

THE RELATIONSHIP OF PERSONAL AND  
CONTEXTUAL DIFFERENCES TO GRIEF  
DISTRESS AND PERSONAL GROWTH

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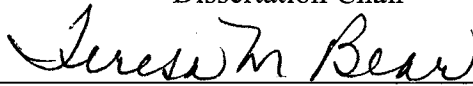
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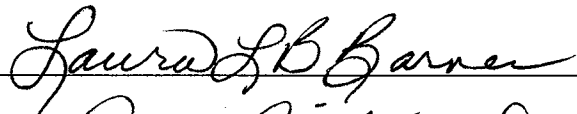
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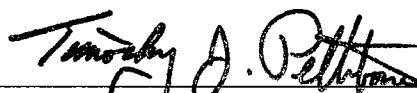
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## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
The Grief Response.....	1
Grief: The Individual Response.....	3
Sense of Coherence: A Personality Disposition and Coping Resource.....	4
Purpose of the Study.....	6
Significance of the Study.....	6
Research Question One.....	7
Research Hypotheses One.....	7
Research Question Two.....	7
Research Hypotheses Two.....	8
Definition of Terms.....	8
Assumptions.....	9
II. REVIEW OF THE LITERATURE.....	11
Introduction.....	11
The History of Bereavement Theory.....	11
Research on the Grief Response.....	18
Factors that Influence the Grief Response.....	25
Sense of Coherence: An Individual Difference in Coping with Stress.....	29
Pathogenesis versus Salutogenesis.....	30
Tension Management and Generalized Resistance Resources.....	31
Sense of Coherence.....	32
Research on the Sense of Coherence.....	35
Summary.....	38
III. METHODOLOGY.....	39
Participants.....	39
Measures.....	40
Demographic Data Sheet.....	40
Hogan Grief Reaction Checklist.....	40
Orientation to Life Questionnaire-Short Form.....	43
Post Traumatic Growth Inventory.....	46
Procedure.....	47

Chapter	Page
IV. RESULTS.....	50
Research Question One.....	50
Hypotheses One.....	50
Research Question Two.....	50
Hypotheses Two.....	51
Preliminary Analyses.....	51
Major Analyses.....	52
Secondary Analyses.....	55
 V. DISCUSSION.....	 60
Research Question One.....	60
Hypotheses One.....	60
Research Question Two.....	60
Hypotheses Two.....	61
Summary of the Results.....	61
Explanation of the Results.....	63
Implications of the Results.....	70
Limitations of the Study.....	72
Future Research.....	73
 REFERENCES.....	 76
 APPENDIXES.....	 90
APPENDIX A—TABLES.....	90
APPENDIX B—INFORMED CONSENT FORM.....	113
APPENDIX C—SCRIPT.....	114
APPENDIX D—DEMOGRAPHIC FORM.....	117
APPENDIX E—MEASURES.....	119
APPENDIX F—IRB APPROVAL FORM.....	129

## LIST OF TABLES

Table	Page
1. Means, Standard Deviations, and Ranges for Continuous Independent Variables and Dependent Variables.....	91
2. Means and Standard Deviations for Gender, Grief Distress and Personal Growth.....	92
3. Means and Standard Deviations for Cause of Death, Grief Distress, and Personal Growth.....	93
4. Means and Standard Deviations for Kinship, Grief Distress, and Personal Growth.....	94
5. Scatterplot for Sense of Coherence and Grief Distress.....	95
6. Intercorrelations and Coefficient Alphas for Continuous Independent Variables and Dependent Variables.....	96
7. Hierarchical Regression Model Summary of Personal and Contextual Variables and Grief Distress.....	97
8. Coefficients: Grief Distress.....	98
9. Hierarchical Regression Model Summary of Personal and Contextual Variables and Personal Growth.....	99
10. Coefficients: Personal Growth.....	100
11. Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Grief Distress 1a.....	101
12. Secondary Analysis Coefficients: Grief Distress 1a.....	102
13. Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Grief Distress 1b.....	103
14. Secondary Analysis Coefficients: Grief Distress 1b.....	104

Table	Page
15. Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Grief Distress 1c.....	105
16. Secondary Analysis Coefficients: Grief Distress 1c.....	106
17. Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Personal Growth 2a.....	107
18. Secondary Analysis Coefficients: Personal Growth 2a.....	108
19. Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Personal Growth 2b.....	109
20. Secondary Analysis Coefficients: Personal Growth 2b.....	110
21. Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Personal Growth 2c.....	111
22. Secondary Analysis Coefficients: Personal Growth 2c.....	112



# CHAPTER I

## INTRODUCTION

The suffering created by the loss of a loved one is a universal human experience. The recognition that death brings distress for the survivor is well established in the scientific literature (Freud, 1917; Lindemann, 1944; Raphael, 1982; Stroebe & Schut, 1999). Yet, there is increasing evidence that grief also creates opportunities for personal growth and positive change (Hogan, 2001; Nolen-Hoeksema, 2001; Tedeschi & Calhoun, 1989-1990; Yalom & Lieberman, 1991). The challenge that confronts contemporary bereavement researchers is how to balance established knowledge of grief distress with emergent knowledge of positive growth. The recognition of the need to integrate both traditional and progressive accounts of grief reaction aptly reflects the dynamic nature of contemporary bereavement research and theory. As Stroebe, Hansson, Stroebe, and Schut (2001) note, “the multidimensionality of bereavement reactions is by now well-accepted” (p. 746). What remains to be seen, however, is how bereavement theory and research will integrate the varied elements of this multidimensional construct.

### The Grief Response

As noted, there is consensus among bereavement researchers, as to what constitutes the typical grief response. Grief reactions are defined in the affective, cognitive, and behavioral domain. Reported affective responses to grief include despair and depression (Hays, Kasl & Jacobs, 1994; Nolen-Hoeksema, McBride & Larson, 1997; Parkes & Weiss, 1983), anxiety (Raphael, 1982; Zisook, Chentsova-Dutton, & Shuchter, 1998), guilt and blame (Field & Bonnano, 2001; Weinberg, 1994), and anger (Hogan,

1999). Other reported grief reactions include crying, detachment, or social withdrawal (Parker & Larson, 1994; Parkes & Weiss, 1983), a sense of helplessness, disorganization, and problems with memory and concentration (Hogan, 1999; Raphael, 1982).

Alternatively, as stated, there have also been recent reports of personal growth from grief. Domains of personal growth include changes in self-perception, such as increased compassion (Hogan, 2001) and wisdom (Tedeschi & Calhoun, 1989-1990), as well as changes in interpersonal relationships, such as improved communication and increased closeness (Nolen-Hoeksema, 2001).

Empirical investigations into personal growth from loss are a relatively new endeavor. However, evidence to date indicates that stressful life events provide an opportunity for some individuals to experience positive change and growth (Affleck & Tennen, 1996; Jaffe, 1985; McMillan, Smith, & Fisher, 1997; Tedeschi & Calhoun, 1995). Posttraumatic growth represents one area of research that seeks to identify the positive changes that result from crisis. Posttraumatic growth (PTG) is a term coined by Tedeschi and Calhoun (1995). The authors contend that posttraumatic growth outcomes may vary from person to person, however, reported changes tend to fall into three consistent categories: changes in self-perception (e.g. increased compassion and strength) changes in interpersonal relationships (e.g. increased closeness), and changes in perspectives toward life (e.g. an awareness of the fragility of life; greater appreciation) (Tedeschi & Calhoun, 1995). Reports of posttraumatic growth have been associated with illness (Schwartzberg, 1993), disaster (Thompson's, 1985), and bereavement (Tedeschi

and Calhoun, 1989-1990). Thus, PTG may provide supporting evidence for personal growth from grief. Consequently, this construct will be incorporated in the current study and used as ancillary measure for future research.

### Grief: The Individual Response

While established reports of grief reaction offer essential evidence of the normal grief trajectory, bereavement is also understood as a personal journey, one that is affected by personal and contextual factors. Personal and contextual factors identified as salient to the grief response include the age and gender of the bereaved (Sanders, 1999; Stroebe, Stroebe, & Schut, 2001), as well as the cause of death, time since death, and kinship relationship between the bereaved and deceased (Middleton, Raphael, Burnett, & Marinek, 1997; Parkes & Weiss, 1983; Shaefer & Moos, 2001). Empirical evidence suggests that younger individuals suffer more than older persons (Ball, 1977; Shanfield & Swain, 1993) and that men tend to experience more distress and prolonged suffering than women (Carmer, 1993; Lee, Willets, & Seccombe, 1998). Further, comparative studies of the kinship relationship between the bereaved have consistently shown that the loss of a child results in more grief distress than the loss of a spouse, parent, or sibling (Cleiren, 1991; Gamino, Sewell, & Easterling, 1998; Klass & Marwit, 1988-1989; Sanders, 1980). Bereavement studies have also shown that unanticipated and accidental deaths tend to result in increased levels of grief (Gamino et al., 1998) and that, although grief can persist for years (Raphael, 1982), distress generally lessens in one year (Sanders, 1997). An additional factor that remains unexamined in bereavement research is how personality contributes to grief distress and personal growth from grief.

## Sense of Coherence: A Personality Disposition and Coping Resource

Aaron Antonovsky (1979, 1987) developed the sense of coherence construct in an attempt to explain individual differences in response to stress. The sense of coherence construct was further developed to explain how some individuals manage to stay reasonably well, despite exposure to numerous physical, emotional, and sociocultural stressors. In response to the dominant, pathological model, defined by traditional stress research, Antonovsky (1979, 1987) coined the term salutogenesis to address the study of factors that sustained health. In contrast to stress and coping theories that define stressors as discrete events that temporarily disrupt homeostasis (DeLongis, Folkman, & Lazarus, 1988), Antonovsky (1979, 1987) viewed stressors as ever-present and conceptualized the human condition as inherently stressful. Thus, Antonovsky (1979, 1987) perceived heterostasis or disorder as the norm and health as the mystery.

Antonovsky (1979, 1987) maintained that individuals manage the tension created by stressors through the utilization of various physical, material, social, cultural, and attitudinal resources, known as generalized resistance resources. The primary function of these coping resources is to help individuals make cognitive and emotional sense of the countless stimuli that impinge upon them. Further, the quantity and quality of generalized resistance resources a person is exposed to, from childhood to adulthood, ultimately function to create life experiences that determine the degree to which the world consistently makes sense both cognitively and emotionally. Antonovsky (1979, 1987) argued that these experiences, over time, solidify into a generalized, pervasive orientation to life which he labeled sense of coherence.

According to Antonovsky (1987), when confronted by a stressor such as bereavement the person with a strong sense of coherence will perceive that resources are readily available (e.g. social support, spiritual, financial), that these resources can be mobilized, and the stressors inherent in bereavement are worthy of investment and commitment. Therefore, this generalized orientation facilitates the selection of appropriate coping strategies and provides a foundation for maintaining and strengthening health. In fact, sense of coherence has consistently demonstrated an inverse relationship to psychological distress (Eriksson & Lundin, 1996; Kaiser, Sattler, Bellack, & Kersin, 1996; Larsson, Per-Olof, & Lundin, 2000; McSherry, & Holm 1994) and a positive relationship to psychological well-being (Carstens & Spangenberg, 1997; Hart, Hittner, & Paras, 1991; Linn, Lewis, Van, & Kimbrough, 1993; Petrie & Brook, 1992) in individuals confronting a variety of stressors (e.g. illness and trauma). However, despite this evidence, sense of coherence has never been studied in relationship to grief distress nor has it been examined in relationship to personal growth from grief.

In conclusion, the grief response has historically been defined by distress symptomatology, including despair, anxiety, anger, detachment, and disorganization. While these factors remain salient and essential in defining the normal grief trajectory, there is increasing empirical evidence that demonstrates personal growth is also an integral factor of the typical grief response. Furthermore, grief reaction is based upon a dynamic interplay of personal and contextual factors that shape and affect the grief outcome. Personal differences reported to effect grief reaction include the age, gender, and personality of the bereaved, as well as the cause of death, time since death,

and kinship relationship between the bereaved and deceased. Although sense of coherence has been extensively studied as an individual difference variable in the stress and coping research, it has never been explored in relationship to grief. The present study is intended to address this gap in the literature. The current study may also offer support for grief as multidimensional construct, one that is influenced by individual differences, and includes both distress and personal growth.

#### Purpose of the Study

The purpose of this study was two-fold. First, the relationship between personal and contextual differences and overall grief distress was explored. Second, the relationship between personal and contextual differences and personal growth from grief was examined. The personal and contextual differences examined include death, sense of coherence, age and gender of the bereaved, cause of death, time since, and kinship relationship between the bereaved and deceased.

#### Significance of the Study

The significance of this study was based upon its potential contribution to the empirical and clinical realm. First, the integration of grief distress and personal growth reflect a relatively new area of research. Results from this study could support emerging evidence of grief as a multidimensional construct that includes personal growth and grief distress as a normal reaction in the grief trajectory. Second, the exploration of personal and contextual differences in relationship to grief reaction can increase knowledge regarding how personal and contextual variables impact the grief response. This information in turn could assist the clinician in supporting, identifying, and defining the thoughts, feelings, and experiences of the bereaved client.

### Research Question

1. Can personal and contextual difference variables account for differences in grief distress as measured by the Hogan Grief Reaction Checklist?

### Hypotheses

1a: Older participants will have significantly less grief distress than younger participants.

1b: Men will have significantly higher grief distress than women.

1c: Participants who demonstrate a strong sense of coherence will have significantly less grief distress than participants who demonstrate a weak sense of coherence.

1d: As the time since death increases grief distress will decrease.

1e: Parents of a deceased child will have significantly higher grief distress than other kinship relationships (spouse, child, sibling, extended).

1f: Participants who experience sudden and violent loss (suicide, homicide, accident) will have significantly higher grief distress than participants who experience other types of loss (illness).

### Research Question:

2. Can personal and contextual differences variables account for differences in personal growth as measured by the Hogan Grief Reaction Checklist?

2a. Older participants will have significantly higher personal growth than younger participants.

2b. Women will have significantly higher personal growth than men.

2c. Participants who demonstrate a strong sense of coherence will be have significantly higher personal growth than participants who demonstrate a weak sense of coherence.

2d. As the time since death increases personal growth will increase.

2e. Parents of a deceased child will have significantly less personal growth than other kinship relationships (spouse, child, sibling, extended).

2f. Participants who experience sudden and violent loss (suicide, homicide, accident) will have significantly less personal growth than participants who experience other types of loss (illness).

### Definition of Terms

Bereavement: The objective situation of having lost someone significant (Stroebe et.al, 2001).

Grief: The emotional (affective) reaction to the loss of a loved one through death. Grief incorporates diverse psychological (cognitive, social-behavioral) and physical (physiological-somatic) manifestations (Stroebe et. al, 2001)

Personal Difference Variables: Age, gender, and personality of the bereaved.

Personality is defined as sense of coherence.

Contextual Difference Variables: Time since the death, cause of death, and kinship relationship between the bereaved and deceased. Cause of death includes a) illness; b) accident; c) suicide; and d) homicide. Kinship relationship includes a) parent; b) spouse; c) child; d) sibling; e) extended.

Despair: A Hogan Grief Reaction Checklist (HGRC) subscale that measures hopelessness, sadness, and loneliness (Hogan, 2001).

Panic Behavior: A HGRC subscale that measures fear, panic, and somatic symptoms (Hogan, 2001).

Blame and Anger: A HGRC subscale that measures irritation, anger, and feelings of injustice (Hogan, 2001).



Detachment: A HGRC subscale that measures avoidance of intimacy and a feeling being detached from a change in identity and others (Hogan, 2001).

Disorganization: A HGRC subscale that measures difficulty concentrating and problems with remembering new information, and recalling formerly remembered information (Hogan, 2001).

Grief Distress: A dependent variable used in this study that consists of the five HGRC distress subscales (despair, panic behavior, blame and anger, detachment, disorganization (Hogan, 2001).

Personal Growth: A HGRC subscale that measures the sense of having become more compassionate, tolerant, forgiving, and hopeful (Hogan, 2001).

Sense of Coherence: A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges worthy of investment and engagement (Antonovsky, 1987, p. 19).

Posttraumatic Growth: Positive change that an individual experiences as a result of the struggle with a major loss or trauma.

#### Assumptions

1. Participants would answer all assessments openly, honestly, and with equal motivation.
2. The instruments used in this study would capture a true representation of participants' grief reaction, sense of coherence, and posttraumatic growth.

3. The participants would be representative of the general adult population rather than a clinical population.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

The current literature review is presented in support of the notion that there is a need for additional research on grief as a multidimensional construct. That is, a construct influenced by personal and contextual factors and one that encompasses both negative and positive outcomes. First, a historical overview of bereavement theory will be presented. This will be followed by a discussion of the empirical research on grief reaction as well as an empirical research on the individual differences that affect grief response. Sense of coherence will be discussed as an individual difference that contributes to coping with stress. A discussion of the empirical research on sense of coherence will conclude this literature review.

#### The History of Bereavement Theory

Distinct shifts can be identified in the historical analysis of bereavement theory and research. Contemporary beliefs regarding the manifestation and multidimensional nature of grief are based upon both progressive and historical accounts of the typical grief response. Thus, the field of bereavement is both dynamic and firmly rooted in traditional notions of how one experiences, recovers, and heals from the loss of a loved one.

A historical analysis of bereavement theory begins with the publication of the classic paper by Sigmund Freud (1917) titled, "Mourning and Melancholia." In this paper, Freud defined the framework that would become the standard psychoanalytic model of mourning. Prior to Freud, bereavement was understood as a common

experience that was viewed primarily in social-behavioral terms. Freud was the first to articulate a perspective on mourning as a psychological process having specific characteristics and dynamics (Hagman, 2001). Thus, Freud's mourning model had significant impact on how psychology defined 'normal' or 'healthy' mourning (Hagman, 1995). Freud conceptualized bereavement as a painful and sad process in which the bereaved must release his or her attachments to the deceased. Decathexis, the incremental divestment of libido from memories of the lost object, was identified as the central process through which the bereaved was able to return to premorbid functioning. Freud's notion of 'normal' mourning, therefore, implied a time-limited course that led to a point of full resolution (Hagman, 2001). Finally, Freud coined the term 'grief work.' This term implies that one must actively confront the experience of bereavement, verbalize one's feelings and reactions about the lost relationship, and remain engaged in an effortful process to prevent pathological consequences (Stroebe, 1992; Stroebe & Schut, 1999).

Despite the influence of Freud's theoretical analysis of mourning, empirical investigations of grief and its consequences did not surface until the 1940's with Lindemann's (1944) publication, "Symptomatology and Management of Acute Grief." In this descriptive study of bereaved psychiatric patients, Lindemann documented the grief reactions of 101 individuals who had lost a loved one from illness, disaster (fire), and war. Based on interviews with the bereaved, Lindemann defined symptoms of normal grief to include somatic distress, preoccupation with the image of the deceased, guilt, hostile reactions, and loss of patterns of conduct (p. 141-142, 1944). Lindemann added credence to Freud's supposition of grief work by stating that "the duration of a grief

reaction seems to depend upon the success with which a person does the grief work, namely, emancipation from the bondage of the deceased, readjustment to the environment in which the deceased is missing, and the formation of new relationships” (p. 143, 1944). Lindemann further argued that with assistance from a psychiatrist, grief work could be accomplished in four to six weeks. Finally, Lindemann described various deviations from the norm including delay of reaction and distorted reactions, which he attributed to the repression or avoidance of grief (Lindemann, 1944).

Unlike Lindemann (1944), John Bowlby (1980) emphasized the biological rather than the psychological function of grieving. Bowlby (1980) argued that the biological function of grief is to regain proximity to the attachment figure (Stroebe, 1992). Bowlby’s (1980) basic paradigm of attachment between mother and infant has made a significant impact on bereavement theory. The theoretical paradigm of attachment serves as a descriptive model for the relationship between the bereaved and deceased. Bowlby’s attachment theory further offers an explanation for the grief response. Specifically, in the mother-infant relationship, separation induces specific forms of anxiety, separation anxiety, distress, and protest. These emotions are settled with reunion, but, if the reunion does not occur, the process of mourning begins with feelings of sadness and loss (Bowlby, 1980). It is this conceptualization that serves as the basis for understanding grief reactions. In support of Bowlby’s theoretical paradigm, Bowlby & Parkes (1970) conducted a longitudinal study of widows who were followed through the first year of bereavement. The psychological features of grief and attendant changes found in the study resembled the sequence of changes that had been reported by Bowlby in earlier studies of separated children (Bowlby, 1953). Based upon the empirical evidence cited in

this study, Bowlby and Parke (1970) published a descriptive classification of the phases of grief. The authors defined the phases of grief as numbness, yearning and searching, disorganization and despair, and reorganization (detachment from the deceased) (Bowlby & Parke, 1970). Inherent in this model is the assumption that grief recovery occurs through a series of stages in which the bereaved must actively work towards reshaping and redefining their attachment to the deceased. Further mourning is considered complete when the bereaved reaches the final phase of reorganization.

The classification system defined by Bowlby & Parke (1970) represents one example of a proliferation of stage-based models of grief that marked bereavement theory from the late 1960's into the 1980's (Kubler-Ross, 1968; Marrone, 1997). As Neimeyer (2001) explains, this focus on seemingly universal phases associated with recovery proved especially popular offering an apparently authoritative road map through the turbulent emotional terrain associated with acute loss and grief. The acceptance of the stage-based model persisted until the early 1990's when David Worden (1991) published his task-based model of mourning as an alternative to the invariant stages proposed by traditional bereavement theories.

Worden (1991) defines grief as a process, not a state, and posits that adaptation to loss occurs via four basic tasks including accepting the reality of the loss; working through grief (rather than more passively experiencing it); adjusting to an environment without the deceased; and relocating the deceased emotionally (Stroebe & Schut, 2001; Worden, 1991). While the fourth task, relocating the deceased emotionally, reflects remnants of Freud's original proposition of decathexis, Worden (1991) contends that differences exist. For example, Worden (1991) states that the mourner never completely

forgets the deceased nor totally withdraws his or her investment in the deceased's representation. Instead, the bereaved is faced with the need to restructure his or her relationship with the deceased in ways that respect the harsh fact that death renders the deceased no longer available to the living as that person had been available in the past. Second, healthy mourning strives to enable ongoing life to be productive and rewarding despite the enduring pain of loss and grief (Corr & Doka, 1994; Worden, 1991).

Inherent in Worden's model is the assumption that grief is finished when the tasks of mourning are accomplished. Thus, the formulation incorporates an implicit "time" dimension in that different coping tasks are appropriate at different durations of bereavement (Stroebe & Schut, 2001). Worden's (1991) conceptualization of grief remains a viable component of current bereavement theory. Further, the task model's implicit time dimension is recognized as an integral feature of the normal grief trajectory. Although Worden (1991) does not support a definitive time frame, he contends that full resolution can rarely occur under one year and that for many two years is not too long.

Worden's (1991) task based model serves as an example of an increasing awareness of the dynamic coping process inherent in the grief response. Further, current bereavement theory acknowledges the influence of individual differences and variability in grief reactions. For example, the traditional grief-work construct (the belief that the bereaved must doggedly confront the experience of bereavement to accept the loss and avoid detrimental health consequences) has been criticized for its inability to describe cross-cultural and sub-cultural (gender) differences (Stroebe, 1992). Apparently, not only do beliefs in some societies fail to show any equivalent to the grief work hypothesis, but the absence of grief work in some cultures does not seem to be associated with high

depression, illness, or pathology. Further, Stroebe & Schut (1999), contend the grief-work hypothesis does not take into account the fluctuation of attention in the coping process and the need to attend to stressors other than the lost relationship itself.

In response to the cited limitations of the grief-work construct, Stroebe & Schut (1999) propose the Dual Process Model (DPM). The DPM is unique in that it integrates salient elements of established bereavement theories. The model incorporates elements from Bowlby's (1980) attachment theory, Worden's (1991) task-based model, social construction models (e.g. meaning reconstruction), and cognitive stress and process models (e.g. coping styles). Further, the DPM is based on the assumption that grief necessitates coping with a number of diverse stressors. The model identifies two broad types of stressors categorized as loss- versus restoration-oriented. Loss-orientation refers to the bereaved individual's concentration on and processing of some aspect of the loss experience itself. Restoration-orientation refers to the focus on secondary stressors that are consequences of bereavement. The DPM contends that confrontation and avoidance of these two types of stressors is dynamic, fluctuating, and changes over time, and that the bereaved will oscillate between confronting and avoiding loss- versus restoration-oriented stressors. The DPM further identifies cognitive processes (meanings, assumptions, and types of expression) associated with good versus poor adaptation (Stroebe & Schut, 1999; Stroebe & Schut, 2001) For example, Stroebe & Schut (2001) contend that persistent negative affect can enhance grief but that positive cognitive reappraisals sustain the coping efforts and enable the bereaved to cope effectively with their loss. Further, this cognitive analysis provides a framework within which the meaning reconstruction, or rebuilding of previously held beliefs, can be understood. For



example, coping with a death involves an ongoing confrontation of the meaning of the deceased person for the bereaved. Thus, coping effectively with grief entails meaning reconstruction, negotiation, and renegotiation over time (Neimeyer, 1998; Neimeyer, 2001; Stroebe & Schut, 2001).

Stroebe & Schut (2001) maintain that the most salient issue facing current bereavement theory can be summarized by one basic question: What is adaptive coping? As noted, Stroebe & Schut (1999) contend that there are good reasons to assume that certain coping strategies enable some people to come to terms with loss and avoid severe health consequences whereas others adopt strategies that are detrimental to health. Therefore, better understanding of what comprises adaptive versus maladaptive coping should lend itself to the more accurate prediction of differential health outcomes and ultimately to work toward reduction of risk among vulnerable individuals.

Despite a generalized acceptance of the symptoms that constitute a typical or normal pattern of grief reaction, contemporary bereavement theory is skeptical of the universality of an invariant emotional trajectory that leads from psychological disequilibrium to readjustment (Neimeyer, 2001). Thus, developmental or stage-based models are considered as guides to understanding the grief process rather than a doctrine to be followed in a lock-step fashion (Toth, Stockton, & Browne, 2000). Recent bereavement theory, therefore, emphasizes the multidimensional nature of grief taking into account more complex patterns of grief adaptation and reaction in the cognitive, behavioral, social, and emotional realm.

## Research on the Grief Response

As noted, a fundamental issue in bereavement research concerns the manifestations or symptomatology of the grief response. Review of the literature demonstrates consensus among investigators in descriptions of the typical or normal grief response (Davis & Nolen-Hoeksema, 2001; Osterweis, Solomon, & Green, 1984; Parkes & Weiss, 1983; Schuter & Zisook, 1993; Stroebe, Hansson, Stroebe, & Schut, 2001). Grief reactions identified in the bereavement research literature include affective, behavioral, cognitive, and physiological and somatic responses (Jacobs, Hansen, Stanislav, Ostfeld, Berkman, & Kim, 1990; Norris & Murrell, 1990; Pettingale & Tee, 1994; Schwarzer, 1992; Weinberg, 1994; Zisook & Shuchter, 2001).

The term bereavement refers to the objective situation of having lost someone significant (Stroebe et al., 2001). Grief is the usual reaction to bereavement and includes emotional, psychological, and physical responses to loss (Toth et al., 2000). Affective grief reactions cited in bereavement studies include depression, despair, and dejection (Hays, Kasl, & Jacobs, 1994; Nolen-Hoeksema, McBride & Larson, 1997; Paternak, Reynolds, Frank, Miller, Houck, Schlernitzauer, Prigerson, & Kupfer, 1993; Parkes & Weiss, 1982; Raphael, 1984; Vachon, Sheldon, Lancee, Lyall, Rogers & Freeman, 1982; Zisook, Shuchter, & Lewis, 1997). Empirical studies demonstrate that depressive affect is a common and prominent reaction during the first several weeks following the death of a loved one. These studies further demonstrate that despair generally subsides over the first 12 months, but may remain intermittently present for months or years (Parkes & Weiss, 1983; Thompson & Gallagher-Thompson, 1991) The degree to which the symptoms are persistent, pervasive, interfere with functioning, and/or impede grief

resolution determines the point at which major depression is the most appropriate diagnosis (Zisook & Shuchter, 2001).

Other affective reactions considered to be integral to the normal grief reaction include anxiety (Jacobs, Hansen, Stanislave, Ostfeld, Berkman, & Kim, 1990; Zisook, Chentsova-Dutton, & Shuchter, 1998), guilt and blame (Field & Bonanno, 2001; Nolen-Hoeksema, 2000; Weinberg, 1994), anger and hostility (Hogan, 1999) anhedonia, and loneliness (Stroebe, Stroebe, Abakoumkin, & Schut, 1996). When compared to community prevalence rates for the same metropolitan area, bereaved spouses demonstrated increased rates of panic disorder and generalized anxiety disorder 6 months following the loss of their spouse (Jacobs et al., 1990). More recently, Zisook et al. (1998) argued that posttraumatic stress disorder may be a more common response to bereavement than previously thought, citing the results of his study with 350 newly bereaved widows and widowers. Two months following the death of their spouse, Zisook et al. (1998) found that 10% of those whose spouses died of a chronic illness met criteria for posttraumatic stress disorder while 9% of those whose spouses died unexpectedly met criteria, and 36% of those whose spouses died from “unnatural” causes (suicide or accident) also met criteria for posttraumatic stress disorder. Further, the investigators found that posttraumatic stress disorder symptoms were strongly associated with depression. This finding reflects the majority of studies whose participants endorse multiple domains of distress at any given time (Hogan, 1999; Parkes & Weiss, 1984; Pettingale & Tee, 1994).

Alternatively, in a study of blame and desire for revenge Weinberg (1994) found that 47% of the bereaved blamed others for the death of their loved one. Further, whether

the death resulted from natural causes (e.g. disease) or unnatural causes (e.g. murders, accidents, or suicides) significantly affected the amount and type of blame expressed. Unnatural deaths were associated with greater blame (84%) in contrast to the blame associated with deaths resulting from natural causes (39.5%). The present results, however, must be interpreted with caution given the relatively small sample of mourners who were grieving unnatural deaths ( $n = 40$ ) when compared to those who were grieving natural deaths ( $n = 160$ ).

Other grief reactions cited in the bereavement research include behavioral manifestations such as agitation, fatigue, crying, and social withdrawal (Nolen-Hoeksema, Parker, & Larson, 1994; Parkes & Weiss, 1983; Stroebe et al., 1996). Further, cognitive grief reactions reported include preoccupation with thoughts of the deceased, lowered self-esteem, self-reproach, helplessness and hopelessness, a sense of unreality, and problems with memory and concentration (Hogan, 1999; Nolen-Hoeksema, 2000; Raphael, 1982; Schwarzberg & Halgin, 1991) Finally, physiological and somatic manifestations include loss of appetite, sleep disturbances, energy loss, exhaustion, somatic complaints, physical complaints similar to those the deceased had endured, changes in drug intake, and susceptibility to illness and disease (Lindemann, 1944; Pettingale & Tee, 1994; Stroebe et. al, 2001).

Recent findings in grief research also demonstrate a significant shift in the factors that are examined as part of the normal grief response. Increasingly, researchers have begun to explore and identify not only the factors related to grief distress but also to identify the factors related to positive outcomes (Calhoun & Tedeschi, 1989-1990; Calhoun & Tedeschi, 1990; Davis and Nolen-Hoeksema, 1998; Edmonds & Hooker,

1992; Folkman, 1997; Frantz, Farrell, & Trolley, 2001; Fry, 1998; Gamino & Sewell, 2000; Hogan, 2001; Hogan, Morse, & Tason, 1996; Kessler, 1987; McRae & Costa, 1988; Miles & Crandall, 1983; Mullan, 1992; Nolen-Hoeksema, 2000; Polatinsky & Esprey, 2000; Updegraff & Taylor, 2000; Wheeler, 2001; Yalom & Liberman, 1991).

Empirical recognition of personal growth from grief broadens traditional notions of the normal grief trajectory. This empirical evidence is largely based upon the assumption that a traumatic experience like bereavement can serve as a catalyst for positive and personal change.

In fact, studies that explore a variety of stressful events have found that typically over half of individuals who experience a traumatic life event, report some degree of positive outcome as a result, including changes in self-perception, social relationships, and life perspective (Taylor, 1983; Wallerstein, 1986). These reports have contributed to an emerging body of knowledge that recognizes crisis as an opportunity for personal growth. One area of research that represents this endeavor is posttraumatic growth. Posttraumatic growth (PTG) is a term coined by Tedeschi and Calhoun (1995). PTG refers to the positive changes that an individual experiences as a result of the struggle with a major loss or trauma. The authors developed the Posttraumatic Growth Inventory (PTGI), a quantitative measure, to assess perceived benefit from crisis. The posttraumatic growth construct and its attendant measure, the PTGI, appear valuable to the current study's investigation of personal growth from grief. Thus, this measure will be included in the present study as an ancillary measure for future research that may support evidence of personal growth from grief.

Posttraumatic growth has been associated with three domains of change: (1) self concept, (2) relationships with social networks, and (3) personal growth and life priorities (Updegraff & Taylor, 2000). For example, reports of changes in interpersonal relationships include an increase in compassion, empathy, emotional expressiveness, self-disclosure, and altruism (McMillan, Smith, & Fisher, 1997; Tedeschi & Calhoun, 1995). Other reports of posttraumatic growth include changes in one's perspective toward to life, to include a deeper appreciation of life, a reprioritization of life goals, and a greater openness to spiritual and religious matters (Jaffe, 1985; O'Connor, Wicker, & Germino, 1990; Tedeschi & Calhoun, 1995). Final reports of posttraumatic growth include changes in self-perception, including increased compassion, patience, personal strength, and wisdom (Affleck & Tennen, 1996; Curbow, Somerfield, Baker, Wingard, & Legro, 1993).

Posttraumatic growth has been associated with a number of stressful life events including illness, such as cancer (Welch-McCraffrey, Hoffman, Leigh, Loescher, & Meysken, 1989), HIV (Schwartzberg, 1993), and heart disease (Affleck, Tennen, & Croog, 1987). Further, two-thirds of the participants in Thompson's (1985) study of residential fire victims and over half of the participants in Affleck, Tennen, and Gershman' (1985) study of parents with children in neonatal intensive care units reported personal growth and positive change from these events. Although posttraumatic growth, as a distinct construct in of itself, has not been examined in bereavement, positive changes and personal growth have been explored in relationship to grief.

Tedeschi and Calhoun's (1989-1990) study reflect one of the earliest investigations into personal growth from grief. The authors utilized a semi-structured

interview format, based upon thirteen potential areas of growth: self-reliance, social support, philosophy of life, acceptance of one's own death, emotional expression, self-perception, interests, ability to confront subsequent crises, perceived maturity, ability to understand others, acceptance of the interdependency with others, religious beliefs, and the development of new interpersonal relationships. Fifty-two adults who had lost a spouse, sibling, parent, or close friend were interviewed. The results indicate that the most prevalent positive changes reported were in the areas of self-perception. Seventy-three percent of the participants noted an increase in maturity, independence, wisdom, sense of personal strength, and the belief that they were more capable of handling future crises as the result of the loss of their loved one. Similarly, Nolen-Hoeksema (2000) investigated personal growth from grief in a sample of 240 participants that ranged in age from 18 to 84. These individuals were interviewed within one, six, thirteen, and eighteen months after their loved one died. Sixty-five percent of this sample reported they had found something positive about their grief experience. Reports of positive growth included an awareness of the fragility of life, the need to reprioritize one's life and goals, and the belief that they had become more tolerant, sensitive, patient, and loving with others. Further, participants in this study reported a realization of personal strength and an increased awareness of the importance of relationships.

In a further attempt to identify positive experiences associated with grief, Franz, Farrell, and Trolley (2001) analyzed a series of structured interviews collected over an 8-year period. Data were collected by graduate students enrolled in a grief counseling course from 1989-1996. Each of the 397 participants interviewed were asked four open-ended questions, three of which directly related to the possibility of growth from grief,

including: 1) Despite the tragedy of death, is there anything positive or good that has come about as a result of the death? 2) What is the main thing you've learned so far from this experience? 3) Are there any ways in which you are now a different person than you were before the death? The results of this study indicate that 84% of the participants affirmed that something positive had resulted from the loss of their loved one. Positive results include strengthened relationships, greater appreciation of life, and an increased sense of independence, compassion, patience, spirituality, and a decreased fear of death. Further, participants noted an increased awareness of the fragility of life and the importance of living in the present moment.

As these noted studies demonstrate, the majority of the research that examines personal growth from grief is based upon an open-ended or semi-structured interview format (Davis, Nolen-Hoeksema, & Larson, 1998; Davis & Nolen-Hoeksema, 2001; Edmonds & Hooker, 1992; Folkman, 1997; Hogan, Morse, & Tason, 1996; Kessler, 1987; Miles & Crandall, 1983; Yalom & Lieberman, 1991). As a consequence, relatively little is known about personal growth from grief based upon alternative or quantitative methods. Despite the empirical evidence that personal growth may be an integral component to the normal grief trajectory the majority of grief instruments do not recognize the personal growth factor. As a result, the majority of bereavement studies, based upon quantitative methods, have not included positive or personal growth when assessing the grief response.

One exception to this finding is the 2001 study by Gamino, Sewell, and Easterling in which the authors proposed a dual investigation of both the "pathogenesis" of grief as well as factors related to an adaptive grief response (p. 633, 2001). The sample in this



study consisted of both a clinical outpatient and non-clinical group. Data were collected from 85 individuals grieving the death of a significant person in their life including a spouse, parent, child, and other family relative (e.g. sibling or grandparent). Within this sample the cause of death included illness, accident, suicide, and homicide. The authors defined an adaptive response to grief as “personal growth” as measured by the Hogan Grief Reaction Checklist Personal Growth subscale. Pathogenic or risk factors identified by the authors included participant-related variables such as history of mental health treatment and the cause of the loved one’s death. Gamino, Sewell, and Easterling (2001) found that higher levels of grief affect, as measured by the Grief Experience Inventory, were associated with traumatic death, perception of preventability, and younger age of the decedent. Alternatively, the authors found that traumatic death, history of mental health treatment, and number of other losses predicted personal growth. Thus, not only does this study demonstrate an inclusion of both grief distress and personal growth from grief, but introduces the effect of other variables that may impact the grief response.

#### Factors that Influence the Grief Response

Grief distress, adaptation, and personal growth following bereavement result from a dynamic interplay of personal and environmental factors that affect grief outcome. Factors identified as influential in determining grief reaction include personal and environmental variables. Personal variables that have been found to effect grief outcome include age (Stroebe, Stroebe, & Schut, 2001) gender (Sanders, 1999), and personality (Stroebe, Stroebe, & Domittner, 1988). Environmental or contextual factors that have been reported to impact grief outcome include forewarning or cause of death (Shaefer &

Moos, 2001), the kinship relationship between the bereaved and the deceased (Middleton, Raphael, Burnett, & Marinek, 1997), and time since death (Parkes & Weiss, 1983).

The majority of studies that have examined the effect of age on grief reaction have focused upon spousal loss. Results indicate that older individuals suffer less than their younger counterparts (Ball, 1977; Sanders, 1997; Shanfield & Swain, 1984). For example, Zisook, Shuchter, Sledge, and Mulvihill (1993) found that older widows and widowers viewed themselves as being less depressed, less anxious, and better adjusted to widowhood than did younger persons. In contrast, Parkes & Weiss (1983) found that between younger and older widows the younger participants demonstrated increased levels of psychological problems whereas the older widows reported more physical distress. Studies that focus exclusively on the elderly population warn that despite the apparent resiliency of the older bereaved, grief in later life results in significant physical and emotional distress (Byrne, 1994; Pasternak, Reynolds, Frank, Miller, Houck, Schlernitzauer, Prigerson, & Kupfer, 1993; Fry 1998; Thompson & Gallagher-Thompson, 1991). Yet, as Lund (1989) found, although depression, confusion, and loneliness are typical grief reactions, older bereaved spouses also demonstrate an increased awareness of the opportunity for personal growth from grief.

Similar to the research on age and bereavement, the examination of gender differences in grief reaction have largely been based on conjugal bereavement studies. In general, these studies have found that while men and women both suffer, the effects are relatively greater for widowers than for widows (Cramer, 1993; Lee, Willetts, & Seccombe, 1998; Radloff, 1975; Stroebe, Stroebe, & Schut, 2001; Umberson, Wortman, and Kessler, 1992;). However, there remains a lack of agreement regarding the effects of

gender on bereavement outcome as some studies have reported that widows sustain greater problems and suffer greater depression than widowers (Gilbar & Dagan, 1995; Jacobs, Kasl, Osfeld, Berkman, & Charpentier, 1987). These findings, however, must be interpreted with caution due to the lack of nonbereaved controls. As Stroebe, Stroebe, & Schut (2001) further explain, studies that report increased levels of depression in females must take into account the potential confounding influence of the general gender difference rate of depression (there is a higher depression among women in the population).

Additional contextual factors that effect grief outcome include the kinship relationship between the bereaved and the deceased. Comparative studies of the kinship relationship have consistently shown that the loss of a child (De Vries, Davis, Worman, & Lehman, 1997; Gamino, Sewell, & Easterling, 1998; Hogan, 1999; Klass & Marwit, 1988-1989; Middleton, Raphael, Burnett, & Marinek, 1998; Neugarten, 1979; Nolen-Hoeksema, 2001; Rando, 1986; Videka-Sherman, 1982) results in more intense, or more persistent, grief and depression than the loss of a spouse, parent, or sibling (Cleiren, 1991; De Vries, Lana, & Falck, 1994; Leahy, 1992; Middleton et al., 1998; Nolen-Hoeksema & Larson, 1999 ; Owen, Fulton, & Markusen, 1982; Sanders, 1980; Scharlach & Fredriksen, 1993). Further, researchers have noted that parental grief can intensify over time (Lehman, Wortman, & Williams, 1987) as opposed to the generally established notion that grief distress significantly abates by one year to two years post-loss (Parkes & Weiss, 1983; Sanders, 1997; Worden, 1992) Despite evidence of significant distress recent studies have also found that bereaved parents report personal growth as a result of their loss (Hogan, 2001, Hogan & Morse, 1999; Nolen-Hoeksema, 2001). Alternatively,

Nolen-Hoeksema (2001) found that bereaved spouses were the least able to identify positive growth experiences in grief. Thus, although grief distress may appear significantly more prominent in parents who have lost a child when compared to spouses, the spouse may be less likely to define personal growth as a salient feature of their grief response.

Final contextual factors that have been found to effect grief reaction include forewarning and cause of death (Schaefer & Moos, 2001; Sweeting & Gilhooly, 1990). Bereavement studies have found that unanticipated and accidental deaths tend to result in higher levels of grief distress (De Vries et.al, 1997; Gamino et al., 1998; Middleton et al., 1998; Sanders, 1988). However, a number of contradictions also exist in the literature. Although advanced warning of death has been found to be positively associated with greater subsequent outcome in some studies (Ball, 1977; Lundin, 1984; Parkes & Weiss, 1983), in other studies there is no association between advanced warning and improved outcome following bereavement (Gerber, 1975; Jacobs, Kasl, Ostfeld, Berkman, & Charpentier, 1986; Sanders, 1980). Stroebe, Stroebe, & Domittner (1988) contend that one explanation for the discrepant findings is based upon individual differences in reactions to sudden or anticipated loss. For example, when the bereaved participants in Stroebe, Stroebe, and Domittner's 1988 study were divided into groups according to whether they held internal or external control beliefs, the personality variable was found to moderate the impact of expectedness. The authors further report that unexpected losses resulted in higher levels of depression and somatic complaints only among those who believed that they had little control over their lives. Thus, it appears that personality differences may play an influential role in predicting the grief response.

## Sense of Coherence: An Individual Difference in Coping with Stress

Early investigators in the field of stress research proposed a direct link between stressful life events and illness (Cannon, 1932; Selye, 1956). The experience of stress was considered harmful due to its attendant disruption on an individual's emotional and physiological, self-regulatory, homeostatic functioning. Thus, an individual's tendency to develop illness was based on the belief that it was the stressors themselves that determined the likelihood of illness. In an effort to quantify stressful events and predict the likelihood of illness, Holmes and Rahe (1967) developed the Social Readjustment Rating Scale. The scale was based on the notion that stressors are pathogenic, that is risk factors that could be identified and causally related to pathological outcome.

Although earlier research relating stressful life events to illness demonstrated a reliable association between life stress and dysfunction, these findings had only been able to account for 9% to 10% of the variation among individuals in the physical and psychological outcomes of exposure to stress (Somerfield & McCrae, 2000). Further, despite exposure to similar stressors and risk factors, some individuals demonstrated different illness patterns and some failed to demonstrate any form of illness (Taylor, 1991). During the 1970's, in response to these types of findings, the field of stress research turned toward the recognition of intrapsychic processes and other observable adaptational efforts. Instead of studying the stressors as the sole trigger to dysfunction attention turned toward investigating the processes that were believed to intervene or mediate the stress response (Somerfield & McCrae, 2000).

A number of variables were identified as instrumental in the stress and coping response including social support (Cohen & Edwards, 1989; Cohen & Willis, 1985),

physical fitness (Brown, 1991), sociocultural and socioeconomic resources (Kessler & Neighbors, 1986; Williams, Barefoot, Califf, Haney, Saunders, Pryor, Hlatky, Siegler, & Mark, 1992), as well as personality factors such as optimism (Scheier & Carver, 1992), hardiness (Kobasa, 1979), locus-of-control (Rotter, 1966), self-efficacy (Bandura, 1977), sense of control (Rodin, 1986), and learned helplessness (Seligman, 1975). The integration of the characteristics of the individual in the stress response, with its emphasis on how that person perceives his or her environment, marked an important shift in the stress and coping research. Implicit in this perspective was the possibility that certain factors may have a direct and positive effect on an individual's ability to avoid illness and move toward health (Antonovsky & Sourani, 1988). It was in this context that Antonovsky, a medical sociologist, introduced his concept of salutogenesis. Antonovsky proposed the salutogenic orientation as a health promoting individual difference and coping resource. He further offered this concept as an alternative to the pathogenic, disease-prevention model that had defined earlier generations of stress research.

#### Pathogenesis versus Salutogenesis

As noted, the pathogenic model served as the core paradigm that shaped stress research. The pathogenic orientation proposes that disease is caused by various "bugs," risk factors or agents (e.g. psychosocial, microbiological), either singularly or multifactorially. The underlying assumption of the pathogenic model is homeostasis. Further, the pathogenic model proposes that homeostasis-maintaining and homeostasis-restoring mechanisms (e.g. neuropsychological, immunological) regulate disruptions or potential disruptions to an individual's system. When these mechanisms fail to restore homeostasis disease may result (Antonovsky, 1987; Koratkov, 1998).

In contrast, according to Antonovsky's salutogenic model, the underlying assumption governing human nature is not homeostasis but dynamic heterostatic disequilibrium. The heterostatic system is characterized by entropy, a pressure toward disorder or chaos. Antonovsky (1979, 1987) argued, however, that the human system is an open system. Inherent in the open system is the opportunity for negative entropy or making order from chaos. Thus, although the salutogenic model contends that internal and external stressors are ever-present individuals have the ability to make sense of the events and experiences that confront them.

The salutogenic model further proposes that health and disease exist along a multidimensional continuum and are not characterized by the dichotomous conceptualization proposed by the pathogenic model. What interests Antonovsky (1987) is not what caused or prevented 'dis-ease,' but what underlies the movement toward the health end of the continuum. Thus, the core of the salutogenic paradigm focuses on successful coping by studying the resources or strategies that assist the individual in creating order from chaos. Central to this model is the sense of coherence, a global personality disposition, hypothesized to affect the appraisals of stressors, direct the use of appropriate coping strategies, and contribute to more positive health (Antonovsky, 1987).

#### Tension Management and Generalized Resistance Resources

Implicit in Antonovsky's (1979, 1987) conceptualization of sense of coherence and the ubiquity of a stressor-rich environment is the notion of tension management. According to the salutogenic model, stressors can result in beneficial, neutral, or pathogenic consequences. The consequences depend on how the tension, which arises from the stressor, is dealt with by the individual. If the tension is managed well, then the

outcome may be neutral or salutary which would facilitate movement toward health. If, on the other hand, tension management is poor, then the individual may move closer to disorder. Tension management is based upon the appropriate use of personal and environmental resources. That is, in order to manage the tension created by a stressor people look for inputs or resources from the social and physical environment, as well as their own personal reserves, that reduce the pressure toward entropy (disorder).

Antonovsky (1979, 1987) defined these inputs as generalized resistance resources. Generalized resistance resources, therefore, reflect an integrative or holistic perspective on coping that recognizes psychological, social, and cultural resources as essential components in effectively managing stress and maintaining health (Antonovsky, 1979, 1987).

Antonovsky (1979, 1987) argued that generalized resistance resources could be physical and biochemical, (e.g. genetic and immunocompetence), material (e.g. wealth, status, and power), cognitive and emotional (e.g. knowledge, intelligence, ego strength, and ego identity), values and/or attitudinal (e.g. beliefs and coping styles), interpersonal and relational (e.g. social support and commitment), and socio cultural (e.g. religious or political affiliation and cultural stability). Antonovsky (1979, 1987) further maintained that all generalized resistance resources share a common element, that is, each provide the means or an experience by which one can make sense of a given stressor.

### Sense of Coherence

Antonovsky (1979, 1987) maintained that generalized resistance resources provide people with meaningful, orderly, and coherent life experiences. He coined the term sense



of coherence to unify the basic function of the generalized resistance resources. Thus, the sense of coherence can be considered both a coping resource and a personality disposition that differs in degree among individuals. Sense of coherence describes the extent to which the individual uses generalized resistance resources to manage the tension inherent in stress and crisis. Formally defined, sense of coherence refers to a global orientation that reflects the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges worthy of investment and engagement (Antonovsky 1987). Antonovsky (1979) further maintained that one's sense of coherence becomes reasonably stable by the end of early adulthood. He described the sense of coherence as a "dispositional orientation that is embedded within an individual's personality structure as well as in the ambience of a subculture, culture, or historical period" (Antonovsky, 1979, p. 124).

The sense of coherence construct consists of three interrelated factors: comprehensibility; manageability; and meaningfulness (Antonvosky, 1979, 1987). Comprehensibility refers to the extent to which individuals perceive the stimuli that faces them as predictable, ordered, and as making 'cognitive sense.' An individual with a strong sense of coherence is able to discern structure in experiences, whereas an individual low in sense of coherence is likely to perceive experiences as chaotic, random, and inexplicable (Antonovky, 1987). Further, the more consistent an individual's early life experiences are growing up, the stronger their sense of comprehensibility. Consistent

and predictable experiences allow people to anticipate and understand what specific idiosyncratic events may arise in a given situation and how best to adapt (Korotkov, 1998; Antonovsky, 1987).

The second sense of coherence factor, manageability, refers to the extent to which individuals perceive that they have the personal and social resources to confront and cope with demand. It is important to note that having a strong sense of coherence does not necessarily imply that one must be in direct possession of the needed resource.

Antonovsky's (1979, 1987) manageability factor recognizes the use of resources that are controlled by "legitimate others" (Antonovsky, 1987, p. 16) such as a spouse, family, friends, God, health care providers, and political leaders. Thus, the individual with a strong sense of coherence does not need to be in direct control of the resource to cope effectively with a given stressor. More importantly, the individual must perceive that the needed resources are available regardless of the source or structure (e.g. material, spiritual, or cognitive).

Antonovsky (1987) maintained that meaningfulness, the third sense of coherence factor, was the most critical. Meaningfulness incorporates the emotional or motivational elements necessary in coping. This factor refers to the extent to which one feels that life makes sense emotionally, that at least some of the problems and demands posed by living are worth investing energy in, are worthy of commitment and engagement, and are "challenges," rather than "burdens" (p. 19, 1987). Antonovsky (1979) maintained that if one's life experiences are characterized by participation in making decisions a strong

sense of meaningfulness develops. However, when individuals are denied participation in shaping outcomes they tend to see life as devoid of meaning which may result in a weak sense of coherence.

As stated, sense of coherence is defined as a generalized and enduring way of perceiving the world and one's place in it. Antonvosky (1984) emphasized that a strong sense of coherence does not imply a life devoid of complication or distress. It does, however, imply that when conflicts, complexity, and crises arise, the person with a strong sense of coherence will confront the stressor with the confidence that, as in the past, by and large things will work out well despite the discomfort. Further, Antonovsky (1984) maintained that the person with a strong sense of coherence would be more likely to appraise a stressor as benign, salutary, or less dangerous than an individual with a weaker sense of coherence. Again, the underlying element is the confidence that things will work out, that one has the resources to cope, that the confusing will become comprehensible, and that the potential for tension resolution exists.

#### Research on the Sense of Coherence

Sense of coherence has been widely studied and consistently found to be inversely related to depression and anxiety (Carstens & Spangenberg, 1997; Eriksson & Lundin, 1996; Frommberger, Stieglitz, Straub, Nyberg, Schlickewei, Kuner, & Berger, 1999; Hart, Hittner, & Paras, 1991; Kaiser, Sattler, Bellack, & Kersin, 1996; Larsson, Per-Olof, & Lundin, 2000; Linn, Lewis, & Kimbrough, 1993; McSherry, & Holm 1994; Petrie & Brook, 1992; Wolff & Ratner, 1999) For example, Kaiser, Sattler, Bellack, and Kersin (1996) examined the psychological functioning of men and women, one month following Hurricane Hugo. The authors defined sense of coherence as a personal characteristic

resource and found that a high sense of coherence was negatively associated with depression, trait anxiety, and posttraumatic stress disorder. Eriksson and Lundin (1996) also examined sense of coherence in relationship to a traumatic event, the Estonia disaster, a ferry that sank and killed over six hundred passengers in Europe. The authors found that the survivors with a higher sense of coherence reported less post-traumatic stress, dissociation, and anxiety related to the event. These findings are supported by additional studies of sense of coherence, depression, and anxiety related to a traumatic event, such as a traffic accident (Frommberger, Stieglitz, Straub, Nyberg, Schlickewei, Kuner, & Berger, 1999), childhood trauma (Wolff & Ratner, 1999), and exposure to trauma through military service in a war-torn nation (Larsson, Per-Olof, & Lundin, 2000).

Additional studies demonstrate the positive relationship between a high sense of coherence and improved outcome in individuals who confront more long-term and ongoing stressors such as illness (Gritz, Wellisch, Siau, & He-Jing, 1990; Motzer & Stewart, 1996; Mullen, Smith, & Hill, 1993; Nesbitt & Heidrich, 2000; Nyamathi, 1993) adjustment to a physical disability (Callahan & Pincus, 1995; Feigin, 1998; Feigin, Shere, & Abraham, 1996; Lustig, Rosenthal, Strauser, & Haynes, 2000; Petrie & Azariah, 1990) immigration, and acculturation (Ying & Akutus, 1997; Ying, Akutus, Zhang, & Huang, 1997) For example, Linn, Lewis, Van and Kimbrough (1993) found that sense of coherence was a significant predictor of anxiety and self-esteem in adults infected with HIV. The authors contend that participants with a higher sense of coherence reported increased levels of self-esteem and lower levels of anxiety. Further, Ying and Akutus (1997) found that a high sense of coherence among 2,232 Southeast Asian refugees, was

associated with less life stress, depression, anxiety, and demoralization, and associated with higher levels of reported happiness.

As the Ying and Akutus (1997) study demonstrates, sense of coherence has been positively associated with psychological and psycho-social well-being (Carmel, Anson, Levenson, Bonneh, & Maoz, 1991; Carstens & Spangenberg, 1997; Coward, 1996; Flannery & Flannery, 1990; Hart, Hittner, & Paras, 1991; Kivimaki, Feldt, Vahetera, & Nurmi, 2000; Linn, Lewis, Van, & Kimbrough, 1993; Lustig, Rosenthal, Strauser, & Haynes, 2000; Motzer, 1996; Nyamathi, 1992; Petrie & Brook, 1992; Petrie & Azariah, 1990; Sagy, Antonovsky, & Adler, 1990; Ying & Akutsu, 1997). For example, Nesbitt and Heidrich (2000) found that a high sense of coherence was related to increased levels of quality of life and more favorable illness appraisals in older women diagnosed with a chronic illness.

The Nesibtt and Heidrich (2000) study also demonstrates the potential role of sense of coherence as a mediator of stress. Other studies have also conceptualized sense of coherence as a mediator in an attempt to discern its role in stress appraisal and relationship to other resource variables (Adams & Bezner, 2000; Mullen, Smith, & Hill, 1993; Ying, Akutus, Zhang, & Huang, 1997) For example, Nyamathi (1993) investigated the relationship between sense of coherence, appraisal of threat, emotional distress, and high-risk behavior in minority women. The author found that sense of coherence was significantly and negatively related to emotional distress, appraisal of threat and high-risk behavior. Further, path analyses revealed that sense of coherence, by its association with appraisal, was indirectly associated with both distress and risk. That is, sense of coherence accounted for 45% of the variance in distress, 10% of the variance in appraisal

of threat, and 4% of the variance in high-risk behavior. Other studies also report sense of coherence as a significant predictor in determining psychological distress.

Although the sense of coherence construct has been examined and found to have a positive relationship to quality of life, perceived wellness, and psychological well-being (Carmel, Anson, Levenson, Bonneh, & Maoz, 1991; Carstens & Spangenberg, 1997; Coward, 1996; Flannery & Flannery, 1990; Hart, Hittner, & Paras, 1991; Kivimaki, Feldt, Vahetera, & Nurmi, 2000; Linn, Lewis, Van, & Kimbrough, 1993; Lustig, Rosenthal, Strauser, & Haynes, 2000; Motzer, 1996; Nyamathi, 1992; Petrie & Brook, 1992; Petrie & Azariah, 1990; Sagy, Antonovsky, & Adler, 1990; Ying & Akutsu, 1997). Sense of coherence has never been examined in relationship to perceived benefit or personal growth from stress.

### Summary

Through their empirical studies researchers have done much to change assumptions about the consequences of bereavement. Historically grief was understood as a one-dimensional construct with invariant stages of recovery. Currently, grief is understood as a multidimensional construct that is influenced by individual differences. Further, empirical evidence of the grief response demonstrates the typical grief trajectory includes both grief distress and personal growth from grief.

## CHAPTER III

### METHODOLOGY

#### Participants

The participants in the study included 88 adults who had chosen to participate in a grief group and who had experienced the death of a loved one. The participants were recruited from five different grief groups in Northeastern and Central Oklahoma. Seventy of the participants were female (79.5%) and 18 were male (20.4%). The age of the participants ranged from 18 to 92 and the mean age was 49.6 (SD = 15.75). The kinship relationship of the participants to the deceased were defined as follows: 15 (17%) participants were bereaved parents, 29 (32.9%) were bereaved spouses, 27 (30.6%) were bereaved children, 5 (5.6%) were bereaved siblings, and 12 (13.6%) had an extended kinship relationship to the deceased. The cause of death reported by the participants included the following: 68 (77.2%) deaths were due to illness, 18 (20.4%) were accidental deaths, and 2 (2.3%) were due to homicide. None of the participants indicated deaths due to suicide. The mean number of months since the death was 34.72 (SD = 64.95) and time since death ranged from 1 month (8.0%) to 336 months (1.1%).

The five grief group organizations utilized in this study include one hospital, two funeral homes, one hospice, and one Norman-based chapter of Compassionate Friends. The hospital was located in metropolitan area of Central Oklahoma while the hospice, Compassionate Friends, and one funeral home were located in rural areas of Northeastern Oklahoma. The other funeral home grief group was located in a metropolitan area of Northeastern Oklahoma. The grief group sponsored by the hospital was a 6-week closed

group facilitated by a nationally certified grief specialist. One of the funeral home grief groups was also facilitated by a nationally certified grief specialist and utilized a 12 week closed group format. The other grief group located within a rural funeral home was an open support group for widows that met monthly and was facilitated by a widowed peer. The hospice grief group was a 7-week closed group facilitated by a licensed clinical psychologist and the Compassionate Friends group was a support group open to parents of children who have died. The Compassionate Friends group was also facilitated by a licensed professional counselor.

### Measures

The participants completed the following forms: an informed consent form, a demographic data sheet, the Hogan Grief Reaction Checklist (Hogan, 2001), the Orientation to Life Questionnaire-Short-Form (Antonovsky, 1987), and the Post Traumatic Growth Inventory (Tedeschi & Calhoun, 1996).

### Demographic Data Sheet

Following the completion of the informed consent form (Appendix A), the participants completed the demographic data sheet (Appendix C). This form requested information regarding the type of kinship relationship between the participant and the deceased, the cause of the decedent's death, and the number of months since the death. Additional demographic information requested included participant age and gender, and race.

### Hogan Grief Reaction Checklist

The Hogan Grief Reaction Checklist (HGRC, Hogan, 2001, Appendix D) is a relatively new 61-item instrument developed to measure the multidimensional nature of



the bereavement process. The HGRC was developed empirically from data collected from bereaved adults who had experienced the death of a loved one. Factor analysis of the HGRC revealed 6 factors in the normal trajectory of the grieving process: Five grief distress factors including, despair, panic behavior, blame and anger, detachment, and disorganization, and one personal growth factor (Hogan, 2001).

Items for the HGRC were empirically generated in the following way. First, interview and anecdotal data from bereaved adults were obtained. Content analysis of these data resulted in the six reported theoretical categories. An initial set of 100 items was developed and then analyzed through a series of eight focus groups (6-10 members per group). One set of focus groups was based on the cause of death (illness, accident, homicide, suicide) and the second set of four focus groups was based on the relationship to the deceased (parent, sibling, spouse, and child). Members of these groups were asked to assess the degree to which items represented their personal experience with grief. The 100 items were then reviewed by a panel of 36 graduate nurses who were asked to sort items into the six predetermined categories (despair, panic behavior, blame and anger, disorganization, detachment, and personal growth). Items with 80% consensus were retained (Hogan, 2001).

Initial psychometric testing of the trial 100-item version of the HGRC was given to 586 adults recruited through support groups including Compassionate Friends, Survivors of Suicide, Parents of Murdered Children, and widow support groups. Based upon factor analysis of these data the HGRC was revised to 61 items. The construct validity of the revised 61-item HGRC was assessed using a sample of 209 parents

recruited from mutual support groups. Confirmatory factor analysis of these data supported the construct validity of the HGRC (Hogan, 2001).

Convergent and divergent validity of the HGRC was assessed in relation to three well-established instruments in the grief and stress literature: the Texas Revised Inventory of Grief (TRIG; Faschingbauer, 1981), the Impact of Event Scale (IES; Horowitz, Wilner, & Alverez, 1979), and the Grief Experience Inventory (GEI; Sanders, Mauger, & Strong, 1985). Data analysis revealed that the HGRC subscales are correlated with appropriate subscales from each of the three instruments (correlations range from .46 to .63). For example, the HGRC Despair subscale, which measures hopelessness, sadness, and loneliness, is moderately correlated with the GEI Despair subscale (.60) (measuring hopelessness and pessimism) and the IES intrusion subscale (.62) (measuring preoccupation with thoughts, feelings, and images associated with loss). Further, the HGRC Personal Growth subscale, which measures the sense of having become more compassionate, tolerant, forgiving, and hopeful, is negatively correlated to each of the other HGRC subscales and all of the TRIG, GEI, and IES subscales (Hogan, 2001).

Reliability of the HGRC is demonstrated by Cronbach's alpha coefficients that range from .79 to .90 for the six subscales: Despair (.89); Panic Behavior (.90); Blame/Anger (.79); Detachment (.87); Disorganization (.90); and Personal Growth (.82) (Hogan, 2001). Gamino, Sewell, and Easterling (2000) report comparable reliability estimates: Despair (.89); Panic (.90); Blame/Anger (.79); Detachment (.87); Disorganization (.84); and Personal growth (.82).

Participant response on the HGRC is based upon a 5-point Likert-style scale. The participants will be asked to indicate how well each item describes the way they have

been feeling for the past two weeks. Responses range from “Does not describe me at all” (1), “Does not Describe me” (2), “Describes me fairly well” (3), “Describes me well” (4), and “Describes me very well” (5).

#### Orientation to Life Questionnaire-Short Form (SOC-13)

Antonovsky (1987) developed the Orientation to Life Questionnaire-Short Form (SOC-13; Appendix E) to measure sense of coherence. Using a grounded theory methodology Antonovsky (1987) interviewed 51 trauma survivors. Guided by the salutogenic model and definition of sense of coherence, each respondent was classified as having either a strong, moderate, or weak sense of coherence. Once consensual validity was obtained among the four judges the protocols of the sixteen individuals who had been classified as having a strong sense of coherence and the eleven that were classified as having a weak sense of coherence were reviewed.

The SOC items were constructed using a method created by Guttman, identified as facet design (see Shye, 1978). Using this methodology, the researcher specifies the facets to be measured and defines the important elements in each facet. Antonovsky (1987) identified the first facet to be considered as the sense of coherence, with its three components of comprehensibility, manageability, and meaningfulness. Thus, every item selected by Antonovsky (1987) represented one of these three components. Further, the sense of coherence was defined as the response mode of the respondent to a given stimulus. (For example, a questionnaire item would ask, to what extent do you perceive stimulus X as comprehensible?)

The second step in the construction of the SOC, was to determine important facets of the stimuli and the elements to be included under each facet. Four facets were selected:

the modality of the stimulus (instrumental, cognitive, or affective), its source (internal, external, or both internal and external), the nature of the demand it posed (concrete, diffuse, or abstract), and its time reference (past, present, or future). Antonovsky (1987) contends that he then went “back and forth, from intuitive and literature-derived items” (p. 77-78, 1987) to develop mapping sentences that, in turn, generated 36 possible items. After testing the questionnaire and subjecting the items to several statistical analyses, Antonovksy (1987) arrived at the 29 items that comprise the current Orientation to Life Questionnaire-Long Form (SOC-29) and the 13 items that comprise the abbreviated Orientation to Life-Short Form (SOC-13)

The SOC-13 consists of 5 comprehensibility, 4 manageability, and 4 meaningfulness components. Each item reflects one of the three components of the sense of coherence. Each item is scaled along a seven-point semantic differential with two anchoring phrases. For example, participants are asked: “Until now your life has had: no clear goals or purpose at all (answer 1)...very clear goals and purpose (answer 7). Five of the items are reversed-scored to avoid a response set bias. Possible total scores range from 13 to 91. Higher scores are purported to reflect a greater or stronger sense of coherence. As indicated by the facet design used to construct the SOC-13, Antonovsky (1987, 1993) argued that the instrument reflects a single, common factor. Further, factor analytic studies have failed to reproduce three distinct subscales (comprehensibility, manageability, and meaningfulness). It has, therefore, been recommended that only the total SOC score be used in research (Anotnovsky, 1993).

Antonovsky (1987) maintained that the SOC-13 could be used cross-culturally. Support for the validity of its cross-cultural applicability has been reported in studies with

several ethnic and cultural groups including Asian, African American, European, and Middle Eastern samples (Bellack, D.R., & Kersin, J., 1996; Carmel, S., Anson, O., Levenson, A., Bonneh, D.Y. & Moaz, B., 1991; Kaiser, C.F., Sattler, D.N., Nyamathi, 1993; Ying & Akutus, 1997). The SOC-29 and SOC-13 were originally developed in Hebrew, but have been translated into 14 different languages. According to Antonovsky (1993), over 4,000 individuals have completed the SOC-13. More than half of the respondents are women, all social classes have been represented, and adults of all ages have been assessed.

Antonovsky (1993) reported Cronbach's alpha ranging from .74 to .91 in 16 studies using the 13-item short form. (SOC-29 Cronbach alpha's range from .82 to .95 in 26 reported studies). Test-retest reliabilities of .92 were reported for one-week and .85 to .93 for up to one-month (Antonovsky, 1993). Further, the stability of the sense of coherence construct was examined in a 4-year longitudinal study. Test-retest reliabilities of the SOC-13 in this study were reported to be .82 for males .75 for females (Kivimaki, Feldt, Vahtera, & Nurmi, 2000).

Antonovsky (1987) maintains that the evidence for convergent validity of the sense of coherence is derived from significant positive correlations with theoretically similar constructs. Significant positive correlations have been reported between sense of coherence and Rotter's Internal-External Locus of Control Scale, hardiness, and optimism (as cited in Antonovsky, 1987). Studies evaluating the scale's discriminant validity have reported sense of coherence to be unrelated to intellectual functioning (Frenz, Carey, & Jorgensen, 1993) and perceived availability of social support (Hart et al., 1991).

## Post Traumatic Growth Inventory

The Post Traumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), a 21-item self-report questionnaire is a relatively new instrument developed to measure positive growth from trauma. This scale was designed to assess perceived benefits that result from a crisis, including positive changes in self-perception, interpersonal relationship, and philosophy toward life. The PTGI will be included in the current study as an ancillary instrument for future research. Thus, the data obtained from this measure will not be analyzed in this study but analyzed in future research.

When developing the PTGI, Tedeschi and Calhoun (1996) began with 34 items, all positively worded, all with a 0 to 5 response choice (0 = I did not experience this change as a result of my crises, 3 = I experienced this changes to a moderate degree as a result of my crisis, 5 = I experienced this change to a very great degree as a result of my crisis). Each item referred to growth that pertained to college students' most negative event in the past 5 years. The scale was administered to approximately 600 students.

Principal component analysis with orthogonal rotation led to the deletion of 13 items; the remaining 21 items comprised five factors (subscales) that accounted for 60% of the variance: (a) relating to others (e.g. "A sense of closeness with others"), (b) new possibilities (e.g. "I developed new interests"), (c) personal strength (e.g. "A feeling of self-reliance"), (d) spiritual change (e.g. "I have a stronger religious faith"), and (e) appreciation of life ("My priorities about what is important in life") The noted five factors (relating to others, new possibilities; personal strength; spiritual change; and appreciation of life) comprise the current version of the PTGI (Tedeschi & Calhoun, 1996).

Reliability estimates of the PTGI demonstrate good internal reliability. The full-scale reliability of the PTGI has been estimated at .90. Reliability estimates for the five separate subscales, range from .67 to .85. Further, a small subsample of the 600 students that were initially administered the PTGI, completed the measure again about 2 months later. The test-retest reliability of the full PTGI was adequate (.71). However, for two of the PTGI subscales (personal strength and appreciation of life), the temporal stability was low ( $r = .37$  and  $.47$ , respectively).

Cohen, Hettler, and Pane (1998) note that the validity of the PTGI may be hampered by its reliance on crisis victims' reports of stress-related positive outcomes. Therefore, the authors suggest that the researcher proceed with caution given that the accuracy of the victims' reports of PTG (posttraumatic growth) may be limited. For example, if PTG is assessed in the early stages of a crisis, positive reports might reflect denial, a coping response that is typical in the initial stages of a crisis. A related issue regarding the validity of the PTGI concerns perceived PTG as an outcome from perceived PTG as an individual difference variable.

### Procedure

The participants were recruited for eight months between Fall 2001 and Summer 2002 through verbal announcements by the group facilitators of each grief group. The primary investigator contacted the grief group facilitator via telephone, explained the purpose of the study, and mailed a survey packet to the facilitator. The primary investigator contacted the group facilitator once the survey had been received, discussed concerns regarding study procedure and purpose, and reiterated the importance of consistency across administration and utilization of the script. The primary investigator

offered to provide the group facilitator a summary of the study's results. The grief group facilitator agreed to the conditions of the study, receipt of final results, and agreed to verbally announce the opportunity to participate in the study at the beginning of their next scheduled grief group. The verbal announcement read by the group facilitator stated that participation in the study was open to any group member who had suffered the death of a loved one. A script was read to the participants that described the purpose and procedure for the study (Appendix B). Group members that were interested in participating in the study received a survey packet at the end of group and once completed, returned the packet to the group facilitator in the sealed envelope provided.

At the time of administration participants were informed that their participation was voluntary and each respondent was provided a written consent to participate in the study. The components of the informed consent included the nature of the study, the potential benefits and risks of participation, and the notification of the right to withdraw participation at anytime without penalty (See Appendix A). A personal copy of the informed consent form was to each participant.

Each participant completed a packet of self-report questionnaires including a demographic data sheet, the Hogan Grief Reaction Checklist, the Orientation to Life Questionnaire, and the Post Traumatic Growth Inventory. The questionnaires were placed in random order within the packet to control for order effects. It was anticipated that the total time required to complete the questionnaires would be approximately 25 minutes.

All information provided by the participants was kept confidential. All data collected was placed in a locked file cabinet. Questionnaires were identified by number in order to facilitate data entry and analyses. Participants provided their name on only the



informed consent form. The signed consent form was separated from the demographic and questionnaire packet to ensure confidentiality and anonymity of response. Once completed, the surveys were collected by the grief group facilitator and mailed to the primary investigator.

## CHAPTER IV

### RESULTS

#### Analyses

The statistical analyses conducted in this study were based upon the following research questions and hypotheses:

#### Research Question

1. Can personal and contextual difference variables account for differences in grief distress as measured by the Hogan Grief Reaction Checklist?

#### Hypotheses

1a: Older participants will have significantly less grief distress than younger participants.

1b: Men will have significantly higher grief distress than women.

1c: Participants who demonstrate a strong sense of coherence will have significantly less grief distress than participants who demonstrate a weak sense of coherence.

1d: As the time since death increases grief distress will decrease.

1e: Parents of a deceased child will have significantly higher grief distress than other kinship relationships (spouse, child, sibling, extended).

1f: Participants who experience sudden and violent loss (suicide, homicide, accident) will have significantly higher grief distress than participants who experience other types of loss (illness).

#### Research Question:

2. Can personal and contextual differences variables account for differences in personal growth as measured by the Hogan Grief Reaction Checklist?

- 2a. Older participants will have significantly higher personal growth than younger participants.
- 2b. Women will have significantly higher personal growth than men.
- 2c. Participants who demonstrate a strong sense of coherence will be have significantly higher personal growth than participants who demonstrate a weak sense of coherence.
- 2d. As the time since death increases personal growth will increase.
- 2e. Parents of a deceased child will have significantly less personal growth than other kinship relationships (spouse, child, sibling, extended).
- 2f. Participants who experience sudden and violent loss (suicide, homicide, accident) will have significantly less personal growth than participants who experience other types of loss (illness).

### Preliminary Analyses

Table 1 lists the mean, standard deviations, and ranges for all continuous independent variables and dependent variables. Histograms for each of the dependent and continuous independent variables approximated the normal curve for all variables with the exception of time, which was positively skewed. A skew in this direction is to be expected, given that more people are likely to attend a grief group shortly after the death of loved one versus attending a long time after the death. Thus, the data for time was not transformed for the analysis.

The occurrence, range, mean, and standard deviation of the categorical predictor variables (gender, cause of death, and kinship) included seventy female participants (79.5%) and 18 male (20.4%) participants. The age of the participants ranged from 18 to 92 and the mean age was 49.6 (SD = 15.75). The mean number of months since the death

was 34.72 (SD = 64.95) and time since death ranged from 1 month (8.0%) to 336 months (1.1%). The cause of death reported by the participants included 68 (77.2%) deaths due to illness, 18 (20.4%) deaths due to accidents, and 2 (2.3%) deaths due to homicide. None of the participants reported deaths due to suicide. The kinship relationship of the participants to the deceased included 15 (17%) bereaved parents, 29 (32.9%) bereaved spouses, 27 (30.6%) bereaved children, 5 (5.6%) bereaved siblings, and 12 (13.6%) bereaved who had extended kinships to the deceased. See Table 2, 3, and 4 for means and standard deviations of categorical variables (gender, cause of death, kinship) and dependent variables.

The grief distress subscales of the Hogan Grief Reaction Checklist (despair, panic behavior, blame and anger, detachment, disorganization) were collapsed to create one total grief distress score. This use of the HGRC reflects the design of previous research (Gamino et al., 2000).

### Major Analyses

Pearson correlations were conducted to test hypotheses 1a, 1c, and 1d and hypotheses 2a, 2c, and 2d. A significant relationship was found between age and grief distress ( $r = -.286, p < .01$ ), sense of coherence and grief distress ( $r = -.820, p < .01$ ), time and grief distress ( $r = -.288, p < .01$ ), sense of coherence and personal growth ( $r = .530, p < .01$ ), gender and personal growth ( $r = .288, p < .05$ ), and time and personal growth ( $r = .265, p < .05$ ). The hypothesis stated that age would be positively related to personal growth however results showed that age was not significantly related to personal growth. Given the small sample size ( $n = 88$ ) and marked strength of the correlation coefficient between sense of coherence and grief distress ( $r = -.820, p < .01$ ), a scatterplot was

created to determine the presence of outliers. The scatterplot revealed no apparent outliers. Coefficient alpha reliability coefficients were computed for the data at hand and demonstrated good internal reliability for all measures utilized in this study. The reliability estimate of the Orientation to Life Questionnaire was .88 and the reliability estimate for the five collapsed HGRC subscales was .97. Lastly, the reliability estimate for the personal growth subscale of the HGRC was .88. See Table 5 for the scatterplot and Table 6 for the intercorrelations and coefficient alphas for the study variables.

An independent sample t-test was conducted to test hypotheses 1b and 2b. Results demonstrated partial support for the hypotheses. The T-tests revealed no significant difference between males and females on grief distress ( $t(1, 86) = -.521, p = .604$ ) but indicated a significant gender difference on personal growth. Contrary to expected findings men demonstrated significantly higher personal growth than women ( $t(1,86) = 2.17, p = .033$ ).

To test hypotheses 1a – 1f and hypotheses 2a –2f, two hierarchical regression analyses were also conducted, one for each of the two criterion variables (grief distress and personal growth). Both models included six predictor variables, three personal variables (age, gender, personality), and three contextual variables (time, cause of death, and kinship). For each hierarchical model, the personal variables age and gender were entered as a block in the first step because each served as a demographic variable. Personality (sense of coherence) was entered independently as a block in the second step to assess incremental variance. The three contextual variables (time, cause, and kinship) were entered separately as blocks in the third, fourth, and fifth step. Time was the first contextual variable entered as a block in the third step because bereavement literature

supports time as significant over and above cause and kinship in relationship to grief distress and personal growth (Parkes & Weiss, 1983; Stroebe, W. & Schut, H., 2001; Tedeschi & Calhoun, 1995). Cause of death was entered as a block in the fourth step and kinship was entered as a block in the fifth step.

The first hierarchical regression analysis assessed hypotheses 1a –1f, the relationship among personal and contextual variables and grief distress. The full model  $R^2$  was examined and found to be significant ( $R^2_{adj} = .702$ ,  $p = .00$ ). Hypothesis 1b stated that sense of coherence would account for a significant proportion of the variance in grief distress. To test this hypothesis, the change in  $R^2$  between step 1 (age and gender) and step 2 (sense of coherence) was examined. Results indicated that sense of coherence explained a significant amount of the variance in grief distress ( $R^2_{change} = .595$ ,  $p = .00$ ). Beta weights were examined and provided support for the expectation that age ( $\beta = -.283$ ,  $p = .01$ ) and time ( $\beta = -.137$ ,  $p = .030$ ) would account for a significant amount of the variance in grief distress. Contrary to expected findings, results did not support hypotheses 1b, 1e, and 1f, that gender, cause of death, and kinship would account for a significant proportion of the variance in grief distress. See Table 7 for the grief distress full regression model summary and Table 8 for the coefficients.

The second hierarchical regression analysis assessed hypothesis 2a- 2f, the relationship among personal and contextual variables and personal growth. The full model  $R^2$  was examined and found to be significant ( $R^2_{adj} = .331$ ,  $p = .00$ ). Hypothesis 2c stated that sense of coherence would account for a significant proportion of the variance in personal growth. To test this hypothesis, the change in  $R^2$  between step 1 (age and gender) and step 2 (sense of coherence) was examined. Results indicated that sense of

coherence explained a significant amount of the variance in personal growth ( $R^2_{\text{change}} = .276, p = .00$ ). Beta weights were examined and provided support for hypothesis 2b that gender would account for a significant amount of the variance ( $\beta = -.223, p = .038$ ). Results did not provide support for hypotheses 2a, 2d, 2e, and 2f that age, time, kinship, and cause of death would account for a significant proportion of the variance. See Table 9 for the personal growth full regression model summary and Table 10 for the coefficients.

### Secondary Analyses

Findings from the hierarchical regression analyses for grief distress and personal growth prompted additional analyses. As noted, sense of coherence accounted for a significant amount of the variance in both the hierarchical regression analyses for grief distress ( $R^2_{\text{change}} = .595, p = .00$ ) and the hierarchical regression analyses for personal growth ( $R^2_{\text{change}} = .276, p = .00$ ). Secondary analyses were conducted with sense of coherence pulled from the model in order to better assess the effect of time, cause of death, and kinship on grief distress and personal growth.

Six hierarchical regression analyses were conducted, three for each of the two criterion variables (grief distress and personal growth). Each hierarchical regression model included five predictor variables, two personal variables (age, gender) and three contextual variables (time, cause of death, and kinship). In each model, the personal variables age and gender were entered as a block in the first step. The order of the three contextual variables (time, cause, and kinship) was rotated and each variable was entered separately as a block in either step two, three, or four. In the first secondary grief distress and personal growth hierarchical regression analysis model time was entered as a block

in the second step, cause of death was entered as a block in the third step, and kinship was entered as a block in the fourth step. In the second secondary grief distress and personal growth regression analysis model cause of death was entered as a block in the second step, kinship was entered as block in the third step, and time was entered as block in the fourth step. In the final secondary grief distress and personal growth regression analysis model, kinship was entered as a block in the second step, cause of death was entered as a block in the third step, and kinship was entered as a block in the fourth step.

The first full model  $R^2$  for the secondary grief distress regression analyses was examined and found to be significant ( $R^2_{adj} = .134, p = .01$ ). The change in  $R^2$  between step 1 (age and gender), step 2 (time), step 3 (cause of death), and step 4 (kinship) was also examined. Results showed a significant change between step 1 (age and gender) and step 2 (time) ( $R^2_{change} = .065, p = .01$ ) and indicated that time accounted for a significant amount of the variance ( $\beta = -.259, p = .01$ ). The remaining variables, cause of death ( $R^2_{change} = .023, p = .32$ ) in step 3 and kinship ( $R^2_{change} = .053, p = .27$ ) in 4, were not found to be significant sources of variance in the model summary. However when Beta weights were examined results revealed support for the expectation the kinship group, parents of a deceased child, was a significant predictor of grief distress ( $\beta = .413, p = .03$ ). See Table 11 for the first secondary grief distress hierarchical regression analysis model summary and Table 12 for the coefficients.

The  $R^2_{change}$  in the second secondary regression analyses was examined. Results found significant change between step 3 (kinship) and step 4 (time) ( $R^2_{change} = .047, p = .03$ ) and indicated that time accounted for a significant amount of the variance ( $\beta = -.240, p = .03$ ) The remaining variables, cause of death ( $R^2_{change} = .031, p = .24$ ) in step 2 and



kinship ( $R^2_{\text{change}} = .064, p = .20$ ) in step 3 were not found to be significant sources of variance in the model summary. However when Beta weights were examined results provided support for the expectation the kinship group, parents of a deceased child, was a significant predictor of grief distress ( $\beta = .413, p = .03$ ). See Table 13 for the second secondary grief distress regression analyses model summary and Table 14 for the coefficients.

The  $R^2_{\text{change}}$  in the final secondary regression analyses was examined. Once again, time ( $\beta = -.278, p = .01$ ) was the only variable found to be a significant source of variance in the full model. Results indicated a significant change between step 2 (kinship) and step 3 (time) ( $R^2_{\text{change}} = .068, p = .01$ ). The remaining variables kinship ( $R^2_{\text{change}} = .056, p = .27$ ) in step 2 and cause of death ( $R^2_{\text{change}} = .018, p = .41$ ) in step 4 were not found to be significant sources of variance in the full model. Again, when Beta weights were examined results revealed evidence for the expectation the kinship group, parents of a deceased child, was a significant predictor of grief distress ( $\beta = .413, p = .03$ ). See Table 15 for the third secondary grief distress regression analysis model summary and Table 16 for the coefficients.

The first full model  $R^2$  for the secondary personal growth regression analyses was examined and found to be significant ( $R^2_{\text{adj}} = .049, p = .03$ ). The change in  $R^2$  between step 1 (age and gender), step 2 (time), step 3 (cause of death), and step 4 (kinship) was also examined. Results showed a significant change between step 1 (age and gender) and step 2 (time) ( $R^2_{\text{change}} = .056, p = .02$ ) and indicated that when sense of coherence is removed from the regression model time was the only variable that accounted for a significant amount of the variance ( $\beta = .24, p = .02$ ). The remaining variables, cause of

death ( $R^2_{\text{change}} = .026, p = .30$ ) in step 3 and kinship ( $R^2_{\text{change}} = .011, p = .91$ ) in step 4, were not found to be significant sources of variance. See Table 17 for the first secondary grief distress hierarchical regression analysis model summary and Table 18 coefficients.

The  $R^2_{\text{change}}$  in the second secondary regression analyses was examined. Results found significant change between step 3 (kinship) and step 4 (time) ( $R^2_{\text{change}} = .059, p = .02$ ) and indicated that time accounted for a significant amount of the variance ( $\beta = .268, p = .02$ ). The remaining variables, cause of death ( $R^2_{\text{change}} = .024, p = .35$ ) in step 2 and kinship ( $R^2_{\text{change}} = .011, p = .92$ ) in step 3 were not found to be significant sources of variance. See Table 19 for the second secondary grief distress regression analyses model summary and Table 20 for the coefficients.

The  $R^2_{\text{change}}$  in the final secondary regression analyses was examined. Once again, time was the only variable found to be a significant source of variance ( $\beta = .24, p = .02$ ). Results indicated a significant change between step 2 (kinship) and step 3 (time) ( $R^2_{\text{change}} = .052, p = .03$ ). The remaining variables kinship ( $R^2_{\text{change}} = .012, p = .90$ ) in step 2 and cause of death ( $R^2_{\text{change}} = .028, p = .28$ ) in step 4 were not found to be significant sources of variance. See Table 21 for the third secondary grief distress regression analysis model summary and Table 22 for the coefficients.

Two one-way anova's were conducted to further explore variability among causes of death and kinship group. The hypotheses stated that sudden and violent deaths (suicide, homicide, accident) would be associated with higher levels of grief distress than other causes of death. As noted, none of the participants reported that they had experienced a loss by suicide. Results indicated no significant differences in grief distress by cause of death ( $F(2, 85) = 2.439, p = .093, \text{Eta}^2 = .054$ ). The hypotheses further stated

that sudden and violent deaths would be associated with lower levels of personal growth than other causes of death (illness). Results revealed no significant differences in personal growth among the various causes of death. ( $F(2, 85) = 1.517, p = .225, \eta^2 = .034$ ). Subsequent analyses on kinship relationship, grief distress, and personal growth showed similar findings. The hypotheses stated parents of a deceased child would have significantly higher grief distress than other kinship relationships (spouse, child, sibling, extended). Results demonstrated no significant differences among the various kinship groups on grief distress ( $F(4, 83) = 1.221, p = .308, \eta^2 = .056$ ). The results also indicated no significant differences among the kinship groups (parent, spouse, child, sibling, extended) on personal growth ( $F(4, 83) = .420, p = .794, \eta^2 = .020$ ).

## CHAPTER V

### DISCUSSION

This chapter provides a summary and explanation of the results found in this study.

Implications of the results are discussed and limitations of the study are noted.

Suggestions for future research conclude this chapter. This discussion was based upon the following research questions and hypothesis:

#### Research Question

1. Can personal and contextual difference variables account for differences in grief distress as measured by the Hogan Grief Reaction Checklist?

#### Hypotheses

1a: Older participants will have significantly less grief distress than younger participants.

1b: Men will have significantly higher grief distress than women.

1c: Participants who demonstrate a strong sense of coherence will have significantly less grief distress than participants who demonstrate a weak sense of coherence.

1d: As the time since death increases grief distress will decrease.

1e: Parents of a deceased child will have significantly higher grief distress than other kinship relationships (spouse, child, sibling, extended).

1f: Participants who experience sudden and violent loss (suicide, homicide, accident) will have significantly higher grief distress than participants who experience other types of loss (illness).

#### Research Question:

2. Can personal and contextual differences variables account for differences in personal growth as measured by the Hogan Grief Reaction Checklist?

- 2a. Older participants will have significantly higher personal growth than younger participants.
- 2b. Women will have significantly higher personal growth than men.
- 2c. Participants who demonstrate a strong sense of coherence will be have significantly higher personal growth than participants who demonstrate a weak sense of coherence.
- 2d. As the time since death increases personal growth will increase.
- 2e. Parents of a deceased child will have significantly less personal growth than other kinship relationships (spouse, child, sibling, extended).
- 2f. Participants who experience sudden and violent loss (suicide, homicide, accident) will have significantly less personal growth than participants who experience other types of loss (illness).

#### Summary of the Results

It was expected that the personal variables, age, gender, and sense of coherence of the bereaved would be negatively related to grief distress. Findings from this study provided only partial support for this hypothesis. Results indicated a significant relationship between age, sense of coherence, and grief distress however, the results failed to demonstrate a significant relationship between gender and grief distress. Findings indicated an inverse relationship between age and grief distress, such that the older participants reported less grief distress than the younger participants. Results further revealed that participants who demonstrated a strong or high sense of coherence reported less grief distress. The results seem to also suggest that sense of coherence may be responsible for most of the differences in reported grief distress over and above all other

personal and contextual variables. Finally, study results showed that being a male or a female had no significant relationship to grief distress.

As noted, the contextual variables in this study believed to impact grief distress include time since death, cause of death, and the kinship relationship between the bereaved and deceased. Results from this study provided partial support for the proposed relationship among these variables. Results identified time since death and parental kinship as the only significant contextual variables related to grief distress. These findings indicate that the more time that has elapsed since the death the less grief distress reported and that parents of a deceased child have significantly higher grief distress than other kinship groups (spouse, child, sibling, extended). The results found no significant relationship between cause of death and grief distress.

It was expected that the personal variables, age, gender, and sense of coherence of the bereaved would be positively related to personal growth. Findings from this study provided only partial support for this hypothesis. Results indicated a significant relationship between gender, sense of coherence, and personal growth, but failed to demonstrate a significant relationship between age and personal growth. It was expected that females would have significantly higher personal growth than males, however findings demonstrated that men reported higher levels of personal growth. The results further revealed that participants with a high or strong sense of coherence reported higher levels of personal growth than participants with a low or weak sense of coherence. The results also seem to suggest that sense of coherence may be responsible for most of the differences in reported personal growth over and above all other personal and contextual variables.

As noted, the contextual variables in this study believed to impact personal growth include time since death, cause of death, and the kinship relationship between the bereaved and deceased. Unexpectedly, results from this study provided only partial support for the expected relationship among these variables. Results identified time since death as the only contextual variable related to personal growth. This finding suggests that the more time that has passed since the death the more personal growth reported by the bereaved. The results found no significant connection among cause of death, kinship, and personal growth.

#### Explanation of the Results

The findings from this study demonstrated that participants reported both grief distress and personal growth as measured by the Hogan Grief Reaction Checklist (Hogan, 2001). These results support the growing evidence that loss may provide an opportunity for the bereaved to experience positive change and personal growth (Hogan, 2001; Nolen-Hoeksema, 2001; Tedeschi & Calhoun, 1989-1990; Yalom & Lieberman, 1991). The results of this study also demonstrate that individual differences, personal and contextual factors, may be related to how one responds to grief. These findings support the research literature that suggests a relationship between individual and situational variables and grief outcome (Ball, 1977; Middleton et al., 1997; Parkes & Weiss, 1983; Sanders, 1997; Sanders, 1999; Schaefer & Moos, 2001; Shanfield & Swain, 1993; Stroebe et al., 2001).

Interestingly, the results of this study indicate that some of the personal and contextual variables that relate to grief distress appear different from the personal and contextual variables that relate to personal growth. As noted, age was significantly related

to grief distress, but not significantly related to personal growth. One plausible explanation for the difference between age and grief distress is that older groups may have experienced more losses and may have learned how to better cope with grief. It is also possible, that with age comes the expectation and awareness that death is a natural part of life and thus when it does occur, it relates to less grief distress. The findings from this study regarding age and grief distress support prior bereavement research suggesting older individuals report less grief distress than younger individuals (Ball, 1977; Sanders, 1997; Shanfield & Swain, 1984; Zisook et al., 1993). It is curious however, that age was not significantly related to personal growth particularly, if one assumes that prior loss experiences and/or expectations of death as a natural occurrence could lend itself to perceiving personal growth experiences in the older group. As Lund (1989) found, although depression, confusion, and loneliness are typical grief reactions, older bereaved spouses also demonstrate an increased awareness of the opportunity for personal growth from grief.

The other personal variable in this study that appears to relate differently to grief distress than it relates to personal growth is gender. As noted, gender was significantly related to personal growth, but not significantly related to grief distress. While the research literature lacks agreement regarding the effects of gender on bereavement outcome, considerable evidence indicates that men appear to suffer more than women (Cramer, 1993; Lee et al., 1998; Radloff, 1975; Stroebe et al., 2001; Umberson et al., 1992). However, each of these bereavement studies that examined gender and grief distress were based upon spousal loss. The current study explored other types of loss that may account for the difference in grief outcome. As noted, additional findings from this



study demonstrate that men reported more personal growth than women. This result contradicts expected findings. Yet, Tennen & Affleck (1998) argue that in studies that examine the relationship between gender and personal growth, “contradictory findings have been the rule rather than the exception” (p. 89). Given the discrepant views in the research on gender and personal growth and the fact that the personal growth research is in its infancy, this study’s findings may reveal significant new clues regarding the differences between men and women and the capacity to perceive gains from distress. On the other hand, male participants comprised only 20.4% of this study sample and included individuals who had voluntarily sought help to cope with their grief in a support group context. It is possible that a limited sample size and characteristics of the men in the study unduly influenced the results. Finally, one personal growth factor was examined in this study compared to the utilization of five grief distress factors. It is possible that the addition of personal growth factors could help discriminate the relationship between gender and personal growth.

The final personal variable, sense of coherence, demonstrated a markedly significant relationship to grief distress and personal growth from grief. As noted, these results indicate that individuals with a high sense of coherence reported less grief distress and more personal growth. It would seem understandable that individuals who perceive life as meaningful, manageable, and comprehensible rather than pointless, overwhelming, and chaotic seem better able to cope with a painful life event such as bereavement. Thus, “It is the strength of the sense of coherence of the person experiencing such events that will determine whether the outcomes will be noxious, neutral, or salutary (Antonovsky, 1987 p. 29).” The findings further suggest that a relatively stable and constant orientation

toward life appears to be more significantly related to grief distress and personal growth than all other personal and contextual variables. This implies that despite the conditions surrounding the death and the age and gender of the bereaved, those individuals with a strong sense of coherence may report less grief distress and more positive changes from the experience.

The results from this study support existing research that has found sense of coherence to be inversely related to depression and anxiety (Carstens & Spangenberg, 1997; Hart et al., 1991; Kaiser et al., 1996; Larsson et al., 2000; Linn et al., 1993; Petrie & Brook, 1992) and positively related to improved outcome in individuals confronting long-term and on-going stressors (e.g. illness) (Gritz et al., 1990; Motzer & Stewart, 1996; Mullen et al., 1993; Nesbitt & Heidrich, 2000; Nyamathi, 1993). Further, there has been no prior research that has investigated the relationship between sense of coherence and bereavement. Results from this study provide evidence that sense of coherence significantly contributes to the variability in grief outcome.

As reported, sense of coherence has been positively associated with psychological and psycho-social well-being (Hart et al., 1991; Linn et al., 1993; Petrie & Brook, 1992; Motzer, 1996; Nesbitt and Heidrich, 2000; Sagy et al., 1990; Lustig et al., 2000). Thus, results of the study add to this established research base. Similar to grief distress, however, no prior research has investigated the relationship between sense of coherence and personal growth from grief. Findings from this study contribute evidence that sense of coherence appears to be salient in whether or not one reports personal growth from grief.

It seems important to note that the difference between the individual with a strong sense of coherence and a weak sense of coherence does not imply that the individual with a stronger sense of coherence does not have intense feelings of emotional distress in response to bereavement. It is possible that he or she may be even more likely to acknowledge and express their feelings rather than deny and repress them. The acknowledgement and expression of emotion may allow the bereaved to then better manage, regulate, and choose compensatory mechanisms to cope effectively with the loss. It is also possible that the individual with a weaker sense of coherence perceives his or emotion as more intense and pervasive. Perhaps, because the individual with a strong sense of coherence has more likely transformed his or her grief to a more manageable tension, he or she is more able to perceive personal growth from the experience (Antonovsky, 1987).

The contextual variables in this study (time since death, cause of death, kinship relationship between bereaved and deceased) provide additional information about the variability of the grief response. Established grief theorist (Stroebe & Schut, 1999; Wordon, 1991) and empirical research posit that grief distress appears most acute in the months just following the death and tend to lessen in intensity after one year (Parkes, 1983; Parkes, 2001; Pasternak et al., 1993; Sanders, 1999). It is important to note that individuals may recycle through feelings of grief distress for years however, in general the acuteness of the emotional pain tends to lessen as time passes (Stroebe & Schut, 1999). Results from this study support existing research demonstrating that as more time passes since the death, the less grief distress that is reported.

The question of how time relates to personal growth remains largely unexamined in the research literature and theory (Tedeschi & Calhoun, 1996), yet existing studies suggest that as time passes, the bereaved are increasingly able to perceive positive change from the experience (Franz et al., 2001; Nolen-Hoeksema, 2001; Schaefer & Moos, 2001). Results from this study support this emergent knowledge and demonstrate that as more time passes since the death, the bereaved report more personal growth. It is possible that the death challenges the bereaved to more critically examine their life (e.g. its importance and brevity) and this experience may facilitate a gradual recognition of the strengths and/or positive changes that resulted from the loss.

The inclusion of the other contextual variables, cause of death and kinship relationship, was intended to explore the relationship among the expectedness of the loss, the differential bonds between the bereaved and deceased, grief distress, and personal growth. It was proposed that the more sudden the cause of death (accident, homicide, suicide), the more grief distress and less personal growth that would be reported. Surprisingly, results from this study did not provide evidence for this association. Findings indicated no significant relationship among causes of death and grief distress and among causes of death and personal growth. This finding contradicts existing research that demonstrates advanced warning of death as positively associated with improved outcome (Ball, 1977; Lundin, 1984; Parkes & Weiss, 1983). However, other studies have indicated no association between expectedness and improved outcome following bereavement (Gerber, 1975; Jacobs et al., 1986; Sanders, 1980). It seems plausible, that the more time one has to prepare for a death (e.g. from illness) versus a sudden and/or violent death (e.g. homicide, suicide) the more one is able to access the

personal and social resources needed to cope effectively with the loss. Conversely, it seems the more one has time to cope with a death, the more likely he or she may perceive personal growth and/or positive change. Yet, the prospect of a loved one's death does not necessarily facilitate a uniform response across all people. The unexpected outcome in this study (as well as the contradictory evidence in the research literature) seems to point towards increased significance of other individual differences (e.g. personality) and situational factors (e.g. time since death) in the grief response. The results from this study regarding sense of coherence, time since death, grief distress, and personal growth lend credence to this claim. Methodological constraints may also be responsible for divergent findings. The prevailing cause of death among the participants was illness (77.2%) with fewer reports of accident (20.4%), homicide (2.3%), and no reports of suicide.

It was expected that parents of a deceased child would report more grief distress and less personal growth than other kinship relationships (spouse, child, sibling, extended). Results from this study provided partial evidence for this link and supported comparative studies that found that the loss of a child results in more grief distress than the loss of a spouse, parent, or sibling (Cleiren, 1991; Gamino et al., 1998; Klass & Marwit, 1988-1989; Sanders, 1980; Warwick et al., 1998). The higher levels of distress may reflect the complexity and intensity of the relationship between parent and child. The sense of responsibility for the welfare of the child, the loss of potential life and immortality, and the challenge to the normative expectation that parents are to precede their children in death may all intensify grief distress. Conversely, while studies have demonstrated that parents who lost a child experienced increased compassion, appreciation for life, and perceived importance and value of significant others (Hogan,

2001; Miles & Crandall, 1983), this study proposed that parents of a deceased child would have less personal growth than other kinship relationships due to the inherent complexities of the loss. Results did not find support for this association. This finding might indicate that other factors in this study (e.g. time since death, gender) as well as other factors not examined (e.g. age of the child) may account for differences in reported personal growth.

### Implications of the Results

A primary purpose of this research was to explore the possibility that grief could include experiences of personal growth and positive change. As noted, the awareness that loss incites distress is well established in bereavement research and theory (Freud, 1917; Lindemann, 1944; Raphael, 1982; Stroebe & Schut, 1999). The recognition that grief could also facilitate personal growth, however, is a relatively new phenomenon in bereavement research and theory (Hogan, 2001; Nolen-Hoeksema, 2001; Tedeschi & Calhoun, 1989-1990; Yalom & Lieberman, 1991). Results from this study provide additional empirical evidence that the bereaved may perceive personal growth from loss. These findings have relevance for the clinical realm and could guide therapeutic interventions. For example, while the therapist attends to the client's grief distress, he or she may also stay attuned to the possibility that the client perceives him or her self as stronger, more compassionate, or changed in some other positive way because of the loss. The client may express a heightened existential awareness that could facilitate therapeutic conversations about values, beliefs, and aspects of change. The timing of such interventions seem significant, as the results of this study suggest that time is a critical variable in both grief distress and personal growth. It is probable that a bereaved client

may not perceive and could even resent the suggestion that their loss may bring positive change, yet as time passes, the client may become increasingly aware of this possibility.

The results from this study provide valuable information for bereavement research, theory, and clinical practice. The findings regarding the personal variable sense of coherence imply that despite the circumstances of the loss and/or the demographics of the bereaved it is his or her generalized orientation to life that may define the grief response. This finding has significant clinical implications that add depth to the conceptualization of the client's loss and insight regarding his or her coping strategies.

The results also support grief as a multidimensional construct that can be impacted by other personal and contextual differences. As reflected by this study and prior research, the variables that seem to consistently emerge as significantly related to grief distress are time since death (Parkes, 1983; Parkes, 2001; Pasternak et al., 1993; Sanders, 1999; Stroebe & Schut, 1999) and the age of the bereaved (Ball, 1977; Sanders, 1997; Shanfield & Swain, 1984; Zisook et al., 1993). These findings imply that treatment interventions will likely shift as time passes and the bereaved client continues to confront and cope with the impact of the loss. As noted, findings also indicate that parental loss may create more grief distress than other relational losses. This implies that parents of a deceased child may communicate and cope with loss experiences that are unique to the parent-child bond and could greatly benefit from the community and normalization provided by a group context for parental loss.

### Limitations of the Study

The limitations of this study require a cautious interpretation of the results. First, the response rate was not optimal (68%) and the sample size ( $n = 88$ ) was small which may have limited the study's statistical power. Also, the individuals who participated in the study were volunteer members of grief support groups. It is probable that these individuals differ from other bereaved adults who did not choose to seek help in coping with their grief. Further, the participants were predominately Caucasian and female (79.5%), which also limits the generalizability of the results.

There are potential confounding variables that may have impacted the results. First, participants were not asked whether or not they had sought other mental health treatment for their loss. Also, the demographic form (that asked the participants to identify the times since death, cause of death, and kinship relationship) did not include instructions for how to handle multiple deaths (e.g. list the most recent death). As a result, eight surveys cited multiple deaths that differed across time, cause, and kinship. It was decided that the data would be entered using the most recent death because it seemed most likely that the participant would answer the assessments with this death in mind. It is possible, however, that the participant answered the grief distress and/or personal growth items with various loss experiences in mind. This undermines the ability to assess the connection among the study variables.

Other limitations in this study include potential inconsistency across administration. While every attempt was made to emphasize the importance of following the outlined procedures to the grief group facilitators, the primary investigator was present at only one administration and therefore, could not ensure uniformity across



administration. Also, the nature of the grief groups used in this study prevented consistency in the administration. The primary investigator sought to have the grief group facilitator administer the survey prior to the first grief group. However, three of the five facilitators felt it prudent to meet with their grief group members first then introduce the study at the end of the meeting, and identify volunteers. Also, another grief group was comprised of widows who had already been meeting for a considerable amount of time prior to participating in the study.

Final limitations concern the instruments used in the study. First, all measures in this study relied on self-report. Also, the grief measure assessed five grief distress factors and only one personal growth factor. The lack of additional personal growth factors may have impacted the strength of results found in the study. Finally, the strength of the relationship between sense of coherence and grief distress appears curiously strong. This may indicate that the sense of coherence and grief distress measures are assessing the same construct.

### Future Research

The investigation of grief as a multidimensional concept and one that includes personal growth is in its early stages. Future studies are needed to find additional evidence for personal growth from loss. Other studies may be able to more accurately assess the construct by including additional personal growth measures. The Post-Traumatic Growth Inventory (PTGI) was included in the current study's survey packet as an ancillary measure for future research. Future research could explore the relationship between grief distress and personal growth as measured by the HGRC and the PTGI and reassess the relationship of the personal and contextual variables to personal growth with

the addition of the personal growth factors. Although this study found no significant relationship between cause of death, kinship, grief distress, and personal growth, more research is needed to discern how advanced warning and/or the nature of the bond between the bereaved and deceased may impact the grief response. Future research could target specific types of losses and increase the number of participants who endorse various losses to address the limitations found in this study. Also, studies are needed that explore how diversity and/or culture are related to the grief distress and personal growth.

The results of this study suggest that the specific factors, the personal and contextual variables, associated with grief distress and personal growth may be different. Future research could clarify the factors associated with personal growth and grief distress. For example, age was significantly related to grief distress, but not personal growth. It was expected that the same factors would relate to both grief distress and personal growth. These findings imply that grief distress and personal growth may be distinct processes influenced by distinct factors. In the current study, the only factor that appeared significant for both grief distress and personal growth was time since death. While much is known about how age, gender, and time are related to grief distress, very little is known about how these variables relate to personal growth. This study provides provisional evidence about how these variables are related and may imply that the processes are different, however more research in this area is needed. Future research could investigate not only age and gender, but could also explore other contextual variables (e.g. social support, spirituality) that were not addressed in this study and may explain the variability in personal growth.

As noted, the personal variable that appeared related to both grief distress and personal growth was sense of coherence. In fact, the relationship between sense of coherence and grief distress was markedly and negatively significant. This finding could indicate that grief distress as measured by the Hogan Grief Reaction Checklist, and sense of coherence, assess the same phenomena. Substantial evidence suggests an inverse relationship between sense of coherence and depression/anxiety (Carstens & Spangenberg, 1997; Eriksson & Lundin, 1996; Frommberger et al., 1999; Kaiser et al., 1996; Larsson et al., 2000; Linn et al., 1993; McSherry, & Holm 1994; Petrie & Brook, 1992; Wolff & Ratner, 1999). Further, Geyer (1997) contends that while an inverse relationship between sense of coherence and depression/anxiety appears in accordance with theory, the magnitude of the association needs to be explored. There seems reasonable evidence to assume that both measures (Orientation to Life Questionnaire and the Hogan Grief Reaction Checklist) may be measuring a similar, if not the same construct. Future research could examine the construct validity of these measures.

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## APPENDIX A: Tables

Table 1

Means, Standard Deviations, and Ranges for Continuous Independent Variables and  
Dependent Variables  
(N = 88)

Variable	Mean	SD	Minimum	Maximum
Independent (Personal Differences)				
Age	49.6	15.75	18	92
Sense of Coherence	17.14	14.75	14.00	50.00
Independent (Contextual Differences)				
Time	34.73	64.95	1.00	336.00
Dependent				
Grief Distress	115.48	40.70	50.00	224.00
Personal Growth	37.03	9.25	17.00	60.00

Table 2

Means and Standard Deviations for Gender, Grief Distress, and Personal Growth

<u>Gender</u>		<u>Grief Distress</u>	<u>Personal Growth</u>
Male	Mean	111.00	41.17
	N	18	18
	SD	39.36	10.26
Female	Mean	116.63	35.97
	N	70	70
	SD	41.23	8.73

Table 3

Means and Standard Deviations for Cause of Death, Grief Distress, and Personal Growth

<u>Cause of Death</u>		<u>Grief Distress</u>	<u>Personal Growth</u>
Illness	Mean	112.32	37.89
	N	68	68
	SD	38.42	9.60
Accident	Mean	131.38	33.66
	N	18	18
	SD	46.40	7.64
Homicide	Mean	79.50	38.00
	N	2	2
	SD	27.57	4.24
Total	Mean	115.48	37.03
	N	88	88
	SD	40.70	9.25

Table 4

Means and Standard Deviations for Kinship, Grief Distress, and Personal Growth

<u>Kinship Group</u>		<u>Grief Distress</u>	<u>Personal Growth</u>
Parent	Mean	135.33	35.20
	N	15	15
	SD	46.64	8.02
Spouse	Mean	108.00	38.34
	N	29	29
	SD	35.17	9.42
Child	Mean	113.74	37.48
	N	27	27
	SD	41.38	9.93
Sibling	Mean	120.20	34.40
	N	5	5
	SD	56.55	7.16
Extended	Mean	110.67	36.25
	N	12	12
	SD	40.70	9.25
Total	Mean	115.48	37.03
	N	88	88
	SD	40.70	9.26

Table 5

Scatterplot for Sense of Coherence and Grief Distress

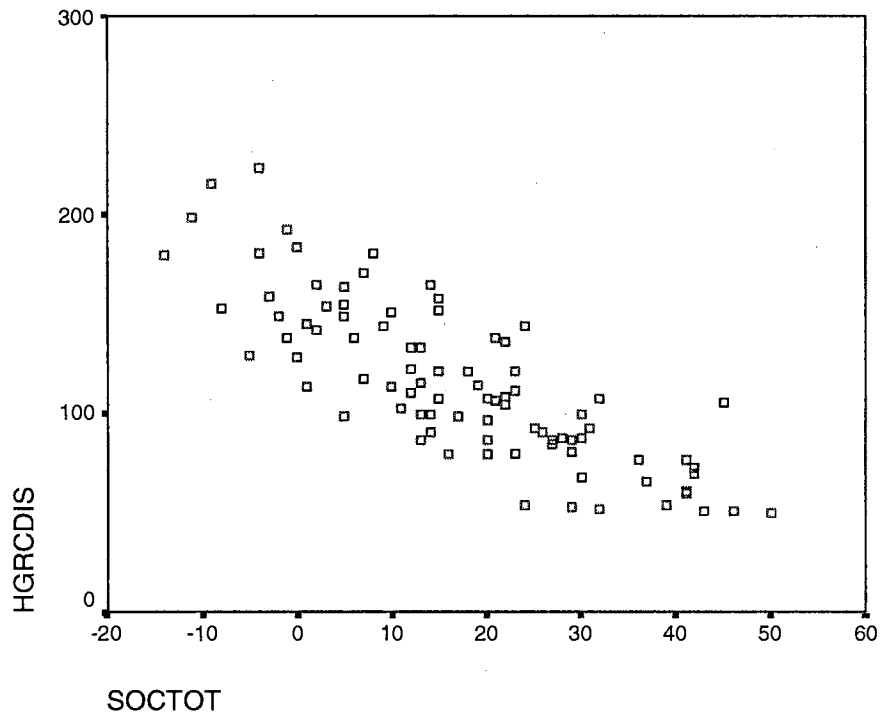


Table 6

Intercorrelations and Coefficient Alphas for Continuous Independent Variables and Dependent Variables (N =88)

Variable	1	2	3	4	
1. Age					
2. SOC	.261*	<b>.88</b>			
3. Time	.112	.184			
4. Grief Distress	-.286**	-.820**	-.288*	<b>.97</b>	
5. Personal Growth	.073	.530**	.265*	-.428**	<b>.88</b>

Note: Coefficient alphas are presented in boldface along the diagonal.

\*\*indicates that the correlation is significant at  $p < .01$ . \*indicates  $p < .05$ .

SOC: Sense of Coherence



Table 7

Hierarchical Regression Model Summary of Personal and Contextual Variables and Grief Distress

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.082	2	85	.026*
SOC			.595	1	84	.000***
Time			.018	1	83	.030*
Cause of Death			.001	2	81	.834
Kinship	.702	.663	.005	4	77	.874

\*p < .05

\*\*p < .01

\*\*\*p < .001

Table 8

Coefficients: Grief Distress

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	$\beta$	t	
1 Constant	146.497	24.463		5.988	.000
age	-.731	.270	-.283	-2.709	.008
gender	2.915	10.472	.029	.278	.781
2 Constant	160.398	14.632		10.962	.000
age	-.196	.167	-.076	-1.174	.244
gender	1.430	6.246	.014	.229	.819
SOC	-2.205	.177	-.799	-12.450	.000
3 Constant	163.758	14.384		11.385	.000
age	-.174	.163	-.067	-1.069	.288
gender	4.431	6.138	.000	.007	.994
SOC	-2.143	.175	-.777	-12.216	.000
time	-8.609	.039	-.137	-2.212	.030
4 Constant	155.678	23.604		6.595	.000
age	-.159	.168	-.061	-.947	.346
gender	2.4024	6.272	.000	.004	.997
SOC	-2.127	.179	-.771	-11.851	.000
time	-.8393	.040	-.134	-2.092	.040
cause1	6.569	17.138	.068	.383	.703
cause2	9.380	17.864	.093	.525	.601
5 Constant	147.050	26.903		5.466	.000
age	-.249	.224	-.096	-1.112	.270
gender	-.492	6.631	-.005	-.074	.941
SOC	-2.084	.188	-.755	-11.102	.000
time	-8.416	.044	-.134	-1.926	.058
cause1	13.541	20.383	.140	.664	.508
cause2	11.048	18.868	.110	.586	.560
kin1	13.510	12.657	.126	1.067	.289
kin2	8.169	10.181	.095	.802	.425
kin3	6.702	8.938	.076	.750	.456
kin4	8,829	13.370	.051	.660	.551

Table 9

Hierarchical Regression Model Summary of Personal and Contextual Variables and Personal Growth

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.055	2	85	.092
SOC			.276	1	84	.000***
Time			.024	1	83	.083
Cause of Death			.010	2	81	.527
Kinship	.408	.331	.044	4	77	.235

\*p < .05

\*\*p < .01

\*\*\*p < .001

Table 10

Coefficients: Personal Growth

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	$\beta$	t	Sig.
1 Constant	44.653	5.644		7.912	.000
age	3.037	.062	.052	.488	.627
gender	-.5082	2.416	-.223	-2.104	.038
2 Constant	42.503	4.793		8.868	.000
age	-5.242	.055	-.089	-.961	.339
gender	-4.853	2.046	-.213	-2.372	.020
SOC	.341	.058	.544	5.878	.000
3 Constant	41.621	4.761		8.742	.000
age	-5.800	.054	-.099	-1.074	.286
gender	-4.489	2.032	-.197	-2.209	.030
SOC	.325	.058	.518	5.592	.000
time	2.261	.013	.159	1.756	.083
4 Constant	38.484	7.769		4.954	.000
age	-6.728	.055	-.115	-1.219	.226
gender	-4.146	2.064	-.182	-2.008	.048
SOC	.318	.059	.507	5.385	.000
time	2.482	.013	.174	1.879	.064
cause1	3.528	5.640	.161	.626	.533
cause2	1.427	5.879	.063	.243	.809
5 Constant	32.222	8.612		3.741	.000
age	-1.42	.072	-.242	-1.984	.051
gender	-4.016	2.123	-.176	-1.1892	.062
SOC	.350	.060	.558	5.823	.000
time	2.707	.014	.190	1.935	.057
cause1	9.040	6.525	.412	1.385	.170
cause2	3.157	6.040	.138	.523	.603
kin1	9.032	4.052	.369	2.229	.029
kin2	5.507	3.259	.281	1.690	.095
kin3	3.142	2.861	.158	1.098	.276
kin4	30322	4.280	.084	.776	.440

Table 11

Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Grief Distress (1a)

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.082	2	85	.026*
Time			.065	1	84	.013*
Cause of Death			.023	2	82	.322
Kinship	.224	.134	.053	4	78	.269

\*p < .05

\*\*p < .01

\*\*\*p < .001

Table 12

Secondary Analysis Coefficients: Grief Distress (1a)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	$\beta$	t	
1 Constant	146.497	24.463		5.988	.000
age	-.731	.270	-.283	-2.709	.008
gender	2.915	10.472	.029	.278	.781
2 Constant	153.566	23.877		6.431	.000
age	-.662	.263	-.256	-2.519	.014
gender	.225	10.207	.002	.022	.983
time	-.162	.064	-.259	-2.540	.013
3 Constant	130.907	38.637		3.388	.001
age	-.573	.270	-.222	-2.127	.036
gender	-.500	10.307	-.005	-.049	.961
time	-.156	.065	-.249	-2.396	.019
cause1	16.849	28.127	.174	.599	.551
cause2	30.869	29.204	.308	1.057	.294
4 Constant	100.473	42.580		2.360	.021
age	-.814	.349	-.315	-2.332	.022
gender	-1.139	1.624	-.011	-.107	.915
time	-.151	.069	-.240	-2.172	.033
cause1	42.815	32.386	.443	1.322	.190
cause2	37.893	29.983	.378	1.264	.210
kin1	44.420	19.783	.412	2.245	.028
kin2	23.124	16.170	.269	1.430	.157
kin3	18.602	14.219	.212	1.308	.195
kin4	16.468	21.394	.094	.770	.444

Table 13

Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Grief Distress (1b)

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.082	2	85	.026*
Cause of Death			.031	2	83	.244
Kinship			.064	4	79	.202
Time	.224	.134	.047	1	78	.033*

\*p < .05

\*\*p < .01

\*\*\*p < .001

Table 14

Secondary Analysis Coefficients: Grief Distress (1b)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	$\beta$	t	Sig.
1 Constant	146.497	24.463		5.988	.000
age	-.731	.270	-.283	-2.709	.008
gender	2.915	10.472	.029	.278	.781
2 Constant	109.584	38.657		2.835	.006
age	-.636	.276	-.246	-2.307	.024
gender	2.614	10.513	.026	.249	.804
cause1	30.791	28.293	.319	1.088	.280
cause2	43.837	29.507	.437	1.486	.141
3 Constant	77.215	42.169		1.831	.071
age	-.917	.354	-.355	-2.591	.011
gender	3.209	10.677	.032	.301	.765
cause1	61.345	31.968	.635	1.919	.059
kin1	46.761	20.213	.435	2.313	.023
kin2	22.781	16.545	.265	1.377	.172
kin3	11.251	14.131	.128	.796	.428
kin4	17.834	21.882	.102	.815	.418
4 Constant	100.473	42.580		2.360	.021
age	-.814	.349	-.315	-2.332	.022
gender	-1.139	10.624	-.011	-.107	.915
cause1	42.815	32.386	.43	1.322	.190
cause2	37.893	29.983	.378	1.264	.210
kin1	44.420	19.783	.413	1.322	.190
kin2	23.124	16.170	.269	1.430	.157
kin3	18.602	14.219	.212	1.308	.195
kin4	16.468	21.394	.094	.770	.033
time	-.151	.069	-.240	-2.172	.033



Table 15

Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Grief Distress (1c)

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.082	2	85	.026*
Kinship			.056	4	81	.271
Time			.068	1	80	.011*
Cause of Death	.224	.134	.018	2	78	.415
*p < .05		**p < .01		***p < .001		

Table 16

Secondary Analysis Coefficients: Grief Distress (1c)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	$\beta$	t	
1 Constant	146.497	24.463		5.988	.000
age	-.731	.270	-.283	-2.709	.008
gender	2.915	10.472	.029	.278	.781
2 Constant	142.998	24.799		5.766	.000
age	-.968	.348	-.374	-2.784	.007
gender	1.655	10.748	.016	.154	.878
kin1	32.483	15.599	.302	2.082	.040
kin2	23.556	16.424	.274	1.434	.155
kin3	10.997	14.118	.125	.779	.438
kin4	14.935	21.260	.085	.702	.484
3 Constant	147.218	24.009		6.132	.000
age	-.842	.339	-.326	-.264	.792
gender	-2.780	10.520	-.028	-.264	.015
kin1	36.189	15.134	.336	2.391	.019
kin2	24.099	15.865	.280	1.519	.133
kin3	19.873	14.055	.226	1.414	.161
kin4	15.151	20.536	.087	.738	.463
time	-.174	.067	-.278	-2.611	.011
4 Constant	100.473	42.580		2.360	.021
age	-.814	.349	-.315	-2.332	.022
gender	-1.139	10.624	-.011	-.107	.915
kin1	44.420	19.783	.413	2.245	.028
kin2	23.124	16.170	.269	1.430	.157
kin3	18.602	14.219	.212	1.308	.195
kin4	16.468	21.394	.094	.770	.444
time	-.151	.069	-.240	-2.272	.033
cause1	42.815	32.386	.443	1.322	.190
cause2	37.893	29.983	.378	1.264	.210

Table 17

Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Personal Growth (2a)

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.055	2	85	.092
Time			.056	1	84	.024*
Cause of Death			.026	2	82	.298
Kinship	.147	.049	.011	4	78	.913

\*p < .05

\*\*p < .01

\*\*\*p < .001

Table 18

Secondary Analysis Coefficients: Personal Growth (2a)

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	$\beta$	t	Sig.
1 Constant	44.653	5.644		7.912	.000
age	3.037	.062	.052	.488	.627
gender	-.5082	2.416	-.223	-2.104	.038
2 Constant	43.165	5.544		7.786	.000
age	1.596	.061	.027	.261	.794
gender	-4.516	2.370	-.198	-1.906	.060
time	3.414	.015	.240	2.303	.024
3 Constant	42.189	8.963		4.707	.000
age	-5.269	.063	-.009	-.084	.933
gender	-4.068	2.391	-.178	-1.701	.093
time	3.562	.015	.250	2.356	.021
cause1	1.991	6.525	.091	.305	.761
cause2	-1.787	6.775	-.078	-.264	.793
4 Constant	40.042	10.144		3.947	.000
age	-4.717	.083	-.080	-.567	.562
gender	-3.822	2.531	-.171	-1.544	.127
time	3.822	.017	.268	2.314	.023
cause1	4.125	7.715	.188	.535	.594
cause2	-1.351	7.143	-.059	-.189	.851
kin1	3.842	4.713	.157	.815	.417
kin2	2.996	3.852	.153	.778	.439
kin3	1.144	3.387	.057	.338	.736
kin4	2.040	5.097	.051	.400	.690

Table 19

Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Personal Growth (2b)

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.055	2	85	.092
Cause of Death			.024	2	83	.351
Kinship			.011	4	79	.921
Time	.147	.049	.059	1	78	.023*

\*p < .05

\*\*p < .01

\*\*\*p < .001

Table 20

Secondary Analysis Coefficients: Personal Growth (2b)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	$\beta$	t	
1 Constant	44.653	5.644		7.912	.000
age	3.037	.062	.052	.488	.627
gender	-.5082	2.416	-.223	-2.104	.038
2 Constant	47.053	8.958		5.253	.000
age	9.062	.064	.015	.142	.888
gender	-4.4778	2.436	-.210	-1.961	.053
cause1	-1.189	6.556	-.054	-.181	.856
cause2	-4.745	6.837	-.208	-.694	.490
3 Constant	45.945	10.085		4.556	.000
age	-2.109	.085	-.036	-.249	.804
gender	-.5011	2.553	-.220	-1.936	.053
cause1	-.578	7.645	-.026	-.076	.940
kin1	3.248	4.834	.133	.672	.504
kin2	3.083	3.957	.158	.779	.438
kin3	3.010	3.379	.151	.891	.376
kin4	1.693	5.233	.043	.324	.747
4 Constant	40.042	10.144		3.947	.000
age	-4.717	.083	-.080	-.567	.572
gender	-3.908	2.531	-.171	-1.544	.127
cause1	4.125	7.715	.188	.535	.594
cause2	-1.351	7.143	-.059	-.189	.851
kin1	3.842	4.713	.157	.815	.417
kin2	2.996	3.852	.153	.778	.439
kin3	1.144	3.387	.057	.338	.736
kin4	2.040	5.097	.051	.400	.690
time	3.822	.017	.268	2.314	.023

Table 21

Hierarchical Regression Model Summary for Secondary Analysis of Personal and Contextual Variables and Personal Growth (2c)

Predictors	R <sup>2</sup>	R <sub>adj</sub>	R <sup>2</sup> <sub>change</sub>	df1	df2	Sig. F <sub>change</sub>
Age & Gender			.055	2	85	.092
Kinship			.012	4	81	.900
Time			.052	1	80	.032*
Cause of Death	.147	.049	.028	2	78	.280
*p < .05                      **p < .01                      ***p < .001						

Table 22

Secondary Analysis Coefficients: Personal Growth (2c)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	$\beta$	t	
1 Constant	44.653	5.644		7.912	.000
age	3.037	.062	.052	.488	.627
gender	-.5082	2.416	-.223	-2.104	.038
2 Constant	44.595	5.866		7.602	.000
age	5.376	.082	.009	.065	.948
gender	-5.124	2.542	-.225	-2.015	.047
kin1	-7.042	3.690	-.003	-.019	.985
kin2	2.067	3.885	.106	.532	.596
kin3	2.324	3.340	.117	.696	.488
kin4	-.175	5.029	-.004	-.035	.972
3 Constant	43.753	5.748		7.611	.000
age	-1.977	.081	-.034	-.243	.808
gender	-4.239	2.519	-.186	-1.683	.096
kin1	-.811	3.624	-.033	-.224	.824
kin2	1.958	3.799	.100	.516	.608
kin3	.552	3.365	.028	.164	.870
kin4	-.218	4.917	-.005	-.044	.965
time	3.479	.016	.244	2.177	.032
4 Constant	40.042	10.144		3.947	.000
age	-4.717	.083	-.080	-.567	.572
gender	-3.098	2.531	-.171	-1.544	.172
kin1	3.842	4.713	.157	.815	.417
kin2	2.996	3.852	.153	.778	.439
kin3	1.144	3.387	.057	.338	.736
kin4	2.040	5.097	.051	.400	.690
time	3.822	.017	.268	2.314	.023
cause1	4.125	7.715	.188	.535	.594
cause2	-1.351	7.143	-.059	-.189	.851



APPENDIX B—INFORMED CONSENT FORM

## Informed Consent for Participation in Research

You are invited to participate in a study exploring how people cope with the death of a loved one. **Participation in this study involves the completion of three questionnaires, which should take no longer than 25 minutes.**

Possible benefits of participating in this study include an increased awareness of your experiences with grief including the identification of feelings, thoughts, and beliefs about loss and grief. It is also possible that you may not perceive benefits from participating in this study. There are no foreseeable risks of participating in this study. However, questions do ask about your feelings and thoughts related to the loss of your loved one; this may be viewed by some participants as being sensitive. The information from the study will assist in strengthening our understanding of grief.

**Participation in this study is completely voluntary.** If you choose to participate, please complete the three questionnaires and place them inside the envelope that has been provided to you. There is no penalty for not participating and you have the right to withdraw your consent in this study at any time without penalty.

**All information collected in this study is strictly confidential.** No individuals will be identified. Surveys will be tracked by numbers only and no identifying information will be collected. The informed consent will be separated from the completed questionnaire to ensure that your identity remains anonymous and confidential.

**Your participation in this study is greatly appreciated.** If you have any questions concerning this study contact Jennifer Dobson, M.S., 434 Willard Hall, (4905) 744-6040 or Teresa M. Bear, Ph.D., 2435 Main Hall (OSU-Tulsa), (918) 594-8516. Questions can also be directed to Sharon Bacher, Institutional Review Board (IRB) Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, 74078,

“I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.”

---

Participant Name (Please Print)

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

APPENDIX C—SCRIPT

## Script

You are invited to participate in a study exploring how people cope with the death of a loved one. Participation in this study would involve completing three questionnaires and a demographics sheet. Completion of these forms should take no longer than 25 minutes. Your participation is voluntary and you are free to withdraw from the study at any time. If you participate, you will not write your name on any of the questionnaires, so your responses will be kept confidential and anonymous. We are hopeful that the results of this study will strengthen our understanding of grief and increase our awareness of how people cope with the loss of a loved one.

APPENDIX D—DEMOGRAPHIC FORM

### Demographic Information

Directions: Please answer each question by filling in or checking the appropriate blank.

1) How old are you? Age \_\_\_\_\_

2) Gender: \_\_\_\_\_ Female \_\_\_\_\_ Male

3) Race: (check all that apply)

\_\_\_\_\_ a) African American

\_\_\_\_\_ d) Caucasian/White

\_\_\_\_\_ b) American Indian/Native American \_\_\_\_\_ e) Hispanic/Latino/Latina

\_\_\_\_\_ c) Asian/Asian American

\_\_\_\_\_ f) Other: \_\_\_\_\_

4) Please indicate your kinship relationship to the deceased: \_\_\_\_\_  
(e.g. spouse, mother, friend, cousin)

5) What was the cause of your loved one's death? \_\_\_\_\_  
(e.g. illness, accident, suicide, homicide)

6) How many months have passed since your loved one's death? \_\_\_\_\_

## APPENDIX E—MEASURES

## The Hogan Grief Reaction Checklist

Developed by Nancy Hogan, Ph.D.

**Instructions:** This questionnaire consists of a list of thoughts and feelings that you may have had since your loved one died. Please read each statement carefully, and choose the number that best describes the way you have been feeling during the past two weeks, including today. Circle the number besides the statement that best describes you. Please do not skip any items.

- 1 Does not describe me at all
- 2 Does not describe me
- 3 Describes me fairly well
- 4 Describes me well
- 5 Describes me very well

1. My hopes are shattered	1	2	3	4	5
2. I have learned to cope better with life	1	2	3	4	5
3. I have little control over my sadness	1	2	3	4	5
4. I worry excessively	1	2	3	4	5
5. I frequently feel bitter	1	2	3	4	5
6. I feel like I am in shock	1	2	3	4	5
7. Sometimes my heart beats faster than it normally does for no reason	1	2	3	4	5
8. I am resentful	1	2	3	4	5
9. I am preoccupied with feeling worthless	1	2	3	4	5
10. I feel as though I am a better person	1	2	3	4	5
11. I believe I should have died and he or she should have lived	1	2	3	4	5



12. I have a better outlook on life	1	2	3	4	5
13. I often have headaches	1	2	3	4	5
14. I feel a heaviness in my heart	1	2	3	4	5
15. I feel revengeful	1	2	3	4	5
16. I have burning in my stomach	1	2	3	4	5
17. I want to die to be with him or her	1	2	3	4	5
18. I frequently have muscle tension	1	2	3	4	5
19. I have more compassion for others	1	2	3	4	5
20. I forget things easily, e.g. names, telephone numbers	1	2	3	4	5
21. I feel shaky	1	2	3	4	5
22. I am confused about who I am	1	2	3	4	5
23. I have lost my confidence	1	2	3	4	5
24. I am stronger because of the grief I have experienced	1	2	3	4	5
25. I don't believe I will ever be happy again	1	2	3	4	5
26. I have difficulty remembering things from the past	1	2	3	4	5
27. I frequently feel frightened	1	2	3	4	5
28. I feel unable to cope	1	2	3	4	5
29. I agonize over his or her death	1	2	3	4	5
30. I am a more forgiving person	1	2	3	4	5
31. I have panic attacks over nothing	1	2	3	4	5
32. I have difficulty concentrating	1	2	3	4	5
33. I feel like I am walking in my sleep	1	2	3	4	5

34. I have shortness of breath	1	2	3	4	5
35. I avoid tenderness	1	2	3	4	5
36. I am more tolerant of myself	1	2	3	4	5
37. I have hostile feelings	1	2	3	4	5
38. I am experiencing feelings of dizziness	1	2	3	4	5
39. I have difficulty leaning new things	1	2	3	4	5
40. I have difficulty accepting the permanence of death	1	2	3	4	5
41. I am more tolerant of others	1	2	3	4	5
42. I blame others	1	2	3	4	5
43. I feel like I don't know myself	1	2	3	4	5
44. I am frequently fatigued	1	2	3	4	5
45. I have hope for the future	1	2	3	4	5
46. I have difficulty with abstract thinking	1	2	3	4	5
47. I feel hopeless	1	2	3	4	5
48. I want to harm others	1	2	3	4	5
49. I have difficulty remembering new information	1	2	3	4	5
50. I feel sick more often	1	2	3	4	5
51. I reached a turning point where I began to let go of some of my grief	1	2	3	4	5
52. I often have back pain	1	2	3	4	5
53. I am afraid that I will lose control	1	2	3	4	5
54. I feel detached from others	1	2	3	4	5

55. I frequently cry	1	2	3	4	5
56. I startle easily	1	2	3	4	5
57. Tasks seem insurmountable	1	2	3	4	5
58. I get angry often	1	2	3	4	5
59. I ache with loneliness	1	2	3	4	5
60. I am having more good days than bad	1	2	3	4	5
61. I care more deeply for others	1	2	3	4	5





13. How often do you have feelings that you're not sure you can keep under control?

1  
**very often**

2

3

4

5

6

7  
**very seldom  
or never**

## Post-Traumatic Growth Inventory

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

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

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

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

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

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

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

5 = I experienced this change to a very great degree as a result of my crisis.

\_\_\_ 1. I changed my priorities about what is important in life.

\_\_\_ 2. I have a greater appreciation for the value of my own life.

\_\_\_ 3. I developed new interests.

\_\_\_ 4. I have a greater feeling of self-reliance.

\_\_\_ 5. I have a better understanding of spiritual matters.

\_\_\_ 6. I more clearly see that I can count on people in times of trouble.

\_\_\_ 7. I established a new path for my life.

\_\_\_ 8. I have a greater sense of closeness with others.

\_\_\_ 9. I am more willing to express my emotions.

\_\_\_ 10. I know better that I can handle difficulties.

\_\_\_ 11. I am able to do better things with my life.

\_\_\_ 12. I am better able to accept the way things work out.

- \_\_\_ 13. I can better appreciate each day.
- \_\_\_ 14. New opportunities are available which wouldn't have been otherwise.
- \_\_\_ 15. I have more compassion for others.
- \_\_\_ 16. I put more effort in my relationships.
- \_\_\_ 17. I am more likely to change things which need changing.
- \_\_\_ 18. I have a stronger religious faith.
- \_\_\_ 19. I discovered that I'm stronger than I thought I was.
- \_\_\_ 20. I learned a great deal about how wonderful people are.
- \_\_\_ 21. I better accept needing others.



APPENDIX F – INSTITUTIONAL REVIEW BOARD APPROVAL

Oklahoma State University  
Institutional Review Board

Protocol Expires: 12/11/02

Date: Wednesday, December 12, 2001

IRB Application No ED0257

Proposal Title: THE RELATIONSHIP OF PERSONAL AND CONTEXTUAL DIFFERENCES TO GRIEF  
DISTRESS AND PERSONAL GROWTH

Principal  
Investigator(s):

Jennifer Dobson  
2435 Main Hall  
Tulsa, OK 74078

Teresa Bear  
2435 Main Hall  
Tulsa, OK 74106

Reviewed and  
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

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Dear PI :


Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following;

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,

  
Carol Olson, Chair



VITA

Jennifer L. Dobson

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE RELATIONSHIP OF PERSONAL AND CONTEXTUAL DIFFERENCES TO  
GRIEF DISTRESS AND PERSONAL GROWTH

Major Field: Educational Psychology; Specialization area: Counseling Psychology

Biographical:

Education: Received Bachelor of Arts degree in Psychology from Oklahoma State University, Norman, Oklahoma in 1996, and completed the requirements for the Master of Science with a major in Applied Behavioral Studies with a specialization in Community Counseling at Oklahoma State University, Stillwater, Oklahoma, 1999. Completed the requirements for the Doctor of Philosophy in Educational Psychology with a specialization in Counseling Psychology at Oklahoma State University in August, 2003.

Experience: 2002-present, Psychology Intern, Counseling & Psychological Services Center (APA-accredited), University of Georgia, Athens, Georgia; 2001-2002, Intake Counselor, University Counseling Services, Oklahoma State University, Stillwater, Oklahoma; 2000-2001, Doctoral Practicum, Family & Children's Services, Tulsa, Oklahoma; 1999-2000, Doctoral Practicum, Marriage & Family Clinic: Counseling Psychology Clinic, Oklahoma State University, Stillwater, Oklahoma; 1999-2000, Doctoral Practicum, Psychological Services Center, Oklahoma State University, Stillwater, Oklahoma; 1999-1998, Master's Practicum, Domestic Violence Intervention Services, Tulsa, Oklahoma; 1999, Affiliate Contract Therapist, Domestic Violence Intervention Services, Tulsa, Oklahoma; and 1998-1999, Psychiatric Technician, Laureate Psychiatric Hospital, Tulsa, Oklahoma.

Administrative/Committee Experience: 2002-present, Member, Intake Committee, Counseling & Psychological Services Center, University of Georgia, Athens, Georgia and 2000-2001, Student Representative, Counseling Psychology Doctoral Program, Oklahoma State University, Stillwater, Oklahoma.

Professional Memberships: American Psychological Association (APA), Graduate Student Affiliate; Division 17 (Counseling Psychology); Division 35 (The Society for the Psychology of Women)