | 2 | 3 | 4 | 5 |
| 18. I frequently have muscle tension | 1 | 2 | 3 | 4 | 5 |
| 19. I have more compassion for others | 1 | 2 | 3 | 4 | 5 |
| 20. I forget things easily, e.g. names, telephone numbers | 1 | 2 | 3 | 4 | 5 |
| 21. I feel shaky | 1 | 2 | 3 | 4 | 5 |
| 22. I am confused about who I am | 1 | 2 | 3 | 4 | 5 |
| 23. I have lost my confidence | 1 | 2 | 3 | 4 | 5 |
| 24. I am stronger because of the grief I have experienced | 1 | 2 | 3 | 4 | 5 |
| 25. I don't believe I will ever be happy again | 1 | 2 | 3 | 4 | 5 |
| 26. I have difficulty remembering things from the past | 1 | 2 | 3 | 4 | 5 |
| 27. I frequently feel frightened | 1 | 2 | 3 | 4 | 5 |
| 28. I feel unable to cope | 1 | 2 | 3 | 4 | 5 |
| 29. I agonize over her or his death | 1 | 2 | 3 | 4 | 5 |
| 30. I am a more forgiving person | 1 | 2 | 3 | 4 | 5 |
| 31. I have panic attacks over nothing | 1 | 2 | 3 | 4 | 5 |
| 32. I have difficulty concentrating | 1 | 2 | 3 | 4 | 5 |

This is the first of two pages, continue

HGRC, Page 2

1 - does not describe me at all 2 – does not quite describe me
3 – describes me fairly well 4 – describes me well 5 – describes me very well

| | | | | | |
|---|---|---|---|---|---|
| 33. I feel like I am walking in my sleep | 1 | 2 | 3 | 4 | 5 |
| 34. I have shortness of breath | 1 | 2 | 3 | 4 | 5 |
| 35. I avoid tenderness | 1 | 2 | 3 | 4 | 5 |
| 36. I am tolerant of myself | 1 | 2 | 3 | 4 | 5 |
| 37. I have hostile feelings | 1 | 2 | 3 | 4 | 5 |
| 38. I am experiencing periods of dizziness | 1 | 2 | 3 | 4 | 5 |
| 39. I have difficulty learning new things | 1 | 2 | 3 | 4 | 5 |
| 40. I have difficulty accepting the permanence of the death | 1 | 2 | 3 | 4 | 5 |
| 41. I am more tolerant of others | 1 | 2 | 3 | 4 | 5 |
| 42. I blame others | 1 | 2 | 3 | 4 | 5 |
| 43. I feel like I don't know myself | 1 | 2 | 3 | 4 | 5 |
| 44. I am frequently fatigued | 1 | 2 | 3 | 4 | 5 |
| 45. I have hope for the future | 1 | 2 | 3 | 4 | 5 |
| 46. I have difficulty with abstract thinking | 1 | 2 | 3 | 4 | 5 |
| 47. I feel hopeless | 1 | 2 | 3 | 4 | 5 |
| 48. I want to harm others | 1 | 2 | 3 | 4 | 5 |
| 49. I have difficulty remembering new information | 1 | 2 | 3 | 4 | 5 |
| 50. I feel sick more often | 1 | 2 | 3 | 4 | 5 |
| 51. I reached a turning point where I began to let go of some of my grief | 1 | 2 | 3 | 4 | 5 |
| 52. I often have back pain | 1 | 2 | 3 | 4 | 5 |
| 53. I am afraid that I will lose control | 1 | 2 | 3 | 4 | 5 |
| 54. I feel detached from others | 1 | 2 | 3 | 4 | 5 |
| 55. I frequently cry | 1 | 2 | 3 | 4 | 5 |
| 56. I startle easily | 1 | 2 | 3 | 4 | 5 |
| 57. Tasks seem insurmountable | 1 | 2 | 3 | 4 | 5 |
| 58. I get angry often | 1 | 2 | 3 | 4 | 5 |
| 59. I ache with loneliness | 1 | 2 | 3 | 4 | 5 |
| 60. I am having more good days than bad | 1 | 2 | 3 | 4 | 5 |
| 61. I care more deeply for others | 1 | 2 | 3 | 4 | 5 |

PTGI

Developed by Richard G. Tedeschi, Ph.D., and Lawrence G. Calhoun, Ph.D.

Instructions: Indicate for each of the statements below the degree to which this change occurred in your life as a result of your death loss, using the following scale.

0 = I did not experience this change as a result of my death loss.

1 = I experienced this change to a very small degree as a result of my death loss.

2 = I experienced this change to a small degree as a result of my death loss.

3 = I experienced this change to a moderate degree as a result of my death loss.

4 = I experienced this change to a great degree as a result of my death loss.

- ___ 1. I have changed my priorities about what is important in life.
- ___ 2. I have a greater appreciation for the value of my own life.
- ___ 3. I develop new interests.
- ___ 4. I have a greater self-reliance.
- ___ 5. I have a better understanding of spiritual matters.
- ___ 6. I more clearly see that I can count on people in times of trouble.
- ___ 7. I established a new path for my life.
- ___ 8. I have a greater sense of closeness with others.
- ___ 9. I am more willing to express my emotions.
- ___ 10. I know better that I can handle difficulties.
- ___ 11. I am able to do better things with my life.
- ___ 12. I am better able to accept the way things work out.
- ___ 13. I can appreciate each day.
- ___ 14. New opportunities are available which wouldn't have been otherwise.
- ___ 15. I have more compassion for others.
- ___ 16. I put more effort into my relationships.
- ___ 17. I am more likely to change things which need changing.
- ___ 18. I have a stronger religious faith.
- ___ 19. I discovered that I'm stronger than I thought I was.
- ___ 20. I learned a great deal about relationships.
- ___ 21. I better accept needing others.

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RQ

It is easy for me to become emotionally close to people. I am comfortable depending on people and having people depend on me. I don't worry about being alone or having people not accept me.

| | | | | | | |
|--------------------|---|---|---------|---|---|-------------------|
| Not at all like me | | | Neutral | | | Very much like me |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I am uncomfortable getting close to people. I want emotionally close relationships with people, but I find it difficult to trust them completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to people.

| | | | | | | |
|--------------------|---|---|---------|---|---|-------------------|
| Not at all like me | | | Neutral | | | Very much like me |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I want to be completely emotionally intimate with people, but I often find that they are reluctant to get as close as I would like. I am uncomfortable being without close relationships with people, but I sometimes worry that people don't value me as much as I value them.

| | | | | | | |
|--------------------|---|---|---------|---|---|-------------------|
| Not at all like me | | | Neutral | | | Very much like me |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I am comfortable without close emotional relationships with people. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on people or have people depend on me.

| | | | | | | |
|--------------------|---|---|---------|---|---|-------------------|
| Not at all like me | | | Neutral | | | Very much like me |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

SIBS

Please answer the following questions by checking your response.

| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|--|-------------------|-------|---------|----------|----------------------|
| 1. In the future, science will be able to explain everything | _____ | _____ | _____ | _____ | _____ |
| 2. I can find meaning in times of hardship | _____ | _____ | _____ | _____ | _____ |
| 3. A person can be fulfilled without pursuing an active spiritual life | _____ | _____ | _____ | _____ | _____ |
| 4. I am thankful for all that has happened to me | _____ | _____ | _____ | _____ | _____ |
| 5. Spiritual activities have not helped me become closer to other people | _____ | _____ | _____ | _____ | _____ |
| 6. Some experiences can only be understood through one's spiritual beliefs | _____ | _____ | _____ | _____ | _____ |
| 7. A spiritual force influences the events in my life | _____ | _____ | _____ | _____ | _____ |
| 8. My life has a purpose | _____ | _____ | _____ | _____ | _____ |
| 9. Prayers do not really change what happens | _____ | _____ | _____ | _____ | _____ |
| 10. Participating in spiritual events helps me to forgive other people | _____ | _____ | _____ | _____ | _____ |
| 11. My spiritual beliefs continue to evolve | _____ | _____ | _____ | _____ | _____ |
| 12. I believe there is a power greater than myself | _____ | _____ | _____ | _____ | _____ |

Spiritual Involvement and Beliefs Scale (SIBS) page 2

| | | | | | |
|--|--------|---------|-----------|--------|-------|
| 13. I probably will not re-examine my spiritual beliefs | _____ | _____ | _____ | _____ | _____ |
| 14. My spiritual life fulfills me in ways material possessions do not | _____ | _____ | _____ | _____ | _____ |
| 15. Spiritual activities have not helped me develop my identity | _____ | _____ | _____ | _____ | _____ |
| 16. Meditation does not help me feel more in touch with my inner spirit | _____ | _____ | _____ | _____ | _____ |
| 17. I have a personal relationship with a power greater than myself | _____ | _____ | _____ | _____ | _____ |
| 18. I have felt pressured to accept spiritual beliefs that I do not agree with | _____ | _____ | _____ | _____ | _____ |
| 19. Spiritual activities help me draw closer to a power greater than myself | _____ | _____ | _____ | _____ | _____ |
| Please indicate how often you do the following: | | | | | |
| | Always | Usually | Sometimes | Rarely | Never |
| 20. When I wrong someone I make an effort to apologize | _____ | _____ | _____ | _____ | _____ |
| 21. When I am ashamed of something I've done, I tell someone about it | _____ | _____ | _____ | _____ | _____ |
| 22. I solve my problems without spiritual resources | _____ | _____ | _____ | _____ | _____ |
| 23. I examine my actions to see if they reflect my values | _____ | _____ | _____ | _____ | _____ |

Spiritual Involvement and Beliefs Scale (SIBS) page 3

24. During the WEEK, I pray.....(check one)

- 10 or more times
- 7-9 times
- 4-6 times
- 1-3 times
- 0 times

25. During the WEEK, I meditated.....(check one)

- 10 or more times
- 7-9 times
- 4-6 times
- 1-3 times
- 0 times

26. Last MONTH, I participated in spiritual activities with at least one other person....(check one)

- more than 15 times
- 11-15 times
- 6-10 times
- 1-5 times
- 0 times

APPENDIX E
Counseling Resource List

Resource List

We thank you for completing questionnaires for this study. We are very interested in your experiences of grief, growth as well as your relationships with others, and your spiritual beliefs and practices. Sometimes, when people participate in research studies, they may become aware of their own feelings and experiences that they may wish to discuss with others, including counseling professionals. We have provided you with a list of resources in case you become aware of your interest in seeking help to cope with your thoughts and feelings about yourself and your experiences. Please feel free to talk with counselors and/or therapists at one of these community resource agencies for assistance. You may also wish to contact the primary researcher of this study, Kristi Bratkovich, M.S, or Dr. Carrie Winterowd, 434 Willard Hall, Oklahoma State University, Stillwater, Oklahoma, 74078 at (405) 744-9446. We appreciate your participation in this study.

Counseling Psychology Clinic

408 Willard Hall

Oklahoma State University

Stillwater, OK 74078

(405) 744-6980

University Counseling Services

316 Student Union

Oklahoma State University

(405) 744-5472

VITA

Kristi Lyn Bratkovich

Candidate for the Degree of

Doctorate of Philosophy

Dissertation: THE RELATIONSHIP OF ATTACHMENT AND SPRITUALITY WITH
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Date of Degree: July, 2010

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Title of Study: THE RELATIONSHIP OF ATTACHMENT AND SPIRITUALITY
WITH POSTTRAUMATIC GROWTH FOLLOWING A DEATH LOSS FOR
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Pages in Study: 102

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Major Field: Educational Psychology

Scope and Method of Study: The purpose of the present study is to explore the relationship of college students' general spiritual beliefs and practices and the quality and nature of their relationships with others (i.e., general attachment: secure, preoccupied, dismissive, fearful), with their bereavement and post-traumatic growth following the loss of a loved one. The sample consisted of 131 participants who completed an on-line survey including a demographic sheet, the Hogan Grief Reaction Checklist (Hogan, 2001), the Post-Traumatic Growth Inventory (Tedeschi & Calhoun, 1996), the Spirituality Involvement and Beliefs Scale (Hatch, Burg, Naberhaus, & Hellmich; 1999), and the Relationships Questionnaire (Bartholomew and Horowitz, 1991). Analyses utilized in this study were a Pearson correlation and multiple linear regressions.

Findings and Conclusions: Results indicated that spirituality and posttraumatic growth were positively correlated. There was a significant negative correlation between the amount of distress due to grief and level of spirituality. Fearful attachment to others in general was positively correlated with grief distress and was positively correlated with posttraumatic growth. Secure attachment was positively correlated with posttraumatic growth. A multiple regression found that spirituality and general attachment styles accounted for 25.6% of the variance in posttraumatic growth scores. A multiple regression found that spirituality and general attachment styles accounted for 16.8% of the variance in grief distress scores. Future research may be used to determine the influence of other variables in understanding PTG, the importance of studying the attachment styles in clinical samples of college students, including use of clinical interviews and behavioral observations. Implications for practice include helping college students to utilize their spiritual beliefs and interpersonal styles in order to help them cope with grief experiences, as well as, facilitate growth experiences.

ADVISER'S APPROVAL: Dr. Carrie Winterowd
