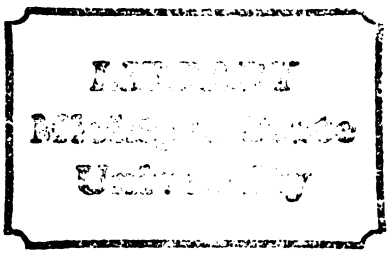

This is to certify that the

dissertation entitled

THE DEVELOPMENT, RELIABILITY, AND VALIDITY OF AN INSTRUMENT DESIGNED TO MEASURE GRIEF

presented by

Diane Karen Deutsch

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Counseling Psychology

Major professor

Date 8/20/87

THE DEVELOPMENT, RELIABILITY, AND VALIDITY OF AN INSTRUMENT DESIGNED TO MEASURE GRIEF

By

Diane Karen Deutsch

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Personnel Services,
and Educational Psychology

1982

ABSTRACT

THE DEVELOPMENT, RELIABILITY, AND VALIDITY OF AN INSTRUMENT DESIGNED TO MEASURE GRIEF

By

Diane Karen Deutsch

This study was undertaken in an effort to develop and validate an instrument which would measure a construct of grief. Such an instrument would be a valuable research and clinical tool.

Grief is assumed to result from various losses, but especially from the death of a person significant to the bereaved. The grief response to loss is described by many theorists. Grieving is defined as a normal, universal healing response to loss. Grief is distinguished from pathological variants of responses to loss, which are primarily characterized by depression. This distinction served as the basis for the validity studies of the instrument.

The instrument developed to measure grief was titled The Response to Loss Instrument (RLI). The variables of the grief response to loss were organized according to six dimensions of the mourning process: the physical, the emotional, the cognitive, the spiritual, the behavioral, and the imaginative.

RLI and a measure of stress, The Life Experiences Survey, and The Beck Depression Inventory, a measure of depression, were given to

152 subjects. Some subjects were in groups for the recently bereaved, and other subjects were contacted through college classes.

The reliability of the total scale and the subscales of the instrument as measured by Cronbach's alpha was .95 for the total scale and between .88 and .73 for the subscales.

The validity of the RLI was investigated by testing seven hypotheses, six of which were supported. The imaginative scale was not able to distinguish a severe-depression group from a no-depression group. The RLI was, however, able to distinguish a depressive response to loss from a normal grief response on a measure of the difference between the Cognitive scale and the Emotional scale, a measure interpreted to be a measure of defensive processes directed against grief. The Physical scale was also able to distinguish a severe-depression group from a no-depression group.

Initial reliability and validity studies of the RLI indicate sufficient psychometric properties to warrant continuing development of the RLI as a clinical assessment tool.

ACKNOWLEDGMENTS

This dissertation year has been a difficult year, marked by important endings and equally important beginnings. Loss and grief are themes intertwined throughout the work and the life of this year. Various people have contributed to the completion of this project by encouraging my persistence and my skills; others shared the process of finding meaning in our beginnings and endings.

Norm Kagan served as my major professor and, by modeling a successful professional counseling psychologist, helped me define my own professional identity. At crucial points in my graduate career, Norm's expressed belief in my capabilities gave me the courage to face difficult tasks. In the process of writing this dissertation, Norm has proven invaluable as an editor by helping me to formulate and express my ideas clearly. I feel a deep appreciation for his personal involvement and concern for me as his student and for his continuing support for my developing abilities as a researcher and psychologist.

The person most responsible for my interest and research in the area of loss and grief is John Schneider. He taught me about the importance of grieving and of allowing time to experience the loss aspects of life's transitions. We have shared together the search for understanding grief, and we have shared our own endings with each other. John has influenced my thinking about loss and my living with

grief. The work of this project took on new excitement when discussed with John. His influence will extend far beyond the work of this project.

Judith Taylor, who willingly served as a committee member, gave invaluable advice about statistical methodology. Most important, she helped me sort out the difference between the statistical significance and the clinical significance of the results of my research. She reminded me when necessary to focus on the clinical development of the instrument, rather than getting bogged down in the statistical complexities of instrument development. She encouraged an intuitive approach to understanding the data, which was greatly appreciated.

Bill Hinds has been a helpful and supportive teacher during the course of my graduate education. He made invaluable suggestions for the improvement of the organization and readability of this project.

The confidence of my committee in my abilities helped me to continue to strive for the furthest reaches of my capacities as a researcher.

I am also indebted to the subjects in this study, many of whom had experienced a significant loss. Their willingness to respond to the instrument in the midst of mourning made this dissertation possible.

Pat Terry, my computer consultant, was especially helpful and a calming influence during the days of analysis on the computer. His knowledge and personal style are most appreciated.

Others who have beem important to me this year because of our shared process of searching and finding meanings in our beginnings

and endings. Karen Johnson, Anita Buckwalter, Lynn Pier-Fitzgerald, Wendy Fielder, and Jim Heavenrich were especially important because they shared openly with me their grief experiences and the wisdom that comes from remaining vulnerable and open in the face of loss. They were warm and caring companions who helped me to laugh during this dissertation year.

Finally and most important, to Bill I am most grateful as he shared with me on a daily basis the victories and defeats of this research. He helped me put into perspective the importance of this project when I felt overwhelmed, and he offered his real assistance during times of need. Most important, I always felt his love, patience, and belief in me undergirding our life together.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

THE PROBLEM

General Statement

The purpose of this study is the development and initial evaluation of an instrument which purports to measure mourning.

Specific Problem

Grief and morning are well described in the literature, but instrumentation is not developed to measure a construct of grief and mourning. Mourning is assumed to result from various losses, especially the death of a close family member (Faschingbauer, Devaul, & Zisook, 1977), This study uses the term "mourning" or "uncomplicated mourning" as defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM III), 1980 guidelines. Uncomplicated mourning is a normal reaction to a significant loss, especially the death of a loved person. Reactions to the loss include such symptoms as poor appetite, weight loss, and insomnia. These responses are regarded as normal by the individual with uncomplicated mourning. Duration of these reactions varies among different cultural groups. Responses are strongest the first two or three months after the loss and then taper off over time with symptoms increasing at anniversaries associated with the loss. The DSM III (1980) contrasts uncomplicated mourning with depression, with which it is sometimes confused by the

clinician. Development of a clinical depression but not uncomplicated mourning is manifested by preoccupation with (1) worthlessness, (2) prolonged and marked functional impairment, and (3) marked psychomotor retardation sometimes accompanied with a strong desire to die. Normal grief is also to be distinguished from pathological variants of grief such as chronic mourning and delayed or inhibited grief, both of which have as a common symptom, acute depression (Bowlby, 1980). Pathological grief symptomology is expressed in (1) an inability to cry, (b) numerous physical ailments, (3) excessive and prolonged depression, and (4) obsessive, self-destructive behavior (Folta, 1981).

The manifestations of normal mourning were conceptualized by Freud (1917) as the result of giving up the satisfactions and need-fulfilling functions provided in the past by the deceased and now no longer available due to the loss. Depression was conceptualized by Beck (1972) to be the result of the activation by some disappointing or stressful life event of idiosyncratic and systematic distorted cognitions that force an individual to interpret his/her future and himself/herself in a negative way.

The development of a depressive disorder is significantly correlated with stressful life events, especially losses and exits from the social field (Paykel, 1979). The stress of the loss of someone or something valued by the bereaved may result in either uncomplicated mourning, the term used in this study, or in disordered variants of mourning. Disordered variants of mourning, chronic mourning, inhibited mourning, and post-traumatic stress disorder are characterized

by depression according to the DSM III (1980), Bowlby (1980), and Engel (1967).

Researchers investigating the role of loss events in the development of a depressive response to loss have available various measures of depression such as the Minnesota Multiphasic Personality Inventory (MMPI), the Beck Depression Inventory (BDI), and the inventory designed for epidemiological research developed by Feighner, Robins, Guze et al. (1972). However, a nonpathological response, uncomplicated mourning, as a response to loss is not operationalized or presently measurable through an accepted instrument. This has limited the investigation of the relationship between pathological and nonpathological responses to the stressful life events of loss and exits from the social field (Tennant, Bebbington, & Hurry, 1981).

Determining the role of life events in the development of depressive illness and the impact of depression on grieving is gaining increasing recognition as a productive area of research because of the interest in understanding the factors influencing the development of depression. A recent trend in research is also the investigation of the resilience shown by some individuals in the face of extreme stress in order to understand why some individuals experiencing extreme stress do not develop psychological disorders such as depression. This reslience has been labeled the "hardiness factor" by researchers Kolbsa, Maddi, and Kahn (in press) and Kobasa (1979). Personality factors of commitment, internal locus of control, and interpreting stress as a challenge have distinguished subjects who cope well with stress from those who developed mental or physical illness in response

to stress. Grieving is recognized as a universal (Rosenblatt, Walsh, & Jackson, 1976), healing response to loss (Engel, 1962; Schneider, in press), and with instrumentation could be investigated as another hardiness factor.

The development of such an instrument which would measure mourning as a normal, universal healing response to loss is the specific purpose of this study.

Need for the Study

The experience of loss is universal. Each stage of life is a balance between losses and gains; from weaning to death we lose assumptive worlds (Parkes, 1975) and are challenged to create new meaning structures, new identities, and new relationships in the wake of the inevitable changes brought about by the losses of death, aging, illness, relocation, and the natural developmental losses such as leaving home, graduation, marriage, and children growing up and leaving home. A cross-cultural study by Rosenblatt, Walsh, and Jackson in 1976 documents the universality of mourning as a natural response to loss.

Mourning is a complex response of the individual to loss. Schneider (1981) categorized the responses to loss into emotional, physical, imaginative, spiritual, behavioral, and cognitive dimensions. Theorists of mourning--Sigmund Freud, Eric Lindemann, George Engel, Colin Murray Parkes, Peter Marris, and John Bowlby--observed the mourning process, and their descriptions of mourning can be placed into these dimensions. A further discussion of these dimensions is found in Chapter II.

Failure to grieve and mourn the loss of a loved one or the separation from a loved one is associated with the development of a variety of disorders (Arieti & Bemporad, 1978). Arieti's theory of the etiology of depression states that depression results from the inability to experience the emotions and thoughts of mourning. If an individual is able to tolerate the sorrow associated with the loss, then depression is avoided. Bowlby (1980) also postulated that depressive symptoms result from the failure of mourning to take a normal course. Two forms of the failure to grieve normally were postulated by Bowlby: (1) chronic mourning, the inability to resolve the loss accompanied by intense and unmitigated grief responses and (2) inhibited mourning, the failure to experience any of the thoughts, feelings, or behaviors of mourning. Both these atypical forms of mourning are characterized principally by depressive symptoms according to Bowlby (1980).

Because of the serious consequences postulated for individuals who do not grieve and mourn, knowing whether or not someone is grieving normally and knowing how they are responding to the loss is an important diagnostic question for the clinician and physician. The presently available instrumentation, measures of depression, is able to measure the extent to which depression is a part of an individual's response to loss. A measure of depression, however, gives only a part of the clinical picture of bereavement. The actual mechanisms of the mourning process also need to be measured and evaluated in order for an accurate understanding of the status of the bereaved individual to be made. If such an instrument were available, it would be possible

to determine if the individual was inhibiting their grief, chronically grieving, or grieving normally. Measuring the cognitive, emotional, spiritual, physical, and behavioral responses to loss would also give more specific information about the grief process of the individual which could be used to develop a treatment plan for those seeking help for a loss.

An instrument could, if validated, be administered during treatment to assess the effect of grief counseling on the progress of the client through mourning.

A validated reliable measure of the normal mourning process could also be used in research to determine if responses to the death of a significant person are similar to other types of losses such as loss of home, job, or possessions. The existing literature which describes mourning is based on interviews with individuals bereaved by the death of a significant person. Only two researchers, Parkes (1972) and Marris (1975), investigated losses other than death. Parkes interviewed patients with a recent amputation and Marris, individuals relocated because of slum clearance. Both concluded from their interviews that amputees and dislocated persons experience mourning. Freud (1917) mentioned grief in response to the loss of an abstraction such as fatherland, freedom, or other ideals, and Bowlby (1980) attributed the mourning response to separations from beloved persons. Schneider (1981) expanded the nature of loss to include internal and external events which bring about change. (See Table 1.)

Testing the hypothesis that mourning results from a variety of losses such as loss of home, divorce, flood, chronic illness, etc., would be possible with a valid and reliable measure of the normal mourning based on response to death and separations from a significant individual. Parkes (1972) expressed concern that some losses because of their magnitude, characteristic, or because of the age of the bereaved may carry a special risk of depression, rather than growth. An instrument measuring mourning could be used to investigate different populations with different types of losses to determine which groups of people are especially at risk. Conversely, exploration of which populations with what types of loss are especially able to grieve and resolve their loss in a growthful manner would be possible. Research in this area would contribute to the "hardiness" research of Maddi and Kolbasa and Kahn (1979, in press), who are interested in the sources of strength and coping in personality.

This instrument could also help determine how ubiquitous mourning is within our society and which losses require grief and mourning and which ones do not require a grief response.

Theory

The grief syndrome and the process of mourning refers to a specific syndrome of bodily, emotional, cognitive, behavioral, and spiritual changes that the bereaved individual usually expresses. Exceptions are atypical cases in which grief is delayed or prolonged in some way which makes the individual susceptible to physical and/or psychological illness. In this study, mourning refers to the entire

psychosocial process of response to bereavement from initial coping strategies to grieving to resolution of the loss. Grief will refer to the complex bodily, emotional, cognitive, behavioral, and spiritual changes manifested during the second phase, the grieving phase of mourning.

Modern studies of mourning began with a seminal paper by Freud in 1917, "Mourning and Melancholia." He listed four characteristics of mourning: (1) painful dejection, (2) cessation of interest in the outside world, (3) loss of capacity to love, and (4) inhibition of activity. Freud based his observations on a small number of cases, and in the introduction to his 1917 paper cautioned against any claim to general validity.

Lindemann (1944, 1945) observed grief in a large number of individuals and identified the stages of normal grief: (1) initial shock, (2) intense effects of sadness, (3) withdrawal from the environment, (4) protest of the loss, and (5) a gradual resolution of the grief. He hypothesized, based on 101 bereaved survivors of the Coconut Grove fire, that the inability to grieve normally following loss results in a greater susceptibility to psychosomatic illness or to other serious psychological difficulties.

Engel (1962) built upon Lindemann's work. He continued to investigate mourning in a medical setting. He proposed that the type of relationship with the deceased influenced the eventual outcome of mourning. Relationships characterized by dependency or ambivalence predisposed the bereaved to a more difficult resolution of mourning. Engel described mourning as beginning in shock, disbelief, and denial

of the painful character of the loss and progressing to an increasing awareness of the pain of the loss expressed by acute sadness, weeping, anguish and despair, and anger. Resolution of the loss is aided by an identification of the admired qualities of the deceased and a continuing appreciation for these qualities of the bereaved.

Parkes (1965, 1972, 1975, 1981) has carried out a number of empirical studies on widows and widowers in Great Britain and the United States. His primary research thrust was to distinguish between typical, uncomplicated bereavement and its variants: chronic grief, inhibited grief, and delayed grief. Through structured, systematic interviews with the recently bereaved, he investigated the mediating, antecedent, and concurrent variables determining the course of mourning. Mourning, according to Parkes, involves searching for the absent or dead person, recognizing the permanence of the loss, and pining and yearning for the deceased until eventually real interest in the world returns.

Marris (1958, 1975), using naturalistic observations of widows and the victims of slum clearance, developed a comprehensive theory about the response to loss which applies to losses other than those caused by a death. His theory includes the formulation of a "conservative impulse." This refers to the desire to return to the time before the loss, and the natural resistance to change. He also theorized that mourning is resolved not by finding a substitute for what was lost, but by abstracting what was fundamentally important in the relationship and reformulating these values in order to find meaning and purpose in the present.

Bowlby (1963, 1969, 1973, 1980) developed a theory of mourning and the disordered variants of mourning based on his observations of attachment behavior in young children and primates. His phasic theory of healthy mourning emphasizes the cognitive biases of the individual which are learned in childhood through interacting with early attachment figures. A unique contribution by Bowlby to the phenomenology of healthy mourning is his emphasis on the importance of information processing. For an individual to mourn and resolve a loss, he/she must be able to accurately, completely, and quickly process information brought about by the loss. The ability of the bereaved to process information about a loss is in part determined by the early style of attachment the bereaved had with nurturing figures in childhood. Attachments that were distant or anxious or ambivalent predispose the bereaved to distort information about the loss so that accurate, complete information about the loss is not quickly processed and distortions about the loss make resolution difficult. Bowlby, like the next theorist, Schneider, reviewed the literature on bereavement and integrated this information into his theory.

Schneider (in press) analyzed the major works on bereavement and loss as well as observing his own grief process, the response to loss by his patients in psychotherapy, as well as his observations of many individuals in the grief-and-loss workshops he has led. His model emphasizes the growth aspect of loss. The process of growth from bereavement is examined in a wholistic perspective. The whole self is understood to be affected by the loss. This includes the

physical, the emotional, the spiritual, the cognitive, and the behavioral dimensions of self.

The seven theorists and researchers who have just been discussed--Freud, Lindemann, Engel, Marris, Parkes, Bowlby, and Schneider--provided the empirical and conceptual basis for an instrument designed to measure mourning. Mourning is a process which occurs over time. The following section contains a discussion of the phases of mourning.

Phases of the Mourning Process

Both Bowlby (1980) and Schneider (1981, in press), who reviewed the literature on mourning, organized the responses to loss into phases. Bowlby described three phases of mourning: (1) the searching phase, (2) the phase of disorganization and despair, and (3) the phase of reorganization and recovery. Schneider's system is more complex. He organized the responses to loss into four themes of mourning: (1) attempts to limit awareness, (2) awareness, (3) gaining perspective, and (4) transcending loss. Within each theme are phases of the response to loss. Attempts to limit awareness include holding-on and letting-go strategies to limit awareness. Awareness is the phase of mourning usually labeled grief. Gaining perspective includes phases of healing and acceptance. Transcending loss involves resolution, empowering of self, and transcendent mystical experiences, which is part of the final state of growth from loss.

Lindemann, Engel, Marris, and Parkes also conceptualized mourning as a phasic process. (See Table 1.) Freud did not explicitly describe or label phases of mourning, but strategies for coping with

Table 1: Theories of Mourning

Theorist	First Phase: Coping Strategies	Second Phase: Grieving	Third Phase: Resolution	Etiology of Mourning
FREUD (1917)	1. Separation anxiety experienced with hope of regaining deceased. 2. Repression of feelings associated with the loss.	1. Hypercathexis of every memory, image, thought, and expectation associated with deceased. 2. Painful feelings of dejection. 3. Loss of capacity to adopt new love objects. 4. Loss of interest in the outside world. 5. Loss of interest in activities not connected with deceased.	1. The freeing of time and energy so that the bereaved once more becomes free and uninhibited by ties to the deceased.	1. Mourning takes place after a severe loss of a loved person or of an abstraction such as fatherland, freedom, or other ideals.
LINDEMANN (1944, 1945)	1. Avoidance of reminders of the loss. 2. Keeping from thought all references to the deceased.	1. Expression of intense emotions especially frequent crying. 2. Preoccupation with the deceased. 3. Physical exhaustion. 4. Sighing respiration. 5. Loss of appetite. 6. Loss of normal patterns of conduct. 7. Irritability with things in general. 8. Tightness in the throat.	1. Emancipation from the emotional bondage to the deceased. 2. Readjustment to the environment in which the deceased is missing. 3. Formation of new relationships.	1. Mourning is caused by separation reactions, especially death, but can be caused by separations which occur for other reasons.
ENGEL (1961, 1962, 1967)	1. Shock and disbelief. 2. The painful character of the loss is denied or muted.	1. Increasing awareness of the pain of the loss. 2. Acute sadness. 3. Anxiety and fear without the cause being clearly identified. 4. Crying. 5. Great degree of anguish and despair.		

Table 1: Continued

Theorist	First Phase: Coping Strategies	Second Phase: Grieving	Third Phase: Resolution	Etiology of Mourning
ENGEL		6. Anger toward those who are felt to be responsible for the loss. 7. Recognition of the helplessness and hopelessness of attempts to bring back the deceased.	1. Resolution involves restitution of the admired qualities of the deceased and identification with these qualities.	1. Mourning is a characteristic response to the loss of a valued object or person; could include loss of a job, home, or valued possession.
MARRIS (1958, 1975)	1. Numbness. 2. Apathy. 3. Feeling of the aimless futility of life. 4. Unwillingness to surrender the past. 5. Imagining the future where the past has been forgotten.	1. Acute physical distress. 2. Hostility toward others. 3. Exhaustion. 4. Intense sadness.	1. Reformulation of the loss by discovering the terms on which reattachment to others would still make life worth living. 2. Rehabilitating, abstracting, and maintaining what was important in the relationship with the deceased.	1. Mourning is the response to the loss of something that gave life meaning and structure; examples are death and urban relocation.
PARKES (1965, 1972, 1981)	1. Searching for the absent dead person by (a) calling for the lost person, (b) wandering aimlessly, (c) general restlessness, (d) maintaining a belief that the loss has not occurred.	1. Pining and yearning for the dead. 2. Sadness. 3. Anger. 4. Guilt. 5. Review of memories of dead person.	1. Real interest in the world returns. 2. Interest in the future. 3. Planning for the future.	1. Mourning is the response to the loss of a loved person through separation or death; can be the response to becoming physically disabled, loss of job, and divorce.

Table 1: Continued

Theorist	First Phase: Coping Strategies	Second Phase: Grieving	Third Phase: Resolution	Etiology of Mourning
BOWLBY (1980)	1. Initially numbness. 2. Defenses against pining for the lost person. 3. Searching with expectation of finding deceased.	1. Disorganization of goal-oriented behavior. 2. Facing up to reality of living without deceased. 3. Examination of how and why loss occurred. 4. Pining for dead person. 5. Expression of sadness, yearning, anxiety, anger, guilt, and despair. 6. Apathy and aimlessness.	1. Reorganization of life patterns. 2. Development of new attachments.	1. Mourning is the result of the disruption of attachment bonds through death or separation. 2. Other attachments such as a house, a pet, treasured possessions, or attachments to something purely symbolic.
SCHNEIDER (1981, in press)	1. Holding-on strategies, which involve denying the reality of the loss. 2. Letting-go strategies, which involve attempts to minimize the importance of the loss.	1. Physically: no energy for involvements, exhaustion, heaviness, pangs accompanied by pain. 2. Cognitively: all thoughts are connected to the loss; thinking is about implications of the loss. 3. Emotionally: sadness, crying, deep sobs, loneliness, helplessness, hopelessness. 4. Spiritually: existential crisis, what is the meaning of this death or loss, beliefs are challenged, inner emptiness, nothing is meaningful. 5. Behaviorally: desire to retreat to experience the grief, passivity, no involvement with activities, sense of waiting for something.	1. Initially a time of healing, acceptance of the loss. 2. Resolution. 3. Empowering of self. 4. Transcending the loss.	1. Mourning is the result of the loss aspect of change and includes external changes such as the loss of a relationship, loss of objects, and environmental changes and 2. Internal changes such as role changes and change in self-concept.

loss can be extrapolated from his theories of defense. He described the symptoms of grieving and explicitly stated that grief is resolved when the bereaved's time and energy are freed and he/she is uninhibited by ties to the past relationship.

The three phases of mourning--coping strategies, grieving, and resolution--are categories developed by the researcher to organize the material presented by the theorists and covered in Table 1. The following discussion is based principally on Schneider (1981, in press) and Bowlby (1980) because their theories are based on an extensive review of the mourning-and-loss literature. Their theories synthesize the views and concepts of Freud, Lindemann, Marris, Engel, and Parkes.

The First Phase: "Coping Strategies"

The initial awareness and the coping and defensive strategies which are triggered by the loss begin the process of responding to the loss. At first, the reality of the loss is too painful and too overwhelming to allow fully into awareness. The bereaved responds with alarm, disbelief, and shock (Schneider, 1981). Bowlby (1980) characterized the first phase as numbness, which may last from a few hours to a week. After the numbness and shock, the individual uses coping strategies to defend against the full impact of the loss. Strategies may be defensive in that they distort reality in some way and prevent full comprehension and acknowledgment of the loss, or they may use the available ego functions of the individual to modulate the awareness of the loss so that the bereaved slowly allows

the reality of the loss into awareness (Blanck & Blanck, 1974). Horowitz (1976) described this as periods of avoidance of the loss interrupted by intrusive thoughts and feelings of the loss which, if the process is going well, is in tolerable doses so that the bereaved slowly allows the reality of the loss into awareness. Bowlby (1980) considered this fluctuation between realizing the reality of the loss and denying the reality of the loss as an essential part of the beginning phase of normal mourning. Marris (1975) described these fluctuations as part of the normal ambivalence that accompanies change. The desire to go back to the time before the loss occurred and the desire to let go of the past and move on to the future characterizes the ambivalence of this phase according to Marris (1975).

The Second Phase: "Grieving"

In this phase, the finality of what is lost is fully allowed into consciousness. The defense and coping strategies of the earlier phase are used with less frequency, and the bereaved is fully aware of the loss as a permanent change. Full awareness of the loss is what is commonly called grieving. Bowlby (1980) described disorganization and despair as characteristic of this phase. Previous patterns of behavior which were connected to the person who is dead are no longer meaningful and new patterns have not developed, which results in an experience of being disorganized. Goal-directed behavior ceases. The bereaved despairs of recovering the dead, and this is accompanied by feelings of sadness and intense sorrow manifested by weeping and sobbing. Engel (1967) described the feelings of helplessness and

hopelessness in this phase. The grieving individual feels helpless to change the past and bring back the dead and hopeless about living in the future without the dead person. Schneider (1981) stated that physical exhaustion, lack of energy, and lack of interest in the outside world characterize this phase. Existential psychoanalysts Yalom (1980) and Moustakas (1972) emphasized the confrontation with one's mortality and essential aloneness in this phase.

The Third Phase: "Resolution"

Experiencing fully the pain, exhaustion, despair, and helplessness of grief allows for the resolution and reformulation of the loss (Schneider, 1981). This phase is initially a time of recovery and acceptance of the loss. Bowlby (1980) described this phase as a time of reorganization in which the bereaved actively redefines the self and the life situation without the dead person. Reformulation was posited by Marris (1975) as the process of detaching the sense of purpose from the relationship with the person who has died and reformulating one's life purpose so that life can again have direction. For Schneider (1981), growth can result from loss, and in the final phases of response to loss, growth beyond resolution can take the form of increased self-awareness and self-trust. For some individuals who continue to remain open to the mourning process, Schneider posited the final phase, transcending loss, in which individual meanings expand to insights about ultimate meanings and the interconnectedness of all of life is experienced.

Instrument Development

The instrument which is being developed to operationalize a construct of grief derived from the theories proposed by Freud, Lindemann, Engel, Marris, Parkes, Bowlby, and Schneider is titled The Response to Loss Instrument. An item-by-item analysis of the instrument with the theoretical basis for each item is presented in Chapter II.

The variables of the grief response to loss are organized according to the hypothesis proposed by Schneider (1981) that there are five dimensions of the mourning process: the physical, the emotional, the intellectual, the spiritual, and the behavioral. According to Schneider, this schema is an attempt to include the response of the whole person without emphasizing one aspect of the self over another. Using this framework is also a helpful tool to organize the large number of variables attributed to persons in mourning by the loss-and-mourning researchers who were listed above. The imaginative dimension is a dimension added by the researcher. Gorer (1965), in a sociological study of mourning in Great Britain, described the experiences of widows who imagined the presence of their dead spouse. Both Parkes (1972) and Rees (1975) reported the importance of vivid dreams and a sense of the actual presence of the deceased to the bereaved. Additionally, Schneider (1980), in an article on the difference between depression and mourning, reported that the ability to dream distinguishes the normal from one who is depressed. Imagination, therefore, seemed to be a dimension involved in mourning and important to include because of its potential as a measure that might differentiate

between grief and depression. The dimensions used to organize the variables of mourning proposed by Freud, Lindemann, Engel, Marris, Parkes, Bowlby, and Schneider are:

1. Cognitive dimension. Aspects of response to loss which involve information processing about any experiences associated with the loss are included in this dimension.

2. Physical dimension. The vegetative responses of appetite for food and sex are included here, as well as responses affecting sleep patterns and energy levels.

3. Imaginative dimension. This aspect of response contains all responses involving the use of imagination, including imagining the presence of the dead or images associated with the loss.

4. Emotional dimension. All the emotions, sadness, guilt, and anger, associated with the loss are included in this dimension.

5. Spiritual dimension. This dimension includes beliefs about life after death, and God, and beliefs about the meaning and purpose of existence. This dimension includes existential concerns of responsibility and human limits but does not include experiences related to participation in organized religion.

6. Behavioral dimension. This dimension involves all responses affecting the patterns of conduct of the bereaved, including observable behaviors, interaction with others, and involvement in activities like social functions.

Items for the instrument were developed with these dimensions serving as guidelines. This instrument was based only on the second phase of the mourning process, the full awareness of loss, or what is

commonly called grieving. Validating a measure of some construct such as grief first involves specifying the domain of observables (Nunnally, 1967). The domain can be narrowly or broadly defined. In this case, a slightly broad hoop has been thrown around the variables associated with the awareness-of-loss phase and may include variables associated with the two other phases.

Because the phases of mourning are not discrete but rather aspects of a human process that does not move in an orderly progression, certain items may reflect the process of coping with a loss rather than grieving for the loss, and other items may reflect more the resolution of the loss rather than grieving for the loss.

Research Questions

As mentioned previously, for this instrument to be a viable clinical and research tool, it must be demonstrated as both reliable and valid. These two general research questions were used to guide the investigator. Ten specific hypotheses were developed to test these questions. They are as follows:

1. Is the Response to Loss Instrument a reliable measure of grief?
    a. Is the total scale score internally consistent?
    b. Are the scale scores internally consistent?
    c. What are the interscale correlations?
2. Is the RLI a valid measure of grief?
    a. Do total scale scores on the RLI decrease over time unless a depressive response interferes?

b. Does impact of the loss and time since the loss predict grief scores?

c. Is the RLI able to distinguish a depressive response to loss from a normal grief response by being sensitive to the defensive process of separating cognitions from emotions?

d. Do severely depressed subjects score higher on the Physical scale than subjects who are not depressed?

e. Do severely depressed subjects score lower on the Imaginative scale than subjects who are not depressed?

f. Do severely depressed subjects across type of loss score higher on the RLI than subjects who are not depressed?

g. What scales best discriminate between severely depressed and not-depressed subjects?

Definition of Terms

Special terms used in this study are defined as follows:

Loss: Refers to the absence, either by death or for other reasons, of people, places, ideals, or objects assessed as meaningful or valuable and whose symbolic or real absence disrupts habitual patterns.

Mourning: Refers to the psychosocial process of responding to a loss, which includes the phases of coping strategies used to deal with a loss, to grieving for the loss, to the resolution of the loss.

Grief: The term for the subjective response to loss, including the sorrow, mental distress, emotional agitation, sadness, suffering, and related feelings caused by a significant loss, the label in this study for the second phase of mourning.

Bereavement: Refers to the objective state of an individual who has experienced loss by death of a significant person, usually a spouse, parent, child, other family member, or close friend.

Overview

In Chapter I, the problem to be investigated in this study was introduced, the need for the study was discussed, and terms relevant to the study were defined. Chapter II contains the empirical and theoretical development of the instrument and the item development of the instrument. In Chapter III, a review of the literature related to grief instrumentation, grief and depression, loss and stress is evaluated and presented. Chapter IV contains the methods and design of the study. Chapter V presents the results. In Chapter Chapter VI are reports of the summary, conclusions, and implications based on the results of the study.

CHAPTER II

DEVELOPMENT OF THE RESPONSE TO LOSS INSTRUMENT

Initially, the instrument was developed based on all three phases of mourning: coping, grieving, and resolution. Based on Schneider's theory (in press), a rationally based item-development procedure was employed. Each aspect of the theory was operationalized and discussed by Schneider and Deutsch. A final instrument of 268 items resulted from the operationalizing of the three phases of mourning. This instrument was judged by the researcher as too long to be useful as an assessment or screening instrument. A shorter form was developed based on the grieving phase of mourning and titled The Response to Loss Instrument. A young-widows group and an adult church group were administered the initial form of the RLI and requested to discuss the items as they answered the instrument in order to determine which items were unclear or ambiguous. The present form of the RLI is based on a revision of those items which were unclear or ambiguous.

The Response to Loss Instrument is based on the theories and observation of Freud, Lindemann, Engel, Marris, Parkes, Bowlby, and Schneider. In this chapter, the views of the theorists which formed the basis for the generation of items are delineated. The discussion of the literature and items is organized according to the six dimensions

of the second phase of mourning as described in Chapter I. These dimensions are the cognitive, emotional, physical, imaginative, spiritual, and behavioral response to loss. The response options of the Response to Loss Instrument are self-ratings and require the subject to rate each item using the following system:

0 = does not describe me
1 = sometimes describes me
2 = most of the time describes me
3 = accurately describes me

Cognitive Response to Loss

Lindemann (1944) analyzed the responses of 101 survivors of the Coconut Grove fire and the relatives of those who died in the fire. His findings included the observation that in uncomplicated grief, the grieving individual is preoccupied with thoughts of the deceased. Engle (1962), who observed the relatives of chronically ill children and adults, also concluded that the work of mourning involves thinking of the lost person and an identification of the admired qualities of the dead. Thinking about the dead is related to cognitively acknowledging the loss, which initiates the acute phase of mourning according to Bowlby (1980). Identifying the admired qualities of the dead is preparation for the third phase of mourning, for it allows for the continuity of the past with the future (Marris, 1975).

Bowlby (1980) labeled the second phase of mourning "disorganization." He described the cognitive aspects of this stage as the intellectual acknowledgment of the reality of living without what was lost. Parkes (1965) interviewed both psychiatric patients who had

lost a parent, spouse, or child within the six months before admission to a hospital and a group of widows who had not sought psychiatric help. In the psychiatric population the bereaved expressed disbelief that the loss occurred. In mourning that was progressing normally, the bereaved accepted the loss and explored the consequences of the transition occasioned by the loss. Schneider (1981) described the cognitive characteristics of the second phase of mourning as a focusing on the immediate consequences of the loss and an absence of a future time perspective. Marris (1975) described the awareness-of-loss phase as a time of brooding over the past and as a time of sorting out what can be conserved and what must be let go of forever.

In summary, the following concepts were operationalized to form the Cognitive scale: comprehension of the reality of the loss, examination of the consequences of the loss, and thinking about the meaning and significance of the loss.

The following items were generated from these concepts:

1. When I focus on my loss, I feel that I have nothing to look forward to.
2. I think about what I have lost, and I think about how my life is being affected.
3. I am aware of what will never again be a part of my life because of my loss.
4. I think about the loss a lot.
5. I know that what I have lost will never return.
6. I spent time sifting through past experiences related to what I have lost.

7. I know I am helpless to change the situation and bring back what is lost.

Emotional Response to Loss

A variety of emotions have been described by researchers who have observed the mourning process. Anger, irritation, sadness, great sorrow, longing, and guilt are frequently observed emotions (Bowlby, 1980).

Anger is commonly experienced in the second phase of mourning. Bowlby (1980) observed the anger and protest in small children separated from their parents. The separation reaction is the paradigm for the mourning response of adults, according to Bowlby. He postulated that anger is the result of the frustration caused by the loss.

Parkes (1970), in his study of typical grief in 22 London widows, found that anger was described at some time during the first year of bereavement in all but four widows. The most frequent form of anger was a general irritability or bitterness. This was related to the widow feeling that the world was a potentially dangerous place to live now. Parkes interpreted the anger as the result of the sense of insecurity and frustration at the loss of a major source of support. Lindemann (1944) and Marris (1975) both described the manifestations and targets of anger as anger against those believed responsible for the loss, anger toward those impeding reunion with the dead person, and anger against the dead person.

Some guilt is expressed and expected in typical grief (Parkes, 1970). Guilt related to reviewing the events of the death in order

to be assured that the bereaved had done all that could be done is expected as part of the sorting-out process (Marris, 1975). But severe self-reproach is more typical of grief which leads to the development of a psychiatric illness (Parkes, 1965). The Diagnostic and Statistical Manual III (1980) describes the guilt of normal bereavement as chiefly about things done or not done at the time of the death by the survivor, rather than the guilt which is the result of feelings of worthlessness.

Sadness, longing, sorrow, and crying are expected features of the emotional manifestation of mourning (Parkes, 1970). Pining or yearning for the deceased was considered by Parkes (1970) to be the central feature of grief, without which grief cannot truly be said to have occurred, and when present it is a sure sign that a person is mourning. Bowlby (1980) described sadness as a normal and healthy response to any misfortune and hypothesized that the ability to sustain repeated recurrences of yearning and sadness allows for the resolution of mourning and minimizes the activation of defensive processes directed against the yearning for what is lost. Defensive processes would be manifested by the disconnection of the feeling response from the situation of the loss. The disconnection between cognitive and emotional responses to loss would contribute to pathological responses to loss (Bowlby, 1980).

In summary, the following concepts were operationalized to form the Emotional scale: strong feelings, including guilt, anger, sadness, about the loss; pining and yearning for the deceased; visible

manifestations of feelings, like sobbing. The following items were generated from these concepts:

1. I have many feelings about the loss.
2. I often weep or sob about the loss.
3. I feel angry about some of the consequences of the loss.
4. I feel sadness whenever I am reminded about my loss.
5. I am angry with some people associated with my loss.
6. When I admit it to myself, I feel sad most of the time about my loss.
7. The tears have been hard to stop this week.
8. I feel guilty about the loss.
9. I find myself longing for what or who is lost.
10. Many more people irritate me now than did before the loss.

Physical Response to Loss

A hypothesis stated by general-stress-theory researchers on loss and mourning, a subset of general stress theory, proposes that among the bereaved, those who fail to grieve are at even greater risk for illness in general, and psychosomatic illnesses in particular, than the general population (Klerman & Izen, 1977). But even in normal mourning, somatic symptoms are to be expected, but in the case of normal mourning these symptoms do not lead to debilitating illnesses. Engel (1967) speculated that illness develops when the bereaved gives in to the somatic symptoms and gives up on life. The inability to limit the extent and duration of the physical response to loss leads to physical illness. Vegetative symptoms are also

common to depression. Loss of weight, difficulty sleeping, lowered physical energy, and loss of sexual appetite are vegetative signs of depression.

Physical symptoms usually peak in the four months following bereavement. By the end of the first year, 85% of the bereaved are relatively symptom free, which means the extent and duration of the somatic distress response is contained within a one-year time limit for most bereaved individuals (Clayton, 1974; Engel, 1961; Lindemann, 1944).

Physical response to loss has been documented by various researchers. Marris (1958) interviewed 72 widows under the age of 56. He stated that 79% of the widows experienced difficulty sleeping after bereavement. Parkes (1972), in comparing the bereaved with the nonbereaved, found that trouble falling asleep, awakening in the middle of the night, and weight fluctuations reached statistical significance for the bereaved group. Clayton (1974) also reported that weight loss and sleep distress distinguish the response of the bereaved group from that of the nonbereaved.

Parkes (1970), in his longitudinal study of widows, described the inhibition of appetites and activities as the result of the painful and time-consuming process of mourning. Sleeping, eating, and daily responsibilities took second place to grief work. Some form of sleep disturbance was found in 17 out of 22 widows. Nineteen widows lost their appetite during the first month, and from the third month onward, weight gain was considered a problem. Schneider (in press) described the vegetative responses as a feeling of general

heaviness throughout the body, as a feeling of having a weight in the pit of the stomach, and as a general loss of energy. Engel (1961) described the somatic distress as a general feeling of being in pain, anorexia, and sleep disturbance. Ability to limit the extent of the physical response to loss so that serious physical illness does not result distinguishes the normal grief response from a pathological response.

In summary, the following concepts were operationalized to form the Physical scale: loss of energy, disturbances in sleep and eating habits, and generalized physical pain.

The following items were generated from these concepts:

1. When I think about the loss, I feel pain all through my body.
2. My eating habits have changed since the loss; I am eating more.
3. My eating habits have changed since the loss; I am eating less.
4. I do not sleep as well as I did before the loss.
5. I find myself sighing frequently.
6. I am easily exhausted by any effort.
7. My whole body feels heavy.
8. My level of energy has decreased since the loss.

Behavioral Response to Loss

Parkes (1970) observed in the widows he studied a restlessness and a desire to search for who or what was lost, even though the bereaved knew that the loss was permanent. Behaviorally, this is

manifested by the bereaved starting to go some place or to initiate some task and then in the middle of the activity realize the uselessness and irrationality of the behavior. The bereaved feels restless and is also not interested in doing things that were of interest before the loss. These activities now seem useless and energy is not available for anything else but responding to the loss (Schneider, in press).

Relationships with people vary over time, depending on the need of the bereaved. Maddison and Walker (1967) found that widows who were able to work through their grief had a relationship with at least one other person who accepted them and was not afraid of their anxiety, anger, sadness, or guilt. Moustakis (1972) and Schneider (in press) described the importance of having time alone to sort out all of the complex feelings and thoughts experienced in the loss. Both these existentialists feel that seeking out and tolerating time alone is a key to the growthful dimension of mourning.

Freud (1917) described mourning as the time of letting go of the lost person or ideal and the emotional involvement with the lost person or ideal. Emotions are detached in order to prepare for new attachment, but during grief new attachments are not yet possible because all the individual's energy is directed toward the struggle between wanting to stay attached to what is dead or lost and recognizing that the loss is irreversible.

Lindemann (1944) described the painful lack of capacity to initiate and maintain organized patterns of activity. The bereaved carries out normal activities, but with effort, because a large part

of customary activity was done in connection with the deceased. Now that activity has lost its significance. Especially the habits of social interaction, such as making conversation and sharing enterprises with others, seem to be beyond the capacity of the bereaved.

Somewhat differently, Marris (1975) described the disorganized and confused behavior of the bereaved as self-protection against the demands made by the environment for responsive behavior which they are not yet ready to make. Long periods of apathy and lack of responsiveness to environmental stimuli are, according to Marris, a bid for more time to work through the conflicts of bereavement. The major conflict postulated by Marris is to be able to acknowledge the strength of the original attachment while also searching for terms on which reattachment would still make life worth living.

Bowlby (1963) observed bereaved individuals' behavior and described it as disorganized. He explained the disorganization of behavior during the awareness of loss as the result of a series of repeated and painful disappointments caused by the effort to be reunited with the dead or lost person. As the effort to be reunited proves hopeless, behavior ceases to be focused on the absent person. Behavior, lacking an object toward which to be organized, becomes disorganized. The bereaved person is observed to be restless, unable to sit still, and moves about in an aimless fashion continuously searching for something to do.

In summary, the following concepts were operationalized to form the Behavioral scale: a disruption of normal patterns of behavior, a lack of interest in new activities or relationships, an

increased desire to be alone, and a need to be relieved of the demands of ordinary life.

The following items were generated from these concepts:

1. I find that things I used to be involved in before the loss are not of much interest to me now.
2. I am not interested in making new attachments.
3. It helps to be with a trusted friend who accepts me just as I am.
4. I find myself walking somewhere and I forget where I am going.
5. I like being with people when they do not make demands on me.
6. I lose the thread of conversations when I am with others.
7. I prefer being alone much of the time.
8. When I am wanting to be with others, it is simply to be with them and sit quietly.

Imaginative Response to Loss

The imaginative response to loss involves the use of the imagination to remember, to image, and/or to dream about the situation which is ended or about the person who is dead. Freud (1917) understood the importance of imagination in mourning. The mourning process progresses, according to Freud, by calling up every single memory and remembering every expectation associated with the lost person until the present reality is accepted and the tie to the person and expectations about a future with that person are dissolved. This

process is painful and time consuming, and unless it occurs, the individual's energy and interests remain bound to the past.

Parkes (1970) asked the widows in his study about their dreams. More than half reported dreams of their husbands which were marked by their vivid and realistic quality. These clear visions of the husband were interpreted by Parkes as an effect of the urge to recover the lost person.

Rees (1975) investigated widowed people and their experience of hallucinations of the dead spouse. He defined hallucination as the sense of the presence of the dead person in addition to visual, auditory, and tactile hallucinations. His study of 227 widows and 66 widowers from Wales found that 50% of this sample had post-bereavement hallucinations. People whose marriages were long and happy were more likely to have experienced hallucinations. Most participants expressed a sense of protection and companionship and stated that their hallucinations were helpful to them in resolving their grief. Rees concluded that hallucinations are normal experiences after bereavement and that they are helpful psychological phenomena to those experiencing them. Bowlby (1980) observed that if the bereaved person finds his dreams comforting, this is a reliable indicator that mourning is taking a favorable course.

Rosenblatt, Walsh, and Jackson (1976) explored mourning processes across cultures. They included hallucinations under the category of ghost beliefs. Ghost beliefs, according to Rosenblatt, Walsh, and Jackson, are the sense of the presence of a ghost after the death of an individual familiar to the bereaved. They agreed with Bowlby (1980)

and Rees (1975) that experiences of the dead are both a normal and universal aspect of mourning. They explained the helpfulness of hallucinations by speculating that in interacting with a ghost, the bereaved could transact unfinished emotional, relational, or decision-making business with the deceased.

In summary, the following concepts were operationalized to form the Imaginative scale: hallucinations, dreams, and images of the deceased; remembering past experiences with the deceased; and using the imagination to converse with the deceased.

The items generated from these concepts are:

1. I daydream about scenes from my life before this loss.
2. I have conversations with the person I have lost.
3. I sense the presence of the person I have lost.
4. My dreams about the loss seem to help me accept and understand my loss.
5. I imagine I am talking to the person I have lost.
6. I have vivid dreams about people and places that are connected to my loss.
7. I communicate to people who are no longer a part of my life through fantasy, prayer, and or imagination.

Spiritual Response to Loss

The spiritual response to loss involves the effect of the loss on the belief system of the bereaved. Schneider (1982, in press) postulated that the spiritual dimension of the awareness phase of mourning involves an increased awareness of the fragility of life,

an increased capacity to imagine one's own death, a test of the will to live, and a challenge to all previous beliefs. According to Schneider, the bereaved questions conventional wisdom and previously held religious beliefs during this phase of mourning. The bereaved searches for a reason why the loss occurred and in the process of searching rejects beliefs that were not tested by the pain of loss. Simple answers to the spiritual questions of life are rejected. Previous beliefs which were held as protections from loss and pain are rejected as interpretations of experience.

Facing one's own death is, according to Yalom (1980), an important existential component of grief. Awareness of loss includes, for Yalom, the awareness of one's own death. To grieve for the loss of another is also to grieve for the loss of belief in one's own immortality. To face one's own death is an experience of mastery, according to Yalom. Accepting the anxiety of not having control over death develops in the individual a strong sense of personal mastery and decreases the guilt feelings which have developed as a defense against helplessness. Recognizing one's limits as a human by separating out ancillary feelings of helplessness from true helplessness and giving up control over the uncontrollable is, according to Yalom, an important part of the work of mourning.

In summary, the following concepts were operationalized to form the Spiritual scale: one's own death is faced more realistically and less fearfully, human limitations are accepted, and pre-loss belief systems are questioned and there is acceptance of human powerlessness over death.

The following items were generated from these concepts:

1. I am not as frightened of dying as I was before the loss.
2. This loss is a reminder of the limits of my human power.
3. My beliefs no longer give me the comfort they did before the loss.
4. This loss has challenged some of my most cherished beliefs.
5. I am increasingly aware of my own mortality.
6. My faith has been shaken by this loss.
7. Before my loss, I believed that I was special and nothing bad would happen to me; I no longer believe this.

The six dimensions of the Response to Loss Instrument are summarized in Table 2.

Table 2: Summary of the Six Dimensions of the Response to Loss Instrument

---

COGNITIVE RESPONSE TO LOSS

1. When I focus on my loss, I feel that I have nothing to look forward to.
2. I think about what I have lost, and I think about how my life is being affected.
3. I am aware of what will never again be a part of my life because of my loss.
4. I think about the loss a lot.
5. I know that what I have lost will never return.
6. I spend time sifting through past experiences related to what I have lost.
7. I know I am helpless to change the situation and bring back what is lost.

EMOTIONAL RESPONSE TO LOSS

1. I have many feelings about the loss.
2. I often weep or sob about the loss.
3. I feel angry about some of the consequences of the loss.
4. I feel sadness whenever I am reminded about my loss
5. I am angry with some people associated with my loss.
6. When I admit it to myself, I feel sad most of the time about my loss.
7. The tears have been hard to stop this week.
8. I feel guilty about the loss.
9. I find myself longing for what or who is lost.
10. Many more people irritate me now than did before the loss.

PHYSICAL RESPONSE TO LOSS

1. When I think about the loss, I can feel pain all through my body.
2. My eating habits have changed since the loss; I am eating more.
3. My eating habits have changed since the loss; I am eating less.
4. I do not sleep as well as I did before the loss.
5. I find myself sighing frequently.
6. I am easily exhausted by any effort.
7. My whole body feels heavy.
8. My level of energy has decreased since the loss.

Table 2: Continued

IMAGINATIVE RESPONSE TO LOSS

1. I daydream about scenes from my life before this loss.
2. I have conversations with the person I have lost.
3. I sense the presence of the person I have lost.
4. My dreams about the loss seem to help me accept and understand my loss.
5. I imagine I am talking to the person I have lost.
6. I have vivid dreams about people and places that are connected to my loss.
7. I communicate to people who are no longer a part of my life, through fantasy, prayer, and/or my imagination.

SPIRITUAL RESPONSE TO LOSS

1. I am not as frightened of dying as I was before the loss.
2. This loss is a reminder of the limits of my human power.
3. My beliefs no longer give me the comfort they did before the loss.
4. This loss has challenged some of my most cherished beliefs.
5. I am increasingly aware of my own mortality.
6. My faith has been shaken by this loss.
7. Before my loss, I believed that I was special and nothing bad would happen to me; I no longer believe this.

BEHAVIORAL RESPONSE TO LOSS

1. I find that things I used to be involved in before the loss are not of much interest to me now.
2. I am not interested in making new attachments.
3. Being with a trusted friend who accepts me just as I am helps.
4. I find myself walking somewhere and I forget where I am going.
5. I like being with people when they do not make demands on me.
6. I find myself losing the thread of conversations when I am with others.
7. I prefer being alone much of the time.
8. When I am wanting to be with others, it is simply to be with them and sit quietly.

CHAPTER III

REVIEW OF THE LITERATURE

The review of the literature covers three major areas which bear relevance to mourning: instrumentation of grief and mourning, a comparison of the difference and similarities between grief and depression, and relevant literature on the relationship between stress and loss.

Grief Instrumentation

Two published reports on the development of grief instruments are available: The Texas Inventory of Grief (TIG) published in 1977 and a grief scale contained within The Children's Hospital of Akron Parent Concerns Questionnaire (CHPCQ) published in 1980.

The Texas Inventory of Grief was developed by Faschingbauer, Devaul, and Zisook at the University of Texas Medical School at Houston. In 1977, they reported on the continuing development of the TIG. This instrument is a seven-item paper-and-pencil measure of the extent of unresolved grief. The items were generated by the researchers based on clinical experience with unresolved grief. The instrument was initially 13 statements and tested on 57 patients in a psychiatric outpatient clinic who had lost one or more first-degree relatives. A sample of 36 completed instruments from this group was analyzed for internal consistency. Items with statistically significant

correlations ($p < .05$) with the total score were retained. Seven items remained, and they were correlated with their total score. This reliability analysis resulted in the seven items correlating highest with the total score rather than with the other items. Items overlapped each other by about 18%.

Construct validity was tested by comparing the 13 subjects who had answered the instrument in terms of a death that had occurred within the last two years with 47 subjects who had answered the instrument in terms of a death that had occurred two years ago or longer. The 13 subjects' scores with more recent losses were higher than the scores of the 47 subjects with a death more than two years ago ($p < .05$).

The second published report, A Validation Study of a Grief Scale Used With Parents of Critically Ill Infants, is a dissertation by Jon Thomas published in 1980. The grief instrument is composed of seven items which are part of a longer questionnaire: The Children's Hospital of Akron Parent Concerns Questionnaire (CHPCQ). The seven items include questions about (a) sleeping, (b) sadness, (c) eating, (d) preoccupation with the baby, (e) irritability, (f) self-blame, and (g) anger. The items are asked in the form of: (a) never was a problem, (b) was a mild problem, (c) was a moderate problem, and (d) was a big problem.

The purpose of the instrument is to determine which parents of critically ill infants to provide counseling services to because of their difficulty with the grief process.

The researcher found two factors. The first factor was comparable across the mother, father, and unwed-mother groups. The second factor was found in only the father groups. The second factor was composed of anger and guilt responses. The reliability for the first factor was .78 and for the second factor .65 using Cronbach's alpha as the test for internal consistency.

The strength of this research is that it is normed on the population the questionnaire was designed for, and a large sample, an n of 350, was sampled. The CHPCQ is a quick, simple self-report instrument. Over time, cut-off points for families at risk who have lost a child can be identified and empirically verified by the hopsital staff.

The weaknesses of this research are that the response options of the grief scale require that the individual be willing to admit to having a problem with one of the seven aspects of grief contained on the grief scale of the CHPCQ. Individuals who do not want to admit to having a problem may not be honest in responding to the grief scale. Grief reactions are very different from normal experiences, and an individual may be alarmed by all reactions to the loss and therefore state that their responses are all a problem. Either way, an accurate picture of the grief response of parents to their child's illness may be distorted by requiring the parent to evaluate the problematic nature of their grief.

The Texas Grief Instrument (TGI) is a weaker instrument than the grief scale of the CHPCQ. There are four problems with the Texas Grief Instrument. The first problem with this instrument is that some items on the instrument describe a normal grief response as described

by many observers of the grief process. Item 1 of the TGI, for example, "At times I still feel the need to cry for the person who died," represents a typical grief response (Marris, 1958; Parkes, 1970). Other items represent a pathological grief response, such as Item 4, "I am unable to accept the death of the person who died." Bowlby (1980) considered this a key to the inability to complete grief. With mixed items for both normal and pathological grief it is difficult to decide what construct of grief is being measured.

The second problem with the instrument is the failure to use a control group of individuals who were not outpatients in a psychiatric clinic, but who had experienced a significant loss for which they had not sought psychiatric help. Without a control group it is difficult to know if this instrument is measuring unresolved grief or a psychiatric outpatient's response to stress.

The third criticism of The Texas Inventory of Grief is that without defining and measuring normal grief, the researchers' attempt to statistically define abnormal brief as a score of two standard deviations above the normative sample mean is bound to fail if their measure is only of the extent of unresolved grief.

The fourth difficulty with the TGI is that the basis of the item generation for the instrument, the observations by the researchers of unresolved grief, is neither theoretically based nor a comprehensive coverage of grief as found in the existing grief-and-loss literature (Bowlby, 1980; Schneider, 1981).

Grief and Depression

Depression

Depression is a generic term which contains a diverse set of symptoms: dejection, apathy, the blues, sleep disturbances, anorexia, and decreased libido (Averill, 1979). The syndrome of depression runs on a continuum from normal and adaptive coping responses to the extremes of a major clinical depression requiring hospitalization and protection against self-destructive behaviors.

On the normal end of the depression continuum are those depressive reactions that are an aspect of response to loss. A healthy person must have the capacity to suffer and be depressed, according to ego psychologist Hartmann (1958). Depression is classified according to symptomatology and not by etiology.

Akiskal and McKinney (1973) posited a psychobiological model of the etiology of depression in which depressive symptoms represent a "final common path." This model accounts for the role of loss and how loss events interact with other sources of stress in the etiology of depression. The four sources of depression are (a) physiological stressors, which include hypothyroidism, viral infections, and other disease processes that interfere with the production of amines; (b) the genetic predisposition of the individual, which involves dysfunction of the presynaptic membrane which prevents the conduction of neurotransmitters like seratonin or a genetic predisposition to receptor insensitivity to the diencephalic functions of mood, reward and punishment, and arousal regulation; (c) the third process, developmental predisposition, affects the ability to use adaptive

mechanisms in response to current stressors. Early object loss and experiences of helplessness due to lack of adequate adult role models who foster a child's development of mastery over one's fate contribute to adult vulnerability to depression but are not sufficient causes without interaction with other social and biological events; and (d) psychosocial stressors constitute the fourth process and consist of events which stress the individual's adaptive mechanism. Adult object loss is considered especially an undesirable and stressful event. The experience of bereavement is one of several conditions which interacts with other sources and events leading to the final common pathway of depression, according to this model.

In summary, depression is a syndrome consisting of diverse symptoms which may be caused by the interaction of biological, genetic, developmental, and environmental factors. The continuum of depressive symptoms consists of normal feelings of sadness and the blues and continues to the extremes of clinical depression, which in some cases is life threatening.

Grief

Grief is a reaction to loss that has a set of well-defined responses which were covered in Chapter II. When grief runs its normal course, recovery and growth occur and new relationships are developed, new meanings found, and a new purpose is established (Marris, 1975).

Engel (1961) and Bowlby (1963) described the experience of a significant loss to be like the wound caused by a physical injury. Grief is to loss what the biological process of healing is to a physical wound.

Sometimes healing does not occur because the healing process is interrupted in some way. Interruption results in a form of pathological grief; the three most common variants are (a) delayed grief, in which no expression is given to feelings; (b) inhibited grief, in which mourning is minimal or absent and psychosomatic symptoms become manifest as expressive pathways of grief; and (c) chronic grief, where grief is prolonged, overly intense, and severe (Folta, 1981).

Bowlby (1980) examined the common psychological mechanisms by which the healing process of grief can be interrupted. These mechanisms are (a) when the individual disconnects either cognitively or emotionally from the loss. In this case the bereaved either thinks about the loss but has no feelings, or has many strong feelings but does not connect them to a loss; (b) when the individual believes the loss is reversible and continues searching for the person who is dead or no longer available for need gratification; (c) when individuals believe that they are responsible for the loss and feel that it is a punishment for which they should feel guilty. Self-reproach and guilt prevent the resolution of grief; and (d) repression of sorrow and sadness because of fear about experiencing emotional pain.

For the healing of the wound caused by the loss to occur, Bowlby (1980) observed that the bereaved must be able to endure the buffeting of emotion, which includes intense pining and angry feeling toward the deceased and others connected to the loss. Cognitively, the bereaved must be able to examine how and why the loss occurred. Bowlby also stated that the bereaved must be able to experience the

disorganization that results as the search for the deceased is proven futile.

In summary, grief is a normal, healing process that occurs in response to a loss. Psychological mechanisms of denial, self-reproach, guilt, or the disconnection of emotion and cognitive processes may interrupt the healing. Ability to tolerate psychological pain, anger, disruption of normal patterns of behavior, and searching for meaning are psychological mechanisms which allow the course of mourning and grief to have a favorable outcome.

Grief and Depression: Their Similarities and Differences

Mourning is a normal reaction to a significant loss. Depression is an affective state, common among psychiatric patients and the general population. Uncomplicated mourning and depression share common manifestations and etiology and differ in some significant aspects.

The distinction between uncomplicated mourning and melancholia or depression was first made by Freud (1917). Depression, according to Freud, is characterized by (a) a lowering of self-regard, (b) self-reproach, and (c) the expectation of punishment. For Freud, both depression and grief share (a) a lack of interest in the outside world, (b) a loss of the capacity to love, and (c) an inhibition in activity. Freud emphasized that grieving is a natural process and counseled against interfering in this process.

Clayton, Herjanic, Murphy, and Woodruff (1974) applied psychiatric research diagnostic criteria for depression developed by Feigher, Robins, Guze et al. (1972) to a randomly selected group of 109 recently

bereaved men and women. Responses of this group to a structured interview were compared with patients hospitalized with a primary affective disorder. Clayton et al. found that using the depression criteria developed by Feigher et al., of the bereaved sample, 35% would be classified depressed at one month, 25% at four months, 17% at one year, and 45% were depressed at some point during the year. The major similarities of symptoms were poor concentration, anorexia, and loss of interest in reading and television. One symptom, crying easily, was significantly more prevalent in bereaved subjects. Four symptoms found in the psychiatric sample were completely absent among the bereaved sample: (a) I would rather be dead, (b) suicidal thoughts, (c) physical retardation, and (d) feeling like a burden to others. This study supported Freud's theory that depression and grief differ primarily in that depression involves negative feelings about the self. These feelings are reflected in feelings of wanting to be dead and suicidal thoughts.

Beck (1972) compared a group of 966 depressed patients with a nondepressed group of patients. The symptoms of the depressed group were divided into four categories: (a) feelings and feeling states, (b) cognitive manifestations of depression, (c) motivational symptoms, and (d) vegetative and physical manifestations. The fourth symptom category, vegetative and physical manifestations of depression, includes: loss of appetite, disturbances in sleep, loss of libido, and fatigability. This is very similar to the "depressive complex" observed by Wiener, Gerber, Battin, and Arkin (1975) in some grieving subjects. The complex includes loss of appetite, sleep

difficulty, fatigue, agitation, retardation, and loss of interest in normal activities. This is similar to the fourth symptom category described by Beck, the vegetative and physical manifestations of depression. Using Beck's schema, the vegetative manifestations of both grief and depression are similar.

While vegetative signs are similar, in all other categories depression differs from grief and mourning. Cognitively, depression is manifested in self-blame and self-destructive behaviors. Feeling and feeling states are sadness with an inability to cry and feelings of helplessness and hopelessness about the self, the world, and the future that the depressed person cannot limit and which are not based on reality (Beck, 1972). The depressed person is not aware of the reason for his/her depression and lacks conscious awareness that a loss has occurred.

In mourning there is a meaningful loss recognized by the bereaved and a variety of responses to his loss. Responses in bereavement do not include self-blame or a drop in self-esteem. In mourning there is helplessness and hopelessness. But in uncomplicated bereavement, these responses are limited by the bereaved (Schneider, 1980) before becoming self-destructive. As Freud (1917) stated in Mourning and Melancholia, "In grief the world becomes poor and empty; in melancholia it is the ego itself" (p. 155).

Grief and depression also differ with regard to dreams, fantasies, and imagery. Schmale and Engel (1975) presented some evidence which suggests that depressed individuals show a marked decrease in REM cycle sleep, which is usually associated with dreaming. Depressed

individuals have difficulty imagining or fantasizing. Part of depression, according to Beck (1972), is the inability to imagine alternative images of the self, the future, or the world. Beck also found that the thematic content of clinical material uncovered in therapy was continuous with daydreams, and dreams in the sleeping state. Depressed individuals have dreams with masochistic content (Beck, 1959, 1961).

Parkes (1972) also reported the presence of vivid dreams of the deceased in those actively grieving. Morrison (1978), who developed a method of using imagery to help people grieve, reported that reactivation of grieving is marked by daydreams and images which help focus on who or what was lost. Using imagery to focus on what the bereaved was doing and feeling at the time of the loss helps depressed subjects start to actively grieve, according to Morrison.

In summary, uncomplicated mourning and depression are similarly manifested by vegetative signs of inhibited physical appetities and by low mood and low energy. Uncomplicated mourning differs from depression by the recognition of a loss by the bereaved; open weeping which is consciously experienced as pining for the deceased; a capacity to imagine, use fantasy, and dream; a positive self-evaluation; an ability to limit the experience of helplessness and hopelessness; and an ability to limit the use of physical channels of expressing the response to loss so that a serious physical illness does not develop.

Stress and Loss

A major thrust in psychological research in the last 10 years is the linkage of naturally occurring life events with the development of psychological and physical illnesses (Phillips & Bierman, 1981). Adaption to life events is considered stressful because it requires use of coping and defensive mechanisms on the part of the person experiencing life changes. Sources of psychological stress, such as loss of persons, job, valued possessions, and home, elicit patterns of psychological response which may be adaptive and facilitate coping with the loss, or the responses may be maladaptive and prevent resolution of the loss.

Visotsky, Hamburg, Gross, and Lebovits (1961) defined the effectiveness of coping with the loss of physical health when an individual is diagnosed with a chronic illness. Coping is defined as effective when it serves one or more of the following functions:

1. keeping distress within manageable limits
2. enabling one to feel hope
3. maintaining meaningful social relationships
4. maintaining a sense of personal worth
5. enhancing prospects for physical recovery
6. enabling one to establish a satisfactory situation after maximum physical recovery has been reached.

When coping is ineffective, stress-related variables such as anxiety, tension, depression, heart ailments, and cancer may result (Selye, 1976).

Selye's General Adaptation Syndrome (GAS) accounts for all forms of change which activate this general defense. Alarm, resistance, and exhaustion are responses to the quantity of change experienced by an individual. A measure of life experiences based on the quantity of change is Holmes and Rahe's (1967) Social Readjustment Rating Scale. This scale measures the total amount of readjustment required for each life event, regardless of the desirability of the event. Life events are given point values, and the assumption is that the higher the accumulated points, the more the individual's resources are depleted and the more likely that illness will result. Another approach was taken by Lazarus (1966), who conceptualized stress as a more specific response of the individual to a specific stressor. His theory emphasizes the nature of the demand, the characteristics of the individual, and the appraisal of the event by the individual. Coping with the stress of the life event depends on these specific factors.

Sarason, Johnson, and Siegel (1978) developed the Life Experiences Survey to take into account individual differences in appraisal of life events. In their research, they found negatively appraised life events correlated higher with the stress-related variables of depression and anxiety than the total change score, which includes positively and negatively appraised change.

Part of this specific approach to stress is the attempt to discover more about specific events that correlate more highly with impairment than other events. Myers, Lindenthal, Pepper, and Ostrander (1972) reported that the exit of an individual from the social field

of the respondent is associated more strongly with changes in impairment than comparable entrances into the social field. However, no measure of grief was included in this research, or a measure of what might constitute a nonpathological response to exit events.

Paykel (1979) studied the role of negatively appraised change and the development of clinical depression. In his research, exits from the social field more highly correlated with clinical manifestations of depression than other life events. Brown and Harris (1978) and Prudo, Brown, Harris, and Dowland (1981) were interested in further refining the role of major losses in the etiology of depression. Their interpretation of the results of an epidemiological study of women in London was that depression will tend not to follow a major stressor such as a loss of a significant other person without the presence of at least one of four vulnerability factors: lack of intimacy with husband, three or more children under age 14 living at home, lack of employment, and loss of mother before age 11.

For those researchers for whom specific stressors led to specific disorders, loss events or exits from the social field were considered major stressors and correlated significantly higher than other events to measures of psychological impairment, especially depression (Paykel, 1979).

The mourning process described by Freud, Lindemann, Engel, Marris, Parkes, Bowlby, Schneider, and Clayton includes vegetative responses, strong emotions, loss-centered thinking, images and dreams of what is gone, and oftentimes an existential crisis (Yalom, 1980). Mourning may appear pathognomonic to observers who are unaware of

the connection between the grief response and the loss experienced by the bereaved. The above-mentioned dimensions of the grief response constitute a normal and adaptive response to the stress of a loss. The pattern of response to loss leads to the healing of the wound caused by the loss (Engel, 1962). Responses to grief are coping responses because they fulfill the coping functions as defined by Visotsky, Hamburg, Goss, and Lebovits (1961). The failure of an effective coping response to loss is depression. Depression, according to Arieti and Bemporad (1978), implies a deviation from the normal way of experiencing some emotions, especially sadness and sorrow.

Individuals who cannot tolerate sadness transform sadness into anxiety, rage, anger, hypochondriacal, or psychosomatic mechanisms. If the work of sorrow is successful, depression is avoided. Depression, as defined by Arieti (1978), is an ineffective method of coping with loss.

Summary

Presently available grief instrumentation is not adequate to measure normal grief. The Texas Grief Instrument (1977) was designed to measure unresolved grief. Items were generated for this instrument by the researchers' observations of the manifestations of unresolved grief in a clinical population. Items cover both abnormal responses as well as normal responses to loss. The Grief Scale of The Children's Hospital of Akron Parent Concerns Questionnaire (CHPCQ) was designed for parents of critically ill children. The items covered by the instrument are based on normal responses to loss according to

the major theorists cited in this review. The response options to the instrument require that each item be evaluated by the parent and be answered in terms of whether the response is a problem for the parent or not. This requires that the parent be able to evaluate the normality of the grief response. Without a measure of a normal response to loss, no clear distinction can be made between a normal and a pathological response to loss.

Grief is characterized in the literature as a normal response to loss (Bowlby, 1980; Engel, 1961; Folta, 1981; Marris, 1975), depression as a maladaptive response (Averill, 1979). The etiology of depression was accounted for by Akiskal and McKinney (1973) with a four-source theory. One of the four sources of depression is psychosocial stressors, especially adult object loss. A response of either depression or grief may result from losses or exits from the social field, according to Paykel (1979). Research by Brown and Harris (1978) has investigated sociological variables which might account for the development of depression in response to the death of a significant person. They concluded that variables such as early loss, lack of a job, children to care for at home, and no intimacy with a spouse act as vulnerability factors for women experiencing a death. Bowlby (1980) hypothesized that depression results from the interruption of the natural process of grief by the mechanism of disconnecting either emotionally or cognitively from the loss. Interruption of the grief process may also occur, according to Bowlby, if the bereaved refuses to accept the reailty of the loss, feels guilt and responsibility for the loss, or inhibits the expression of sorrow and sadness.

The ability to dream, imagine, and use fantasy was posited by Beck (1972), Schmale and Engel (1975), and Morrison (1978) to account for the ability of the bereaved to resolve loss without developing depression.

Loss is a specific stress that is correlated with depression (Paykel, 1979). Negatively appraised change is also correlated with stress-related variables such as depression (Sarason, Johnson, & Siegal, 1978). For those individuals who respond to the stress of a loss with depression, the assumption is made that they have failed to grieve for their loss (Bowlby, 1980). Arieti and Bemporad (1976) described depression as the failure of the bereaved to tolerate sadness and do the work of sorrow. These hypotheses have not been tested because the existing research on stress and loss uses only instruments that measure stress as defined by Selye (1976) or Sarason, Johnson, and Siegal (1978) and measures of depression. No research has accounted for the group of bereaved individuals who respond to the stress of a loss without developing a stress-related variable such as depression. Primarily, no research is being carried out in this area because no measures of normal stress responses or grief are available.

CHAPTER IV

DESIGN OF THE STUDY

The fourth chapter contains a description of the sample, the design of the study, the measures used, the hypotheses, and the statistical analyses conducted.

Subjects

The subject population was a purposive sample chosen to include subjects who had had a significant loss and sought help for the loss within the last two years and other groups where there was a possibility that some members of the group had experienced a loss within the last two years. In order to obtain a response to loss, it was necessary to find groups that had formed because they shared the experience of a common loss. Three such groups were contacted: (a) a young widows group at Lansing Community College; (b) The Society for Compassionate Friends in Ann Arbor, Michigan, a group for parents who had lost a child; and (c) the Hoping Group in Lansing, Michigan, a group for parents who had lost an infant. Other subjects where there was a possibility some members of the class had experienced a loss were contacted through seven college classes. These classes included five psychology classes at Lansing Community College, a psychology-of-women class at Michigan State University, and an Interpersonal Process Recall class at Michigan State University. A

further group of subjects were Hospice volunteers and friends of the investigator who were contacted because they had experienced a loss within the past two years.

Subjects were informed that the investigator was conducting a study of response to loss. Loss was defined as the absence by death or separation of someone or something valued by the subject. Specific losses of death, divorce, moving, break-up with a mate, and job-related losses were given as examples to the subjects. Subjects were informed that participating in the study involved responding to three self-report questionnaires. The first required answering questions about life experiences that had occurred within the past two years and then rating the impact of these experiences from -3 (extremely negative) to +3 (extremely positive). The second questionnaire required answering questions about current feelings and thoughts. The third questionnaire required choosing a loss that had occurred within the past two years and answering questions about the recent response (within the past month) to that loss.

Subjects were then requested to complete the standard research consent form as required by the Human Subjects Committee. Subjects were further informed that they could contact the investigator if they wished to learn the results of the study.

Design

The Response to Loss Instrument (RLI) is a rationally constructed and empirically tested instrument. The rational basis of this instrument was discussed in Chapter II. The empirical development of this instrument involved tests of both reliability and validity.

Reliability will be assessed using a test of internal consistency. Test-retest procedures would not be applicable for measuring a process such as grief, which changes over time. Items will be analyzed for internal consistency to insure that a homogeneous concept was being measured.

Of the three ways of ascertaining validity, concurrent, construct, and predictive, construct validity is the most applicable to this study. Construct validity requires the accumulation of information about how the construct under consideration responds in a variety of different situations. Construct validity is a process of gradually collecting information about the instrument being developed through testing hypotheses about the operationalized construct (Anastasi, 1976).

This study was designed to accumulate information about the construct validity of the Response to Loss Instrument. Demonstrating construct validity, according to Campbell (1960), requires showing that a test construct correlates highly with variables it is expected to correlate with and does not correlate with variables it is theoretically expected to be different from. Cronbach and Meehl (1955) suggested that a number of hypotheses regarding the expected characteristics of a personality variable be described and tested to support the validity of the instrument.

Depression is a variable expected to differ from normal uncomplicated mourning in certain expected directions. If support is found for the hypotheses presented in the next section, then the construct

of grief operationalized in the Response to Loss Instrument will be supported.

Measures Used in the Study

Three measures were used in this study: the Beck Depression Inventory, the Life Experiences Survey, and the Response to Loss Instrument.

The measure of depression is the Beck Depression Inventory (BDI) (Beck & Beamesderfer, 1974). This is a 21-item self-report inventory based on cognitive, emotional, motivational, and physical manifestations of depression. This instrument was chosen because of its proven reliability and validity and its wide use in behavioral research. Each item consists of four evaluative self-statements in order of increasing severity. The subject is instructed to circle the statement which best describes the way he/she feels. An example is as follows:

0 I do not feel sad
1 I feel sad
2 I am so sad all the time and I can't snap out of it
3 I am so sad or unhappy that I can't stand it

The BDI was found to have a split-half reliability coefficient of .86 for a sample of 97 depressed subjects (Beck & Beamesderfer, 1974). It was found to correlate with clinicians' global rating of depth of depression .65 (Beck & Beamesderfer, 1974). Nussbaum et al. (1963) found initial and final correlations between the MMPI D-scale and the BDI to be .75 and .69, respectively. Investigation of the construct validity of the BDI yielded strong support for the

inventory's validity. Seven hypotheses using depression as the criterion measure were tested and supported. Hypotheses included expectations the depressed subjects would have (a) "masochistic" dream content, (b) negative self-concept, (c) identify with the "loser" on projective tests, (d) have a history of deprivation, (e) respond to experimentally induced failure with a disproportionate drop in self-esteem, (f) show a high correlation between intensity of depression and suicidal intent, and (g) following a success experience, show a significant subjective and objective improvement. Beck concluded that the validity of the BDI was supported.

Beck and Beamesderfer (1974) stated that there is no arbitrary score to use as a cut-off point for depression with the BDI. The cut-off point is best determined by the characteristics of the sample and the purposes for which the instrument is being used. They recommended that for identifying a relatively pure group of depressed subjects for research purposes, when the desire is to minimize false positives, a high cutting score should be used. For clinical use, Beck had developed a rating system which determines the level of depression based on BDI scores. This rating system is as follows:

0- 4 No depression
5- 7 Mild depression
8-15 Moderate depression
16+ Severe depression

A measure of specific life stress, the Life Experiences Survey (LES) developed by Sarason, Johnson, and Siegel (1978) was administered. It is a 57-item self-report inventory of events experienced

during the past 24 months. It consists of a list of events which are experienced with at least some degree of frequency in the general population, e.g., marriage, death of a parent, as well as events pertinent to college students, e.g., failing a course. For every event experienced, the subject is instructed to rate its impact at the time the event occurred. The ratings range from -3, indicating an extremely negative impact, to +3, representing an extremely positive impact. No impact is rated 0.

In test-retest reliability studies of the LES, undergraduate students (n = 58) were administered the LES twice, five to six weeks apart. The reliability correlation for the negative change score was .88 ($p < .001$).

The LES correlates significantly with a number of relevant personality and behavioral indices. For a sample of 97 undergraduate students, the LES was correlated with both trait and state anxiety measures. Negative change scores correlated .29 ($p < .01$) with trait anxiety and .46 ($p < .001$) with state anxiety, while total change scores correlated .21 ($p < .05$) and .37 ($p < .001$), respectively. In a sample of 64 undergraduate students, the negative change score correlated .24 ($p < .05$) with the Beck Depression Inventory and .32 ($p < .02$) with the Locus of Control scale. No significant correlations were found for either positive or total change scores. The authors concluded that the negative change score was reliable and significantly related to a number of stress-related dependent measures.

Research Questions and Hypotheses

This study investigated and attempted to answer two general questions about the reliability and validity of the Response to Loss Instrument. Questions of reliability and validity were tested by research hypotheses: Three hypotheses were developed to test reliability and seven to test validity. Support for these research hypotheses is the first step in answering questions of reliability and validity of the RLI.

Reliability of the RLI

Hypothesis I: The internal consistency of the total items of the Response to Loss Instrument will be sufficiently high to infer homogeneity of the construct of grief.

Hypothesis II: The internal consistency of the six scales of the Response to Loss Instrument will be sufficiently high to infer that each scale is measuring a single dimension of grief.

Hypothesis III: The scales of the Response to Loss Instrument will be highly correlated with each other.

Validity of the RLI

Following the description by Cronbach and Meehl (1955) of construct validity, which requires the testing of a number of hypotheses regarding the personality variable under consideration, the seven hypotheses investigated, if confirmed, would lend support to the validity of the RLI.

Mourning is a process that occurs over time. The response begins with an initial period of defensive measures which can last up to two weeks and would not include subjects in this study. Mourning continues with an intense response to the loss when the bereaved is

fully aware of the reality of the loss. Finally, the intense response abates during the resolution phase.

Hypothesis IV (a): The Response to Loss Instrument scores of subjects who score below 18 on the Beck Depression Inventory (nonseverely depressed subjects) will have a significant negative correlation with the time since the reported loss occurred.

Hypothesis IV (b): The Response to Loss Instrument scores of subjects who score 18 or above on the Beck Depression Inventory (severely depressed subjects) will not significantly correlate with the time since the reported loss occurred.

The impact of the loss event as subjectively rated by the subject will influence the intensity of the mourning response. The more impact the loss event has, the more intense the grief response will be (Bowlby, 1980).

Hypothesis V: The impact of the loss score and the time since the reported loss will significantly predict total scores on the Response to Loss Instrument.

According to Bowlby's (1980) theory, defense against loss involves the separation of cognitions and information about the loss from emotional responses to the loss. These defensive processes interfere with the normal process of mourning, and because the sorrow work does not get completed, the subject's response to the loss is characterized by depression (Arieti & Bemporad, 1978; Bowlby, 1980).

Hypothesis VI: Differences are predicted between the Severe Depression group and the No Depression group on a measure of the separation of cognitions from emotions on the Response to Loss Instrument.

According to theorists Bowlby (1980), Rees (1975), and Schneider (in press), the ability to dream and use dreams to resolve the loss, the ability to imagine and use the imagination in the service of the

mourning process are aspects of normal mourning and, in particular, distinguish it from pathological responses to loss.

Hypothesis VII: Subjects in the No Depression group will score significantly higher on the Imaginative scale of the Response to Loss Instrument than subjects in the Severe Depression group.

A nonpathological response to loss involves the ability to limit the expression of grief through physical channels. Using the body to express response to loss can lead to physical illness and diverts the grief process in such a way that working through and resolution become impossible. Psychologically a person who somatacizes becomes depressed (Bowlby, 1980).

Hypothesis VIII: Subjects in the Severe Depression group will score significantly higher on the Physical scale of the Response to Loss Instrument than subjects in the No Depression group.

Chronic grief is a characteristic pathological variant of mourning whose chief symptom is depression, according to Bowlby (1980). Chronic grief involves an overly severe grief response to loss with an inability to work through the responses of loss to resolution.

Hypothesis IX: Across types of loss, the Severe Depression group will score significantly higher on the Response to Loss Instrument than the No Depression group.

Hypothesis X: A discriminative function can be generated from the scale scores of the Response to Loss Instrument and be used to discriminate between the Severe Depression and No Depression groups within the Death and Separation groups.

Research Procedures

Procedures used to test the ten hypotheses are discussed in the next section.

Reliability Hypotheses

Hypotheses I, II, and III are intended to provide information about the reliability of the RLI. Reliability studies on self-report instruments like the RLI are usually tests of internal consistency.

The internal consistency of a test is a measure of its homogeneity. If the instrument is not homogeneous, scores on the instrument are difficult to interpret because more than one construct is being measured. How the different constructs are being combined to produce the single score is unknown.

Internal consistency of the RLI (Hypothesis I) and of the scales of the RLI (Hypothesis II) was tested by computing Cronbach's Coefficient Alpha. The coefficient is determined by computation of all the means of the split-half coefficients resulting from all possible item pairings (Cronbach, 1951). A value of at least .75 is considered necessary for a scale to be judged internally consistent or homogeneous.

Relationships between the scales (Hypothesis III) were determined by computing Pearson Product Moment Correlations between the scale totals.

Validity Hypotheses

Hypotheses IV to X were addressed to the validity of the RLI. Validity refers to the extent to which an instrument measures what it purports to measure. Tests of construct validity, one type of validity, involve development of a set of hypotheses to determine if

the construct under investigation behaves as expected based on the guiding theory.

The first test of construct validity (Hypothesis IVa) was to determine if the RLI would be associated with the amount of time which had passed since the reported loss. The expectation was that higher scores on the RLI would be associated with more recent losses, and lower RLI scores with losses that had occurred longer ago. The procedure used was to correlate the total RLI score of all subjects with the amount of time since the loss occurred. For this hypothesis to be accepted, a negative correlation, significant at the .05 level, would have to be found.

The second hypothesis, Hypothesis IVb, is related to the first. It was expected that the Depressed group would not be grieving normally, and therefore their scores on the RLI would not correlate significantly with the time since the reported loss. Any positive correlation, significant at the .05 level, would not support this hypothesis.

A third test of construct validity was to determine if the RLI total score was related to the subjective impact of the loss. It was expected that the more negative impact the loss event had, the more intense the grief response, and therefore the larger the score on the RLI would be. Time since the loss occurred was also expected to predict the RLI total score. Hypothesis V was tested by a Multiple Regression Analysis. The impact-of-the-loss and the time-since-the-loss variables were considered predictor variables of the RLI total score if the level of significance reached the .05 level.

The fourth test of construct validity, Hypothesis VI, was a test of the theory that in normal grief cognitions and emotions are parallel responses, but that in depression, defensive processes interfere with grief. Therefore, in depression, emotions and cognitions are separated and one or the other is repressed. A Two-Way Analysis of Variance was employed to compare the mean scores of the Severe Depression group and the No Depression group on a measure created by subtracting the score on the Emotional scale from the score on the Cognitive scale of the RLI. Subgroups within the sample were also tested in this manner. Subjects who had responded to the RLI in terms of a death and subjects who had responded in terms of a separation were included in an analysis to assess if membership in either of these groups accounted for differences in cell means. Main effects and interaction effects were considered significant at the .05 level.

Hypotheses VII and VIII were also developed to determine if the RLI could distinguish a grief response to loss from a depression response to loss. It was hypothesized that the Severe Depression group would score significantly lower on the Imaginative scale (Hypothesis VII) and significantly higher on the Physical scale (Hypothesis VIII) than subjects in the No Depression group. Both hypotheses were tested with a Two-Way Analysis of Variance to compare the mean scores on the Imaginative scale and the Physical scale for these populations to see if they were the same or different. Type of loss, separation or death, was also investigated to determine if type of loss accounted for differences in cell means. Main effects and interaction effects were considered significant at the .05 level.

Another test of the validity of the RLI as a measure of grief was to determine if, across types of loss, the Severe Depression group would score significantly higher on the RLI than the No Depression group (Hypothesis IX). A *t*-test was computed between the No Depression and the Severe Depression groups to determine if the Severe Depression group means were significantly higher, at the .05 level.

The final hypothesis, Hypothesis X, involved a test of the ability of the scales of the RLI to meaningfully discriminate between the Severe Depression group and the No Depression group. Discriminant Analysis was performed on the loss-by-separation group and the loss-by-death group. Only scales which discriminated at the .05 level of significance were considered in the discriminant function.

CHAPTER V

RESULTS

This chapter presents a description of the subject pool and the test results of the hypotheses under investigation. Each hypothesis is restated and the statistical procedures described. The results of the analysis are then presented.

Summary Statistics of Subjects

The final subject pool consisted of 152 subjects, 41 males and 111 females. The mean age for the total sample was 29.25. The mean level of education was 15.20 for males and 14.85 for females, and 14.95 for the total sample. The sample was predominantly single; 51.2% of the males were single, 42.3% of the females, and 44.7% of the total sample. The majority of subjects had no children--59.1% of the total sample. Sixty-six and four-tenths percent of the total sample had no experiences of early loss. Divorce of parents was the most prevalent early loss; 13.2% of the total sample had parents divorce before they left home. The majority of subjects had never been in therapy (70.9% of the total sample).

Subjects were requested to answer the Response to Loss Instrument in terms of a loss that had occurred within the last two years. Twenty and one-tenth percent answered the RLI in terms of a loss under the category Other. The losses included under the category

Other are listed in Table 3. The second largest group was break up with girl friend or boy friend, which accounted for 17.8% of the total sample. Percentages for the other losses are found in Table 4.

The time since the reported loss occurred had five categories: within the last three months, from four months to six months, seven months to one year, 13 months to two years, and no loss within the last two years. The largest percentage of males, 24.4%, had no loss within the last two years. For females, the largest number had a loss that occurred 13 months to two years ago, 28.8% of the female sample. Twenty-seven percent of the total sample answered the RLI in terms of a loss that had occurred 13 months to two years ago.

The impact of the reported loss was rated from -3 (extremely negative) to +3 (extremely positive). The majority of the males, the females, and the total sample rated their reported loss -3 (extremely negative). The respective percentages are: 43.6% of the males, 46.3% of the females, and 45.6% of the total sample. Other percentages are listed in Table 4.

The Life Experiences Survey (LES) negative change score was used to measure subjects' quantity of life experiences perceived as having negative impact. Males' average score was 11.56 (SD = 8.72) and females' average score was 10.68 (SD = 8.07). For the total sample, the average negative change score was 10.92 (SD = 8.23).

The Beck Depression Inventory (BDI) was used to measure subjects' level of depression. Males' average score was 9.26 (SD = 5.19), and females' average score was 8.83 (SD = 7.50). For the total sample, the average score on the BDI was 8.95 (SD = 6.94).

Table 3: Losses Reported Under the Category Other on the RLI and the Subgroup Placement of the Loss

Loss Reported
Death Subgroup[a]
1. Death of grandmother
2. Death of grandfather
3. Death of cousin
4. Death of cousin
5. Death of brother
6. Death of grandparent
7. Death of grandfather
8. Death of brother
9. Death of grandmother
10. Death of infant nephew
11. Abortion
12. Death of grandfather
Separation Subgroup[b]
13. Husband working in other state
14. Separated from spouse
15. Moving to new area for college
16. Separation from old friends
17. Brain injury of cousin
18. Loss of closeness with family
19. Loss of close woman friend
20. Loss of contact with friend
21. Loss of friendship
22. Divorce of parents
23. Loss of contact with loved one
Other Loss Subgroup[c]
24. Lack of preparation for college
25. Loss of income
26. Sexual difficulties
27. Sexual problems
28. Jo job after graduation
29. No job after graduation
30. Personal illness

[a] $\underline{n} = 12.$

[b] $\underline{n} = 11.$

[c] $\underline{n} = 7.$

Table 4: Description of Subjects

	Male[a]		Female[b]		Total[c]	
	Mean	SD	Mean	SD	Mean	SD
Age	27.53	10.19	29.88	11.69	29.25	11.31
Education	15.20	2.75	14.85	2.70	14.95	2.71
LES Negative Change Score	11.56	8.72	10.68	8.07	10.92	8.23
Beck Depression Inventory	9.26	5.19	8.83	7.50	8.95	6.94
Response to Loss Instrument	32.00	20.40	31.77	22.06	31.83	21.56
			Percentages			
Marital Status						
1. single	51.2%		42.3%		44.7%	
2. married	31.7%		27.9%		28.9%	
3. separated from spouse	2.4%		3.6%		3.3%	
4. divorced	7.3%		6.3%		6.6%	
5. engaged	2.4%		3.6		3.3%	
6. widow or widower	0.0%		10.8%		7.9%	
7. living with a lover	4.9%		4.5%		4.6%	
8. living alone	0.0%		0.9%		0.7%	
Children						
1. living at home	32.5%		31.2%		31.5%	
2. not living at home	7.5%		10.1%		9.4%	
3. no children	60.0%		58.7%		59.1%	
Early Losses						
1. mother died before age 15	0.0%		4.5%		3.3%	
2. father died before age 15	4.9%		9.0%		7.9%	
3. sibling died while still at home	0.0%		2.7%		2.0%	
4. parents divorced	7.3%		15.3%		13.2%	
5. close school friend died	4.9%		8.1%		7.2%	
6. no loss	82.9%		60.4%		66.4%	

Table 4: Continued

	Male[a]	Female[b]	Total[c]
Therapy Experiences			
1. sought therapy before loss	22.5%	18.0%	19.2%
2. sought therapy for the loss	0.0%	13.5%	9.9%
3. considering therapy for loss	0.0%	0.0%	0.0%
4. no therapy	77.5%	68.5%	70.9%
Reported Loss			
1. death of spouse	0.0%	8.1%	5.9%
2. death of child	12.2%	12.6%	12.5%
3. death of parent	9.8%	15.3%	13.8%
4. death of friend	7.3%	6.3%	6.6%
5. job-related loss	2.4%	6.3%	5.3%
6. divorce	0.0%	3.6%	2.6%
7. break up with girl or boy friend	31.7%	12.6%	17.8%
8. moving, leaving home	2.4%	2.7%	2.6%
9. other loss	17.1%	21.6%	20.4%
10. no loss	17.1%	10.8%	12.4%
Time Since Loss			
1. 3 months or less	19.5%	18.9%	19.1%
2. 4-6 months	19.5%	14.4%	15.8%
3. 7 months-1 year	14.6%	21.6%	19.7%
4. 13 months-2 years	22.0%	28.8%	2.7%
5. no loss within 2 years	24.4%	16.2%	18.4%
Impact of Loss			
1. -3 (extremely negative)	43.6%	46.3%	45.6%
2. -2 (moderately negative)	15.4%	22.2%	20.4%
3. -1 (somewhat negative)	15.4%	13.9%	14.3%
4. 0 (no impact)	23.1%	13.0%	15.6%
5. +1 (slightly positive)	0.0%	2.8%	2.0%
6. +2 (moderately positive)	2.6%	.9%	1.4%
7. +3 (extremely positive)	0.0%	.9%	.7%

[a] n = 41.

[b] n = 111.

[c] n = 152.

The Response to Loss Instrument (RLI) was used to measure the grief response to the reported loss. Males' average score was 32.00 (SD = 20.40), and females' average score was 31.77 (SD = 22.06). For the total sample, the average score was 31.83 (SD = 21.56).

Subgroup Formation by Category of Reported Loss

Subjects were asked to answer the Response to Loss Instrument in terms of a specific loss. Ten categories of possible losses were provided: (a) death of a spouse; (b) death of a child; (c) death of a parent; (d) death of a friend; (e) job-related loss; (f) divorce; (g) break up with girl or boy friend; (h) moving to a new area, including leaving home for the first time; (i) other loss, and (j) no loss. These categories were divided into four groups: subjects who responded to the RLI in terms of (1) Death, (b) Separation, (c) an Other loss, or (d) No Loss.

The loss by Death group included: (a) death of a spouse, (b) death of a child, (c) death of a parent, and (d) death of a friend. The loss category Other was analyzed, and appropriate subjects from this category were added to the Death group. The losses reported from the category Other and the group placement for each loss are listed in Table 3. The Death group has 71 subjects.

The Separation group included: (a) divorce; (b) break up with girl or boy friend; (c) moving to a new area, including leaving home for the first time, and 11 subjects from the category Other. These losses included under the group Separation are listed in Table 3. The total number of subjects in the Separation group is 46.

The Other loss group included job-related losses and seven subjects from the Other category. These losses are also listed in Table 3. This group has 15 subjects.

The No Loss group are subjects who stated that they had no loss. The No Loss group is composed of 19 subjects.

The description of the subgroups of the sample on the Beck Depression Inventory, the Life Experiences Survey Negative Change Score, the Response to Loss Instrument, age, and education are reported in Table 5. No further analyses were computed on the No Loss and the Other loss groups.

Separation and Death group differences were explored by *t*-tests on the RLI, the Beck Depression Inventory, the Negative Change Score of the Life Experiences Survey, the rating of the impact of the loss, and the time since the reported loss occurred. One significant difference was found on the Negative Change Score of the Life Experiences Survey. Table 6 summarizes these results.

Sex differences were also investigated by computing *t*-tests for the total sample on the RLI, the BDI, the LES Negative Change Score, the time since the loss, and the impact of the loss. No significant differences were found. *T*-tests were also computed for the Death and Separation groups, and again no significant sex differences were found within these two groups.

Formation of the Severe Depression and No Depression Groups

Testing of the hypotheses required the formation of a group that was severely depressed and a group with no depression. The Beck

Table 5: Means and Standard Deviations for Groups Within the Sample on the BDI, LES Negative Change Score, RLI, Age, and Education Variables

Group	n	Mean	SD
Beck Depression Inventory (BDI)			
Death	71	9.78	7.54
Separation	46	8.56	6.54
Other Loss	15	9.49	8.28
No Loss	19	6.63	3.50
Total	152	8.95	6.94
LES Negative Change Score			
Death	71	8.23	7.19
Separation	46	13.10	8.09
Other Loss	15	13.33	10.52
No Loss	19	9.15	8.46
Total	152	10.92	8.23
Response to Loss Instrument (RLI)			
Death	71	38.70	21.17
Separation	46	33.80	17.75
Other Loss	15	28.40	19.89
No Loss	19	5.52	9.17
Total	152	31.83	21.56
Age			
Death	71	33.64	13.12
Separation	46	25.37	7.21
Other Loss	15	25.46	7.64
No Loss	19	25.57	9.52
Total	152	29.25	11.31
Education			
Death	71	14.72	2.30
Separation	46	15.55	3.09
Other Loss	15	15.40	1.92
No Loss	19	13.88	3.44
Total	152	14.95	2.71

Table 6: T-Tests Comparing the Death and Separation Groups on the Following Variables: RLI, BDI, LES Negative Change Score, Time Since the Loss, and the Loss Impact

Variable	Group	N	Mean	SD	t-Value	Two-Tail Probability
RLI	Separation	46	33.80	17.75	-1.35	.18
	Death	71	38.70	21.17		
BDI	Separation	46	8.57	6.54	- .92	.36
	Death	71	9.78	7.54		
LES Negative Change Score	Separation	46	13.11	8.09	2.64	.01*
	Death	71	9.24	7.19		
Time Since the Loss	Separation	46	1.67	1.11	-1.58	.12
	Death	71	2.03	1.28		
Loss Impact	Separation	46	.85	1.01	- .50	.62
	Death	71	.96	1.36		

*$p < .01$.

Depression Inventory, when used as a clinical assessment instrument, rates depression with the following scale:

0- 4	no depression
5- 7	mild depression
8-15	moderate depression
16+	severe depression

In order to eliminate false positives, a cut-off point of 18 on the Beck Depression Inventory was used to create the Severe Depression group. Twenty subjects account for this group, which is 13.2% of the total sample. Subjects from the Severe Depression group cut across all subject groups: Three lost a spouse, four experienced a break up with a girl or boy friend, three the death of a parent, four the death of a child, two job-related losses, one the death of a friend, one a divorce, one a separation, and one sexual difficulties.

The No Depression group was formed by including subjects scoring three or below on the Beck Depression Inventory, to insure the exclusion of mildly depressed subjects. Thirty subjects are included in this group, which is 19.7% of the total sample. Subjects from this group endorsed the following losses: (a) loss of a spouse, one subject; (b) loss of a child, two subjects; (c) loss of a parent, five subjects; (d) loss of a friend, four subjects; (e) loss of a job, one subject; (f) divorce, one subject; (g) break up with girl friend or boy friend, seven subjects; (h) moving, one subject; (i) no loss, three subjects; and (j) other loss: death of grandparent, separation from husband, death of grandfather, death of brother, no job after graduation, five subjects.

T-tests were calculated on the No Depression and Severe Depression groups on the RLI, BDI, LES Negative Change Score, time since the loss, and the impact of the loss. Significant differences were found between the No Depression group and the Severe Depression group on all variables but the time since the loss. Table 7 summarizes these results.

Test of the Hypotheses

Hypotheses Related to the Reliability of the Response to Loss Instrument

Hypothesis I: The internal consistency of the total items of the Response to Loss Instrument will be sufficiently high to infer homogeneity of the construct of grief.

The internal consistency of the instrument was determined by computing Cronbach's Alpha Coefficient. The total scale alpha coefficient was .95. This is a high coefficient for a self-report instrument. This high level of internal consistency permits a strong inference that the instrument measures a single dimension, namely, grief.

Reliability of the RLI was further assessed using the split-half method. A randomized form of the RLI was subjected to this analysis, and a reliability correlation of .95 was found. All reliability tests of the RLI are summarized in Table 8.

Hypothesis II: The internal consistency of the six scales of the Response to Loss Instrument will be sufficiently high to infer that each scale is measuring a single dimension of grief.

The alpha coefficient determined for each of the six scales of the RLI is lower than the alpha coefficient for the entire instrument. The alpha coefficient for each scale, listed in descending order of

Table 7: T-Tests Comparing the Severe Depression and No Depression Groups on the Following Variables: RLI, BDI, LES Negative Change Score, Time Since the Loss, and the Loss Impact

Variable	Group	N	Mean	SD	t-Value	Two-Tailed Probability
RLI	No Depres.	30	17.47	2.16	- 9.18	.001**
	Severe Dep.	20	57.85	3.82		
BDI	No Depres.	30	1.57	.22	-16.33	.001**
	Severe Dep.	20	22.52	1.27		
LES Negative Change Score	No Depres.	30	6.37	.84	- 4.61	.001**
	Severe Dep.	20	12.20	1.96		
Time Since the Loss	No Depres.	30	1.97	.23	- .09	.927
	Severe Dep.	20	2.00	.28		
Loss Impact	No Depres.	30	1.50[a]	.21	3.33	.002*
	Severe Dep.	20	.50[b]	.21		

[a] 1.50 = a loss impact between -2 and -1.

[b] .50 = a loss impact between -3 and -2.

*$p < .002$.

**$p < .001$.

homogeneity, is .88 for the Emotional dimension scale, .84 for the Cognitive dimension scale, .79 for the Physical dimension scale, .75 for the Imaginative dimension scale, .74 for the Spiritual dimension scale, and .73 for the Behavioral dimension scale. The results are presented in Table 8.

Table 8: Internal Consistency of the Response to Loss Instrument for Total Scores and Scale Scores: Cronbach's Alpha and Split-Half Reliability (N = 152)

Scale	Reliability
	Cronbach's Alpha
Cognitive Scale	.84
Emotional Scale	.88
Physical Scale	.79 .80 with Item 11 removed[a]
Imaginative Scale	.75
Spiritual Scale	.74 .75 with Item 49 removed[b]
Behavioral Scale	.73
Total (47 items)	.95
Total (37 items with Scale B removed and Items 11 and 49)	.95
	Split-Half Reliability
Total (47 items)	.95
Total (37 items with Scale B removed and Items 11 and 49)	.95

[a]Item 11 is "My eating habits have changed since the loss; I am eating more."

[b]Item 49 is "I am increasingly aware of my own mortality."

The alpha coefficients were determined for each scale by successively removing each item from the scale. Removing Item 11 from the Physical dimension scale improved the alpha coefficient from .79 to .80. All further analyses on the RLI were performed without this item. Item 49, when removed from the Spiritual dimension scale, improved the alpha coefficient from .74 to .75. All further analyses on the RLI were performed with this item removed.

At this point in the analysis, the Behavioral scale was dropped from all further analysis of the RLI. The alpha coefficient of .73 was considered too low to be sure that only one dimension was being measured by this scale.

The internal consistency of the revised form of the RLI with 37 items was determined by computing Cronbach's alpha coefficient. The alpha coefficient for the revised form was the same as the total instrument: .95.

Hypothesis III: The scales of the Response to Loss Instrument will be highly correlated with each other.

The correlations between the five scales of the RLI were determined by computing a Pearson Product Moment Correlation matrix.

The inter-scale correlations range from .55 between the Imaginative and the Spiritual dimension scales to .80 between the Cognitive and the Emotional dimension scales. The results of this analysis are presented in Table 9.

Table 9: Correlation Matrix of the Subscales of the Response to Loss Instrument

Scale	Scale				
	Emotional	Cognitive	Spiritual	Physical	Imaginative
Emotional	..	.80	.68	.73	.65
Cognitive	.80	..	.64	.64	.59
Spiritual	.68	.64	..	.57	.55
Physical	.73	.64	.57	..	.58
Imaginative	.65	.59	.55	.58	..

Note: All correlations are significant at $p < .001$.

Hypotheses Related to the Validity of the Response to Loss Instrument

Hypothesis IVa: The Response to Loss Instrument scores of subjects who score below 18 on the Beck Depression Inventory (non-severely depressed subjects) will have a significant negative correlation with the time since the reported loss occurred.

This hypothesis was tested by computing a Pearson Product Moment Correlation between the RLI scores of subjects who scored below 18 on the Beck Depression Inventory and the time since the reported loss occurred. The RLI significantly correlated with time since the loss ($r = -.34$, $p < .001$).

Hypothesis IVb: The Response to Loss Instrument scores of subjects who score 18 or above on the Beck Depression Inventory (severely depressed subjects) will not significantly correlate with the time since the reported loss occurred.

This hypothesis was tested, as was the previous hypothesis, by a Pearson Product Moment Correlation. The RLI score of the Severe Depression group (18 or over on the BDI) was correlated with the time

since the loss. No significant correlation was obtained; therefore, the hypothesis was supported (r = -.09, p < .35).

Hypothesis V: The impact of the loss score and the time since the reported loss will significantly predict total scores on the Response to Loss Instrument.

A multiple regression analysis was performed using the RLI as the dependent variable and the impact of the loss and the time since the loss as the independent variables. Thirty-seven and ninety-six hundredths percent of the variation in the RLI was explained by the impact of the loss and the time since the loss. The multiple r = .67, which represents the multiple correlation between the dependent and the two independent variables, was significant (p < .001).

The independent variables, the impact of loss and the time since the loss, have significant linear effects on the RLI. The impact of the loss accounts for 34.53% of the variation in the RLI (F = 67.96, p < .000). The time since the loss is also significant but only adds 3.43% explained variation (F = 7.95; p < .005).

Hypothesis VI: Differences are predicted between the Severe Depression group and the No Depression group on a measure of the separation of cognitions from emotions on the Response to Loss Instrument.

This hypothesis was tested with a Two-Way Analysis of Variance. The Severe Depression group and the No Depression group and type of reported loss were the independent variables. Type of loss was subdivided into losses caused by death and losses caused by separation. The results are found in Table 10.

One main effect was found for the level of depression (F [1,41] = 7.39, p < .01). Severely depressed subjects scored significantly

higher on the measure of difference between the Cognitive and Emotional scale scores of the RLI. No significant interactions were found.

Table 10: Analysis of Variance of the RLI Cognitive Scale Minus the Emotional Scale Difference Score for Level of Depression and Type of Loss (Separation and Death)

Source	df	SS	MS	F
Level of depression	1	60.67	60.67	7.39*
Type of loss	1	.58	.58	.79
Lev dep x type of loss	1	15.57	15.57	.18
Within-groups	38	312.01	8.21	

*$p < .01$.

Hypothesis VII: Subjects in the No Depression group will score significantly higher on the Imaginative scale of the Response to Loss Instrument than subjects in the Severe Depression group.

A Two-Way Analysis of Variance was computed to test the effect of level of depression on the Imaginative scale of the RLI. The reported loss groups consisted of subjects responding to the RLI in terms of a loss caused by a separation or by a death. The results of this analysis indicate that there is a significant main effect for level of depression. Severely depressed subjects scored significantly higher on the Imaginative scale of the RLI than did nondepressed subjects. There were no significant interaction effects. The differences between the groups are the opposite of the hypothesized direction.

The results of this analysis are presented in Table 11. Possible explanations for this result will be discussed in Chapter VI.

Table 11: Analysis of Variance of the Imaginative Scale of the RLI for Level of Depression and Type of Loss (Separation and Death)

Source	df	SS	MS	F
Level of depression	1	185.36	185.36	19.50*
Type of loss	1	.40	.40	.04
Lev dep x type of loss	1	28.48	28.48	3.00
Within groups	38	361.14	9.50	

*$p < .001$.

Hypothesis VIII: Subjects in the Severe Depression group will score significantly higher on the Physical scale of the Response to Loss Instrument than subjects in the No Depression group.

This hypothesis was tested by computing a Two-Way Analysis of Variance to test the effect of level of depression and type of loss on the Physical scale of the RLI. The results of this analysis are presented in Table 12.

A significant main effect was found for the level of depression (F [1,41] = 106.31, $p < .001$). Severely depressed subjects scored significantly higher on the Physical scale of the RLI than did non-depressed subjects. No significant interaction effects were found.

Table 12: Analysis of Variance of the Physical Scale of the RLI for Level of Depression and Type of Loss (Separation and Death)

Source	df	SS	MS	F
Level of depression	1	692.34	692.34	106.31*
Type of loss	1	.77	.77	.12
Lev dep x type of loss	1	9.29	9.29	.24
Within-groups	38	247.47	6.51	

*$p < .001$.

Hypothesis IX: Across types of loss, the Severe Depression group will score significantly higher on the Response to Loss Instrument than the No Depression group.

This hypothesis was tested by a t-test comparison of the RLI means for the Severe Depression and No Depression groups. The Severe Depression group mean was significantly higher ($t = -9.18$, $p < .001$).

Further t-test comparisons between these two groups were performed for the following variables: BDI ($t = -16.33$, $p < .001$), LES Negative Change Score ($t = -4.61$, $p < .001$), loss impact ($t = 3.33$, $p < .002$), and time since the loss ($t = -.09$, $p < .927$). Subjects in the Severe Depression group were significantly more depressed, endorsed a greater number of negatively rated losses, and perceived their reported loss more negatively than did the No Depression group subjects. However, there was no significant difference found in the amount of time since the loss.

Hypothesis X: A meaningful discriminative function can be generated from the scale scores of the Response to Loss Instrument and be used to discriminate between the Severe Depression and No Depression groups within the Death and Separation groups.

Separate discriminant analyses were performed for the Death and Separation groups. Discriminant analysis is a form of multiple regression and is used to determine which variables in a given set have the most power to discriminate between two criterion variables. The variables used in both analyses were the scales of the RLI. The criterion variables were no depression and a loss by death and severe depression and a loss by death. The same analysis was performed on the loss-by-separation group.

Means and standard deviations were generated for the scales of the RLI for the No Depression and Severe Depression groups within the loss-by-separation group. Wilkes' lambda was generated for each scale of the RLI. The lambda level indicates the discriminating power of the variable (the larger the lambda is, the less the discriminating power). Table 13 presents a summary of these findings.

For the separation group, the scales which had significant discriminating power between the Severe Depression and the No Depression groups were the Cognitive scale (lambda = .22, $p < .0001$), the Imaginative scale (lambda = .25, $p < .0001$), and the Physical scale (lambda = .27, $p < .0001$).

A discriminant analysis was also performed on the Severe Depression and No Depression groups within the loss-by-death group. The following discriminant variables were significant: the Cognitive scale (lambda = .19, $p < .001$), the Spiritual scale (lambda = .20, $p < .001$), and the Physical scale (lambda = .26, $p < .001$). Scales not found to be in the discriminant function, in the death group, were the Imaginative scale and the Emotional scale. These scales

were eliminated because they did not account for a significant amount of the variation between the Severe Depression and the No Depression groups. The Spiritual scale and the Emotional scale were eliminated from the separation group discriminant function for the same reason.

Table 13: Discriminant Analysis on Death and Separation Groups Using the RLI Subscales as Discriminating Variables

Variable RLI Subgroup	Reported Loss by Separation: No Depression[a]		Reported Loss by Separation: Severe Depression[b]		Wilkes Lambda
	Mean	SD	Mean	SD	
1. Spiritual	1.5	2.1	5.3	3.8	
2. Cognitive	6.1	3.6	10.0	4.0	.22*
3. Physical	1.3	1.4	8.3	3.1	.27*
4. Imaginative	3.9	2.2	6.0	3.7	.24*
5. Emotional	6.0	3.3	15.1	3.7	

Variable RLI Subgroup	Reported Loss by Death: No Depression[c]		Reported Loss by Death: Severe Depression[d]		Wilkes Lambda
	Mean	SD	Mean	SD	
1. Spiritual	2.9	2.4	11.3	4.5	.19*
2. Cognitive	7.5	4.1	16.4	4.7	.18*
3. Physical	.8	1.4	9.8	3.7	.25*
4. Imaginative	2.3	3.2	7.9	3.2	
5. Emotional	5.7	4.4	19.1	6.1	

[a] n = 10.
[b] n = 6.
[c] n = 15.
[d] n = 11.

*p < .001.

Further Analyses

Correlation Coefficients

In a further study of the relationship between the Response to Loss Instrument and the variables of depression, negatively experienced change, time since the loss, and loss impact, correlation coefficients were calculated for the Death group, the Separation group, the No Depression group, and the Severe Depression group.

For the Death group, except for the loss date, correlations between variables were significant. Time since the loss did not correlate significantly with any of the other variables. The highest correlation was between the RLI and the Beck Depression Inventory (r = .72, p < .001).

The Separation group differed from the Death group in two ways: (a) one further correlation was significant--the time since the loss correlated with the RLI (at the .001 level) and (b) the order of significance differed in the Separation group--the highest correlation was between the RLI and the LES Negative Change score (r = .51, p < .001) and then between the BDI and the RLI (r = .40, p < .001), and finally between the loss impact and the RLI (r = -.42, p < .002).

Both the No Depression and the Severe Depression group had only one significant correlation: The RLI correlated significantly with the impact of the loss for both groups (r = -.56, p < .001; r = -.39, p < .05, respectively).

Correlation coefficients between the BDI and the Life Experiences Survey negative change score were also calculated. Sarason et al. (1978), in their research with the LES, found a correlation of .24

($p < .05$) with an undergraduate population. Correlations between the BDI and the LES Negative Change score were calculated for the following groups: Death group, Separation group, No Depression group, and Severe Depression group. The correlation for the No Depression group was .27 and was not significant. The correlations between the BDI and the LES Negative Change score were significant for the Death group ($r = .50$, $p < .001$), the Separation group ($r = .43$, $p < .001$), and the Severe Depression group ($r = .38$, $p < .05$). The implication of these results will be discussed in the next chapter. A summary of these correlations is in Table 14.

Multiple Regression

A regression equation was computed using the Response to Loss Instrument as the dependent variable and the Beck Depression Inventory, the time since the loss, the impact of the loss, and the Life Experiences Survey Negative Change score as the independent variables. The purpose of this analysis was to determine how much of the variation of the RLI could be attributed to depression as measured by the BDI and to stress as measured by the LES Negative Change score. The variables time since the loss and the impact of the loss were also included because they accounted for a significant amount of the variation in the previous regression equation conducted under the test of Hypothesis V.

Fifty-eight and ninety-three hundredths percent of the variation in the RLI was explained by the independent variables. Three of the four variables contributed significantly to the overall linear

Table 14: Correlation Coefficients Between the RLI and the LES Negative Change Score, the BDI, the Time Since the Loss, and the Impact of the Loss on Groups Within the Sample

	LES Neg.	BDI	Time	Impact of the Loss
Response to Loss Instrument				
Death group	.37***	.72***	-.02	-.43***
Separation group	.51***	.50***	-.46***	-.42**
No Depression group	.22	.04	-.15	-.56***
Severe Depression group	-.03	.19	-.09	-.39*

Correlation Coefficients Between the BDI and the LES Negative Change Score on Groups Within the Sample

	BDI
LES Negative Change Score	
Death group	.50***
Separation group	.43***
No Depression group	.27
Severe Depression group	.38*

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

dependence of the RLI on the independent variables.[4] The largest proportion of explained variation was accounted for by the BDI ($F = 86.48$, $p < .001$); 37.36% of the variation in the RLI was explained by the BDI. The second largest proportion of explained variation was accounted for by the impact of the loss ($F = 60.58$, $p < .001$); 18.55% of the variation in the RLI was explained by the impact of the loss. While the time since the loss was significant ($F = 10.11$, $p < .002$),

only 2.91% of the variation in the RLI was explained by the time since the loss. The Life Experiences Negative Change score does not explain a significant amount of the variation in the RLI (F = .38, p < .54).

Analysis of Variance

A Two-Way Analysis of Variance of the RLI total score which tested for main effects of level of depression and of the Death/ Separation groups as well as for the interaction effects of depression and type of loss was performed. Both main effects and the interaction of depression by type of loss were significant. These results appear in Table 15.

Scores on the RLI were not significantly different for the Death and Separation groups when the subject was in the No Depression group. Under the Severe Depression condition, the scores of the Death group were significantly higher (p < .03) than the scores of the Separation group. It appears that loss by death increases grief responses as measured by the RLI when there is a severe depression as measured by the BDI, but RLI scores are not increased as much by the severity of depression when a loss by separation has occurred.

T-Tests

To explore the question--Are subjects who score in the severe depression range on the BDI significantly (p < .05) more likely to be in therapy or to have been in therapy?--a t-test was performed on the Therapy and No Therapy groups using the total score on the BDI as the dependent variable. The t-test was significant (t = 2.31, p < .03).

Subjects who enter therapy have significantly higher scores on the BDI than subjects who have not entered therapy.

Table 15: Analysis of Variance of the RLI Total Score for Level of Depression and Type of Loss (Separation and Death)

Source	df	SS	MS	F
Level of depression	1	14602.97	14602.97	43.77**
Type of loss	1	637.56	637.56	3.59
Lev dep x type of loss	1	858.82	858.82	4.83*
Within-groups	38	6756.49	177.80	

*$p < .05$.
**$p < .001$.

Summary of Findings

Two research questions about the reliability and validity of the Response to Loss Instrument have been investigated by the testing of ten hypotheses.

The first three hypotheses investigated the first research question, which concerned the reliability of the instrument. The hypothesis that the instrument was internally consistent was supported with a reliability of .95. The second hypothesis tested the reliability of the six scales of the RLI. The reliability ranged from .88 to .73. The scale with the lowest reliability, the Behavioral scale, was dropped from the instrument and further analyses, as were the two items which lowered the reliability of the Physical scale and the Spiritual scale. The third hypothesis investigated the relationship

of the RLI scales to each other. The scales of the RLI were found to be highly correlated with each other, with correlations ranging from .80 to .55.

The last seven hypotheses were related to the validity of the RLI. Hypothesis VII, which indicated that a high Imaginative scale score could distinguish a Severe Depression group from a No Depression group, was not supported. All other hypotheses relating to validity were supported.

Hypotheses IVa and IVb, indicating that in a normal response to loss the total scores on the instrument would decrease with time unless a depressive response interfered with normal grief or was an alternative response to loss, were supported.

Hypothesis V, that subjects' scores on the RLI could be predicted from the impact of the loss and the time since the loss, was supported. The impact of the loss was an especially powerful predictor of the RLI score.

The hypothesis (VI) that the instrument could distinguish a depressive response to loss from a normal grief response by being sensitive to the defensive process of separating cognitions from emotions, which is characteristic of depression, was supported. Hypothesis VIII, which predicted that subjects from the Severe Depression group would score higher on the Physical scale than the No Depression group, was supported. Both of these hypotheses lend credence to the instrument's ability to distinguish depression from grief. Hypothesis IX also contributed to this conclusion. This hypothesis predicted that across types of loss (Death and Separation groups) the Severe

Depression group would score significantly higher on the RLI than the No Depression group. This hypothesis was supported.

The last hypothesis, that a discriminant function could be generated to discriminate between the Severe Depression group and the No Depression group within both the Separation and Death groups, was supported. For the Separation group, the Cognitive scale, the Physical scale, and the Imaginative scale were the best discriminators. For the Death group, scales of the Cognitive dimension, the Physical dimension, and the Spiritual dimension were the best discriminators between the Severe Depression Death group and the No Depression Death group.

A discussion of the meaning and significance of these results is found in the next chapter, Chapter VI.

CHAPTER VI

DISCUSSION AND CONCLUSION

Summary

This study was undertaken in an effort to develop and validate an instrument which would measure a construct of grief. Such an instrument would be a valuable research and clinical tool.

Grief is assumed to result from various losses, especially the death of a close family member (Faschingvauer, Devaul, & Zisook, 1977). The grief response to loss has been described by many theorists. The instrument developed for this study was based on the following seven theorists: Freud (1917), Lindemann (1944, 1945), Engel (1961, 1962), Marris (1958, 1975), Parkes (1972, 1980), Bowlby (1980), and Schneider (1981, in press).

The instrument which is being developed to measure grief is titled the Response to Loss Instrument (RLI). The variables of the grief response to loss are organized according to a hypothesis developed by Schneider (1981). He proposed that there are five dimensions of the mourning process: the physical, the emotional, the intellectual, the spiritual, and the behavioral. A sixth dimension, the imaginative, was added by the researcher.

Items for the Response to Loss Instrument were developed with these dimensions serving as guidelines. Three phases of mourning have been posited by the seven theorists who formed the basis of this

study: a coping phase, an awareness phase, and a resolution phase. The RLI is only operationalizing the second phase of mourning, the awareness phase, or what is commonly called grieving.

Grieving is defined as a normal, universal healing response to loss. Grief is distinguished from pathological variants of responses to loss, which are primarily characterized by depression. This distinction served as the basis for the studies of the validity of the instrument.

The purpose of the instrument was to measure grief. If, in fact, the instrument measures grief, responses should differ in some characteristic ways from a depressive response to loss.

The Response to Loss Instrument, the Life Experiences Survey, and the Beck Depression Inventory were given to 152 subjects from Lansing Community College, Michigan State University, and three groups for the recently bereaved. These groups were a young widows group and two groups for parents who had recently lost children.

Reliability studies produced internal consistency alpha coefficients of .95, which are unusually high. Split-half reliability was also .95 for the RLI.[1] Interscale correlations ranged from .80 to .55.

Validity studies on seven hypotheses yielded support for six. The hypothesis that the severely depressed subjects in the sample would score lower on the Imaginative scale than the subjects who were not depressed was not supported. The hypothesis that total

---

[1]For example, split-half reliability on the MMPI scales is reported in the .70s (Weiner, 1976).

scale scores on the RLI would decrease over time unless interfered with by a depressive response was supported. The hypotheses that the RLI would be able to distinguish a depressive response to loss from a normal grief response by higher scores on the Physical scale and a score based on the difference between the Cognitive scale and the Emotional scale were supported. A meaningful discriminant function was generated on the RLI scale scores between the Severe Depression group and the No Depression group. The following sections discuss the significance and meaning of the results of these reliability and validity tests. Implications for the clinical use of the RLI and future development of the RLI are also discussed.

Discussion of the Hypotheses

Reliability of the Instrument

One type of reliability, internal consistency, was tested for on the total scale and all subscales. Two tests of internal consistency were performed, Cronbach's Alpha and split-half reliability. A total scale alpha of .95 indicates an unusually high degree of consistency, as does the .95 split-half correlation for the total scale.

Subscale correlations ranged from an alpha of .88 for the Cognitive scale to an alpha of .73 for the Behavioral scale. Therefore, except for the Behavioral scale, scale alphas indicate reasonable consistency and are accurately measuring one concept.

A level of internal consistency of .95 is high for a self-report measure of a psychological construct like grief. One possible explanation is that each item was developed on the basis of the observations

of several grief theorists. These theories were based on observations of varied populations in terms of ages and losses; RLI items, therefore, reflected a consistent and perhaps universal response to loss. Averill (1979) and Bowlby (1980) postulated that grief is a universal and biologically based survival response of humans to permanent or temporary separations from valued people. Survival is based on human bonding for protection against predators, so to make the breaking of bonds painful insured the continued bonding of humans to each other. Biologically based responses have a consistent and predictable manifestation. Another possible basis for the high consistency is based not on grief theory but on test-construction theory. The scale consistency may simply be based on the response set of the subject who answered all items similarly without reflecting on the content of the items. To test this theory, items diametrically opposed to grief would need to be inserted in the instrument to determine if these items would be answered the same way as the grief items because of the response set of the subject. However, response set alone would not seem to explain the reliability findings because the No Depression group and the Severe Depression group's BDI scores did not correlate with the RLI scores significantly ($\underline{r}$ = .04, $\underline{r}$ = .19, respectively). Total score RLI and BDI correlation was $\underline{r}$ = .62 ($\underline{p}$ < .001) so the variation cannot be explained completely by response set, as these are results that are predicted by grief theory.

Another possible explanation is that one mood state is being tapped into. The same core theme is being reflected in all items; each item is asking about the same mood, but in many different ways.

The high alpha coefficient and the high intercorrelations of scales suggest the possibility of a single factor which is reflecting a single mood state. The single factor may be more potent than any of the subscale factors. However, even if psychometrically one major factor is being tapped, clinically interpretation of the individual scales might still prove useful in working with grieving individuals.

Internal consistency of the scales was acceptably high except for the Behavioral scale, which was dropped from further analysis. The lack of consistency in the Behavioral scale may be explained because the items cover too broad a range of behaviors. Behaviors ranged from those involving others, such as Item 21--"Being with a trusted friend who accepts me just as I am helps," to items only related to the individual, such as Item 8--"I find that things I used to be involved in before the loss are not of much interest to me now." The Behavioral scale may be measuring something different from the other scales.

Another possible explanation is that the Behavioral scale reflects items influenced by the pre-loss personality of the bereaved more than other scales. A Behavioral scale item like Item 34, "I like being with people when they do not make demands on me," may be characteristic for an introvert both before and after a loss but only after a loss for an extrovert. Therefore, to further develop the Behavioral scale, items could be rewritten so that they are less dependent on the pre-loss personality of the bereaved. Two scales could be developed; one could contain items related to interpersonal behavior and another to behavior not dependent on interaction with others.

Scale correlations ranged from a high of .80 between the Cognitive scale and the Emotional scale and a low correlation of .55 between the Imaginative scale and the Spiritual scale. Scales of the RLI overlap a considerable amount, from 30% overlap to 64% overlap. While there is a good deal of shared variation, each scale also accounts for a unique part of the grief scale variation. In normal grief, emotions and cognitions are expected to be parallel responses to loss, according to Bowlby (1980), and this would partially account for the .80 correlation between these two scales.

Validity of the Instrument

Seven hypotheses were tested to determine if the RLI did measure grief as opposed to being simply another measure of depression or a measure of something else unrelated to grief.

It was expected that the instrument would be sensitive to the effects of time on grief as measured by the RLI. A correlation coefficient was computed which indicated a significant negative correlation between the time since the loss and the RLI at the $p < .001$ level ($n = 152$). The correlation was -.29 (8% of variation), so while statistically significant, the magnitude is small. Removing the 20 subjects scoring 18 or above on the BDI increased the correlation to -.34 (12% of the variation), which was expected because with a depressive response to loss, grief becomes chronic and is not resolved by time alone. Both of these Hypotheses (IV and V) lend support to the construct validity of the RLI. RLI scores change in the expected direction over time when not interfered with by depression.

A multiple-regression equation was calculated using time since the loss and the impact of the loss score. The impact of the loss score was a much better predictor of the RLI score than the time since the loss; although the time since the loss's power to predict the RLI score was significant, it only accounted for 3.44% of the variation above and beyond the variation accounted for by the impact of loss score. The simple correlation of time since the loss with the RLI ($r = -.29$, $p < .001$) was again, although significant, of a small magnitude, 8.41% of the variation.

This information may reveal information about the grief process. The old adage, "time heals all wounds," may not be true. The more important variable may be the loss impact rather than the time since the loss. The greater the impact of the loss, the more likely meaning structures will be challenged (Marris, 1976) and whole patterns of life changed. The impact of loss score may be particularly sensitive to personality variables such as dependency and vulnerability to loss. To test this hypothesis, personality tests would need to be given along with the RLI to determine the effect of these variables on the RLI and the correlation of impact scores and personality variables.

The subjective appraisal of an event as measured by the impact score may also be explained by developmental issues. An adolescent ready to leave home who has a parent die may feel preempted and angry at being left. An older person may expect the death of a parent and have a much milder reaction. Clinically, this suggests that the meaning any particular loss has for an individual is best understood

in terms of the meaning of that particular loss for that particular individual.

An additional multiple-regression analysis was computed with these independent variables: BDI, LES Negative Change score, the time since the loss, and loss impact in order to determine which variable was the best predictor of the RLI score. The best predictor of the total RLI score was the BDI, the measure of depression. This measure accounted for 37.36% of the variation on the RLI. Impact of loss was the next best predictor of the RLI, with 18.55% of explained variation. Time was not an important predictor of the grief score as measured by the RLI. And the stress measure (LES Negative Change score) was not significant.

This result suggests that the BDI and the RLI are not independent variables. However, grief and depression are expected to overlap somewhat, and with this sample the overlap was 37.36%. One possible explanation is that the RLI is just another measure of depression. Other explanations are also possible; one is that the RLI measures a distinct construct called grief, which is explained by the other 62.64% of the RLI variation. The BDI was not developed to differentiate depression from grief, and some of the observed overlap may reflect BDI depression scale items which are not pathological but may be grief items.

Hypotheses VI, VII, and VII, validity tests of the RLI, are all related because the primary purpose of each was to determine if the RLI scales could distinguish a grief response to loss from a depression response to loss. Two-way analyses of variance were calculated

using the scales for the Physical dimension, the Imaginative dimension, and a score based on the difference between the Cognitive and the Emotional scale. This difference score was interpreted to be a measure of defensive processes directed against grief.

Loss by Separation and Loss by Death groups were also tested for main effects on the RLI. Group membership did not account for a main effect on mean group scores in these three hypotheses.

Level of depression was a significant main effect in all three hypotheses. Hypothesis VI predicted that subjects in the Severe Depression group would defend against the loss by separating emotions from cognitions, but in the No Depression group, subjects would respond to loss equally with both cognitions and emotions. Hypothesis VI was supported at the $p < .01$ level. Of these three hypotheses, this is the most interesting because it lends support to Bowlby's theory and psychoanalytic theory in general about defensive processes leading to psychopathology. In this case it lends the strongest support for the construct validity of the RLI and the sensitivity of the instrument's scale scores to measure an expected difference between a Severe Depression group and a No Depression group. No theoretical statement about cause and effect can be made. Depression may have existed before the loss and interfered with the grief process, or depression may be an alternative response to grief and interfered with characteristic grief responses. More testing is needed to better understand this phenomenon. One possible study would be to predict the eventual outcome of recently bereaved subjects with high Cognitive and Emotional scale differences to determine the predictive ability of

the instrument to discriminate between subjects with an expected normal grief process versus subjects who might experience a difficult mourning period.

Hypothesis VIII predicted that Physical scale scores would be significantly ($p < .05$) higher for the Severe Depression group than for the No Depression group. The difference between groups for the Physical scale mean was significant at the $p < .001$ level. The Severe Depression group mean was higher for the Physical scale. While this information supports the validity of the RLI, these results are to be expected because the BDI contains 7 out of the 21 items on the scale which refer to the physical aspects of depression. Physical symptoms are also expected in grief. But when they are too high, the hypothesis is that loss responses are being channeled into physical expression and depression results (Arieti, 1976). While it is not surprising that subjects who are in the Severe Depression group score higher on the Physical Scale of the RLI because somaticization is expected in a depression response to loss, it does support the ability of the RLI to measure the physical dimension of loss. Extremes on the Physical scale are expected to correlate with high scores on the BDI.

Hypothesis VII was not supported. It was expected that subjects in the No Depression group would score higher on the Imaginative scale than subjects in the Severe Depression group. In fact, the opposite was true. Severe Depression group scores were higher ($p < .001$) than the scores of the No Depression group.

One possible explanation for this result is that the theorists like Rees (1975) and Parkes (1972) who described the role of imagination

in normal grief are wrong about imagination being an aspect of normal grief. Another possible explanation is that imagination can be used within moderation as part of the normal grief response, but that like the physical response to loss, when used excessively or negatively is more characteristic of depression than grief. The items from the Imaginative scale do not specify how the imagination is used. For instance, Item 6, "I daydream about scenes from my life before this loss." Negative images could be the primary use of this aspect of imagination, which would be characteristic of depression. In this case, imagination is being used defensively and would increase the bereaved's feelings of helplessness and hopelessness resulting in what Engel (1967) called the giving-up/given-up complex. Further research is needed to determine the difference between the use of imagination in grief and depression. Before changing the Imaginative scale items, research would need to be conducted comparing the role of imagination, dreams, and images between groups of people identified as grieving or depressed.

A further analysis, a Two-Way Analysis of Variance on the total RLI was performed. The RLI scores rose for the Death group under conditions of Severe Depression but not for the Separation group.

One possible interpretation is that separation is a more manageable loss; it is without the tragic dimension associated with a death, especially a sudden, unexpected death of a young child or spouse. A sudden loss may break down defenses so much so that grief cannot be modulated. The defense of intellectualization (which might be

expected in a population with a mean education level of 14.95 years) does not work well with a death because thinking at all can easily lead to reminders of the deceased. In separation, thinking may be part of the searching response (Parkes, 1972), and thinking can perhaps lead to problem solving which might bring back the absent person. With absence there is hope, with death no hope.

Hypothesis IX tested the expectation that total scores on the RLI would be higher for the Severe Depression group than for the No Depression group because chronic grief, an overly severe grief response to loss, is characterized by depression (Bowlby, 1980). A *t*-test was computed and found significant at the $p < .001$ level.

Chronic grief is measured on the RLI by higher total scores than that of the No Depression group. This hypothesis is supported and adds support bo Bowlby's theory that chronic grief and depression occur together.

Hypothesis X was a discriminant analysis on the Severe and No Depression groups within both the Death and Separation groups. Three scales were found to be significant discriminators for each group. For the Death group, the Cognitive scale, the Spiritual scale, and the Physical scale best discriminated the Severe Depression from the No Depression group. For the Separation group, the Cognitive scale, the Imaginative scale, and the Physical scale were the best discriminators.

For both the Separation and Death groups, the Cognitive scale mean was a significant discriminator ($p < .001$) between the No Depression group and the Severe Depression group. The role of cognitions for

the Severe Depression group might be that thinking about the loss constantly keeps the awareness of the loss in the forefront for the bereaved and offers no respite from the loss. Recognition of the loss has been made, but thoughts about the loss constantly intrude with no means of averting one's thoughts from the loss (Horowitz, 1976). The Emotional scale is not a significant discriminator between Severe Depression and No Depression, which means that the scores of these two groups were more similar than the scores of the three scales which were significant discriminators ($p < .001$). Emotions are probably not being expressed by the Severe Depression group, at least not to the extent that this group is thinking about the loss. Perhaps these emotions are being channeled indirectly through physical channels. The Physical scale discriminated for both the Separation and Death groups.

The Spiritual scale may reflect the older age of the loss by Death group. Perhaps a death more radically opens up questioning about belief systems, a sense of purpose in life, and trust in human power. A spiritual crisis of this kind may lead to temporary depression for individuals experiencing their first major loss. Developmentally, the Death group is older than the Separation group and may be coming to terms with the limitations implied with reaching middle age.

Imagination as a discriminator may be explained for the Separation group by the fact that in separation the loss feels like a death but the person is still alive; the imagination may come into play imagining even more terrible losses occurring because of the separation. Developmentally, the task of the early twenties is to make

attachments. A failed attachment at this age may lead to fear of not being able to ever make an attachment. The imagination may be used to fantasize a future without intimacy. Self-reproach for failing at a present relationship may also be the result of earlier unresolved separations.

The Physical dimension discriminated for both the Death and Separation groups. One explanation is that the Physical dimension of loss becomes a channel for expression of the sadness and yearning of grief which cannot be tolerated by the severely depressed individual. Parkes (1972) stated that ability to tolerate sadness and yearning is the basis of grief and the ability to grieve.

Support for Hypothesis V, which measured a separation of cognitions from emotions, which was interpreted as a measure of defense, would also lend support to this conclusion. Either cognitive processing or emotional experiencing of grief is being defended against and perhaps finding expression through physical channels.

An additional analysis was computed on the correlations between the RLI and the LES Negative Change score, the BDI, time since the loss, and impact of the loss to further explore relationships between the RLI and other variables. These correlations were calculated for the Death group, the Separation group, the No Depression group, and the Severe Depression group. LES Negative Change score, BDI, and impact of the loss were significant ($p < .01$) for both the Death and Separation groups. But only impact of loss was significant for the No Depression and Severe Depression groups.

At the extreme ends of the distribution of the BDI scores (No Depression and Severe Depression), there is no correlation or overlap between depression as measured by the BDI and grief as measured by the RLI. Moderate depression correlates with moderate grief. Theoretically, Bowlby's (1980) theory, which states that severe depression is the inability to grieve, would appear to be one explanation for this finding. The Severe Depression group BDI scores do not correlate with the grief measure, the RLI, but the loss groups, the Death and Separation groups, both correlate with the grief measure.

The Severe Depression group may be coping with a loss by depression and not by grieving, according to the grief measure, the RLI. For this group, the stress measure does not correlate with the RLI (the stress measure, the LES Negative Change score, does correlate for the Death and Separation groups), which may mean that depression does not result simply from general stress but may be the interaction of personality predispositions and a specific precipitating loss, which substantiates the theory proposed by Brown and Harris (1978), which is that in their sample, the women who became depressed did so because of a major loss and vulnerability factors.

The Separation group was the only group where time since the loss correlated with the RLI ($\underline{r} = -.46$, $\underline{p} < .001$). Loss by separation more than loss by death may allow the grief process to progress in a more orderly fashion through time. Untimely death, which was the case for this sample, is especially difficult to resolve (Parkes, 1981). Time alone does not account for the grief response of those bereaved by death in this sample.

Generalizability

Because the sample was obtained from the Lansing and Ann Arbor, Michigan, areas and was not obtained randomly, how generalizable are the findings in this study?

Subjects were selected for this study who had experienced a loss and wanted to associated with others with similar losses, and other subjects were contacted through college courses where there was a possibility that some members of the class had experienced a loss. Therefore, the selection process was nonrandomized, which usually limits generalizability. However, some empirical evidence supports the contention that the results of this study are generalizable.

Standardized instruments used in this study, the Life Experiences Survey and the Beck Depression Inventory, report similar correlations. The LES Negative Change score correlated .24 with the BDI in the study by Sarason (1978), and in this study the LES Negative Change score correlated .25 with the BDI on the group with the 20 severely depressed subjects removed. And the reliability of the BDI was similar; a .86 split-half was reported by Beck and Beamesderfer (1974), and in this study Cronbach's alpha was .85 for the BDI and .79 for the split-half reliability of the BDI.

A logical argument, the Tukey-Cornfield bridge argument, which states that logical inferences can be made from even nonrandomized samples to populations of interest, can also be made for the generalizability of the results of this study.

The logical argument of Tukey-Cornfield is limited by any peculiarity of the sample studied--in this case, the subjects from

the Lansing and Ann Arbor, Michigan, areas. One peculiarity might be the unusually stressful economic situation in the Lansing area, an economic depression. This might limit the generalizability of the findings in this study to populations experiencing stressful economic situations. But given the similarity of the summary statistics of the instruments to other studies, support is lent to the generalizability of the results of this study to other populations.

Implications for Clinical Use of the Response to Loss Instrument

The reliability and validity studies of the Response to Loss Instrument have lent enough support to the psychometric properties of the RLI to recommend its use in a clinical setting. This instrument would be helpful for someone who has expressed a need for help for a loss by seeking out a physician, a therapist, or a group and who has an identifiable loss.

The therapist or physician who uses this instrument could also administer the Beck Depression Inventory and the Life Experiences Survey. Someone seeking help for a loss may not have experienced the loss within the last two years and may be having difficulty with only one loss. Based on this possibility, it is recommended that the instructions be changed from requiring the client to answer the RLI in terms of a loss that has occurred within the last two years to answering the RLI in terms of a loss that is unresolved. Requesting the client to fill out one form for each unresolved loss would also give important information about the frequency of significant unresolved loss for this client.

The score on the Beck Depression Inventory can be used along with a clinical interview to determine if depression is a factor in the presenting clinical picture. If it is, through the interview, information about the effect of depression on the grief process can be sought to determine if the depression existed before the loss, was an alternative response to grief, or if grief was progressing normally and depression interfered in the middle of the grief process. The total grief score can be used to determine the amount of grief presently being experienced in terms of the reported loss. If the loss occurred more than two years ago and the grief score is high, 53 for this population, which is one standard deviation above the mean for the total sample, then something is interfering with resolution of the loss. Depressive components may be interfering, especially self-blame or guilt feelings or negative cognitions about the world, the self, or the future (Beck, 1972). If the negative change score of the LES is high, 19 or above for this population, which is one standard deviation above the mean, multiple stressors may make sorting out individual losses difficult. Each loss needs to be grieved for separately in order for resolution to occur (Schneider, in press).

Scores on the RLI scales may be investigated for an individual's protocol by examining the level of scores, whether they are high, medium, or low, and by examining the evenness of scores within the individual's profile. Determination of the level of scores can be made by the norms produced for this sample and reported in Appendix B. However, new norms would need to be developed for the population of interest to the therapist or physician.

The scales of the RLI would be the next scores to evaluate for clinical interpretation of the RLI. The first step would be to examine the scores on each scale to determine whether the scores are even or if some scales are higher than others. Evenness of scale scores means that grief is progressing normally and responses are parallel. A response of the whole person with all five dimensions is expected, according to Schneider's theory (in press). If scale scores are not evenly distributed, the next step is to order the scores from the highest to the lowest.

Possible interpretations of each scale when it is the highest of all scale scores will now be given:

COGNITIVE SCALE: If this scale is the highest, it could mean that the main mechanism of coping with the loss is the use of intellectual defenses. Thinking about the loss, searching for the meaning of the loss, and examining the consequences of the loss (Marris, 1975; Parkes, 1972) are the primary activities reflected by this scale. If the score of the Emotional scale is much lower than the score of the Cognitive scale, this could be interpreted to mean that cognitions are being used to cope with the loss by excluding emotional reactions.

PHYSICAL SCALE: If this scale is the highest, it could be interpreted to mean that the client has a tendency to channel unpleasant feelings and uncomfortable thoughts into physical symptoms. The actual symptoms expressed by the client may have symbolic meaning in terms of the loss. The final illness and/or death of the deceased may be minimized by the bereaved (Parkes, 1970). Inhibition of appetites--hunger, sex, and sleep--and general physical pain in the stomach

and chest and loss of energy are physical expressions reflected in this scale (Bowlby, 1980; Parkes, 1970).

EMOTIONAL SCALE: If this scale is the highest, it could be interpreted to mean that the client is experiencing many strong feelings and is not connecting the feelings to a cognitive understanding of the basis of the feelings. Examination of the score on the Cognitive scale would contribute information about the availability of cognitive understanding and control of the feelings of grief. If the Emotional scale is highest, the feelings of grief are strong, but resolution may be difficult until the source of the feelings, including the thoughts and images, is connected to the feelings. Freud (1917) termed this hypercathexis, by which he meant that grief is resolved by remembering every thought, hope, and memory of the deceased and experiencing all the feelings associated with these memories. Guilt, anger, sadness, yearning, and sobbing are the emotions reflected in this scale.

SPIRITUAL SCALE: If this scale is the highest, it could be interpreted to mean that the client's belief system has been challenged by this loss. Pre-loss beliefs and religious systems may no longer be available to give the client a world-view or way to interpret experience. If the loss of meaning is being experienced by the client, the development of new meanings based on the reality of loss and the awareness of human limitations in preventing loss could be a goal of therapy.

IMAGINATIVE SCALE: If this scale is the highest, it could be interpreted to mean that the client is either using his/her imagination

to increase the feelings of helplessness associated with the loss (Engel, 1967), or he/she may have a lot of unfinished business with the person he/she has lost and is attempting to revolve this business (Rosenblatt, Walsh, & Jackson, 1976). Therapeutic interventions could then be designed to change negative images which are resulting in helplessness and hopelessness by evaluating areas in the client's life where he/she is not powerless and by using the imagination in such a way that the future is envisioned in a hopeful manner. Unfinished business can also be facilitated by use of active therapies such as gestalt techniques and psychodrama.

Scores that are in the middle ranges can be interpreted to mean that these dimensions of grief are being modulated by the client and are under the client's control. The client is able to tolerate the psychological and physical pain of grief without being overwhelmed by the grief response. Referring to Appendix B, which contains the means, standard deviations, and ranges of the scale scores of groups within the sample, could help ascertain the meaning of middle-range scores. However, for any specific population a therapist or physician works with, new norms would need to be developed.

The final step in the clinical interpretation of the RLI would be to examine the lowest scores of the scale scores. Lowest scores would be determined by comparing scale scores to the other scale scores. Interpretation of each scale when it is the lowest of all scale scores will now be given:

COGNITIVE SCALE: If this scale is the lowest, it could be interpreted to mean that the client is unable to use cognitive

strategies to cope with the loss. Cognitive processing of the reality, the meaning, the significance, and the consequences of the loss has not occurred and therefore might make resolution of the loss difficult.

EMOTIONAL SCALE: If this scale is the lowest, it could be interpreted to mean that the strong feelings of guilt, anger, and sadness or grief are not being expressed. Examination of the Cognitive scale and the Physical scale might reveal further dynamics of this process. If either scale is elevated, it may mean that cognitions are being used defensively to repress the painful emotions of grief. If the Physical scale is highest, it may mean that emotions are being somaticized (Engel, 1972).

PHYSICAL SCALE: If this scale is the lowest, it may mean that the client is either just entering intense grief or just coming out of an intense experience of grief. Loss of energy (Lindemann, 1944), disturbances in sleep or eating, and generalized physical pain (Schneider, 1981) are concepts reflected in this scale.

IMAGINATIVE SCALE: If this scale is the lowest, it may mean that the client's grief is nearing resolution, unfinished business has been taken care of, and the client no longer needs to dream, or image the deceased or absent person (Rees, 1975).

SPIRITUAL SCALE: If this scale is the lowest, it may mean that the loss did not affect the belief system of the bereaved. In this research, loss through death more than loss through separation resulted in a spiritual crisis. For some people a loss increases their commitment to their previously held beliefs, and for others

all previously held beliefs are challenged and are no longer found to be meaningful.

If all scales are low and a recent significant loss has occurred, the client may be inhibiting all aspects of the grief process (Bowlby, 1980; Parkes, 1972). A client who has scores in the moderate or severe range on the BDI and scores one standard deviation above the mean on the LES Negative Change score (19+) and is in the no loss group on the RLI with very low scale scores, this client may be inhibiting his/her grief response. Volkan (1972) has developed regrief therapy techniques to facilitate this variation of grief.

The RLI's clinical usefulness as an assessment tool will have to be determined over time by clinicians who use it and by research assessing the outcome of clients treated with therapeutic strategies based on assessment with the RLI.

Recommendations for Future Development of the RLI

Given the results of this study, certain implications about modifications in the RLI are suggested, as well as recommendations for further research with the RLI.

Changes in the instrument would involve changing the instructions for individuals who are taking the instrument. Three changes are recommended; one is to change the instructions regarding choice of the loss. Rather than any loss in the last two years, asking for an unresolved loss would give more helpful information for clinical assessment. The second change of instructions would be to eliminate asking the subject to answer the RLI in terms of a loss that had

occurred within the last two years. Two years may not be enough time to resolve a loss; especially the sudden loss of a significant person takes many years to resolve. Finally, the RLI measures the intensity of grief and the duration but not the frequency of loss. Therefore, instructions could be given to answer separate RLI forms for each loss, in order to measure responses of people who have multiple losses.

The Imaginative scale and the Behavioral scale need to be modified. The Behavioral scale may represent more than one factor and perhaps through factor analysis, separate factors could be determined. Behavioral scale items might also be improved by generating items that reflect only observable, measurable external events and behaviors rather than any internal events and states or motivational statements. The Imaginative scale needs to be developed to be able to measure more specifically a grief rather than a depressive response to loss.

Further research is recommended on other groups such as relatives of suicides and newly released political prisoners. Follow-up on the health and survival of these mourners would contribute information on the normal ranges of scores on the RLI. Further mechanisms of grief and factors influencing resolution of grief might be investigated with follow-up data on these groups. The statistical data obtained are promising enough to suggest that the RLI be replicated on a broader, more geographically representative national sample, such as users of funeral homes in various states.

Research with clinicians' use of the instrument is important to develop the RLI as an assessment tool. Research on clinicians using the model of grief operationalized in the RLI and using the RLI to

develop treatment plans versus an unstructured approach to grief counseling which doesn't use the RLI and does not recognize a developmental grief approach would provide some information about the efficacy of the instrument and the grief model it is based on.

Initially, the RLI was part of a longer instrument containing the other two phases of mourning, coping and resolution. Further development of the RLI will need to take into account these two phases.

The RLI has shown sufficient psychometric properties to warrant continued research and beginning use as a clinical assessment tool by physicians and therapists working with grieving individuals. Further research is desirable to determine the usefulness of the instrument to therapists and physicians and to determine how well the RLI can predict the outcome of grief.

APPENDICES

APPENDIX A

QUESTIONNAIRE PACKET

MICHIGAN STATE UNIVERSITY

Department of Psychology

DEPARTMENTAL RESEARCH CONSENT FORM

1. I have freely consented to take part in a scientific study being conducted by: Diane Deutsch

   under the supervision of: John Schneider, Ph.D.

   Academic Title: Associate Professor of Psychiatry

2. The study has been explained to me and I understand the explanation that has been given and what my participation will involve.

3. I am aware that responding to the instruments in this research might lead to negative and unpleasant emotions.

4. I understand that I am free to discontinue my participation in the study at any time without penalty.

5. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

6. I understand that my participation in the study does not guarantee any beneficial results to me.

7. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signed: _____

Date: _____

DEMOGRAPHIC AND BACKGROUND INFORMATION

Please answer all items.

1. Age _____

2. Sex _____

3. Occupation _____

4. Years of education completed _____

5. Marital status
   1. single
   2. married
   3. separated from spouse
   4. divorced
   5. engaged
   6. widow or widower
   7. living with a lover
   8. living alone

6. Children
   1. my children are living at home
   2. my children are not living at home
   3. no children

7. Early Experience of Loss
   1. mother died before the age of 15
   2. father died before the age of 15
   3. sibling died while you were still living at home
   4. parents divorced before you left home
   5. close school friend died before you were 15

8. Therapy Experiences
   1. sought therapy before the current loss
   2. sought therapy for the present loss
   3. I am considering seeking therapy because of my loss
   4. I have not sought therapy and am not planning to

The Life Experiences Survey

Listed below are a number of events which sometimes bring about change in the lives of those who experience them and which necessitate social readjustment. Please check those events which you have experienced in the recent past and indicate the time period during which you have experienced each event. Be sure that all check marks are directly across from the items they correspond to.

Also, for each item checked below, please circle the extent to which you viewed the event as having either a positive or negative impact on your life at the time the event occurred. That is, indicate the type and extent of impact that the event had. A rating of -3 would indicate an extremely negative impact. A rating of 0 suggests no impact either positive or negative. A rating of +3 would indicate an extremely positive impact.

SECTION I

	0 to 6 mo	7 mo to 1 yr	# yrs ago	extremely negative	moderately negative	somewhat negative	no impact	slightly positive	moderately positive	extremely positive
1. Marriage				-3	-2	-1	0	+1	+2	+3
2. Detention in jail or comparable institution				-3	-2	-1	0	+1	+2	+3
3. Death of spouse				-3	-2	-1	0	+1	+2	+3
4. Death of close family member: a. mother				-3	-2	-1	0	+1	+2	+3
b. father				-3	-2	-1	0	+1	+2	+3
c. brother				-3	-2	-1	0	+1	+2	+3
d. sister				-3	-2	-1	0	+1	+2	+3
e. grandmother				-3	-2	-1	0	+1	+2	+3
f. grandfather				-3	-2	-1	0	+1	+2	+3
g. other (specify)				-3	-2	-1	0	+1	+2	+3
5. Foreclosure on mortgage or loan				-3	-2	-1	0	+1	+2	+3
6. Death of close friend				-3	-2	-1	0	+1	+2	+3
7. Outstanding personal achievement				-3	-2	-1	0	+1	+2	+3
8. Minor law violations (traffic tickets, disturbing the peace, etc.)				-3	-2	-1	0	+1	+2	+3
9. Male: Wife/girlfriend's pregnancy				-3	-2	-1	0	+1	+2	+3
10. Female: Pregnancy				-3	-2	-1	0	+1	+2	+3
11. Changed work situation (different work responsibility, major change in working conditions, working hours, etc.)				-3	-2	-1	0	+1	+2	+3
12. New job				-3	-2	-1	0	+1	+2	+3
13. Serious illness or injury of close family member: a. father				-3	-2	-1	0	+1	+2	+3
b. mother				-3	-2	-1	0	+1	+2	+3
c. sister				-3	-2	-1	0	+1	+2	+3
d. brother				-3	-2	-1	0	+1	+2	+3
e. grandfather				-3	-2	-1	0	+1	+2	+3
f. grandmother				-3	-2	-1	0	+1	+2	+3
g. spouse				-3	-2	-1	0	+1	+2	+3
h. other (specify)				-3	-2	-1	0	+1	+2	+3

		0 to 6 mo	7 mo to 1 yr	# yrs ago	extremely negative	moderately negative	somewhat negative	no impact	slightly positive	moderately positive	extremely positive
14.	Sexual difficulties				-3	-2	-1	0	+1	+2	+3
15.	Trouble with employer (in danger of losing job, being suspended, demoted, etc.)				-3	-2	-1	0	+1	-2	+3
16.	Trouble with in-laws				-3	-2	-1	0	+1	+2	+3
17.	Major change in financial status (a lot better off or a lot worse off)				-3	-2	-1	0	+1	+2	+3
18.	Major change in closeness of family members (increased or decreased closeness)				-3	-2	-1	0	+1	+2	+3
19.	Gaining a new family member (through birth, adoption, family member moving in, etc.)				-3	-2	-1	0	+1	+2	+3
20.	Change of residence				-3	-2	-1	0	+1	+2	+3
21.	Marital separation from mate (due to conflict)				-3	-2	-1	0	+1	+2	+3
22.	Major change in church activities (increased or decreased attendance)				-3	-2	-1	0	+1	+2	+3
23.	Marital reconcilation with mate				-3	-2	-1	0	+1	+2	+3
24.	Major change in number of arguments with spouse (a lot more or a lot less arguments)				-3	-2	-1	0	+1	+2	+3
25.	Married male: Change in wife's work outside the home (beginning work, ceasing work, changing to a new job, etc.)				-3	-2	-1	0	+1	+2	+3
26.	Married female: Change in husband's work (loss of job, beginning new job, retirement, etc.)				-3	-2	-1	0	+1	+2	+3
27.	Major change in usual type and/or amount of recreation				-3	-2	-1	0	+1	+2	+3
28.	Borrowing more than $10,000 (buying home, business, etc.)				-3	-2	-1	0	+1	+2	+3
29.	Borrowing less than $10,000 (buying car, TV, getting school loan, etc.)				-3	-2	-1	0	+1	+2	+3
30.	Being fired from job				-3	-2	-1	0	+1	+2	+3
31.	Male: Wife/girlfriend having abortion				-3	-2	-1	0	+1	+2	+3
32.	Female: having abortion				-3	-2	-1	0	+1	+2	+3
33.	Major personal illness or injury				-3	-2	-1	0	+1	+2	+3
34.	Major change in social activities. e.g., parties, movies, visiting (increase or decreased participation)				-3	-2	-1	0	+1	+2	+3

	0 to 6 mo	7 mo to 1 yr	# yrs ago	extremely negative	moderately negative	somewhat negative	no impact	slightly positive	moderately positive	extremely positive
35. Major change in living conditions of family (building new home, remodeling, deterioration of home, neighborhood, etc.)				-3	-2	-1	0	+1	+2	+3
36. Divorce				-3	-2	-1	0	+1	+2	+3
37. Serious injury or illness of close friend				-3	-2	-1	0	+1	+2	+3
38. Retirement from work				-3	-2	-1	0	+1	+2	+3
39. Son or daughter leaving home (due to marriage, college, etc.)				-3	-2	-1	0	+1	+2	+3
40. Ending of formal schooling				-3	-2	-1	0	+1	+2	+3
41. Separation from spouse (due to work, travel, etc.)				-3	-2	-1	0	+1	+2	+3
42. Engagement				-3	-2	-1	0	+1	+2	+3
43. Breaking up with boyfriend/ girlfriend				-3	-2	-1	0	+1	+2	+3
44. Leaving home for the first time				-3	-2	-1	0	+1	+2	+3
45. Reconciliation with boyfriend/ girlfriend				-3	-2	-1	0	+1	+2	+3
Other recent experiences which have had an impact on your life. List and rate.										
46.				-3	-2	-1	0	+1	+2	+3
47.				-3	-2	-1	0	+1	+2	+3
48.				-3	-2	-1	0	+1	+2	+3
SECTION 2: Student Only										
49. Beginning a new school experience at a higher academic level (college, graduate school, professional school, etc.)				-3	-2	-1	0	+1	+2	+3
50. Changing to a new school at same academic level (undergraduate, graduate, etc.)				-3	-2	-1	0	+1	+2	+3
51. Academic probation				-3	-2	-1	0	+1	+2	+3
52. Being dismissed from dormitory or other residence				-3	-2	-1	0	+1	+2	+3
53. Failing an important exam				-3	-2	-1	0	+1	+2	+3
54. Changing a major				-3	-2	-1	0	+1	+2	+3
55. Failing a course				-3	-2	-1	0	+1	+2	+3
56. Dropping a course				-3	-2	-1	0	+1	+2	+3
57. Joining a fraternity/sorority				-3	-2	-1	0	+1	+2	+3
58. Financial problems concerning school (in danger of not having sufficient money to continue)				-3	-2	-1	0	+1	+2	+3

BECK INVENTORY

Name _____ Date _____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Use the answer sheet provided and fill in the circle which corresponds with the number of the statement.

1. 0 I do not feel sad.
   1 I feel sad.
   2 I am sad all the time and I can't snap out of it.
   3 I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
   1 I feel discouraged about the future.
   2 I feel I have nothing to look forward to.
   3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
   1 I feel I have failed more than the average.
   2 As I look back on my life, all I can see is a lot of failures.
   3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
   1 I don't enjoy things the way I used to.
   2 I don't get real satisfaction out of anything anymore.
   3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
   1 I feel guilty a good part of the time.
   2 I feel quite guilty most of the time.
   3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
   1 I feel I may be punished.
   2 I expect to be punished.
   3 I feel I am being punished.

7. 0 I don't feel disappointed in myself.
   1 I am disappointed in myself.
   2 I am disgusted with myself.
   3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.
   1 I am critical of myself for my weaknesses or mistakes.
   2 I blame myself all the time for my faults.
   3 I blame myself for everything bad that happens.

9. 0 I don't have any thoughts of killing myself.
   1 I have thoughts of killing myself, but I would not carry them out.
   2 I would like to kill myself.
   3 I would kill myself if I had the chance.

10. 0 I don't cry anymore than usual.
    1 I cry more now than I used to.
    2 I cry all the time now.
    3 I used to be able to cry, but now I can't cry even though I want to.

11 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.

12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

14. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18. 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19. 0 I haven't lost much weight, if any lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less. Yes _____ No _____

20 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems, that I cannot think about anything else.

21. 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

RESPONSE TO LOSS INSTRUMENT (FORM A)

INSTRUCTIONS

The items below consist of possible responses to events experienced as a loss. Choose a loss that you have had within the last two years. If you have difficulty thinking of a loss, use the LIFE EXPERIENCES SURVEY as a source list of possible losses. Answer the items below in terms of your response to this loss during the last month, INCLUDING TODAY. You can indicate the degree to which you are having these responses according to the following scheme:

0 = does not describe me
1 = sometimes describes me
2 = most of the time describes me
3 = accurately describes me

☐ 1. The loss I am thinking about is:

0 = death of a spouse
1 = death of child
2 = death of parent
3 = death of friend
4 = job related loss
5 = divorce
6 = breakup with girl friend or boy friend
7 = moving to a new area, including leaving home for the first time
8 = other, please specify _____
9 = no loss

☐ 2. The loss in my life occurred:

0 = within the last 3 months
1 = 4 months to 6 months ago
2 = 7 months to 1 year ago
3 = 13 months to 2 years ago
4 = no loss within the last two years

☐ 3. When I think about my loss, I feel that I have nothing to look forward to.

☐ 4. I have many feelings in my life about the loss.

☐ 5. When I think about the loss, I feel pain all through my body.

0 = does not describe me
1 = sometimes describes me
2 = most of the time describes me
3 = accurately describes me

☐ 6. I daydream about scenes from my life before this loss.

☐ 7. I am not as frightened of dying as I was before the loss.

☐ 8. I find that things I used to be involved in before the loss are not of much interest to me now.

☐ 9. I think about what I have lost and I think about how my life is being affected.

☐ 10. I often weep or sob about the loss.

☐ 11. My eating habits have changed since the loss; I am eating more.

☐ 12. My eating habits have changed since the loss; I am eating less.

☐ 13. I have conversations with the person I have lost.

☐ 14. This loss is a reminder of the limitations of my human power.

☐ 15. I am not interested in making new attachments.

☐ 16. I am aware of what will never again be a part of my life because of the loss.

☐ 17. I feel angry about some of the consequences of the loss.

☐ 18. I do not sleep as well as I did before the loss.

☐ 19. I sense the presence of the person I have lost.

☐ 20. My beliefs no longer give me the comfort they did before the loss.

☐ 21. Being with a trusted friend who accepts me just as I am helps.

☐ 22. I think about the loss a lot.

☐ 23. I feel sadness whenever I am reminded of my loss.

☐ 24. I find myself sighing frequently.

☐ 25. I am easily exhausted by any effort.

☐ 26. My dreams about the loss seem to help me accept and understand it.

☐ 27. This loss has challenged some of my most cherished beliefs.

☐ 28. I find myself walking somewhere and I forget where I am going.

0 = does not describe me
1 = sometimes describes me
2 = most of the time describes me
3 = accurately describes me

☐ 29. I know that what I have lost will never return.

☐ 30. I am angry with some people associated with my loss.

☐ 31. My whole body feels heavy.

☐ 32. I imagine I am talking to the person I have lost.

☐ 33. My faith has been shaken by this loss.

☐ 34. I like being with people when they do not make demands on me.

☐ 35. When I admit it to myself, I feel sad most of the time about the loss.

☐ 36. I spend time sifting through past experiences related to what I have lost.

☐ 37. The tears have been hard to stop this week.

☐ 38. My level of energy has decreased since the loss.

☐ 39. I have vivid dreams about people and places that are connected to my loss.

☐ 40. Before my loss, I believed that I was special and nothing bad would happen to me; I no longer believe this.

☐ 41. I find myself losing the thread of conversations when I am with others.

☐ 42. I know I am helpless to change the situation and bring back what is lost.

☐ 43. I feel guilty about some things I did or did not do just before the loss.

☐ 44. I prefer being alone much of the time.

☐ 45. I find myself longing for what or who I have lost.

☐ 46. When I want to be with others, I simply want to be with them and sit quietly.

☐ 47. I communicate to people who are not longer a part of my life through fantasy, prayer or imagination.

☐ 48. Many more people irritate me now than did before the loss.

☐ 49. I am increasingly aware of my own mortality.

APPENDIX B

DISTRIBUTION OF THE TOTAL SAMPLE, THE DEATH GROUP, THE SEPARATION GROUP, THE SEVERE DEPRESSION GROUP, AND THE NO DEPRESSION GROUP

Table B-1: Distribution of Groups Within the Sample on the Scales of the RLI: Total Sample, Death Group, Separation Group, Severe Depression Group, and No Depression Group

	Cognitive			Emotional			Spiritual			Physical			Imaginative		
	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
Total sample[a]	9.20	5.68	0-20	10.78	7.46	0-29	4.09	4.06	0-18	3.62	4.00	0-15	4.15	3.84	0-17
Death group[b]	11.73	5.17	2-20	12.59	7.10	1-29	5.11	4.32	0-18	4.70	4.30	0-15	4.56	3.82	0-14
Separation group[c]	8.78	4.07	2-18	12.07	6.34	2-24	3.88	3.70	0-13	3.30	3.66	0-14	5.76	3.87	1-17
Severe depression group[d]	14.40	5.17	4-20	18.30	5.42	7-27	8.95	4.87	1-18	9.40	3.44	4-15	6.80	3.33	0-11
No depression group[e]	6.23	4.23	0-16	5.47	4.19	0-17	2.27	2.50	0-9	.90	1.32	0-5	2.60	2.80	0-11

[a] n = 152.

[b] n = 71.

[c] n = 46.

[d] n = 20.

[e] n = 30.

APPENDIX C

CORRELATIONS OF THE BDI WITH THE SCALE SCORES FOR THE TOTAL SAMPLE, THE SEPARATION GROUP, AND THE DEATH GROUP

Table C-1: Correlation of the Beck Depression Inventory With the Scale Scores of the RLI for the Total Sample, the Separation Group, and the Death Group

	Cognitive	Emotional	Spiritual	Physical	Imaginative
Total sample	.53 $p < .001$	.57 $p < .001$	.47 $p < .001$	.72 $p < .001$	.36 $p < .001$
Separation group	.33 $p < .01$	.55 $p < .001$	.33 $p < .01$	.60 $p < .001$	.14 $p < .18$
Death group	.62 $p < .001$	.61 $p < .001$	.58 $p < .001$	.77 $p < .001$	.49 $p < .001$

LIST OF REFERENCES

LIST OF REFERENCES

Akiskal, H. S., & McKinney, W. T., Jr. Depressive disorders: Toward a unified hypothesis. Science, 1973, 182, 20-29.

American Psychiatric Association. Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, D.C.: Author, 1980.

Anastasi, A. Psychological testing (4th ed.). New York: Macmillan, 1976.

Arieti, S., & Bemporad, J. Severe and mild depression. New York: Basic Books, Inc., 1978.

Averill, J. R. The functions of grief. In C. E. Izard (Ed.). Emotions in personality and psychopathology. New York: Plenum, 1979.

Beck, A. T. Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press, 1972.

Beck, A. T. Assessment of depression: The Depression Inventory. Modern Problems in Pharmacopsychiatry, 1974, 7, 151-169.

Beck, A. T., & Beamesderfer, A. Assessment of depression: The Depression Inventory. In P. Pichot & R. Oliver-Martin (Eds.). Psychological measurements in psychopharmacology. New York: S. Karger, 1974.

Beck, A. T., & Hurvich, M. S. Psychological correlates of depression. I. Frequency of "masochistic" dream content in a private practice sample. Psychosomatic Medicine, 1959, 21, 50-55.

Beck, A. T., Rial, W. J., & Rickels, K. Short form of Depression Inventory: Cross-validation. Psychological Reports, 1974, 34, 1184-1186.

Beck, A. T., & Ward, C. H. Dreams of depressed patients: Characteristic themes in manifest content. Archives of General Psychiatry, 1961, 5, 462-476.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. An inventory for measuring depression. Archives of General Psychiatry, 1961, 4, 561-571.

Blanck, G., & Blanck, R. Ego psychology: Theory and practice. New York: Columbia University Press, 1974.

Bowlby, J. Pathological mourning and childhood mourning. Journal of the American Psychoanalytic Association, 1963, 11, 500-541.

Bowlby, J. Attachment and loss. Vol. I: Attachment. New York: Basic Books, Inc., 1969.

Bowlby, J. Attachment and loss. Vol. II: Separation. New York: Basic Books, Inc., 1973.

Bowlby, J. Attachment and loss. Vol. III: Loss. New York: Basic Books, Inc., 1980.

Brown, G. W. Meaning, measurement and stress of life events. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.). Stressful life events: Their nature and effects. New York: John Wiley & Sons, 1974.

Brown, G. W., & Harris, T. O. Social origins of depression. London: Tavistock Press, 1978.

Campbell, D. T. Recommendations for APA test standards regarding construct, trait, and discriminant validity. American Psychologist, 1960, 15, 546-553.

Clarke, M., & Williams, A. J. Depression in women after perinatal death. Lancet, 1979, 8122, 916-917.

Clayton, P. J. Mortality and morbidity in the first year of widowhood. Archives of General Psychiatry, 1974, 125, 747-750.

Clayton, P. J., Desmarais, L., & Winokur, G. A study of normal bereavement. American Journal of Psychiatry, 1968, 125, 168-174.

Clayton, P. J., Herjanic, M., Murphy, G., & Woodruff, R. Mourning and depression: Their similarities and differences. Canadian Psychology Association Journal, 1974, 19, 309-312.

Cleary, P. J. A checklist for life event research. Journal of Psychosomatic Research, 1980, 24, 199-207.

Cochrane, R. The Life Events Inventory: A measure of the relative severity of psycho-social stressors. Journal of Psychosomatic Research, 1973, 17, 135-139.

Cronbach, L. J. Coefficient alpha and the internal structure of tests. Psychometrika, 1951, 16, 297-334.

Cronbach, L. J., & Meehl, P. E. Construct validity in psychological tests. Psychological Bulletin, 1955, 52, 281-302.

Depue, R. (Ed.). The psychobiology of the depressive disorders. Implications for the effects of stress. New York: Academic Press, 1974.

DeVaul, R. A., Zisook, S., & Faschingbauer, T. Clinical aspects of grief and bereavement. Symposium on psychological issues in primary care. Philadelphia: W. B. Saunders Co., 1979.

Dohrenwend, B. S., & Dohrenwend, B. P. Some issues in research on stressful life events. Journal of Nervous and Mental Diseases, 1978, 166, 7-15.

Dunlop, R. Helping the bereaved. Maryland: Charles Press Publications, Inc., 1978.

Elliott, B. A., & Hein, H. Neonatal death: Reflections for physicians. Pediatrics, 1978, 62, 96-102.

Engel, G. L. Is grief a disease? Psychosomatic Medicine, 1961, 23, 18-23.

Engel, G. L. Psychological development in health and disease. Philadelphia: W. B. Saunders Co., 1962.

Engel, G. L. The psychological setting of somatic disease: The giving-up--given-up complex. Proceedings of the Royal Society of Medicine, 1967, 60, 553-555.

Faschinghauer, T., Devaul, R., & Zisook, S. Development of the Texas Inventory of Grief. American Journal of Psychiatry, 1977, 134, 696-698.

Feighner, J. P., Robins, E., Guze, S. B., et al. Diagnostic criteria for use in psychiatric research. Archives of General Psychiatry, 1972, 26, 57-63.

Folta, J. R. Pathological grief. In O. Margolis, H. Raether, A. Kutscher et al. (Eds.). Acute grief. New York: Columbia University Press, 1981.

Freud, S. Mourning and melancholia. 1917. Standard Edition. London: Hogarth Press, 1961.

Glick, I., Weiss, R., & Parkes, M. C. The first year of bereavement. New York: John Wiley & Sons, 1974.

Goodwin, F. K., & Polter, W. Z. Biology of affective illness. In J. O. Cole, A. F. Schotzberg, & S. H. Frazier (Eds.). Depression: Biology, psychodynamics, and treatment. New York: Plenum, 1978.

Gorer, G. Death, grief, and mourning in contemporary Britain. London: Tavistock Publications, 1965.

Grant, I., Sweetwood, H., Gerst, M., & Yager, J. Scaling procedures in life events research. Journal of Psychosomatic Research, 1978, 22, 525-530.

Greist, J. H., & Greist, T. V. Antidepressant treatment--The essentials. Baltimore, Md.: The Williams & Wilkins Co., 1979.

Hartmann, H. Ego psychology and the problem of adaptation. New York: International Universities Press, 1958.

Holmes, T. H., & Rahe, R. H. The Social Readjustment Rating Scale. Journal of Psychosomatic Research, 1967, 11, 213-218.

Horowitz, M. J. Stress response syndromes. New York: Aronson, 1976.

Kaplan, L. Oneness and separateness: From infant to individual. New York: Simon & Schuster, 1978.

Klerman, G. L., & Izen, J. The effects of bereavement and grief on physical health and general well being. In F. Reichsman (Ed.). Studies in psychosomatic medicine. Basel: S. Karger Press, 1977.

Kobasa, S. C. Stressful life events, personality and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 1979, 37, 1-11.

Kobasa, S. C., Maddi, S. R., & Kahn, S. Hardiness and health: A prospective study. Journal of Personality and Social Psychology, in press.

Lazarus, R. S. Psychological stress and the coping process. New York: McGraw-Hill, 1966.

Lei, H., & Skinner, H. A. A psychometric study of life events and social readjustment. Journal of Psychosomatic Research, 1980, 24, 57-65.

Lindemann, E. Symptomatology and management of acute grief. American Journal of Psychiatry, 1944, 101, 141-148.

Lindemann, E. Psychiatric factors in the treatment of ulcerative colitis. Archives of Neurology and Psychiatry, 1945, 53, 322.

Maddison, D., & Raphael, B. Conjugal bereavement and the social network. In B. Schoenberg, I. Gerber, A. Wiener, A. Kutscher, D. Peretz, & A. Carr (Eds.). Bereavement: Its psychosocial aspects. New York: Columbia University Press, 1975.

Maddison, D., & Walker, W. L. Factors affecting the outcome of conjugal bereavement. British Journal of Psychiatry, 1967, 113, 1057-1067.

Marris, P. Widows and their families. London: Routledge & Kegan Paul, 1958.

Marris, P. Loss and change. Garden City, N.J.: Anchor Press, 1975.

Montgomery, S. A., & Asberg, M. A new depression scale designed to be sensitive to change. British Journal of Psychiatry, 1979, 134, 382-389.

Morrison, J. K. Successful grieving: Changing personal constructs through mental imagery. Journal of Mental Images, 1978, 2, 63-68.

Moustakas, C. Loneliness and love. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.

Myers, J. K., Lindenthal, J. J., Pepper, M. P., & Ostrander, D. R. Life events and mental status: A longitudinal study. Journal of Health and Social Behavior, 1972, 13, 398-406.

Myers, J., & Weissman, M. Use of a self-report symptom scale to detect depression in a community sample. American Journal of Psychiatry, 1980, 137, 1081-1084.

Nunnally, J. C. Psychometric theory. New York: McGraw-Hill, 1967.

Nussbaum, K., & Michaux, W. W. Response to humor in depression. A prediction and evaluation of patient change? Psychiatric Quarterly, 1963, 37, 527-539.

Parkes, C. M. Bereavement and mental illness, Part I. A clinical study of the grief of bereaved psychiatric patients. British Journal of Medical Psychology, 1965, 38, 1-12. (a)

Parkes, C. M. Bereavement and mental illness, Part II. A classification of bereavement reactions. British Journal of Medical Psychology, 1965, 38, 13-26. (b)

Parkes, C. M. The first year of bereavement. Psychiatry, 1970, 33, 444-467.

Parkes, C. M. Bereavement: Studies of grief in adult life. London: Tavistock Publication, 1972.

Parkes, C. M. What becomes of redundant world models? A contribution to the study of adaptation to change. British Journal of Medical Psychology, 1975, 48, 131-137.

Parkes, C. M. Psychosocial care of the family after the patient's death. In O. Margolis, H. Raether, A. Kutscher et al. (Eds.). Acute grief. New York: Columbia University Press, 1981.

Paykel, E. S. Contributions of life events to causation of psychiatric illness. Psychological Medicine, 1978, 8, 245-253.

Paykel, E. S. Recent life events in the development of the depressive disorders. In R. A. Depue (Ed.). The psychobiology of the depressive disorders. Implications for the effects of stress. New York: Academic Press, 1979.

Paykel, E., Myers, J. K., Dienelt, M., Klerman, G., Lindenthal, J., & Pepper, M. Life events and depression: A controlled study. Archives of General Psychiatry, 1969, 21, 753-760.

Phillips, J. S., & Bierman, K. L. Treatment of depression: An illustration of trends and issues. Annual Review of Psychology, 1981, 32, 414-421.

Pincus, L. Death and the family. The importance of mourning. New York: Vintage, 1976.

Plutchik, R. The emotions: Facts, theories, and a new model. New York: Random House, 1962.

Prudo, R., Brown, G. W., Harris, T., & Dowland, J. Psychiatric disorder in a rural and an urban population: 2. Sensitivity to loss. Psychological Medicine, 1981, 11, 601-616.

Rahe, R. Life change measurement clarification. Psychosomatic Medicine, 1978, 40, 95-98.

Rahe, R., & Arthur, R. S. Life change patterns surrounding illness experience. Journal of Psychosomatic Research, 1968, 11, 341-345.

Raphael, B., & Maddison, D. C. The care of bereaved adults. In O. W. Hill (Ed.). Modern trends in psychosomatic medicine. London: Butterworth, 1976.

Redfield, J., & Stone, A. Individual viewpoints of stressful life events. Journal of Consulting and Clinical Psychology, 1979, 47, 147-154.

Rees, W. D. The bereaved and their hallucinations. In B. Schoenberg, I. Gerber, A. Wiener, A. Kutscher, D. Peretz, & A. Carr (Eds.). Bereavement: Its psychosocial aspects. New York: Columbia University Press, 1975.

Rosenblatt, P., Walsh, R., & Jackson, D. Grief and mourning in cross-cultural perspective. USA: Human Relations Area Files, Inc. Press, 1976.

Sarason, I. G., Johnson, J. H., & Siegel, J. M. Assessing the impact of life changes: Development of the Life Experiences Survey. Journal of Consulting and Clinical Psychology, 1978, 46, 932-946.

Schmale, A., & Engel, G. The role of conservation-withdrawal in depressive reactions. In E. J. Anthony & T. Benedek (Eds.). Depression and human existence. Boston: Little, Brown & Co., 1977.

Schneider, J. Clinically significant differences between grief, pathological grief and depression. Patient Counseling and Health Education, 1980, 3, 161-169.

Schneider, J. Growth from bereavement. In P. Pegg & E. Metze (Eds.). Death and dying: A quality of life. London: Pitman Books, Ltd., 1981.

Schneider, J. The nature of loss, the nature of grief. A comprehensive approach to understanding and facilitation. Baltimore: University Park Press, in press.

Selye, H. The stress of life. New York: McGraw-Hill, 1976.

Siegel, J., Johnson, J., & Sarason, I. Mood states and the reporting of life changes. Journal of Psychosomatic Research, 1979, 23, 103-108.

Simos, B. A time to grieve: Loss as a universal human experience. New York: Family Services Association of America, 1979.

Steele, G. P., Henderson, S., & Duncan, J. The reliability of reporting adverse experiences. Psychological Medicine, 1980, 10, 301-306.

Tennant, C., Bebbington, P., & Hurry, J. The role of life events in depressive illness: Is there a substantial causal relation? Psychological Medicine, 1981, 11, 379-384.

Thomas, J. A validation study of a grief scale used with parents of critically ill infants (doctoral dissertation, University of Akron, 1980). Dissertation Abstracts International, 1980, 41, 335B-336B.

Visotsky, H. M., Hamburg, D. A., Goss, M. E., & Lebovits, B. Z. Coping behavior under extreme stress. Archives of General Psychiatry, 1961, 5, 423-448.

Volkan, V. The recognition and prevention of pathological grief. The Virginia Medical Monthly, 1972, 99, 535-540.

Weiner, I. (Ed.). Clinical methods in psychiatry. New York: John Wiley & Sons, 1976.

Wiener, A., Gerber, I., Battin, D., & Arkin, A. The process and phenomenology of bereavement. In B. Schoenberg, I. Gerber, A. Wiener, A. Kutscher, D. Peretz, & A. Carr (Eds.). Bereavement: Its psychosocial aspects. New York: Columbia University Press, 1975.

Wilson, J. Anticipatory grief in response to threatened amputation. Maternal Child Nursing Journal, 1977, 6, 177-186.

Yalom, I. Existential Psychotherapy. New York: Basic Books, 1980.

Zeiss, A. Aversiveness versus change in the assessment of life stress. Journal of Psychosomatic Research, 1980, 24, 15-19.