UNDERSTANDING ANTICIPATORY GRIEF: RELATIONSHIP TO COPING STYLE, ATTACHMENT STYLE, CAREGIVER STRAIN, GENDER ROLE IDENTIFICATION, AND SPIRITUALITY

A Dissertation

by

BRENT NATHAN LANE

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

August 2005

Major Subject: Counseling Psychology
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Chair of Committee, Donna S. Davenport
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August 2005

Major Subject: Counseling Psychology
ABSTRACT

Understanding Anticipatory Grief: Relationship to Coping Style, Attachment Style, Caregiver Strain, Gender Role Identification, and Spirituality. (August 2005)

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This study investigated predictors of anticipatory grief among 70 caregivers using hospice services to care for a dying individual. Anticipatory grief (AG) was positively associated with disengagement coping; more specifically, it was negatively associated with problem avoidance and positively associated with wishful thinking and social withdrawal. Additionally, attachment anxiety was positively associated with anticipatory grief, while attachment avoidance was negatively related. Lastly, spirituality was found to be negatively associated with anticipatory grief. Engagement coping, caregiver strain, and masculine and feminine gender role identification did not significantly predict AG. Implications for clinical practice with caregivers as well as recommendations for future research are offered.
DEDICATION

To Papa who showed me that I do not have to fear death. And to Mariella for all of your love and support. Your help throughout this process was invaluable.
ACKNOWLEDGMENTS

I would like to thank everyone at Hospice Brazos Valley for embracing the project and working so hard to collect participants. Thank you also to Hospice Care Team for your support and assistance. Dr. Davenport, thank you for working with and mentoring me through these last few years. Drs. Brossart, Duffy, and Rosen, thank you for your input as committee members.
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CHAPTER I
INTRODUCTION

Describing Anticipatory Grief

A simple definition of Anticipatory Grief (AG) was offered by Aldrich (1974), who stated that it is “any grief occurring prior to a loss, as distinguished from the grief that occurs at or after a loss.” This definition may be one of the simplest offered for Anticipatory Grief, but it perhaps best captures the essence of the phenomenon. Mourners frequently describe the period before a death, divorce, or other loss where they grieve the impending loss. For example, Davenport (2002), a psychologist, described her own experience with AG in a personal memoir. “I found myself moving from intense feelings to memories of family stories and then onto professional musings; I was tossed about willy-nilly in a storm largely out of my control. It is this process… a shifting kaleidoscope of feelings and thoughts and associations triggered by the impending loss of my much-loved mother.” (p. xiv). Similarly, Enlow (1986), a therapist and nurse, described

This dissertation follows the style of The Journal of Counseling Psychology.
AG relating to her mother’s prolonged terminal illness. “This daughter could handle the death of her beloved mother, but this living death, the loss of a mother as I once knew her is a loss that leaves grief unresolved. It is a morbid grief that persists with great tenacity... Now, even in her helplessness, she has motivated me toward a positive, creative release of painful, harmful emotions.” (p. 36).

These accounts, as well as many others, speak to the grief and adjustment often experienced during the period before an actual death. From this perspective, it seems overly simplistic and limiting to perceive of grief occurring only after, and in direct response to, the death of an individual. Instead, it may be more accurate and therapeutically beneficial to conceptualize grief as a highly individualized process that for many, may begin in advance of an actual death. Who experiences AG, and the extent of the grief, may be related, in part, to the variables proposed in this study: coping style, attachment style, caregiver burden, gender role identification, and spirituality.
History of Anticipatory Grief

Lindemann (1944) first noted the concept of Anticipatory Grief in the psychological literature in his study of acute grief. In this study, he noted that family members of servicemen serving in World War II who operated in constant danger frequently passed through traditional phases of grief while their loved one fought overseas. This grief was often resolved as if they had actually died, and the serviceman’s reintroduction into the family or marriage was often complicated or impossible. Similarly, prisoners and long-term hospital patients have experienced difficulties reintegrating into their families who have grieved their absence or “death” (Fulton & Fulton, 1971).

The majority of the studies confirming the existence of AG were conducted in the 1950’s and 1960’s and investigated the phenomenon through parents of children with cancer (Sweeting & Gilhooly, 1990). One key study documented parental withdrawal, feelings of unworthiness, reminiscence, guilt regarding perceived responsibility for the illness, and emptiness (Richmond & Waisman, 1955). Another noted such anticipatory grief reactions as physical distress, depression, decreased ability to function, anger, hostility, and self-blame (Binger et al, 1969). It should
be noted that many of these early studies describe anticipatory grief responses in strikingly similar descriptions to traditional, post-death grief.

Nature of Conventional Grief

Bowlby (1980) and Parkes (1986) outlined a phasal process of bereavement in adult life. The first phase was termed “numbing” which may include intense distress, anger, or momentary elation. The second phase was “searching” and may include a conscious acknowledgement of the reality of the loss. In this phase, sadness and anguish may be seen along with anxiety, insomnia, anger, preoccupation with the person, and possibly momentary sensation of the other’s presence. “Disorganization and despair” follows, and may result from realization that the desired reunion with the deceased is not going to occur. The experience of the emotions may be intense, and may focus on how or why the death occurred. The final phase was termed “reorganization” and may begin following initiation of reorganization of the griever’s internal framework to incorporate the absence of the deceased. This realization allows the person to begin to create new representations of self and the world (Juri & Marrone, 2003).
Nature of Anticipatory Grief

Natterson and Knudson (1960) described a three-phase response pattern among their parental participants. The first involved denial of the terminal nature of the child’s illness. The second phase involved reduction of conscious denial and attempts to prolong life—a sort of volatile struggle with death. The final phase involved a “calm acceptance” of death and an ability to see the benefit of an end to their child’s suffering. This general pattern of shock/denial, attempts to alter the outcome, emotional lability, and acceptance is found, with slight variation, in other studies (Bozeman, Orbach, & Sutherland, 1955; Chodoff, Friedman, & Hamburg, 1964; Mayer, 2001).

Lindgren, Connelly, and Gaspar (1999) studied 33 spousal and adult child caregivers of dementia patients. They reported that caregivers experienced anger, fear, panic, sadness, and uncertainty at the time of diagnosis as reported by five measures on the Grief Experiences Inventory. These symptoms related to measures of anger/hostility, despair, depersonalization, loss of control, and somatization.

Ambivalent feelings are also often part of anticipatory grief (Lindgren, Connelly, & Gaspar, 1999;
Loos & Bowd, 1997; Theut, Jordan, Ross, & Deutsch, 1991). Anger, uncertainty of the death trajectory, caregiving demands, existential concerns, and attempts to reconcile relationships prior to the death are tasks often present for the caregiver. Caregiver guilt may lessen over time (Lindgren, Connelly, & Gaspar, 1999).

Mayer (2001) conducted a qualitative study of spousal caregivers for patients with Alzheimer’s Disease, and described sadness more excessive during the course of the illness than at the time of the diagnosis. Spouses reported feelings of shock, denial, anguish, and disbelief followed by a back and forth process of life-orientation and loss-orientation similar to that outlined by Stroebe and Schut (2001). They reported decreased well-being along psychological, social, and physiological lines as well as anxiety, concern for the future, impatience/intolerance, loss of autonomy, loss of interaction with their partner, sleep disturbances, lessened opportunity for social interactions, and anger.

Research suggests that spouses who accepted the possibility of the patient’s death reported less post-bereavement distress than did those who did not (Houts, Lipton, Harvey, Simmonds, & Bartholomew, 1989). This may
indicate that acceptance of the death is helpful for bereavement resolution if the degree of emotional distress is low; it might also indicate that those caregivers who had accepted the possibility of their loved one’s death had been working through their AG earlier in the disease progression.

Conventional Grief vs. Anticipatory Grief

Current research has found the differences between AG and conventional grief (CG) to be minimal. Gilliland & Fleming (1998) for example, found that AG and CG do not vary in regard to despair, somatization, death anxiety, social isolation, or denial. Additionally, it is believed that grievers experience all of the phases of traditional grief as they cope with the illness or separation prior to a loss (Sweeting & Gilhooly, 1990).

The Dual Process Model of Coping With Loss

A model proposed by Stroebe and Schut (2001) may provide illustration for both conventional and anticipatory grief (see Figure 1). According to the model, grieving individuals experience grief as an oscillation between a loss-orientation (concentrating on and processing aspects of the loss experience) and restoration-orientation
**Figure 1.** Dual Process Model of Coping With Bereavement.

(concentrating on secondary stressors which also result from the loss experience). Both create anxiety and distress, and are attended to in varying degrees. The authors also note that according to the model, there may also be periods of detachment from the grief during which the individual does not attend to either the loss-orientation or the restoration-orientation. This model appears to demonstrate utility in conceptualizing both conventional and anticipatory grief as well as each predictor investigated in this study. This model will be discussed in light of the findings of this study.

Study Rationale

Despite clinical relevance of anticipatory grief, little empirical research is available on the topic. The present study will explore five variables and whether and in what way they may predict anticipatory grief. Literature has provided examples of coping strategies benefiting or impeding conventional grief, but no findings relate specific effects of coping strategies on AG. Similarly, attachment to the dying has been shown to be associated with CG, but no research has directly investigated the role attachment may play in AG. Research has also investigated the influence of caregiver strain on
caregiver self-care/health and post-loss grief, but
caregiver strain and AG have not been explored together.
AG has also not been investigated in relation to gender
role identification, despite finding gender-unique patterns
of grieving. Lastly, though spirituality has been
identified as important to the post-loss grief process for
many individuals, it has not been explored in relation to
AG. This study seeks to add empirical understanding of the
relationship between these important variables and
anticipatory grief.

Statement of the Problem

The present study was conducted to explore the
potential predictors of anticipatory grief including coping
style, attachment style, caregiver strain, gender role
identification, and spirituality. The following research
questions were investigated:

**Research Question 1**: Does coping style, as measured
by the Coping Styles Inventory, predict AG, as
measured by the Anticipatory Grief Scale?

**Research Question 2**: Does attachment style, as
measured by the Experiences in Close Relationships
Scale, predict AG, as measured by the Anticipatory
Grief Scale?
Research Question 3: Does caregiver strain, as measured by the Caregiver Strain Index, predict AG, as measured by the Anticipatory Grief Scale?

Research Question 4: Does gender role identification, as measured by the Bem Sex Role Inventory, predict AG, as measured by the Anticipatory Grief Scale?

Research Question 5: Does spirituality, as measured by the Index of Core Spiritual Experiences, predict AG, as measured by the Anticipatory Grief Scale?

Definition of Terms

For the purposes of this study, CG will defined as: grief following a death (Gilliland & Fleming, 1998). While CG has been discussed extensively throughout the literature, a lack of clarity continues to exist concerning the concept of AG. For the purposes of this study, AG will be defined as: the experience of loss stimulated prior to a death, in response to the awareness of life-threatening and terminal illness (Aldrich, 1974; Rando, 2000).

Coping style, one of the proposed predictors for AG, will be defined as: the cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus and Folkman, 1984). Another predictor to
be evaluated, attachment style, will be defined as: a disposition toward anxiety and/or avoidance in response to relationship loss (Brennan, Clark, & Shaver, 1998). Caregiver strain will be defined as: the physical, psychological, social, and financial problems experienced by caregivers caring for impaired others (George & Gwyther, 1986). The fourth proposed predictor is gender role identification, defined as: the extent to which one identifies with characteristics and behaviors socially assigned to men and women in a given culture (Bem, 1981; Levant, 1996). The final predictor is spirituality, and will be defined as: a concept including transcendence, self-acceptance, loving relationships with others, hope, and perhaps a relationship with a preeminent other such as God (deVeber, 1995).
CHAPTER II

REVIEW OF THE LITERATURE

Chapter two is organized into five major sections, each corresponding to a predictor evaluated in this study. Each section includes an expansion of the definition of each construct, research examining the relationship between the construct and conventional grief, and research examining the construct in relation to anticipatory grief. Because previous studies have often identified the caregiving and anticipatory grieving processes as interchangeable, both sets of studies will be described.

Coping Style

Description of Coping Style

Coping consists of the cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding one’s resources (Lazarus & Folkman, 1984). Coping styles can be organized into two categories: problem-focused strategies, which are attempts to actively alter the stressor, and emotion-focused strategies, which attempt to alter the emotional responses to the stressor (Lazarus & Folkman, 1984). Others have suggested approach and avoidance strategies or adaptive and maladaptive dichotomies (Maddi, 1980, as cited
Coping Style and Conventional Grief

Given the demands inherent in the loss of a loved one, some research has investigated coping style and grief. Lalitha and Jamuna (2004) investigated coping strategies among bereaved older men and women, noting that coping styles were primarily problem focused (i.e., seek information, establish independence, form new relationships, and increase involvement in spiritual or religious pursuits) rather than emotion focused.

Coping Style and Anticipatory Grief

Clinical observations have noted caregivers who are quickly overwhelmed by circumstances are often unable to act decisively or rationally. Others describe quiet, determined responses to stress, involving problem solving efforts (Zarit, Todd, & Zarit, 1986). For example, familial caregivers of Alzheimer’s patients used the following coping approaches: denial, anger, despair, and avoidance (Mayer, 2001). The authors noted that there were also coping strategies that were more positive, including pleasure in making the patient feel comfortable, enjoying feeling needed and appreciated, feeling competent, having a
positive attitude, and wanting to repay the patient’s kindness (Mayer, 2001). Other studies have investigated strategies used by caregivers, including problem engagement, emotion engagement, problem disengagement, and emotion engagement.

Problem engagement encompasses the majority of those strategies deemed helpful by caregivers, including problem solving (Blood, Luther, & Stemple, 1992), taking one day at a time, acceptance and rationalization of the patient’s deterioration (Hull, 1992), being positive, keeping busy, gathering information from medical professionals (Martens & Davies, 1990), developing goals for the future after the death (Doombus, 1996), organizing life around the patient, functioning on automatic, and being flexible and adaptable to changing circumstances (Grbich, Parker, & Maddocks, 2001).

Another coping style is emotion engagement, of which hospice caregivers listed the following strategies as helpful: faith (Martens & Davies, 1990), maintaining social networks (Blood, Luther, & Stemple, 1992; Doombus, 1996), talking with family and friends (Steele & Fitch, 1996), and going out to eat or drink with friends, talking to self,
talking to family, and/or talking to a priest (Grbich, Parker, & Maddocks, 2001).

Problem disengagement strategies found helpful in the literature included maintaining a sense of humor (Steele & Fitch, 1996), creating time for oneself (Hull, 1992), going into the other room, pursuing preexisting interests, going shopping, going for a walk, or guitar playing (Grbich, Parker, & Maddocks, 2001). No strategies involving emotion disengagement were cited in the literature as helpful.

Some research has documented that coping style may change over the course of grief (Zarit, 1982, as cited in Zarit, Todd, & Zarit, 1986). At initial assessment, wives were found to have greater difficulty maintaining sufficient emotional distance and to use primarily problem-focused coping strategies. After two years of caregiving, wives appeared to have changed their coping style from emphasizing their distress to a more problem-focused style.

Literature provides examples of coping strategies benefiting or impeding healthy resolution, but no findings relate specific effects of coping strategy to levels of anticipatory grief. This study will add this important piece to the literature by investigating the relationship
between various coping styles and levels of anticipatory grief.

Attachment Style

Description of Attachment

Attachment is defined as a disposition to seek proximity to others for security and protection in times of stress (Bowlby, 1980). Much literature has conceptualized adult attachment in a categorical fashion: Secure, Preoccupied, Dismissing, and Fearful (Ainsworth, Blehar, Waters, & Wall, 1978; Bartholomew, 1990; Bowlby, 1988; Collins & Read, 1990; Mikulincer & Florian, 1998; Noppe, 2000; Shaver & Hazan, 1993). After compiling existing attachment measures and conducting a principal components analysis, Brennan, Clark, and Shaver (1998) identified two major factors of attachment that underlie these categorical descriptors: avoidance and anxiety. The avoidance factor includes constructs such as avoidance of intimacy, discomfort with closeness, and self-reliance. The anxiety factor includes constructs such as preoccupation, fear of abandonment, and fear of rejection. Individual scores on these two dimensions may remain continuous or be used to categorize them into one of these four types.
Mikulincer and Florian (1998) describe secure attachment as an inner resource that may help a person positively appraise stressful experiences, constructively cope with stressful events, and improve his or her well-being and adjustment. Insecure attachment may be considered as a risk factor for poor coping and maladjustment. Individuals with insecure attachments are characterized by unstable and inadequate regulation of distress and lack of ability to relieve distress (Bowlby, 1988; Collins & Read, 1990, Shaver & Hazan, 1993).

Theorists have stated that when individuals are faced with the loss of an attachment figure, the yearning for satiation of attachment needs defines the experience of grief (Weiss, 1993). Death represents the ultimate separation and how the individual handles this loss may be predicted by the style of attachment (Harvey & Miller, 1998; Juri & Marrone, 2003; Noppe, 2000; Parkes, 1994; Stroebe, 2002). Many subscribe to Bowlby’s (1980) belief that reactions to loss depend on the attachment experiences one had with the person who died (Collins and Read, 1994; Mikulincer and Florian, 1998).
Attachment and Conventional Grief

Not surprisingly, secure individuals may be less likely to experience depression following a loss than other attachment types (Wayment & Vierthaler, 2002). Bereavement responses of secure individuals may also be more severe than that of other types, but such individuals have the inner resources necessary to cope with the loss and are more likely to recover quickly (Mikulincer & Florian, 1996; Wayment & Vierthaler, 2002). Similarly, secure attachment has been found to be associated with more favorable outcome among both interpretive and supportive group therapy for complicated grief (Ogrodniczuk, Piper, McCallum, Joyce, & Rosie, 2002).

Conversely, bereavement outcomes for insecure individuals are less favorable. Insecurely attached persons deal with significant distress but have less effective resources with which to cope and are more likely to adopt poor coping strategies (Field & Sundin, 2001; Mikulincer & Florian, 1996; Ogrodniczuk, Piper, McCallum, Joyce, & Rosie, 2002).

Anxious-avoidant individuals are more likely to experience depression and grief than secure individuals (Parkes & Weiss, 1983; Sable, 1989; Scharlach, 1991;
Wayment & Vierthaler, 2002). They have also been shown to experience greater symptomatology over time (Field & Sundin, 2001).

In contrast, those persons with attachment styles involving avoidance and fear of intimacy may deny the reality of the loss, thereby inhibiting their grief process (Stroebe, 2002). Fraley and Shaver (1997) reported that avoidant individuals may experience less emotional distress and report insignificant levels of grief and depression. However, they were more likely to experience emotional distress manifested in somatic complaints following a loss (Fraley & Shaver, 1997; Wayment & Vierthaler, 2002).

Ambivalence toward the person who died has been found to impede emotional acceptance of the loss and increase the intensity of the grief (Van Doorn, Kasl, Beery, Jacobs, & Prigerson, 1998; Weiss, 1993). Supporting this notion, Parkes and Weiss (1983) found that bereaved partners with greater levels of reported marital conflict experienced more anxiety, guilt, and depression following the death of their partner. More ambivalence toward one’s spouse may result in more anxiety and depression following the spouse’s death (Parkes & Weiss, 1983).
Lastly, findings assert that increased dependent feelings are associated with negative emotional experiences and adjustment difficulties (Scharlach, 1991). Parkes and Weiss (1983) stated that clingy, dependent relationships may relate to more negative grief reactions because the griever becomes deprived of the security he or she once felt through the presence of the other.

In light of the Dual Process Model of Loss (Stroebe & Schut, 2001), which states that grieving individuals oscillate between a loss-orientation and restoration-orientation, securely attached individuals are expected to oscillate more easily between these two states, and thus adapt to their grieving without complication (Shaver & Tancredy, 2001). Anxious/ambivalent/preoccupied individuals may remain more loss-oriented than other types, as well as experience a more chronic grieving experience. Dismissing individuals may tend to be the most oriented toward restoration, thereby inhibiting and delaying their grief. Lastly, unresolved/disorganized persons would likely have a more sporadic and difficult time oscillating between the two orientations. Securely attached individuals may tend to have the most healthy, moderate grieving process. Those with preoccupied attachments may
experience the most emotional volatility, while those with dismissing styles may express the least emotional response (Shaver & Tancredy, 2001).

**Attachment and Anticipatory Grief**

Despite the foundational assertion that attachment becomes activated in response to distress, surprisingly little has been done to examine its relationship to anticipatory grief. Related existing data, however, suggests that personal relationship with the patient is related to grief responses and that secure attachment is preferable with respect to outcomes among caregivers. For example, spouses reporting higher marital satisfaction and affection prior to diagnosis experienced fewer grief symptoms (e.g., depressive symptoms, despair, anger, lack of control). Satisfactory relationships prior to diagnosis may result in less ambivalence in the relationship, and therefore fewer conflicting feelings such as anger and guilt (Lindgren, Connelly, & Gaspar, 1999). Further, insecure attachment styles characterized by excessive dependency, compulsive caregiving, and defensive separation have been found to predict elevated traumatic grief symptoms among pre-loss spouses (Van Doorn, Kasl, Beery, Jacobs, & Prigerson, 1998).
While attachment has been shown to be associated with grief responses and post-death adjustment, no research has directly investigated the role attachment may play in anticipatory grief responses. This study seeks to investigate this relationship and clarify any connection that may exist. Improved ability to use attachment to the dying to predict difficult caregiver AG may also prove quite valuable in applied settings.

Caregiver Strain

Describing Caregiver Strain

Caregivers of terminally ill patients experience significant stress and may experience what Patterson and McCubbin (1983) term “pile-up of stressors.” Common caregiver stressors include: strained relationships, modifications in activities and goals, increased tasks and time commitments, increased financial burden, need for housing adaptations, social isolation, social role impairment, neglecting or declining personal health, sleep problems and fatigue, emotional distress, physical and mental decline of the patient and associated caregiving tasks, ambiguity regarding prognosis, decision-making, undependable or insensitive others, educational or vocational demands, and perhaps most obvious, grieving
(Ginzler, & Barrett, 2004; Grbich, Parker, & Maddocks, 2001; Hull, 1990; Hunt, Jones, Hansford, & Fiske, 1993; Kileen, 1989; Maddison & Viola, 1968; Norris & Murrell, 1987; Patterson & McCubbin, 1983; Prigerson et al, 2003; Schott-Baer, 1993; Thompson, Breckenridge, Gallagher, & Peterson, 1984; Wyatt, Friedman, Given & Given, 1999; Yeaworth & Valanis, 1985). Surviving spouses even experience increased mortality during the acute grieving period (Stroebe, Stroebe, & Schut, 2001). The process of grief may often be played out in an atypical fashion for caregivers since medical needs, unique demands, and atypical interaction patterns are present in addition to the otherwise expected grief process (Rando, 2000; Worden, 1991).

Caregivers are also more likely to experience strain if they are in poor health, feel they did not have a choice to begin caregiving, are caring for a spouse, or have been caregiving for a longer time. Limited patient mobility and time since diagnosis also predict caregiver strain (Higginson & Priest, 1996; Hunt, Ginzler, and Barrett, 2004).
Caregiver Strain and Conventional Grief

Two hypotheses exist in the professional literature regarding the impact of caregiver strain on post-loss grief outcomes. The first suggests that greater caregiver strain is associated with better post-loss adjustment since caregivers are relieved of their burdensome caregiving responsibilities. A study by George and Gwyther (1984) supports this theory by finding that family caregivers of Alzheimer’s patients demonstrated improvement in well-being following their loved one’s death as measured by increased participation in voluntary organizations, greater satisfaction with social and recreational activities, decreased use of psychotropic drugs, and lessened stress-related psychiatric symptoms. Norris and Murrell (1987) also reported that higher levels of family stress were associated with greater physical health following the death.

The second hypothesis contends that greater caregiving stress is associated with greater difficulty during bereavement. Support for this theory is based in both theory and empirical findings. The “pile-up of stressors” concept presented by Patterson and McCubbin (1983) states that accumulating responsibilities and burdens tax the
coping capacity of the caregivers, leaving them less able to cope with bereavement. Caregiver strain has also been associated with post-loss depression (Bodnar & Kiecolt-Glaser, 1994; Schulz et al, 2001). Similarly, findings by Bass & Bowman (1990) empirically support the “pile-up” hypothesis. Regarding family bereavement, those with greater caregiver strain experienced more difficult post-death bereavement; however, no association was found between caregiver strain and individual bereavement outcomes.

Caregiver Strain and Anticipatory Grief

Regarding the first hypothesis that increased strain is related to better post-loss adjustment, it is conceivable that the process of AG is elevating the family stress and thereby resulting in increased preparation for the loss. With respect to the second hypothesis that increased strain is associated with more difficult post-loss adjustment, one explanation may be that the opportunity for AG may be circumvented by demands inherent in intensive caregiving (Gerber et al, 1975; Rando, 2000; Sanders, 1982).

Increased caregiver strain has been associated with negative reactions (e.g., less positive outlook,
dissatisfaction with support) during the terminal phase of caregiving (Norris & Murrell, 1987; Wyatt, Friedman, Given, & Given, 1999). Caregiver strain is also associated with pre-loss depression (Beery et al, 1997). Chentsova-Dutton et al. (2002) found that depression and other psychological indicators of strain are highest during the caregiving period and begin to diminish in the first few months following the death.

While the impact of caregiver strain on caregiver self-care/health and post-loss grief has been studied, the connection between caregiver strain and AG has not been explored. This study seeks to close this gap by investigating their relationship.

Gender Role Identification

Describing Gender Roles

Gender roles, while often considered to relate to biological differences that define masculinity and femininity, are more aptly considered to be socially constructed from biological, psychological, and social experience (Levant, 1996). These roles influence attention, perception, interpretation, and behavior (Lindstrom, 1999). Gender roles bear marked idiographic variation, and given that they are socially constructed, it
is important to note that the roles may vary for individuals of different social classes, races, ethnic groups, sexual orientations, life stages, and historical eras (Levant, 1996).

The gender roles established and maintained in life are often such that certain genders are assigned certain responsibilities. Research has described the conflict arising from episodes of stress during which individuals are required to act outside of their previously established role (Levant, 1996; Martin & Doka, 1996; Pleck, 1976). The experience of loss may serve as a prime example. Among partners, tasks typically regarded as belonging to the other partner become additional stressors for the grieving individual, who must now be expected to accomplish the additional tasks (Lalitha & Jamuna, 2004).

**Gender Role Identification and Conventional Grief**

Literature has described grief responses among those with a traditional masculine gender role. In general, men tend toward an instrumental expression of grief, including expressing a limited range of emotions (e.g., anger, guilt, and sense of failure), initial responses that are primarily cognitive in nature, preference for solitude, and reluctance to seek help and share grief responses (Good,
Dell, & Mintz, 1989; Martin & Doka, 1996; Martin & Doka, 2000; McCarthy & Holliday, 2004). The "masculine mystique" described by O’Neil (1981) suggested that help-seeking and desire for support signified weakness, vulnerability, and possible incompetence. Further, because men are often less open in expressing their emotions, they are often more comfortable grieving using concrete activities (Boerner & Silverman, 2001; Cook, 1988; Martin & Doka, 2000). Immersion in work activities, problem-solving, and substance abuse are common examples of such activities (Good, Dell, & Mintz, 1989; Martin & Doka, 1996; Martin & Doka, 2000).

In response to grief, the feminine gender role is typically described as openly experiencing and sharing emotions, seeking and accepting help, discussing emotions in a supportive group, and allowing one’s self time to grieve (Boerner & Silverman, 2001; Martin & Doka, 1996; Martin & Doka, 2000; Stillon & McDowell, 1997, as cited in Martin & Doka, 2000). In the literature, this approach is almost uniformly described as the “healthy” approach to grieving.

Literature suggests that men tend to conceptualize themselves instrumentally, that is basing their identity on
individual behaviors rather than relationally (Campbell & Silverman, 1996). As such, male relationships tend to focus more on shared activities and work and men are more likely than women to create a sense of separateness between themselves and others (Ehrensaft, 1995). Alternatively, women tend to conceptualize themselves relationally, that is basing their identity in the context of their relationship to others (Gilligan, 1996; Jordan, 1997; Silverman, 1988). This tendency may explain why women generally experience a more effective support system during their grief than do men (Boerner & Silverman, 2001).

Grieving processes may be influenced by the extent to which survivors considered the spousal role or parenthood as part of their identity (Boerner and Silverman, 2001; Silverman 1986). In their longitudinal sample of bereaved families, Boerner and Silverman (2001) noted that widows tended to view the loss of a spouse as a loss of part of their identity, whereas widowers tended to compartmentalize their roles of father and provider. Widows whose identity was strongly connected to their role as a wife were more profoundly affected by loss in their sense of self and identity than are men (Gilligan, 1996; Jordan, 1997; Silverman, 1988).
Regarding gender differences and outcome, although loss results in increased negative mental and physical health consequences for both genders, including greater mortality in the acute grieving period, these effects are generally more pronounced for surviving men than women. Findings suggest that social support may be an important mediating factor (Stroebe, Stroebe, & Schut, 2001). Thompson (1995) stated that men are often more able to resume normal, daily activities while women may continue to express emotion and seek social support related to the loss. This may be due to the fact men are often socialized to maintain distinction between personal and other domains, while women are often socialized to invest more solely in the personal, family domain (Thompson, 1995).

A survey of counselors and educators certified by the Association of Death Education and Counseling noted that counselors and educators do not see clear differences in grief outcome based on gender, but that each gender tends to run different adjustment risks (Stillon & McDowell, 1997, as cited in Martin & Doka, 2000). They noted that masculine tendency for restricted expression predisposed them to greater risk of complicated grief, while the
feminine tendency to actively grieve predisposed women to
depression and chronic mourning reactions.

**Gender Role Identification and Anticipatory Grief**

The present study attempts to clarify how gender role
identification is related to anticipatory grief. Each of
the above studies references the traditional post-loss
grieving pattern, while none attempt to explore how gender
role identification relates to anticipatory grief.

Further, many of the studies confused gender with gender
role. Given the paucity of research in this area, further
research is needed for assisting grievers and adding to the
understanding of the grief process.

**Spirituality**

**Describing Spirituality**

Spirituality may be broadly defined as a concept
including transcendence, self-acceptance, loving
relationships with others, hope, and perhaps a relationship
with a preeminent other such as God (deVeber, 1995).

Spirituality has been associated with hopefulness, meaning
and purpose in life, charity, community and connectedness,
compassion, forgiveness, and morality (Mahoney & Graci,
1999).
Grief researchers and clinicians have proposed many models to describe the various stages, phases, or tasks involved in the grief process (Bowlby, 1980; Kübler-Ross, 1969; Parkes & Weiss, 1983; Worden, 1991), but until recent years, spirituality has not been significantly included in the conceptualization. Now, theorists have begun to consider existential change, religious conversion, psychospiritual transformation, or innate spirituality as an important part of the grief process for many persons (Marrone, 1999).

The bereaved individual’s assumptive world is uniquely challenged by death, and questions of a spiritual nature frequently result. Questioning why the death occurred is common, and individuals are often able to assimilate the loss through reliance on a belief that life follows a meaningful path and/or leads to an afterlife. Variations on this idea may include continuation of the person’s existence through memory or legacy, though a presence, or a watching-over or guardianship by the deceased individual (Balk, 1999; Chen, 1997; Marrone, 1999). One study found that 47% of grieving participants reported experiencing some sort of contact with the deceased following the death (Frantz, Trolley, & Johll, 1996).
Numerous theorists have posited that the disruption and pain inherent in grief create opportunity for advancing spiritual growth (Balk, 1999; Chen, 1997). In this process, crisis reminds individuals of their spiritual nature, spiritual needs, and spiritual questions.

*Spirituality and Conventional Grief*

Spirituality has been associated with positive grief outcomes, including positive outlook, satisfaction with support, fewer depressive symptoms, fewer negative reactions, and lower levels of caregiver burden (Gamino, Sewell, & Easterling, 2000; Golsworthy & Coyle, 1999; Kazanjian, 1997; Wyatt, Friedman, Given & Given, 1999). A sense of interpersonal or intrapersonal spiritual support, an ongoing relationship with the deceased, attribution of responsibility, creation of explanation for the death, and hope for the future have been found to be elements of positive outcome (Golsworthy & Coyle, 1999).

Most bereaved parents cite their religious beliefs as a source of help (Gilbert, 1992). In a study of parents following the sudden death of a child, spiritual beliefs were positively related to better cognitive processing, finding meaning in the death, and perception of social support. Spiritual beliefs were also related to improved
well-being and lower distress 18 months following the death (McIntosh, Silver, & Wortman, 1993).

This search for meaning among bereaved parents appears aided by spirituality. Cook and Wimberly (1983) noted three rationales used by parents whose child had died: reunion (future reunion with the deceased), reverence (death provides a spiritual lesson), and retribution (death was punishment for parental wrongdoing). Klass (1995) found that members of Compassionate Friends (an organization devoted to support for parents whose child has died) rejected simple religious explanations for the death of their child (i.e., It was God’s will). Instead, they created individualized rationales for living in the post-loss reality.

The experience of grief may also affect one’s spirituality following the death. Shuchter (1986) found that after two years, most grievers regarded the grief process as “growth promoting.” This growth was reflected by renewed values, new perspectives, and appreciation for living. They also reported feeling more sensitive, open, patient, realistic, autonomous, and spiritual following their grief experience. Glick et al. (1974) reported that participants said they felt stronger and more confident
than they had before the mourning experience. Among bereaved parents with religious commitment prior to their child’s terminal illness, the more useful they believed their religious beliefs to be in adjusting to the death, the stronger the beliefs became (Cook & Wimberly, 1983).

**Spirituality and Anticipatory Grief**

Research demonstrates that caregivers frequently invoke spirituality during the pre-death period. In a sample of caregivers using community cancer centers, Wyatt, Friedman, Given, and Given (1999) sampled caregivers and found higher levels of spirituality than among the general population. In a national survey, Hunt, Ginzler, & Barrett (2004) found that 73% of caregivers pray to cope. Another study found that 42% of bereaved participants said that their spiritual beliefs had been very helpful during caregiving (Frantz, Trolley, & John, 1996). Caregivers with higher levels of spirituality also report more positive reactions to the caregiving experience (Wyatt, Friedman, Given, & Given, 1999).

As caregivers struggle to accommodate changing circumstances and demands, many return to previously held spiritual beliefs, while others find new beliefs in God, life, or destiny. Some will reject religion or
spirituality, while others redefine it (Doka, 2002; Marrone, 1999).

Clearly, spirituality has strong implications for grief and grieving, yet relation to anticipatory grief remains unknown. This study examines the potential connection between grief and spirituality by evaluating the role of spirituality in predicting anticipatory grief.

Summary

This study sought to respond, in part, to the recommendations for future research from the National Cancer Institute of Canada Workshop on Symptom Control and Supportive Care in Patients with Advanced Cancer, specifically exploring issues such as coping, caregiver distress, and spirituality. With new information, healthcare providers will be better able to more promptly and effectively intervene (Vachon, Kristjanson, & Higginson, 1995).

The concepts of coping style, attachment style, caregiver strain, gender role identification, and spirituality have all received attention in the literature with regard to grief. What has remained uninvestigated however, is the potential relationship between these variables and anticipatory grief. The purpose of this
study was to explore the relationship of these variables to anticipatory grief.
CHAPTER III

METHODOLOGY

This chapter includes a description of the sample of the present study. Information regarding data collection procedures, measures, and data preparation are then presented.

Participants

Participants were self-identified caregivers using the services of Brazos Valley Hospice (Bryan/College Station, Texas and Brenham, Texas) or Hospice Care Team (Texas City, Texas). Due to the sensitive nature of the topic and developmental differences, only consenting adults were eligible for the study. Any adult (18 years or older) willing to participate who identified himself or herself as a caregiver was given materials regardless of educational level, gender, ethnicity, or other personal factors.

Four hundred and fifty caregivers were provided packets, 78 returned packets, and 70 were included in final analysis, resulting in a response rate of 17%. Demographic and caregiving variables are presented in Table 1.

Procedures

Hospice social workers, already in regular contact with caregivers, gave each interested caregiver one packet.
Table 1

Sample Demographics

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 70)</td>
</tr>
<tr>
<td>Hospice</td>
<td></td>
</tr>
<tr>
<td>Hospice Brazos Valley</td>
<td>67 (95.7)</td>
</tr>
<tr>
<td>Hospice Care Team</td>
<td>3 (4.3)</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
</tr>
<tr>
<td>( M (SD) )</td>
<td>54.7 (12.7)</td>
</tr>
<tr>
<td>Range</td>
<td>20-83</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>7 (10.0)</td>
</tr>
<tr>
<td>Females</td>
<td>63 (90.0)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>59 (84.3)</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>8 (11.4)</td>
</tr>
<tr>
<td>Hispanic/Latino(a)</td>
<td>2 (2.9)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (1.4)</td>
</tr>
<tr>
<td>Highest level of education</td>
<td></td>
</tr>
<tr>
<td>Some high school</td>
<td>2 (2.9)</td>
</tr>
<tr>
<td>Completed GED</td>
<td>5 (7.1)</td>
</tr>
<tr>
<td>Graduated high school</td>
<td>17 (24.3)</td>
</tr>
<tr>
<td>Some college</td>
<td>21 (30)</td>
</tr>
<tr>
<td>Completed college</td>
<td>10 (14.3)</td>
</tr>
<tr>
<td>Some graduate work</td>
<td>4 (5.7)</td>
</tr>
<tr>
<td>Completed advanced degree</td>
<td>11 (15.7)</td>
</tr>
<tr>
<td>Relationship of patient to caregiver</td>
<td></td>
</tr>
<tr>
<td>Spouse/Significant other</td>
<td>19 (27.1)</td>
</tr>
<tr>
<td>Son/Daughter</td>
<td>1 (1.4)</td>
</tr>
<tr>
<td>Parent</td>
<td>36 (51.4)</td>
</tr>
<tr>
<td>Friend</td>
<td>1 (1.4)</td>
</tr>
<tr>
<td>Other</td>
<td>13 (18.6)</td>
</tr>
</tbody>
</table>
Table 1 continued

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( N = 70 )</td>
</tr>
<tr>
<td>Length of caregiver knowledge of terminal status</td>
<td></td>
</tr>
<tr>
<td>Less than one month</td>
<td>5 (7.1)</td>
</tr>
<tr>
<td>1-3 months</td>
<td>19 (27.1)</td>
</tr>
<tr>
<td>3-6 months</td>
<td>9 (12.9)</td>
</tr>
<tr>
<td>6-9 months</td>
<td>5 (7.1)</td>
</tr>
<tr>
<td>9-12 months</td>
<td>5 (7.1)</td>
</tr>
<tr>
<td>Over 1 year</td>
<td>11 (15.7)</td>
</tr>
<tr>
<td>Over 2 years</td>
<td>16 (22.9)</td>
</tr>
<tr>
<td>Length providing care</td>
<td></td>
</tr>
<tr>
<td>Less than one month</td>
<td>8 (11.4)</td>
</tr>
<tr>
<td>1-3 months</td>
<td>13 (18.6)</td>
</tr>
<tr>
<td>3-6 months</td>
<td>11 (15.7)</td>
</tr>
<tr>
<td>6-9 months</td>
<td>5 (7.1)</td>
</tr>
<tr>
<td>9-12 months</td>
<td>3 (4.3)</td>
</tr>
<tr>
<td>Over 1 year</td>
<td>10 (14.3)</td>
</tr>
<tr>
<td>Over 2 years</td>
<td>20 (28.6)</td>
</tr>
<tr>
<td>Highest level of care provided by caregiver</td>
<td></td>
</tr>
<tr>
<td>Little care</td>
<td>2 (2.9)</td>
</tr>
<tr>
<td>Some care</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Moderate care</td>
<td>24 (34.3)</td>
</tr>
<tr>
<td>Significant care</td>
<td>33 (47.1)</td>
</tr>
<tr>
<td>Intense care</td>
<td>11 (15.7)</td>
</tr>
</tbody>
</table>

Note. Values in parentheses reflect percentages unless otherwise specified.
Each packet included a cover letter, information sheet, demographic questionnaire, and six measures in a postage paid return envelope. Care was taken to assure caregivers that participation was completely optional and that a decision not to participate would not result in any negative consequences. Because the study was anonymous, signed consent was not required. The study was approved by the Texas A&M Institutional Review Board as well as respective hospice administrations.

Measures

Anticipatory Grief Scale

The outcome measure used in this study was Anticipatory Grief Scale, the only anticipatory grief scale in the existing literature (Theut, Jordan, Ross, & Deutsch, 1991). The Anticipatory Grief Scale (AGS) consists of 27 items in a 5-point Likert response format and yields a continuous total score that was designed to measure the extent to which one is experiencing anticipatory grief. The items were designed to measure anger, guilt, anxiety, irritability, sadness, feelings of loss, and decreased ability to function at usual tasks. The alpha coefficient has been reported at .84, and correlations have been found with depression, anxiety, and hostility.
Length of Caregiving

This construct was measured by a single, 7-point Likert scale item devised for this study. Responses ranged from less than one month (1) to over two years (7).

Intensity of Caregiving

This construct was measured by a single, 5-point Likert scale item devised for this study. Responses ranged from little care (1; e.g., occasional visits, providing encouragement) to intense care (5; e.g., near constant supervision, lifting and shifting them, managing all medications, changing IV or urine bag).

Coping Styles Inventory

The Coping Styles Inventory (CSI) consists of 72 items in a 5-point Likert response format (Tobin, Holroyd, Reynolds & Wigal, 1989). The initial pool of items consisted of 49 items adapted from the Ways of Coping Checklist (Folkman & Lazarus, 1980) and 60 items developed by the authors. Factor analysis has yielded a three-tiered factor structure (see Figure 2). The present study used the two factors of engagement and disengagement. The engagement factor includes problem solving, cognitive restructuring, expression of emotion, and social support subscales. The disengagement factor includes problem
avoidance, wishful thinking, self-criticism, and social withdrawal subscales. Alpha coefficients for the primary eight factors range from .71 to .94, and test-retest reliability coefficients range from .67 to .83.

Experiences of Close Relationships

The Experiences of Close Relationships scale (ECR) is a 36 item, self-report measure using a 7-point Likert scale that was designed to assess dimensions of adult attachment style (Brennan, Clark, & Shaver, 1998). The measure yields factor-analytically derived, continuous subscales: Avoidance and Anxiety. Avoidance encompasses discomfort with closeness and discomfort with depending on others. Anxiety relates to fear of rejection or abandonment. ECR items were initially pooled from self-report measures of adult romantic attachments, and factor analysis demonstrated that avoidance and anxiety represent the two constructs common throughout the literature (Brennan, Clark, & Shaver, 1998). Atkins (2000) reported the internal consistency of the ECR was high as compared to other attachment style measures, with an alpha coefficient of .94 for Avoidance and of .91 for Anxiety.
Figure 2. Factor Structure of the Coping Style Inventory.

Caregiver Strain Index

The Caregiver Strain Index (CGSI) was designed to quantify strain among informal care providers and consists of 13 items requiring a yes or no response (Robinson, 1983). Items assess the degree to which providing care results in physical and emotional strain, as well as life disruption. The CGSI yields a global score, with higher scores representing higher levels of caregiver strain. The alpha coefficient has been reported as .86, and significant correlations have been found with patient characteristics (e.g. age, anxiety, level of daily activities, mental impairment), subjective perception of the care-taking relationship (e.g. hard to give help, negative lifestyle changes, patient understanding of problems in helping), and emotional status of caregivers (e.g. getting along with patient, overall happiness, anxiety, depression, hostility; Robinson, 1983; Vitaliano, Young, & Russo, 1991).

Bem Sex-Role Inventory

The Bem Sex-Role Inventory (BEM) is a 60-item, 7-point Likert response questionnaire that was developed to explore psychological androgyny by presenting stereotypically feminine or masculine traits. The BEM consists of two scales, Masculinity and Femininity, and respondents rate
the degree to which they identify with gender stereotyped traits. Although scale scores can be used to categorize respondents, the present study used the two continuous scales. The BEM has demonstrated high reliability, with coefficient alpha ranging from .78 to .84 and test-retest reliability ranging from .86 to .88 (Bem, 1981). Divergent validity has been demonstrated through low correlations with the Marlowe-Crowne Social Desirability Scale (Bem, 1981).

Index of Core Spiritual Experiences

The Index of Core Spiritual Experiences (INSPIRIT) was developed to reflect an individual’s degree of intrinsic spirituality by assessing spiritual experiences and belief in God. A single mean score is derived from six multiple choice items and 13 Likert-style ratings of differing spiritual beliefs and experiences. It has demonstrated high reliability (Cronbach’s alpha = .90), as well as concurrent validity through moderately positive correlation with the Intrinsic scale of the Religious Orientation Inventory (Allport & Ross, 1967), and divergent validity through a lack of correlation with the Extrinsic scale (Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991).
Data Preparation/Missing Data

Several steps were taken to prepare the data for analysis, including listwise elimination from the dataset and use of multiple imputation to estimate values for sporadic missing data. Eight cases that were missing an entire measure were excluded listwise, resulting in a final sample size of 70.

The NORM program was used for imputation of missing data (1.16% of the database) and provided a reliable estimate of missing values using information obtained from the observed part of the data set. The program simulates the missing data multiple times, creates equally plausible versions of the complete data, and selects the best estimate of the missing values (Schafer & Schenker, 1997; Schafer, 1999; Shafer & Olsen, 1998).
CHAPTER IV
RESULTS

This chapter presents the analyses conducted for the present study. This includes scale reliability for each measure used in the study, descriptives and correlations for model variables, and findings from the multiple regression analyses.

Preliminary Analyses

Scale Reliability

Chronbach's alpha and item total correlations assessed internal consistency reliability for all measures (see Table 2). Internal consistency was excellent for the attachment measure of avoidance, and good for the measures of disengagement coping, engagement coping, attachment anxiety, masculine identification and anticipatory grief. It was acceptable for the measurement of caregiver strain, feminine identification, and intrinsic spirituality.

Descriptives and Correlations

Descriptives and correlations for model variables are provided in Tables 3 and 4.
Table 2

*Scale Reliability Indices*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cronbach’s Alpha</th>
<th>Range of item total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipatory Grief Scale</td>
<td>.86</td>
<td>-.26 - .79</td>
</tr>
<tr>
<td>Coping Style Inventory – Engagement Factor</td>
<td>.87</td>
<td>.08 - .60</td>
</tr>
<tr>
<td>Coping Style Inventory – Disengagement Factor</td>
<td>.89</td>
<td>.05 - .70</td>
</tr>
<tr>
<td>Experiences in Close Relationships – Avoidance Scale</td>
<td>.92</td>
<td>.40 - .77</td>
</tr>
<tr>
<td>Experiences in Close Relationships – Anxiety Scale</td>
<td>.85</td>
<td>.27 - .64</td>
</tr>
<tr>
<td>Caregiver Strain Index</td>
<td>.77</td>
<td>.20 - .65</td>
</tr>
<tr>
<td>Index of Core Spiritual Experiences</td>
<td>.75</td>
<td>.30 - .70</td>
</tr>
<tr>
<td>Bem Sex Role Inventory – Masculinity Scale</td>
<td>.84</td>
<td>.03 - .71</td>
</tr>
<tr>
<td>Bem Sex Role Inventory – Femininity Scale</td>
<td>.74</td>
<td>-.08 - .61</td>
</tr>
</tbody>
</table>
Table 3

*Descriptive Statistics for Model Variables*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipatory Grief Scale</td>
<td>77.69</td>
<td>15.37</td>
<td>49 - 104</td>
</tr>
<tr>
<td>Length of Caregiving</td>
<td>4.31</td>
<td>2.26</td>
<td>1 - 7</td>
</tr>
<tr>
<td>Intensity of Caregiving</td>
<td>3.73</td>
<td>0.83</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Coping Style Inventory - Engagement Factor</td>
<td>101.26</td>
<td>18.63</td>
<td>55 - 146</td>
</tr>
<tr>
<td>Coping Style Inventory - Disengagement Factor</td>
<td>63.90</td>
<td>17.33</td>
<td>38 - 122</td>
</tr>
<tr>
<td>Experiences in Close Relationships - Avoidance Scale</td>
<td>45.18</td>
<td>20.24</td>
<td>17.06 - 108.28</td>
</tr>
<tr>
<td>Experiences in Close Relationships - Anxiety Scale</td>
<td>43.78</td>
<td>17.04</td>
<td>17.06 - 95.39</td>
</tr>
<tr>
<td>Caregiver Strain Index</td>
<td>7.60</td>
<td>3.25</td>
<td>1-13</td>
</tr>
<tr>
<td>Index of Core Spiritual Experiences</td>
<td>3.34</td>
<td>0.49</td>
<td>1.71 - 4</td>
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<tr>
<td>Bem Sex Role Inventory - Masculinity Scale</td>
<td>47.16</td>
<td>11.33</td>
<td>11 - 66</td>
</tr>
<tr>
<td>Bem Sex Role Inventory - Femininity Scale</td>
<td>56.01</td>
<td>8.92</td>
<td>34 - 76</td>
</tr>
</tbody>
</table>
Table 4

Correlations Among Model Variables

<table>
<thead>
<tr>
<th></th>
<th>AGS</th>
<th>Length</th>
<th>Intense</th>
<th>CSI-E</th>
<th>CSI-D</th>
<th>ECR-Av</th>
<th>ECR-Anx</th>
<th>CGSI</th>
<th>SPIRIT</th>
<th>BEM-M</th>
<th>BEM-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>-0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intense</td>
<td>0.15</td>
<td>0.25*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSI-E</td>
<td>0.09</td>
<td>0.27*</td>
<td>0.30*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSI-D</td>
<td>0.52**</td>
<td>0.00</td>
<td>0.09</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECR-Av</td>
<td>-0.10</td>
<td>-0.00</td>
<td>-0.11</td>
<td>-0.10</td>
<td>0.13</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>ECR-Anx</td>
<td>0.50**</td>
<td>0.18</td>
<td>0.15</td>
<td>0.12</td>
<td>0.54**</td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGSI</td>
<td>0.35**</td>
<td>-0.19</td>
<td>-0.01</td>
<td>-0.15</td>
<td>0.38**</td>
<td>0.25*</td>
<td>0.47**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPIRIT</td>
<td>-0.14</td>
<td>0.06</td>
<td>0.26*</td>
<td>0.38**</td>
<td>0.02</td>
<td>-0.28*</td>
<td>-0.12</td>
<td>-0.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEM-M</td>
<td>-0.31**</td>
<td>-0.05</td>
<td>0.12</td>
<td>0.12</td>
<td>-0.28*</td>
<td>0.09</td>
<td>-0.25*</td>
<td>-0.07</td>
<td>0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEM-F</td>
<td>0.18</td>
<td>0.11</td>
<td>-0.01</td>
<td>0.30*</td>
<td>0.05</td>
<td>-0.29*</td>
<td>0.15</td>
<td>0.08</td>
<td>-0.11</td>
<td>0.13</td>
<td>-</td>
</tr>
</tbody>
</table>

* p < .05
** p < .01

Note. AGS = AG Scale, Length = length of time caregiving, Intense = intensity of caregiving; CSI-E = Coping Style Inventory-Engagement coping; CSI-D = Coping Style Inventory–Disengagement coping; ECR-Av = Experiences in Close Relationships-Avoidance scale; ECR-Anx = Experiences in Close Relationships-Anxiety scale; CGSI = Caregiver Strain Index; SPIRIT = Index of Core Spiritual Experiences; BEM-M = Bem Sex-Roie Inventory-Masculinity scale; BEM-F = Bem Sex-Roie Inventory-Femininity scale.
Primary Analyses

A multiple regression model was used to evaluate the research questions. Anticipatory grief was the dependent variable, predicted by the independent variables of: engagement coping, disengagement coping, attachment anxiety, attachment avoidance, caregiver strain, masculine gender role identification, feminine gender role identification, and spirituality.

Testing the Assumptions of Multiple Regression

The assumptions underlying the use of multiple regression were investigated for this sample. In accordance with the assumptions of regression, examination of residuals indicated that they were normally distributed, examining the predicted and standardized residuals revealed relatively constant error variance, and all correlations between independent variables and residuals were non-significant. Examination of tolerance and the variance inflation factor suggested that multicollinearity was not problematic for these data.

Identifying Multivariate Outliers

Four multivariate outliers were identified using Cook’s distance. A regression was conducted omitting these four participants and because that analysis yielded
somewhat different results, both analyses are presented below. The four outlying cases each had two or more extreme scores on the predictor variables, the majority of which were high scores, and three of them were extremely high on the AGS. However, each were not notably different from the sample in terms of demographic or caregiving variables, making the reason for their extremity unclear.

**Bootstrapping Method**

Given the sample size and the resulting participant to variable ratio, the bootstrapping method was selected to provide greater confidence in the results obtained. Bootstrapping uses resampling with replacement to take repeated samples from the original data. This allows for calculation of summary statistics and confidence intervals for values of interest, such as $R^2$.

**The Regression Model**

In stage 1 of the analysis, the unique contribution of length of time caregiving and intensity of caregiving in predicting AG was investigated. This was done by regressing these two predictors on AG scores. The residuals of this regression were used in all future regressions, thereby controlling for the unique contributions of these variables. Stage 2 regressed the
predictor variables of engagement coping, disengagement coping, attachment anxiety, attachment avoidance, caregiver strain, masculine gender role identification, feminine gender role identification, and spirituality on the saved residuals (see Figure 3).

Stage 1 Regression for the Total Sample

For the stage 1 regression, length of caregiving and intensity of caregiving did not significantly predict AG, \( F(2, 67) = .94, p = .40 \). These variables only accounted for approximately 3% of the variance \( (R^2 = .03) \). Accordingly, standardized regression coefficients were nonsignificant for both length of caregiving and intensity of caregiving (see Table 5).

Stage 2 Regression for the Total Sample

For the stage 2 regression, results indicated that the overall model was significant, \( F(8, 61) = 6.03, p < .001 \). The variables accounted for approximately 44% of the variance \( (R^2 = .44) \). The bootstrapped Multiple \( R^2 \) (based on 1000 replications) was similar, with a mean of \( R^2 = .46 \), median of .45, and a 90% confidence interval of \( .32 - .59 \). Standardized regression coefficients indicated disengagement coping and attachment avoidance were the only significant predictors of anticipatory grief scores.
Figure 3. Multiple Regression Model Predicting Anticipatory Grief.
Table 5

**Summary of Regression Analysis for Caregiving Variables Predicting Anticipatory Grief for the Total Sample (N = 70)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of caregiving</td>
<td>-0.49</td>
<td>0.85</td>
<td>-0.07</td>
<td>-0.58</td>
<td>0.57</td>
<td>-0.07</td>
</tr>
<tr>
<td>Intensity of caregiving</td>
<td>3.09</td>
<td>2.30</td>
<td>0.17</td>
<td>1.34</td>
<td>0.18</td>
<td>0.16</td>
</tr>
</tbody>
</table>
Disengagement was associated with increased anticipatory grieving, whereas attachment avoidance was associated with decreased AG scores (see Table 6). Engagement coping, attachment anxiety, caregiver strain, masculine gender role identification, feminine gender role identification, and spirituality were not significant predictors.

Stage 1 Regression Excluding Multivariate Outliers

When the multivariate outliers were excluded, length of caregiving and intensity of caregiving again did not significantly predict AG, $F(2, 63) = 1.42, p = .25$ (see Table 5). These variables only accounted for approximately 4% of the variance ($R^2 = .04$). Accordingly, standardized regression coefficients were nonsignificant for both length of caregiving and intensity of caregiving (see Table 7).

Stage 2 Regression Excluding Multivariate Outliers

For the stage 2 regression excluding the outliers, results again indicated that the overall model was significant, $F(8, 57) = 8.24, p < .001$. The variables accounted for approximately 54% of the variance ($R^2 = .54$). The bootstrapped Multiple $R^2$ (based on 1000 replications) was similar, with a mean and median $R^2$ of .58 and a 90% confidence interval of .46 - .70. Both disengagement coping and attachment avoidance again significantly
Table 6

Summary of Regression Analysis Predicting Anticipatory Grief for the Total Sample (N = 70)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>T</th>
<th>p</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement coping</td>
<td>0.00</td>
<td>0.10</td>
<td>0.08</td>
<td>0.71</td>
<td>0.48</td>
<td>0.00</td>
</tr>
<tr>
<td>Disengagement coping</td>
<td>0.29</td>
<td>0.11</td>
<td>0.33</td>
<td>2.75</td>
<td>0.01*</td>
<td>0.07</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>0.21</td>
<td>0.11</td>
<td>0.23</td>
<td>1.81</td>
<td>0.08</td>
<td>0.03</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>-0.18</td>
<td>0.09</td>
<td>-0.25</td>
<td>-2.07</td>
<td>0.04*</td>
<td>0.04</td>
</tr>
<tr>
<td>Caregiver strain</td>
<td>0.66</td>
<td>0.54</td>
<td>0.14</td>
<td>1.21</td>
<td>0.23</td>
<td>0.01</td>
</tr>
<tr>
<td>Masculine gender role identification</td>
<td>-0.17</td>
<td>0.15</td>
<td>-0.13</td>
<td>-1.13</td>
<td>0.26</td>
<td>0.01</td>
</tr>
<tr>
<td>Feminine gender role identification</td>
<td>0.00</td>
<td>0.20</td>
<td>0.03</td>
<td>0.26</td>
<td>0.80</td>
<td>0.00</td>
</tr>
<tr>
<td>Spirituality</td>
<td>-6.44</td>
<td>3.72</td>
<td>-0.21</td>
<td>-1.73</td>
<td>0.09</td>
<td>0.03</td>
</tr>
</tbody>
</table>

*p < .05.
Table 7

*Summary of Regression Analysis for Caregiving Variables

*Excluding Multivariate Outliers (N = 66)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>T</th>
<th>p</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of caregiving</td>
<td>-0.37</td>
<td>0.83</td>
<td>-0.06</td>
<td>-0.44</td>
<td>0.66</td>
<td>0.00</td>
</tr>
<tr>
<td>Intensity of caregiving</td>
<td>3.75</td>
<td>2.23</td>
<td>0.21</td>
<td>1.69</td>
<td>0.10</td>
<td>0.04</td>
</tr>
</tbody>
</table>
predicted anticipatory grief and in the same directions, but now attachment anxiety and spirituality also significantly predicted anticipatory grieving scores (see Table 8). Attachment anxiety was positively related to AG, whereas spirituality was negatively related. The remaining predictors did not reach statistical significance.

Disengagement Factor Regression

In order to further investigate the factors underlying disengagement and their relationship to AG, a final multiple regression was run (see Table 9). The same caregiving variables as used above (i.e., length of caregiving, intensity of caregiving) were also included in this analysis to account for their contribution to AG. Two multivariate outliers were identified, and examination of a regression eliminating these two participants indicated that their elimination did not significantly alter findings. Therefore, only the analysis using the total sample is reported. The final regression was significant, \( F(4, 65) = 12.22, p = .001 \). These variables accounted for approximately 43% of the variance (\( R^2 = .43 \)). Similarly, the bootstrapped Multiple \( R^2 \) (based on 1000 replications) identified a mean of .46, median of .45, and a 90% confidence interval of .32 – .58. Problem
Table 8  

Summary of Regression Analysis Excluding Multivariate Outliers ($N = 66$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE\ B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
<th>$sr^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement coping</td>
<td>0.00</td>
<td>0.09</td>
<td>0.11</td>
<td>1.01</td>
<td>0.32</td>
<td>0.01</td>
</tr>
<tr>
<td>Disengagement coping</td>
<td>0.21</td>
<td>0.10</td>
<td>0.23</td>
<td>2.08</td>
<td>0.04*</td>
<td>0.03</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>0.24</td>
<td>0.11</td>
<td>0.26</td>
<td>2.30</td>
<td>0.03*</td>
<td>0.04</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>-0.32</td>
<td>0.09</td>
<td>-0.40</td>
<td>-3.49</td>
<td>0.001**</td>
<td>0.10</td>
</tr>
<tr>
<td>Caregiver strain</td>
<td>0.89</td>
<td>0.48</td>
<td>0.20</td>
<td>1.84</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td>Masculine gender role identification</td>
<td>-0.16</td>
<td>0.14</td>
<td>-0.13</td>
<td>-1.17</td>
<td>0.25</td>
<td>0.01</td>
</tr>
<tr>
<td>Feminine gender role identification</td>
<td>0.00</td>
<td>0.19</td>
<td>0.00</td>
<td>0.00</td>
<td>0.10</td>
<td>0.00</td>
</tr>
<tr>
<td>Spirituality</td>
<td>-8.73</td>
<td>3.39</td>
<td>-0.30</td>
<td>-2.58</td>
<td>0.01*</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01
Table 9

Summary of Regression Analysis for Disengagement Variables
for the Total Sample (N = 70)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
<th>t</th>
<th>P</th>
<th>sr²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem avoidance</td>
<td>-1.03</td>
<td>0.35</td>
<td>-0.31</td>
<td>-2.94</td>
<td>0.01*</td>
<td>0.08</td>
</tr>
<tr>
<td>Wishful thinking</td>
<td>0.79</td>
<td>0.25</td>
<td>0.38</td>
<td>3.15</td>
<td>0.00*</td>
<td>0.09</td>
</tr>
<tr>
<td>Self-criticism</td>
<td>0.38</td>
<td>0.35</td>
<td>0.12</td>
<td>1.10</td>
<td>0.28</td>
<td>0.01</td>
</tr>
<tr>
<td>Social withdrawal</td>
<td>0.93</td>
<td>0.29</td>
<td>0.38</td>
<td>3.23</td>
<td>0.00*</td>
<td>0.09</td>
</tr>
</tbody>
</table>

*p < .01.
avoidance, wishful thinking, and social withdrawal all significantly predicted AG, whereas self-criticism did not. Problem avoidance was negatively related to AG, while wishful thinking and social withdrawal were positively related to AG.

Research Questions

The following research questions were investigated:

Research Question 1: Does coping style, as measured by the Coping Styles Inventory, predict AG, as measured by the Anticipatory Grief Scale?

Disengagement coping was found to predict anticipatory grief (see Tables 6 and 8). Data suggested that caregivers who were more disengaged were more likely to experience anticipatory grief. Further analysis indicated that problem avoidance was significantly and negatively related to AG, wishful thinking and social withdrawal were significantly and positively related to AG, and self-criticism did not significantly predict AG (see Table 9).

Research Question 2: Does attachment style, as measured by the Experiences in Close Relationships Scale, predict AG, as measured by the Anticipatory Grief Scale?
Attachment anxiety was found to predict anticipatory grief when excluding multivariate outliers (see Table 8). In regard to the relationship to the dying individual, caregiver anxiety may present as preoccupation, fear of abandonment, and fear of rejection (Brennan, Clark, & Shaver, 1998). A positive relationship was found in these data, suggesting that more attachment anxiety was associated with higher levels of anticipatory grief.

Attachment avoidance was also found to predict AG and has been found to include avoidance of intimacy, discomfort with closeness, and self-reliance (see Tables 6 and 8; Brennan, Clark, & Shaver, 1998). A negative relationship was found in these data, suggesting that less attachment avoidance was associated with higher levels of anticipatory grief.

**Research Question 3:** Does caregiver strain, as measured by the Caregiver Strain Index, predict AG, as measured by the Anticipatory Grief Scale?

Caregiver strain was not found to be a significant predictor of anticipatory grief (see Tables 6 and 8).

**Research Question 4:** Does gender role identification, as measured by the Bem Sex Role Inventory, predict AG, as measured by the Anticipatory Grief Scale?
Gender role identification was not found to be a significant predictor of anticipatory grief (see Tables 6 and 8).

**Research Question 5:** Does spirituality, as measured by the Index of Core Spiritual Experiences, predict AG, as measured by the Anticipatory Grief Scale?

Spirituality was found to be a significant predictor of anticipatory grief when excluding multivariate outliers. The relationship was negative, suggesting that less spirituality was associated with higher AG scores (see Table 8).
CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The present study was conducted to explore the relationships between anticipatory grief and coping style, attachment style, caregiver strain, gender role identification, and spirituality. More specifically, these variables were explored as predictors of anticipatory grief among caregivers using hospice services to care for dying friends or relatives.

This chapter is divided into four sections. The first expounds upon findings in relation to the research questions presented in Chapter I. The second section discusses limitations of the present study. Next, the clinical application of the findings are presented. And lastly, recommendations for future studies are discussed.

Research Questions

Research Question 1: Does coping style, as measured by the Coping Styles Inventory, predict AG, as measured by the Anticipatory Grief Scale?

The majority of grief-related coping strategies in the literature relate to engagement (i.e., problem engagement and emotion engagement; Blood, Luther, & Stemple, 1992; Doombus, 1996; Grbich, Parker, & Maddocks, 2001; Hull,
1992; Martens & Davies, 1990; Steele & Fitch, 1996). Interestingly, this study found that disengagement coping predicted anticipatory grief such that increased disengagement coping related to increased AG. Disengagement coping is characterized by problem avoidance, wishful thinking, self-criticism, and social withdrawal (Tobin, Holroyd, Reynolds & Wigal, 1989). A regression identifying which types of disengagement coping predicted AG indicated that while problem avoidance, wishful thinking and social withdrawal significantly predicted AG, self-criticism did not.

Problem avoidance, which was negatively related to AG, consisted of items related to refusing to think about the situation, stopping thinking about it, sleeping more than usual, or otherwise avoiding the difficulty of the situation. This finding makes sense in light of Natterson and Knudson’s (1960) three-phase response pattern among parents of dying children in which the first phase of the pattern involved denial of the nature of the terminal illness. Only as their denial began to decrease did they begin to struggle with accepting the impending death. In relation to Kübler-Ross’ (1969) stages of grief, AG appears to move beyond Denial, which precedes Anger, Bargaining,
Depression, and Acceptance. In contrast, shock, denial, and avoidance of painful reality have been consistent with some experiences of pre-loss caregivers, but pre-loss status does not necessarily equate to AG (Bozeman, Orbach, & Sutherland, 1955; Chodoff, Friedman, & Hamburg, 1964; Fulton & Gottesman, 1980; Mayer, 2001; Rando, 1988).

Wishful thinking, which was positively related to AG, was measured by items including hope that the situation would resolve itself or that a miracle would happen. Wishful thinking has not been specifically addressed in the AG literature, but its relation makes sense if one considers the act of wishful thinking as acknowledgment of and struggle with the impending loss.

Social withdrawal, measured by items relating to avoiding others, spending time alone, and keeping feelings to oneself, was positively related to AG. These findings are congruent with studies of AG reactions documenting withdrawal among parents of dying children (Richmond & Waisman, 1955). Importantly, Mayer (2001) noted that caregivers often have less time for social interactions. Perhaps the above findings indicate that social withdrawal is associated with the lonely duty of caregiving and is therefore a component of AG.
Self-criticism, which did not predict grief, was measured by items related to blaming and criticizing oneself for the situation. The lack of relationship between these two constructs is in contrast with earlier findings suggesting self-blame or perceived responsibility to be related to AG (Binger, Ablin, Feurstein, Kushner, Zoger, & Middelsen, 1969; Lindgren, Connelly, & Gaspar, 1999; Richmond & Waisman, 1955).

In sum, caregivers who employ wishful thinking and social withdrawal are more likely to exhibit increased AG, whereas those who employ problem avoidance as a coping strategy may exhibit reduced AG. Self-criticism was not significantly predictive of AG in this study.

**Research Question 2:** Does attachment style, as measured by the Experiences in Close Relationships Scale, predict AG, as measured by the Anticipatory Grief Scale?

The present study found that anticipatory grief was negatively associated with attachment avoidance both with and without outliers, and was positively associated with attachment anxiety when excluding multivariate outliers. Attachment anxiety includes such constructs as preoccupation with the attachment figure (i.e., the dying
person), fear of abandonment, and fear of rejection. Attachment avoidance consists of avoidance of intimacy, discomfort with closeness, and self-reliance, (Brennan, Clark, & Shaver, 1998)

Many have noted that style of attachment predicts adjustment to grief (Harvey & Miller, 1998; Juri & Marrone, 2003; Noppe, 2000; Parkes, 1994; Stroebe, 2002). Individuals with more secure relationships with the dying experience less depression and recover more quickly than those with insecure relationships (Parkes & Weiss, 1983; Sable, 1989; Scharlach, 1991; Wayment & Vierthaler, 2002).

Individuals with attachment anxiety may be generally less stable and less able to relieve distress, (Bowlby, 1988; Collins and Read, 1990; Shaver & Hazan, 1993), lending credence to the idea that they may experience a more intense grief reaction. Further, using the Dual Process Model of Loss, Shaver and Tancredy (2001) stated that anxious individuals are more likely to remain loss-oriented than other individuals and experience a more chronic grieving experience (Stroebe & Schut, 2001). Present findings support the idea that preoccupation with the dying person, fear of being abandoned by them, and fear of rejection by the dying is associated with more AG.
Attachment literature has suggested that individuals with avoidant attachment styles may experience less emotional distress and report lower levels of grief and depression than secure individuals (Fraley & Shaver, 1997). Stroebe (2002) suggested that persons with attachment styles involving avoidance and fear of intimacy may deny the reality of the loss and thereby inhibit their grief process. The concept that attachment avoidance may be negatively related to AG was supported by the results of this study, which indicate that inclination toward intimacy with the dying person, finding comfort with closeness to them, and reliance on him or her was associated with increased AG.

It is important to note that although continuous measures of attachment constructs were used in this study, use of these anxiety and avoidant dimensions to categorize participants indicated that 92% of the respondents were categorized as fearful attachment, only 8% were preoccupied attachment, and no participants were classified as securely attached. The prompt clearly asked participants to respond how they have “generally experienced this relationship, not just what is happening currently,” but the intensity of the impending separation may have influenced the responses to
the items. As a result, participants may have been unable to separate their responses to the attachment questionnaire from their current feelings toward the dying individual.

**Research Question 3**: Does caregiver strain, as measured by the Caregiver Strain Index, predict AG, as measured by the Anticipatory Grief Scale?

Present findings suggest that caregiver strain is not a significant predictor of anticipatory grief. Much literature has explored effects of caregiver strain on grief outcomes, finding either that well-being improved after the patient died and caretaking ended, or that the “pile up of stressors” taxed the capacity of caretakers such that they were less able to cope with bereavement (Patterson & McCubbin, 1983). Findings have also suggested that caregiver strain is associated with pre-loss depression, and that such symptoms begin to diminish in the first few months following the death (Beery et al., 1997; Chentsove-Dutton et al., 2002).

Despite these findings, the present study found that caregiver strain did not predict AG. The measurement of caregiver strain in this study emphasized objective burden (e.g., physical strain from lifting) more than subjective burden (e.g., emotional distress). It may be that a
measure more heavily weighted toward subjective burden would be related to AG. Further, items on the Caregiver Strain Index require dichotomous yes/no responses; reduced opportunity for variance in responses may also have precluded an effect. Finally, it may be that caregiver strain demands so much of one’s personal resources that there is little energy available for AG.

**Research Question 4**: Does gender role identification, as measured by the Bem Sex Role Inventory, predict AG, as measured by the Anticipatory Grief Scale?

Despite research and clinical writings describing gender-specific responses to grief, the present study found gender role identification not to be a significant predictor of AG. Research in gender and grief has largely focused on biological sex rather than gender role identification, and found that men may respond with a more limited range of emotions, a tendency toward cognitive responses, preference for solitude and reluctance to seek help, and propensity to share more openly than women (Boerner & Silverman, 2001; Cook, 1988; Good, Dell, & Mintz, 1989; Martin & Doka, 1996; Martin & Doka, 2000). Women on the other hand, have been found to express emotion more openly, seek help, and allow oneself time to grieve
(Boerner & Silverman, 2001; Martin & Doka, 1996; Martin & Doka, 2000; Stillon & McDowell, 1997, as cited in Martin & Doka, 2000).

Outcome research has suggested that men have a higher mortality rate than do women during the acute grieving period, that men may be socialized to maintain distinction between personal and other domains more than are women, and that women are generally more likely to use social support, which may relate to better grief outcomes (Boerner & Silverman, 2001; Cook, 1988; Martin & Doka, 2000; Stroebe, Stroebe, & Schut, 2001; Thompson, 1995). Though gender itself has been cited as important, present findings indicate that the extent to which one identifies with traditional gender roles was not predictive of AG. These findings may have several possible explanations, the first of which is that gender differences may not emerge during caregiving or prior to the onset of conventional grief. Perhaps the strain inherent in caregiving causes the caregiver to respond to needs such that their own gender-specific grief processes are delayed. Similarly, societal expectations for gender-appropriate grieving may be related to CG reactions, but not yet applied to the individual fulfilling the caregiving role. Lastly, the demographics
of the sample (e.g., 90% female) may have provided limited variance among the responses.

**Research Question 5:** Does spirituality, as measured by the Index of Core Spiritual Experiences, predict AG, as measured by the Anticipatory Grief Scale?

The present study found that when multivariate outliers were excluded from the sample, spirituality was significantly and negatively associated with AG. The research literature has established that death is a significant challenge to one’s assumptive world and that spirituality is an important part of the grief process for many persons (Marrone, 1999). Literature has suggested that spirituality is associated with more positive CG outcomes including positive outlook, satisfaction with support, fewer depressive symptoms and negative reactions, lower levels of caregiver burden, improved cognitive processing, finding meaning, and perception of social support (Gamino, Sewell, & Easterling, 2000; Golsworthy & Coyle, 1999; Kazanjian, 1997; McIntosh, Silver, & Wortman, 1993; Wyatt, Friedman, Given & Given, 1999).

Present findings that lower levels of spirituality are associated with more AG are congruent with the body of evidence relevant to spirituality and CG. Given that
spirituality is generally associated with less depressive symptoms and negative reactions, and given that the nature of grief is distressing, a negative relationship between the two is intuitive. Additionally, spirituality may insulate individuals from high levels of AG, much as the literature suggests it does for CG.

Limitations of the Present Study

The present study had several limitations. First, results were based on self-report, which is inherently influenced by limited self-awareness and attempts at impression management.

Secondly, the study reported a response rate of 17%, lower than was desired. Given the intense physical and emotional demands on caregivers, limited ability to complete the research packet is understandable. Participants were quite possibly experiencing the most stressful and demanding period in their lives and respondent burden due to packet length may have negatively impacted the response rate.

Although analysis of non-respondents would be beneficial, it was not possible due to the anonymous nature of administration. Therefore, it was unclear whether those who chose to participate were significantly different from
those who chose not to. Further, although participants were recruited from three sites, analysis examining significant differences among them was not possible. This was due to both insufficient number of responses from the Texas City area to warrant group comparison and failure to document which packets were delivered through Bryan/College Station, Texas versus Brenham, Texas areas.

With respect to generalizability, all participants were recruited within the State of Texas, and from non-profit or not-for-profit hospices. Therefore generalizability to other regions or care facilities is uncertain.

Lastly, it is possible that findings were impacted by measurement issues. All measures demonstrated at least an acceptable level of internal consistency reliability, but the measure of caregiver strain may have masked potential effect in that it emphasized objective burden over subjective burden. Use of a measure that captured both elements more proportionally may have yielded different results. Also, the attachment results may have been affected by individuals responding to how they currently feel about the relationship rather than how they have generally felt about the relationship over its entire
course, as evidenced by all participants being categorized as insecurely attached. Finding a measure or method to help participants respond to long-term relationship characteristics rather than immediate experience may clarify future results.

Clinical Applications

The Dual Process Model of Coping with Loss (DPM; Stroebe & Schut, 2001), which postulates that grieving individuals oscillate between loss-orientation and restoration-orientation, may provide a means for practitioners working with grief to conceptualize AG among caregivers. Rather than viewing AG as a means to sever ties to the dying person, AG may be better considered a part of the process of acknowledging impending loss and preparing for the adaptation needed while still maintaining relationship with the dying person. Present findings suggest that caregivers experiencing AG may be loss-oriented in that they are acknowledging the impending loss and beginning their grieving process in advance of the death. They may engage in this process privately and with thoughts of escapism and hope for a miracle, but such social withdrawal and wishful thinking may be considered
active aspects of the loss-oriented experience in a grieving individual.

Present attachment findings suggest that AG may be associated with preoccupation with the dying person, fear of abandonment by them, and fear of rejection by the dying individual as well as intimacy with the dying person, finding comfort with closeness to them, and caregiver reliance on him or her. Anxiously attached persons may struggle with the distress associated with loss (Bowlby, 1988; Collins and Read, 1990; Shaver & Hazan, 1993); they may be likely to experience grief during the pre-loss period and may benefit from early intervention. Similarly, those with less avoidance of the dying (i.e., preoccupation with the dying person, fear of being abandonment, and fear of rejection by them) may be likely to also experience AG, and benefit from earlier intervention.

It is clear that hospice caregivers undergo marked stress in both provision of care to the dying individual as well as the personal struggle with cognitive, emotional, spiritual, and behavioral adaptation to impending loss. As agencies such as hospice work to care for patients, another important aspect of their work relates to caring for the caregivers themselves. As such, hospices regularly provide
counseling as well as spiritual support for caregivers and families under using their services. These findings may be helpful to those seeking to intervene in caregivers’ struggle to adapt to caregiving, death, and the changes inherent in the process.

Anticipatory grief is a phenomenon commonly noted by practitioners, yet scarcely investigated through empirical research. The present study adds several pieces of information helpful in understanding AG that may inform practice. By better understanding the nature of AG, practitioners may more easily identify when a caretaker is experiencing AG. For example, for a caregiver who acknowledges reduced denial and avoidance of the impending death and reports a relationship with the dying individual characterized by anxiety, fear, intimacy and reliance, therapeutic intervention could be implemented sooner rather than waiting for the death to occur.

Rather than focusing on assisting caregivers in dealing with grief after the death occurs, hospice workers should consider more active involvement during the pre-loss grieving process. This type of intervention may require a paradigm shift among grief professionals. Rather than conceptualizing grief work as beginning after a death has
occurred, awareness of and responsiveness to AG may help many caregivers with their grief process much sooner than they may have otherwise been served, as well as during a period when they may be ready to begin such work.

Recommendations for Future Research

Anticipatory grief is an important element of the grief process for many persons. Based on the present study, the following recommendations for future research are offered:

1. The regression model presented in this study supported the importance of coping style, attachment to the dying individual, and spirituality in relation to AG. Cross validation of these results using additional samples would be beneficial. Future research considering these variables may also include utilization of other coping mechanisms (e.g., substance abuse), general attachment style (beyond attachment to the dying individual), and religiosity. Future models may also benefit from including personality variables (e.g., neuroticism), degree of intimacy with the dying individual, attempts to reconcile the relationship, presence of additional life stressors, loss of autonomy, death trajectory, existential concerns of
the caregiver, type of illness, and previous grief experience.

2. More empirical research examining AG is needed. Research on the AG process is surprisingly limited, and much of the writing on the topic is conceptual or narrative. Understanding both the predictors of as well as outcomes of AG would be valuable contributions.

3. Measures used in future studies should be aware of measurement issues discussed in the present study. For example, caregiver strain measures should consider exploring subjective burden to a greater extent than did the present study. Attachment measures should also use measures or methods more capable of separating current relationship dynamics from long-term perceptions of the relationship.

4. Longitudinal studies would also make valuable contributions to the understanding of AG. The present study was cross-sectional and unable to capture changes in grief processes across time. Such methods would allow for research into predictive factors, changes in the grief cycle, confirmation/disconfirmation of models such as the DPM in relation to AG.
5. Although the literature suggests that AG may lead to better outcomes, it is largely unclear whether engaging in AG facilitates or inhibits post-loss adaptation. Research into AG should explore how it affects grief outcomes including its relationship to CG. AG may reflect that the individual is so overcome with distress, that the distress will continue post-loss, or the engagement in AG may reduce the amount of grief to be experienced post-loss.
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