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DEATH ANXIETY AND FUTURE TIME PERSPECTIVES IN ADOLESCENCE FOLLOWING THE DEATH OF A CLASSMATE OR PEER

By

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ABSTRACT

DEATH ANXIETY AND FUTURE TIME PERSPECTIVES IN ADOLESCENCE FOLLOWING THE DEATH OF A CLASSMATE OR PEER

By

Elizabeth Ann DeRath

Empirical research is lacking concerning adolescents and grief issues. The purpose of this research is to add to the sparse empirical knowledge concerning adolescents and death, but to enhance the understanding of how peer death might affect adolescents' future time perspectives and death anxiety.

The subjects were asked to complete the Consent Form for Adolescents, the Personal Associations test, six Cards of the Thematic Apperception Test, the Death Anxiety Questionnaire, and a Personal Data Form. Approximately half of the subjects had experienced the death of a classmate or peer since their sophomore year in high school.

Regarding analysis of Personal Associations Test results, findings revealed that regardless of loss experience as death anxiety scores increased, future time perspective scores decreased, and that subjects who experienced a loss had a primary past or present time perspective. Contrary to prediction, subjects who

experienced the loss had a significantly more dense future time perspective than subjects who did not. Although not specifically hypothesized, findings also suggested that males who experienced the death of a classmate or peer had significantly shorter future time perspectives than females.

Regarding post hoc findings, analysis of Personal Association test results reveal that the loss male group had a foreshortened future time perspective which was also impacted by the time since the loss occurred and the relationship with the deceased when compared with the female loss group. The Thematic Apperception Test results appear to be less affected by gender. There were significant main effects for time since the loss occurred and for relationship with the deceased on future time perspective, and a significant main effect for relationship with the deceased on the past-present versus future time perspective issues. There was also a significant main effect for primary place of residence, with rural subjects having a significantly higher score on the Death Anxiety Questionnaire than city subjects.

To my mother, Gladys Katherine McLean Small

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INTRODUCTION

The United States is generally considered a death-denying culture, and it has only been in the last several decades that the study of death has become a "respectable field of inquiry" (Shneidman, 1976, p. xxii). However, there have been few empirical studies of psychological phenomenon related to death. Yalom (1980) states that of twenty-six hundred books and articles on death written prior to 1972, fewer than two percent report empirical research.

The topic of death appears to be overlooked as an important concern particularly in the study of adolescents. As currently as 1990, Wolfelt (1990) refers to adolescent mourning as an historically neglected topic in the grief literature. Twenty-four years ago, Laufer (1966) noted that only a few clinical papers dealt with mourning in adolescence. Wolfenstein (1966) added that relatively little had been reported on children's reactions to loss of a major love object of children from the beginnings of latency into adolescence. Kastenbaum (1974) believes developmental psychologists have tended to regard death

cognitions as peripheral to the main course of mental and personality development. Ten years ago, Yalom (1980) perceived a marked discrepancy between the importance of death concerns to children, including adolescents, and the meager attention paid to the topic in the child development literature. Fleming and Adolph (1986) also point to the omission of adolescence as a distinct developmental stage in grief research. Despite references to different labels such as mourning, reactions to loss, death cognitions, death concerns, the dearth of information specifically concerning adolescents and death issues has not changed to any great extent in the past twenty years with the possible exception of adolescent suicide (Corr and McNeil, 1986). Corr and McNeil state,

> Much has been written about adolescence, and--especially recently--a good deal has been written about dying, death, and bereavement. But very little has been written about the issues involved in the conjunction of these phenomena--with the notable exception of adolescent suicide. (p. xiii)

It is generally accepted that adolescents have an adult-like death concept in that they recognize the universality and permanence of death (Becker, 1977; Dunton, 1974; Hagin and Corwin, 1974; Kastenbaum, 1974; Kubler-Ross, 1983; McGuire and Ely, 1984; Schowalter, 1970). However, Kastenbaum and Aisenberg (1976) recommend distinguishing

between two forms of death concepts, death of others, and death of self. They suggest that the concept of death of self, or the idea that "I" will die, assumes an awareness of individuality and death as more real and personal. In a more recent publication, Kastenbaum (1986) points out that the adolescent men fighting in Viet Nam were not only vividly experiencing the deaths of young men around them but also were experiencing direct threats to their own lives. He further states that, "the life and death questions raised in adolescence creates a sense of vulnerability that we spend most of our adult years trying to conceal and forget." (Corr et al, p. 14). Yalom (1980) and Kubler-Ross (1983) both suggest that beneath the recognition of the loss of a loved person is the reality of personal death and anxiety related to that loss. Kastenbaum and Aisenberg (1976) and Rando (1984) posit that the increased sense of individuality and aloneness that develops in adolescence creates a particular vulnerability related to the awareness of personal mortality. Yalom (1980), states that adolescents tend to show higher overt death anxiety than other age groups, and Hamovitch's study (cited in Morrissey, 1965) found that children over ten who were experiencing a terminal illness showed the greatest anxiety in relation to their own death.

It does appear evident that with the adolescent's increased sense of identity along with greater emancipation and self-determination that an increased awareness of

anxiety related to personal mortality also develops. In connection with previous literature, the current study addresses the issue of death anxiety in relation to one's own death as impacted by the loss of a classmate or peer in adolescence.

In general, however, even though adolescents may intellectually realize the universality and permanence of death, and may experience some death anxiety, they likely defensively believe that death is something that happens to someone else generally late in life. They also, like most adults, tend to avoid the reality that children or adolescents or peers die, perceiving death as something that happens in the temporally distant future. The death of a child is always untimely which adds a significant complication to normal grief. When the death of a child or adolescent does occur, the reality of personal mortality is vividly demonstrated to surviving children or adolescents, with various emotional, physical and behavioral consequences. Kastenbaum and Aisenberg (1976) suggest the possibility that apprehension about death may be a main factor in the adolescent's tendency to limit thoughts about the future to those that are short-range or to the near future rather than to the distant future. The current study explores the relationships among death anxiety, the experience of losing a classmate or peer, and the range of the adolescent's future time perspective.

Adults in the United States tend to be future-oriented with concerns for retirement, more leisure time, and family relationships. Adolescents, by age thirteen or fourteen, tend to be oriented toward the immediate or near rather than the distant future, and have developed conceptions of the past, the future, and the continuity of time. By virtue of the fact that as long as one is alive death resides in the future, it seems reasonable to conclude that a relationship exists between thoughts of the future and thoughts of death. Kastenbaum and Aisenberg (1976) refer to the general difficulty of forming death concepts without some conception of time. Doob (1971) indicates that the age of a person is important in making temporal judgments because it reflects that person's distance from death, which in turn influences experiences and how an individual organizes and utilizes such experiences in regard to the future. He also connects the person's death-related experiences and/or thoughts to his or her time orientation.

Although little empirical research has been conducted, it is generally concluded that adolescents have achieved the concepts of universality and permanence with regard to death. The majority are also capable of comprehending the possibility of the death of another and of their own death. In adolescence, issues regarding individuality and aloneness increase the awareness of personal mortality which results in increased overt, at least, death anxiety. Denial-based defense mechanisms which assist the individual in coping

with death anxiety also enable the person to place thoughts of their own death and that of most significant others into the distant future. However, because thoughts of personal death are distant, adolescents are especially likely, as Kastenbaum and Aisenberg (1976) suggest, to limit their thoughts to contemporary concerns rather than those in the distant future. A question addressed in the current study is whether the death of a classmate or peer increases death anxiety and whether or not increased death anxiety is related to limiting thoughts of the future. Specifically, does the death of a classmate or peer foreshorten the adolescent's future time perspective or influence thoughts more predominantly to the present or past?

A general goal of this exploratory study is to enhance understanding of how peer death affects adolescents. Specifically, a goal of this research is to add to the relatively sparse empirical knowledge concerned with adolescents and death, particularly the death of a classmate or peer.

This research assumes that eighteen- and nineteen-year-old adolescents have attained an adult-like death concept that includes notions about the universality and permanence of death. It also assumes that these adolescents have achieved a level of time perspective which encompasses an awareness of the past, present, and future, as well as a sense of the continuity of time. It is also assumed that given enrollment and participation at a college level, each

subject will be of at least average intelligence. Undergraduate eighteen- and nineteen-year-old students who had and who had not experienced the death of a classmate or peer were included in this study. Four measures were used to generate the data: a Personal Data form, the Thematic Apperception Test, the Personal Associations time perspective measure, and a death anxiety questionnaire which focused on issues related to personal death rather than the death of someone else.

It is hypothesized that: (1) Subjects who have experienced the death of a classmate or peer will score higher on the Death Anxiety Questionnaire than students who have not experienced the death of a classmate or peer; (2) Subjects who have experienced the death of a classmate or peer will have a shorter future time perspective than students who have not, as measured by responses to the Thematic Apperception Test and to the Personal Associations test. Additionally, it was hypothesized that the loss group will also have a less dense future time perspective than the no-loss control group as measured by responses to the Personal Associations measure; (3) Subjects who have suffered the loss of a classmate or peer will be found to primarily have a past or present time perspective rather than a future time perspective as measured by responses to the Thematic Apperception Test and to the Personal Associations test; (4) Whether they have experienced a loss or not, subjects who have high death anxiety scores on the

Death Anxiety Questionnaire will have shorter future time perspective scores than students with low death anxiety scores as measured by responses to the Thematic Apperception Test and the Personal Associations Test, and less dense future time perspective scores as measured by responses to the Personal Associations test.

Automobile accidents are the leading cause of death in adolescence, and homicide and suicide rank second and third respectively. Given the rate of increase in adolescent suicide since the 1950's alone, it is reasonable to assume that many adolescents will experience the death of a classmate or peer during their adolescence. While crisis intervention in the schools at a time of a student's death is in its infancy, it is important to begin to learn about and to understand the adolescent experience regarding death in order to develop effective intervention programs aimed at helping adolescents deal with grief and its resolution. In a recent publication, Feifel (1990) states that psychologists must "expand our information base so that application does not outrun knowledge" (p. 541). As Feifel notes, appropriate and meaningful responses to individuals who are grieving is not only necessary to benefit the immediately involved survivors, but the community at-large as well. According to Feifel (1990), "....there is growing comprehension that community sharing of grief decreases feelings of guilt and depression in survivors and minimizes the break in the societal fabric" (p. 540).

Chapter II

LITERATURE REVIEW

As stated in the introduction, there has been very little written conjoining the issues of adolescence and death, even though each has a fairly extensive literature. As late as 1990, Wolfelt (1990) concludes that "adolescent mourning" has been a neglected area in the grief literature. There is a need not only for empirical research but also for a specific body of literature that explores the conjoint issues of adolescence and death. Kastenbaum (1986) advises caution in considering adolescence and death together--caution against taking only information that results in an ego-syntonic construct. He clearly states that all of the facts and limitations of our knowledge must be examined.

Adolescent Death Concepts

Theoretical Concepts:

Theoretical concepts related to death in adolescents are neither defined well enough nor organized well enough to provide a meaningful basis for understanding the adolescent death experience. As a body of knowledge related to both

experiential variables and theoretical concepts, it appears that much empirical research is needed to tie down many of the variables which currently appear to have their bases mainly in theory.

Kastenbaum and Aisenberg (1976) state: "It is difficult, in practice, to maintain a clear distinction between concepts and attitudes" (p. 372). They cite the complexities of death concepts which change with respect to developmental level and which have ambiguous goals. Corr and McNeil (1986) agree that the topic of death is not a static phenomenon but goes through transformations related to personal, social and environmental circumstances. According to Hagin and Corwin (1974), individuals continue to modify their orientations toward death throughout their lifetimes. Kastenbaum and Aisenberg (1976) caution that there is no consensus on what constitutes a mature death concept. They pose the possibility that a mature death concept is achieved relatively early in life, then a regression occurs to a more socially sanctioned position. Other authors (Becker, 1977; Feifel, 1974) have noted that the concept of death does not necessarily hold together as a unified, internally consistent structure. Specific to children, Wahl (cited in Becker, 1973) concurs that children's death concepts are complex and may vary among individuals and cultures.

Kastenbaum and Aisenberg (1976) distinguish between two concepts of death, death-of-the-other, and I-will-die. Death-of-the-other is related to the perception that with a

death the other is not present, the other is absent. Closely related for the young child is a sense of abandonment which triggers uncomfortable internal feelings and may trigger anxiety-related symptoms. A sense of limitless separation follows, which, if the death involves the loss of a significant other, could lead to a broader sense of separation from the environment. I-will-die implies one has achieved the developmental levels of "self-awareness, logical thought operations, conceptions of probability, necessity, and causation and of personal and physical time, of finality and separation" (Kastenbaum and Aisenberg, 1976, p. 376). Yalom (1980) and Kubler-Ross (1983) both suggest that beneath the recognition of the loss of a loved person is the realization of personal mortality. Because of the exploratory nature of this research, the assumption was made that the eighteen and nineteen-year-old college student subjects recognize the universality and permanence of death, and that they had attained the ability to conceptualize both the death of another and their own death. These assumptions are given further support in the following research regarding developmental aspects of death concepts.

Developmental Perspective of Death Concepts

In one of the early studies on children's concepts of death, Anthony (1940) studied approximately 130 children aged three to thirteen in Great Britain during the early war

years of 1937-39. She used parental reports in thirteen cases, and both a story-completion test and the 1937 Stanford-Binet in the remaining. She found normal children often think of death as a sorrowful separation or as the ultimate result of aggression. These findings are not surprising since these children were in the midst of an international war at the time, were frequently separated from their families, and were exposed to the realities of death and dying. Williams (1974) suggests that reflections on death are an integral part of growing up. Feifel (1974, 1976), strongly supported by Yalom (1980) and others (Kastenbaum, 1974; Mauer, 1974) stresses the importance of the development of an individual's philosophy of life and death as the core of meaning, value, and personality. He also believes the meaning of death is a major organizing principle in determining conduct. Yalom (1980) believes adolescents become aware of death as an ultimate concern. Defensive mechanisms associated with death anxiety help the adolescent integrate a developing philosophy related to death. He perceives this process as an important task of adolescence.

According to Kastenbaum (1974), Nagy's 1948 research findings regarding children's concept of death appear valid. Nagy (1948), studied 378 three-to ten-year-old Hungarian children using their compositions, drawings and discussions to elicit thoughts and feelings about death. Nagy found three major stages in the development of a death concept. In

the first developmental stage, ages 3-5, death is perceived as temporary and reversible. Life and consciousness are attributed to the dead. There is also a close relationship between death and departure at this stage, which according to Kastenbaum and Aisenberg (1976) is likely to result in distress related to the separation aspect of the death. In the second stage, ages 5-9, children tend to personify death in that death is seen as a separate being, but personal death can be avoided. Children could conceive of others dying, but not of their own death. In the third stage, ages 9 to 10+, death is perceived as universal, final and inevitable. Like adults, children in this stage recognize the permanence of death (Becker, 1977; Dunton, 1974; Hagin and Corwin, 1974; Kubler-Ross, 1983; McGuire and Ely, 1984; Schowalter, 1970).

Gordon (1986) states that,

> the early adolescent becomes aware of death, and the late adolescent attempts to impart a meaning to death (as well as to life) that transcends everyday events and infuses the future with hope. Failure to endow the future with optimism results in death of the spirit or suicide. (p. 28)

In spite of the evidence suggesting that by adolescence the necessary developmental steps for the recognition of the universality and finality of death have been achieved, most authors indicate that death has unpleasant associations and most people avoid thoughts of the reality of their own and

their loved ones death (Peretz, 1970). Schowalter (1970), in discussing 10-year old and older terminally ill children's reactions to their own likely death, indicated it is doubtful an individual can fully conceive of the fact of his or her own death.

In summary, research suggests that there is a developmental process associated with the integration of concepts of death. It appears to initially involve denial of or failure to comprehend personal death associating death with separation. There follows a stage where death applies to others. Finally the permanence and reality of one's own and other's death is integrated. Death has unpleasant associations and may be related to avoidance and denial of the topic. A part of the difficulty in assessing the status of death concepts is the distinction between death-of-other and death-of-self. Affective responses to the topic, as well as defensive strategies developed for coping with the anxiety it evokes, also complicate the assessment. It is likely easier for individuals to intellectually acknowledge the universality and permanence of death in general, than it is to respond to issues regarding personal death, which is not only difficult to conceive, but painful thoughts of which are avoided. Development of a realistic notion of death, both one's own and the death of others, is a significant aspect of child and adolescent development.

Variables Related to the Study of Death Concepts:

The literature suggests that age alone correlates consistently and significantly with the stages of children's death concepts (Tallmer, Formanek, and Tallmer, 1974). However, other variables are also important. In their study of 199 children ages 3-9, Tallmer, et al (1974) found lower class children were more aware of the concept of death. The possibility exists that lower class children may use fewer defensive strategies, such as denial or repression, to avoid thoughts of death, and/or may have had more exposure to death experiences. A 1966 study by Mauer (cited in Hagin and Corwin, 1974) reported a positive correlation between the adolescent's academic success and the maturity of attitudes toward death. They identified the "maturation" steps of awareness, denial, projection, curiosity, and personification as being associated with immature attitudes toward death in the low academic group. Some of these could be classified as defensive strategies employed to avoid death anxiety. Propitiation, dare-deviltry, substitution, contempt with laughter, acceptance of inevitability, despair and transmutation into idealism were characteristic of successful students with more mature attitudes toward death. Some of these could also be classified as defensive coping mechanisms to compensate for death anxiety. The differences could be attributed to the maturity of defensive strategies which appear to have as their purpose protection against death anxiety. Also, again, the issue of "mature"

attitudes needs clarification. Kastenbaum and Aisenberg (1976) also believe situational contexts related to specific death experiences may elicit one type of death cognition among several, or may stimulate development of new or modified concepts. Furman (1964) believes the child's ability to comprehend death is clouded if she or he loses a deeply loved or needed person. It would be important to assess at what age the loss occurred. Dunton (1970) suggests that problem-solving attitudes and skills in the family has an effect on the child's death concept, as does the family's socio-economic status (Dunton, 1970; Williams, 1974).

Numerous other variables in addition to age are related to the development of child and adolescent concerns about death. It is evident that there is no clear definition of adolescent death concepts. In general, difficulty in definition and assessment also occur because of the complexity and ambiguity and developmental changes associated with the concepts. It is likely accurate to state that by adolescence most individuals recognize the universality and permanence of death, at least on a cognitive level. The death of others sometime in the future appears to be more easily integrated into one's concept of death than is personal death. Self-awareness, logical thought operations, concepts of probability, necessity and causation, and of personal and physical time and of finality and separation, all components suggested by Kastenbaum and

Aisenberg (1976) of the ability to recognize the reality of personality mortality facilitate a more mature adolescent concept of death. Age, SES, situational contexts, previous loss experiences, family problem-solving skills and possibly academic success are all variables that also affect death concepts. Death anxiety and accompanying protective defenses, a review of which follow, also have an impact on adolescent death concepts.

Death Anxiety

Death Anxiety in Adolescence:

Most authors allude to the existence of fear of death. Morrissey (1965), specifically referring to children with a fatal illness, defines death anxiety as the apprehensive responses related to the child's concerns with limitation of his or her existence. A study by Solnit and Green (cited in Morrissey, 1965) suggest that each child has his or her own fearful concepts about the nature of death. Gordon (1986) asserts that, "like masturbation, adolescent death fears are universally experienced" (p.20) and, like sexual issues, are secretly discussed with peers who likely also have little accurate information. Yalom (1980) also believes that death anxiety is universal and that all individuals are confronted with it. According to Yalom, this anxiety results from a fear of death which follows the child's discovery of his or her own mortality and the realization that there is no

escape from death. He also states that adolescents tend to show higher overt death anxiety than other age groups. Austin and Mack (1986) also report that senior high school students experience a higher level of death anxiety than either junior high school students or adults. They attribute this to a greater level of stress accompanying the physical, emotional, and cognitive changes of adolescence, as well as the adolescents' awareness of and willingness to report their feelings. This is consistent with Hamovitch's study (cited in Morrissey, 1965) findings with fifty children hospitalized with leukemia. Compared to leukemic children aged ten and younger, the children over age 10 in that study showed the greatest anxiety related to the possibility of their own death. Adams and Deveau (1986) in their discussion of dying adolescents state,

> It is against the very nature of adolescents to accept their own death without contention. They naturally believe that they are going to reach adulthood regardless of their illness and to live many more years beyond. Personal death is not meant to be in the adolescents' repertoire. (p. 79)

Kastenbaum and Aisenberg (1976) relate the adolescent's vulnerability to thoughts of his or her own death to the struggle to establish and maintain individuality, whereas Mauer (1964) connects death anxiety with the tasks of identity and purpose in adolescents. Schneider (unpublished

manuscript, 1990) reports that adolescent death anxiety focuses on sudden, unanticipated death and is often associated with fears of being unable to fulfill future goals. According to Peretz (1970), death anxiety studies indicate that death is represented in the imagination as separation from those who provide love and nurture, and with an awareness of being isolated and alone.

Gordon (1986) points out that, "The classic texts on adolescence, such as Conger and Petersen (1984), Josselyn (1971), or Anna Freud (1958), mention death fears only in passing, if at all" (p. 22).

Fear of death, like death concepts, is a complex phenomenon with considerable individual differences that is not clearly delineated. Feifel (1990) reports that, "fear of death is not a unitary or monolithic variable. Various subcomponents are evident, for example, fear of going to hell, loss of identity, loneliness" (p. 539). It seems that death anxiety is more related to death-of-self than death-of-other, subject to developmental considerations, and is also connected with the other major developmental tasks of adolescence.

Other Variables Related to Death Anxiety in Adolescence:

Yalom (1980), and Kastenbaum and Aisenberg (1976), are critical of research that fails to distinguish between one's fear of one's own death and the death of another, or the effects of one's death on others. Yalom (1980) also

differentiates between conscious and unconscious attitudes, and between conscious, manifest anxiety and unconscious anxiety. He is critical of the reliability and validity of instruments currently used to measure attitudes and anxiety related to death. He also perceives a bias in current research approaches, which he attributes to adult fears and denial of death.

Mauer (1964) reported that awareness of fear in relation to death is negatively correlated with intellectual ability until the retarded level. Her subjects were 17- to 19-year-old girls who scored from the 1st to the 99th percentile on the ACE test. The sample reportedly included a good representation of racial, SES, and religious groups. She used an unstructured method, asking what came to mind when you think of death? These results would suggest a relationship between intellectual ability and conscious death anxiety. The results do not really address the relationship between I.Q. and death anxiety, conscious and unconscious. Yalom (1980) cites several research findings regarding death anxiety: Students who have lost a parent have higher death anxiety, devoutly religious individuals have less death anxiety, and death fears were found to be extremely important concerns in a study of 1000 college co-eds. Keller, Sherry, and Piotrowski (1984), summarizing previous studies of death anxiety, found no evidence to support systematic sex-related differences in death anxiety, although they add that more recent research indicates

females fear death more than do males. They cite their own research involving eighteen- to twenty-three-year-olds in which women were more concerned than men about their own death. They also concur with Yalom (1980) that strong religious commitments seemed to lessen fear of death. Kastenbaum and Aisenberg (1976) also found subjects who have a longer future time perspective expressed lower manifest death concerns.

The variables related to the study of death anxiety, like other issues in the study of death and death concerns, are complex and often not well-defined. The most critical variables in regard to research appear to be related to specifying anxiety or concerns related to death-of-self, death-of-other or the effects of one's death on another or others. The conscious or unconscious nature of the anxiety further complicate matters, especially related to measurement.

Thus, in addition to specific variables, it is clear that the mechanisms by which individuals cope with death anxiety also impact on research.

Defense Mechanisms Related to Death Anxiety:

Little empirical research relating to clearly defined defense mechanisms exist, though frequent reference is made to these mechanisms. Mauer (1964) contends that adolescents must find a sublimation for conscious death anxiety. Many authors (Furman, 1970; Mauer, 1964; Peretz, 1970; Yalom,

1980) cite denial-based strategies, such as suppression, repression, displacement, belief in personal omnipotence, as well as religious beliefs, as adaptive coping mechanisms for death anxiety. Morrissey (1965) reports findings that older boys tend to "act out" death anxiety, while older girls are more likely to become depressed. However, Mauer's (1964), study of seventeen- to nineteen-year-old girls found "genuine enjoyment of life" to be one of the most effective defenses against death anxiety. Leviton and Forman (1974) describe the psychological defenses used by some youths against death anxiety. They include avoidance, depression, and manifestations of guilt and anger, especially if the student is recently bereaved.

Yalom (1980) presents the most complete developmental picture of how children defensively protect themselves against death anxiety by developing protective coping mechanisms. He believes these protective mechanisms, such as displacement, sublimation, and conversion, pass through several stages of sophistication and efficiency. In a manner consistent with psychoanalytic theory, awareness of death is relegated to the unconscious, and the overt fear of death abates. However, during adolescence, childhood denial systems become less effective, and adolescents are again faced with issues related to death anxiety. He speculates that two basic defenses against death terror--belief in personal inviolability and in an ultimate rescuer--originate in infancy when parents perform those tasks. Even though

adolescents and adults intellectually may realize the universality of death, on another level theoreticians believe that adolescents wish to believe death is something that happens to someone else. Another method discussed is that the child and adolescent ward off death anxiety by avoiding or denying the reality that children die. When the death of a child does occur, children attempt to resolve the situation by making a distinction between dying and being killed, relegating death to the future, a time beyond imagination even for adolescents who tend to perceive immediate future, not distant. The personification of death which is primarily evident between ages five to nine, lingers through life, as an outside force which externalizes death, making it a figure of a separate being which can be influenced or delayed. Older children, as previously mentioned (Mauer, 1964), appear to relieve fear of death by confirming aliveness. Yalom (1980) contends that adults also deny the reality of death of self by incorporating the mechanisms of denial into life styles and character structure.

Again, as with other facets of this area of study, how one protects oneself against death anxiety is not fixed with regard to choice, efficiency or sophistication. Some of the methods are adaptive coping mechanisms and some maladaptive, depending on the individual and circumstances. Adolescence, however, according to Yalom (1980) is a time when denial

systems become less effective, resulting in increased death anxiety.

Many of the defense mechanisms appear not to be well-defined and often lack empirical research evidence.

Grief Reactions

In Adolescence

Much of the literature in this area refers to death of a parent and/or death of a sibling, and is closely related to defense mechanisms. However, again, Fleming and Adolph (1986) point out that even these topics have received little attention in grief research.

Wolfelt (1990) suggests that although adolescents have the ability and desire to grieve, i.e. "the internal experience of thoughts and feelings that follow death" (p. 29), they do not mourn, i.e., "the shared social response to loss" (p.29). He points out that when a friend dies, usually, but not always, suddenly, and always tragically, the surviving adolescent friend may not be recognized as being bereaved which may further complicate the grieving process. Wolfelt alludes to the risk of suicide in the surviving friend, particularly if there was conflict in the friendship at the time of the death. In general, he contends that adolescents tend to suppress their grief. Bouvard (1988) also suggests that adolescents, "keep the pain of that death inside us" (p.76), when a friend dies,

due to the fact that adolescents are less likely to have peers who have also experienced the death of a friend. She contends that, given that situation, bereaved adolescents will tend to think that they are unusual or abnormal because of the pain and confusion, and, therefore, won't turn to others.

> Gordon (1986) asserts that the death of friends rips asunder whatever fantasies of immortality that may still exist. The death of a peer forces a confrontation with one's own death at any age. For youth, it calls the logic of the natural order into question, challenges God's existence, and violates the ideals of fairness, justice and goodness.... (p. 26)

She goes on to state that the suicide of a peer "taps into adolescent fears about the future and the ability to appropriately manage the tasks of adulthood" (p.26). She alludes to the adolescents' tendency to "deny the physical consequences and finality of actual death" (p.27). Like other authors, Gordon perceives the common risk-taking behavior observed in adolescence as being counterphobic behavior in many ways. She goes on to say that dangerous situations can stimulate death fears while at the same time providing an outlet by testing the body. However, these high-risk behaviors, such as car racing and excessive use of alcohol and drugs, remain "cloaked in the remnants of belief in immortality" (p.27).

Rando (1984) reports adolescents may feel helpless and frightened after a "significant" loss, with a corresponding desire to return to childhood states when there was protection from death awareness and exposure and the consequences. If the adolescent has lost a parent, yearning for that deceased parent may precipitate a sense of regression, which is especially frightening to an adolescent in search of his or her own identity and independence. Rando argues that if this yearning for the closeness and powerlessness of childhood is repressed, the adolescent may become more susceptible to pathological mourning. Anger, which, she says, is more easily expressed, may produce a sense of power as well as contribute to depression. The adolescent may use denial as a defense against the idea of mortality and the fear of losing control. According to Rando (1984), typical adolescent problems may complicate their mourning: "resistance to communicating with adults; overconcern about the acceptability of their responses to others; alienation from adults and sometimes peers; lack of knowledge of the social expectations" (p. 162). Other adolescent developmental issues, such as separation/dependency conflicts, identity formation, heightened emotionality, and sexual conflicts may also affect the mourning process. If guilt, likely due to unresolved issues in the relationship preceding the death, is experienced by the adolescent in the mourning process, several grief reactions may result: "exaggerated pseudoadult behaviors; identification with the

dead person; withdrawal and depression; sexual acting-out; and care-eliciting behaviors designed not only to secure care, but to release tension, self-punish, and sometimes replace the deceased" (p. 162). The specific mechanisms for development of these more pathological reactions is unclear and are areas for further research.

Wolfelt (1990) cites several issues which complicate adolescent mourning. He points out that when an adolescent experiences the death of someone close, that death is usually unexpected and traumatic--a parent suffers a heart attack, a sibling is killed in an auto accident, a friend commits suicide. These types of death lead to a prolonged and heightened sense of unreality. Adolescence is a time for many changes, and, in the context of those changes, conflicts often occur--with siblings, parents, friends. When a death occurs during a period of conflict, a sense of culpability can result. And, when a friend dies, often the adolescent is not recognized as a legitimate mourner because the focus is on the immediate family. Wolfelt points out that for the teenager to admit that he or she needs someone, particularly an adult, is counter to the major developmental task of moving toward autonomy. Adolescents, he says, tend to suppress their grief, to suppress feelings related to the loss, and many adolescents end up feeling alone and abandoned. Grief work is often delayed to adulthood. As a result of these kinds of complications in conjunction with normal adolescent developmental concerns such as separating

from parents and self-concept difficulties, as well as academic and achievement pressures, Wolfelt states there is a "virtual epidemic of complicated mourning among today's teenagers" (p. 52). He cites symptoms such as chronic depression, sleeping difficulties, restlessness, low self-esteem, academic failure or indifference to school, deterioration in relationships with family and friends, drug and alcohol abuse, fighting, inappropriate risk-taking, sexual acting-out, denial of any problems with grief with accompanying image of hypermaturity, symptoms of chronic anxiety, agitation, restlessness and difficulty in concentrating.

Gordon (1986) points out that personal experience with the death of a significant person in adolescence challenges the notions that death is "distant, violent or beautiful" (p. 22). These feelings of "rage, loneliness, guilt and disbelief" (p. 22), that are frequently experienced by bereaved adolescents are usually unexpected and frightening. Resources for help and support are often not available. Even friends and peers, unless they, too, have experienced a significant loss, will withdraw (Gordon, 1986; Wolfelt, 1990).

Fassler (1978) presents a less complicated picture of childhood mourning. Initially, there is disbelief and/or denial; later, remembrances and discussions occur--a time of sharing even ambivalent feelings such as anger and/or guilt. Lastly, a substitute relationship will be searched

for and developed. Adams-Greely and Moynihan (1983) also report adolescents who are coping more adequately and positively. They describe adolescents who, following the death of a significant other, value their roles and the opportunities to assume responsibility, even though the overall situation may be negative.

Wolfenstein (1966) and Adams-Greely and Moynihan (1983) describe adolescents' seeming inability to cry, which they both suggest is an attempt to deny the reality and resulting anxiety. Other adolescent reactions were reported and discussed: inner emptiness of feeling, possibly a defense against regression; delinquent behaviors, such as truancy and stealing, as a result of acute anxiety and a need to be punished for the guilt they experience (Adams-Greely and Moynihan, 1983).

Wolfenstein (1966) reported observational research with 3-19 year old children who had lost a parent. The majority of subjects were adolescents in treatment and were found to be immersed in everyday activities, not withdrawn. When depressed moods occurred, primarily in adolescence, they were isolated from thoughts of the death of the parent. She explains these findings as reflecting denial of the loss with an expectation that the parent would return. There was no report of findings regarding the impact of treatment effects, and it is not clear whether or not the subjects had experienced the death of a parent at the same age or

developmental level. The length of time since the death of a parent was experienced also was not reported.

Garber (1984), in some contradiction, noted more inner-directedness, depression, sadness, loneliness, withdrawal, and preoccupation in children whose parent had died than in children of divorce. Other reported reactions to death of a parent were: identification with the dead parent; a demand to be cared for; sleeping and eating disturbances; and physical aches and pains. (Adams-Greely and Moynihan, 1983; Furman, 1970; Garber, 1984; Glick et al, 1974; Lindemann, 1965). Kubler-Ross (1983), who perceives teenagers as being more affected by the loss of a parent, describes reactions she considers are defensive in nature to the threatened loss of a parent or sibling: acting-out behaviors, such as destructive behavior and promiscuity, and nightmares, moodiness, and an inability to concentrate.

Yalom (1980) and Rando (1984) theorize that the death of a sibling is a major traumatic loss as it undermines the defensive belief against death anxiety that children are not expected to die. Yalom (1980) as well as others (Furman, 1970; Willis, 1974) have observed sadness and guilt with the loss of a sibling, likely, at least in part, the result of competitive and hostile feelings. Willis (1974) adds that children who experience the loss of a sibling may have distorted concepts of illness and death and disturbed attitudes toward doctors, hospitals and religion; they may also develop psychosomatic symptomatology. Disturbed object

relations, involving a detached way of relating and a fear of getting close to peers or adults may result because of fear of hurting that person (omnipotence), or the fear of risking the emotional energy of another relationship that might result in painful loss.

As previously cited, somatic symptom formation has been noted as a reaction to loss (Willis, 1974). Carr and Schoenberg (1970) claim support for the concept that bereavement is associated with increased mortality. They cite a study by Rees and Lutkins that found bereaved relatives to have a much higher mortality rate during the first year of bereavement. They also cite a study by Greene and Miller of thirty-three children and adolescents with leukemia. In thirty-one of the patients there were precursory events which could be interpreted as separations or loss. Dohrenwent and Dohrenwent (1985) suggest that evidence has increased linking stress responses and health consequences.

It is clear that adolescents grieve significant losses. It is outside the scope and intent of the present research to determine the normal or pathological nature of their grief reactions, and it is not clear from the literature what reactions are normal and which are pathological. Clearly empirical study of such issues is needed. The connection made in the literature between grief reactions and defensive strategies suggests that the undiluted emotions resulting from a significant loss could

be overwhelming, and defensive mechanisms can be adaptive in nature. Components of death anxiety are not specifically delineated and need to be identified in order to clarify what defensive strategies are defending against. Other variables can also impact on adolescent grief reactions.

Other Variables in Child/Adolescent Grief Reactions:

In addition to defensive coping measures, variables affecting a child's grief reaction include age, the causes and circumstances of the loss, such as witnessing or causing the death, and pre- and post-family relationships (Rando, 1984). Kubler-Ross (1983) adds the parent's openness and the child's participation in the dying process, as well as the involvement of the family in the grief process. Furman (Adams-Greely and Moynihan, 1983) cites cognitive ability, previous experiences with loss, and social support networks. Altschul and Beiser (1984) also feel the involvement of the child during the time of the dying and following the death of a loved person, as well as whether or not the death was expected will influence the effects on the child. Wiener (1970) lists the personality of the child, while Peretz (1970) adds cultural prescriptions. Although not specified, death by accident or by disease would likely have an effect.

Several authors (Doob, 1971; Kastenbaum and Aisenberg, 1976) make a connection between thoughts of death and thoughts of the future. Kastenbaum and Aisenberg (1976)

suggest that apprehension about death may be a main factor in the adolescent's tendency to limit thoughts of the future to the near rather than to the distant future which may be a positive and effective defensive coping mechanism.

It is difficult if not impossible to separate death concepts, death anxiety and concomitant defense mechanisms, at least from the literature to this point. Also, when an adolescent suffers a significant loss, he or she grieves, whether that grief and repercussions follow a normal or pathological course, and that grieving includes previous as well as current attitudes or concepts regarding death, death fears or anxieties and defensive strategies utilized to cope. There does not appear to be a concise definition for grieving in adolescents and not enough studies to separate normal and pathological grief.

Time Perspective

Theoretical Concepts:

Wallace and Rabin (1960) point out that earlier studies of time perspectives often contain different interpretations of the concept and do not clearly define the concept. As early as 1939, Frank (1939) conceived of the continuum of time as being a multi-dimensional and highly variable phenomenon with immediate "beliefs, necessities, perplexities and emotional feeling tones" (p. 349), of the present projected forward to the future or backward to the

past. Wallace (1956), Kastenbaum (1961) and Rabin (1976) define time perspective as an individual's preferential tendency with respect to the past, present, or future, and the timing and ordering of personalized events along the dimension of time. Doob (1971) defines temporal perspective as the consistent direction of awareness ranging along a continuum where individuals order personal events from the most distant past to the most remote future. He adds that we "recollect something from the past then determine in the present to act in the future," or we "anticipate in the present by recollecting something from the past or by anticipating something about the future" (p. 10). He also refers to the influence of wishful thinking and other drives, or retroactive inhibition in contributing to distortion of past intervals. The accuracy of the past is diminished by intervening subsequent events. Fantasy plays much the same role in relation to the future where the unanticipated may upset the anticipated.

Similarly, Fraisse (1963) proposes that a temporal perspective involves the placement of events, such as going to high school or joining the Army, in time in relation to each other and all bounded by longer periods such as childhood, adolescence, or young adulthood. Thus, each period also contains various life events associated with it. He uses the term temporal horizon to delineate past and future events from current events on the continuum of time. He states that "present activations are constantly referring

us to what has already passed away or to what has not yet come to be" (p. 151).

Even though time perspective may imply definite time periods such as past, present, or future, it is clear that it is not a static concept nor are the periods sharply delineated; rather, even though one may be primarily oriented toward the past, present, or future, one perspective is usually influenced by events of the other or by an individual's perceptions of the past, present, and future as well as intervening events.

Future Time Perspective:

Fraisse (1963) states that the future time perspective "depends on the capacity for anticipating what is to come" (p. 176), and also, to a great extent, on the individual's present emotional state. Individuals may, for example, anticipate future events in time in a pessimistic or an optimistic way, and this can have an effect on where events are placed in the future continuum of time. A desire for and the awareness of the possibility of achieving a goal are also important aspects of the future time perspective. For example, a desire for wealth may be present in both a poor child from the inner-city and a middle-class child from a more affluent suburb. The suburban child may perceive the possibilities of achieving wealth more clearly and easily through family contacts and education than can the

inner-city child who has not been exposed to success and sees little chance of achieving wealth.

Future time perspective, according to Doob (1971), is the timing and ordering of future personalized events. Characteristics of future time perspective include: (a) extension, or the time intervening between the present and the most distant future personalized event; (b) density, or the number of future events listed in free-response situations; and, (c) coherence, or the consistency of the ordering of personalized events (Rabin, 1976). Rabin (1976) notes that extension relates to the extent of planning for, imagery about, and anticipation of the future. Wohlford (1966), specifies extension into the future as "protension," leaving "extension" to encompass the length of a time span encompassed by a cognition.

Measurement of Time Perspective:

According to Wallace and Rabin (1960), time perspective involves not only long periods of time, but also the "total personality, memory for past events, and hopes and aspirations, and anticipations of future events" (p. 232). Both projective and non-projective measures can be used to illustrate time perspective. One might list memories, current thoughts, and future expectations. Using projective techniques such as the Thematic Apperception Test, one could analyze projective stories for these same dimensions along a continuum of past, present, and future (Doob, 1971, Wallace

and Rabin, 1960). Examples of measures include analysis of time span on Thematic Apperception Test stories, and density and identity regarding the future, or paper and pencil tests. Other techniques such as the Tell-Me-A-Story Test, incomplete sentences tests, and the Rorschach, where the tendency to produce Human Movement responses was associated with future orientation, are also useful in examining temporal perspective. Wallace and Rabin (1960) also report questionnaires and interviews may be used to obtain data of individual or group perceptions of the continuum of time.

Wallace and Rabin (1960) cite research difficulties resulting from the lack of clear definitions of time perspective, which, along with methodological differences, makes it difficult to generalize results. Problems also exist regarding selection of appropriate methodology, which, in part, relates back to the lack of precise definitions. Rabin (1976) comments that measurement techniques regarding Future Time Perspective are lacking, and a need exists for development of stable and reliable methods of assessment.

Because of the exploratory nature of this research, the present study does not resolve the issue with regard to development of new techniques, but rather uses both questionnaires and projective and non-projective techniques. Future research will undoubtedly provide more effective techniques for analyzing time perspective.

Developmental Aspects of Time Perspective:

Wallace and Rabin (1960) believe there is ample empirical evidence to suggest a developmental nature to both the concept and perspective of time. On the basis of previous research, they propose that by age two or three, a child has acquired at least a limited notion of past, present, and future time; however, the primary concern is with the immediate present until about age eight. The expanding time concept continues to develop through thirteen or fourteen years of age when the idea of continuity of time and its relatively accurate estimation are reached.

Doob (1971) states that all studies regarding the development of temporal orientation (time perspective) agree on one point: that children are oriented to the present, then gradually develop conceptions of the past and of the future. Observations on a sample consisting of American children found that concepts regarding the present tended to be developed first, and concepts pertaining to the future were used ahead of those referring to the past. However, Doob (1971) agrees with Fraisse (1963) that there is evidence to suggest that the orientations regarding the past and future may develop simultaneously even though concepts regarding the future may be used ahead of those referring to the past.

According to Yalom (1980), thoughts of death and death fears increase during adolescence. According to Kastenbaum and Aisenberg (1976), because thoughts of death usually are

referred to the distant future, adolescents tend to be more oriented toward the near future, perhaps as a means of protecting themselves against death anxiety.

Doob (1971) states that "each age group has a different attitude toward time" (p. 240). In childhood, time is not seen as being controllable; in adolescence, time perspective is concerned with the near rather than the far future; and, in old age, time is perceived as no longer belonging to him or her, future is foreshortened and there is an increase in concerns about death.

Relationship between Time Perspective and Thoughts of Death:

Regarding the relationship between time perspective and death, Doob (1971) indicates that age is critical when considering an individual's temporal judgments about their death. In most circumstances, the younger the person the more death is placed at a distance. This distance influences experiential learning about viewing the future. In support of this notion, he notes that when a person is facing terminal disease and the more immediate possibility of death, their orientation likely will be more toward the present. Often people in these circumstances really begin to live actively in the present rather than delay activities to a future date. Kastenbaum and Aisenberg (1976) suggest the possibility that apprehension about death may be a major factor in the adolescent's tendency to limit thoughts about

the future to the near future rather than the distant future.

Dickstein and Blatt (1966) compared students who had heightened concern regarding death with those less concerned. The high death anxiety group appeared to be more past oriented, with a foreshortened Future Time Perspective.

In a study by Wohlford (1966), it was hypothesized that an individual's affective state may causally influence his or her extension of personal time into the future (protension). The hypotheses were: (a) positive affect tends to lengthen protension, and, (b) negative affect tends to shorten protension. Subjects were 147 undergraduate men and women who were assigned to one of three affect arousals: anticipating a(n) (1) pleasant experience: "Someday in the future, you will have a quite pleasant experience" (p. 561); (2) unpleasant situation: "Someday in the future you will have a quite unpleasant experience" (p. 561); and (3) personal death: "Someday in the future you will die" (p. 561). In all three conditions, subjects were asked to write a brief description of the event as it would actually happen, dealing with circumstances and feelings in detail. Protension was measured directly by a personal association method wherein subjects write down as many ideas or events they can remember thinking about or talking about in the past week or two, and by a TAT measure. The personal association data supported the hypotheses, but the TAT data did not. Further, it was found

that negative affect increased the frequency of cognitions regarding the past and shortened the length into the future of future cognitions. The shortening was observed to be greater under the Personal Death condition. In discussing his results, Wohlford suggested that an individual's horror of nuclear war may lead to the realization of death of self. In turn, this realization and negative affect will likely shorten his or her extension into the future and decrease the frequency of cognitions concerning the future, which may then produce a reluctance to act to achieve a long-range goal, such as the prevention of war.

Many authors agree that there is a relationship between limited future orientation and anxiety. (Rando, 1984; Yalom, 1980). Yalom (1980) reports that over thirty-five percent of ninety children aged five to ten expressed a preference for staying young in story completions since they linked growing old to death. Kastenbaum (1974) believes that death thoughts influence and are influenced by concepts of past and future, of time as quantity. He further states that death may be seen as having an aura of overwhelming catastrophe. Often it is something that even adults feel they can't cope with or talk about and generally avoid. Problems may result from the child's limited ability to conceptualize futurity in general when adult models avoid distant future orientation. Austin and Mack (1986) in discussing nuclear war and the future, report that recent research suggests children both acknowledge and live with

their nuclear fears and deny them. They state, "Many adolescents simultaneously fear that they will have no future, yet continue to develop future plans" (p. 67). These authors also suggest some adolescents are so overwhelmed by an uncertain future that they live in the present.

Schneider (unpublished manuscript, 1990) relates time perspective to the defensive strategy of "letting go" in response to loss. This "letting go" capacity is "the ability to ignore past and future and focus on the moment" (p. 435), providing "respite and freedom from the urgency to change and the emptiness, loneliness and helplessness of being aware of the 'big picture'" (p. 435).

In summary, there appears to be significant evidence to support a meaningful relationship between death thoughts and time perspective. Doob (1971) indicates that temporal judgments are affected by perceived distance from death. He adds that when one is facing the possibility of dying, the orientation will be more toward the present. Especially under the condition of describing the circumstances and feelings related to one's own death in Wohlford's (1966) study, the frequency of cognitions regarding the past were increased and future cognitions were less distant into the future. Dickstein and Blatt (1966) found subjects who had heightened concern regarding death to be more past-oriented with foreshortened future time perspective when compared to subjects less preoccupied with death. Kastenbaum (1974) implied that a child's ability to conceptualize the future

may be impaired by death thoughts. Several authors (Dickstein and Blatt, 1966; Doob, 1971; Kastenbaum, 1974; Wohlford, 1966) have indicated that those subjects who demonstrated heightened concern regarding their own death tended to be present or past oriented with shorter future time perspectives. In actual bereavement situations, Rando (1984) points out that following a significant loss, adolescents often wish to return to the past safety of childhood. As recently as 1990, in an effort to explain psychology's delayed involvement in exploration of death and dying issues, Feifel (1990) maintains that in an achievement and future-oriented society such as ours, the, "prospect of no future at all, and loss of identity, has become an abomination. Hence, death and mourning have invited our hostility and repudiation" (p. 537).

Hypotheses

The present study is exploratory in nature. As previously stated, there is little available research information specifically related to adolescence and death issues. However, specifically related to the death of friends, Gordon (1986) asserts that the death of a friend "rips asunder whatever fantasies of immortality that may still exist. The death of a peer forces a confrontation with one's own death at any age" (p. 26). The present study examines the relationship among adolescent college students'

experiences with the death of a classmate or peer and death anxiety and future time perspective.

Hypothesis 1. If they don't focus on death anxiety, most authors allude to its existence (Gordon, 1986; Morrissey, 1965; Yalom, 1980). Austin and Mack (1986) report that senior high school students experience a higher level of death anxiety than either junior high school students or adults, and in a study of leukemic children, Hamovitch (cited in Morrissey, 1965) found that children over age ten showed the greatest anxiety related to the possibility of their own death. Several authors suggest a relationship between the loss of a loved person and anxiety related to one's own death (Kastenbaum and Aisenberg, 1976; Kubler-Ross, 1983; Rando, 1984; Yalom, 1980). Hypothesis 1 proposes that adolescents who have experienced the death of a classmate or peer will score higher on the Death Anxiety Questionnaire than students who have not experienced the death of a classmate or peer. A covariance matrix reliability analysis was conducted on the Death Anxiety Questionnaire to establish reliability of the measure. An ANOVA was used to test for significance of Hypothesis 1.

Hypothesis 2. Several authors (Doob, 1971; Kastenbaum and Aisenberg, 1976) make a connection between thoughts of death and thoughts of the future. Kastenbaum and Aisenberg (1976) state that because thoughts of death usually are referred to the distant future, adolescents tend to be more oriented toward the near future, perhaps as a means of

protecting themselves against death anxiety. Doob (1971) reports that in adolescence time perspective is concerned with the near rather than the far future. Dickstein and Blatt (1966) found students who had heightened concern regarding death appeared to be more past oriented, with a foreshortened Future Time Perspective when compared with students who were less concerned about death. Wohlford (1966), comments that protension, or the length of the time span encompassed by a cognition into the future, is shorter in subjects of "lower socioeconomic class, delinquents, depressives, and schizophrenics relative to controls, and that those who have short protension seem to be under the influence of a common affect--unhappiness, anxiety, and/or dysphoria" (p. 560). Using the Personal Associations measure and the Thematic Apperception test, Wohlford (1966) found that negative affect increased the frequency of cognitions regarding the past and shortened the length into the future of future cognitions. In addition, the shortening was observed to be greater under the Personal Death condition which involved writing a brief description of the event of one's own death as it would actually happen, dealing with circumstances and feelings in detail. Hypothesis 2 states that subjects who have experienced the death of a classmate or peer will have a shorter future time perspective than those students who have not as measured by the Thematic Apperception Test and the Personal Associations test. They will also have a less dense future time

perspective as measured on the Personal Associations test. An ANOVA was used to test for significance.

Hypothesis 3. Again based on Wohlford's (1966) study using the Thematic Apperception Test and the Personal Associations measure, findings suggest that subjects under the personal death condition had an increased frequency of cognitions regarding the past. Yalom (1980) reports that over thirty-five percent of ninety children aged five to ten expressed a preference for staying young in story completions since they linked growing old to death. Austin and Mack (1986) suggest some adolescents are so overwhelmed by an uncertain future that they live in the present. Schneider (unpublished manuscript, 1990) contends that, in response to loss, ignoring past and future and focusing on the moment may provide a respite from the affect aroused related to being aware of the "big picture." Doob (1971) indicates that when one is facing the possibility of dying, the orientation will be more toward the present. And, Dickstein and Blatt (1966) found subjects who had heightened concern regarding death to be more past-oriented. In actual bereavement situations, Rando (1984) points out that following a significant loss, adolescents often wish to return to the past safety of childhood. Hypothesis 3 proposes that subjects who have experienced the death of a classmate or peer will have a primary past or present time perspective rather than a future time perspective as indicated by the Thematic

Apperception Test and Personal Association test results. An ANOVA was used to test for significance.

Hypothesis 4. Most authors agree that fear of death exists, and some authors suggest that fear of death is highest in adolescence (Austin and Mack, 1986; Hamovitch, 1965; Yalom, 1980). Kastenbaum and Aisenberg (1976) suggest that apprehension about death may be a main factor in the adolescent's tendency to limit thoughts of the future to the near rather than to the distant future. They also found that subjects who have a longer future time perspective expressed lower manifest death concerns. Hypothesis 1 proposes to explore the relationship between death of a classmate and fear of death as measured by the Death Anxiety Questionnaire. Hypothesis 4 is that subjects in both the experimental and control groups who have high death anxiety scores on the Death Anxiety Questionnaire will have shorter future time perspective scores than students with low death anxiety scores as measured by the Thematic Apperception Test and the Personal Associations test. They will also have a less dense Future Time Perspective as measured on the Personal Associations Test. A correlational analysis was conducted to determine whether or not these factors were, in fact, related.

Chapter III

METHOD

Subjects

The sample was drawn from a population of Michigan State University undergraduate psychology students Winter Term 1989. Subjects were all 18- or 19-year-old male or female college students who volunteered to participate, and who received extra credit in their psychology class for their participation. Experiment sign-up sheets were posted with the experiment name of "Impact of the Death of a Friend or Classmate in Adolescence."

Student subjects were asked to sign a "Consent Form for Adolescents" (see Appendix) which included their consent to participate in the study. The consent form also outlined the testing procedures as well as specifying a debriefing session at the end of the assessment phase during which the subjects would be able to ask questions or talk about issues related to the death of the classmate or peer, as well as death issues in general (see Appendix).

A total of 105 students participated in the study. Males and females were tested separately in groups, two groups of females and two groups of males as in Wohlford's 1966 study. The first group tested, females, included 31

subjects, the second group, males, 13; the third group tested, males, included 28 subjects, and the fourth group, females, 33. Of the total, 64 subjects were female and 41 subjects were male. There was a total of 64 students who were 19-years-old, 37 female subjects and 27 male subjects; and 41 who were 18-years-old, 27 female subjects and 14 male subjects. Fifty-four students had experienced the death of a friend or classmate since their sophomore year in high school, 36 female subjects and 18 male subjects; 51 subjects had not, 28 female and 23 males.

Of the 54 subjects who had experienced the death of a classmate or peer since their sophomore year in high school, 7 rated that person as being most like a "best friend," 29 rated that person as being most like a "friend," 16 rated that person as most like an "acquaintance," and 2 rated that person as most like someone they didn't know.

Of the 54 subjects who had experienced the death of a classmate or peer since their sophomore year in high school, for 13 subjects the death had occurred within one year, for 16, one to two years, for 12, two to three years, and for 13, three to four years. For all but 6 subjects the death of the classmate or peer was unexpected. In addition, approximately 75% of the total sample had previously experienced the death of someone they considered close to them.

Measures

All individuals who participated in the study were asked to complete the "Consent Form for Adolescents" (see Appendix), the Personal Associations test, six Cards of the Thematic Apperception Test, the Death Anxiety Questionnaire, and a Personal Data Form. The measures were administered in the above order to avoid a tendency toward death responses.

Personal Associations Test:

The Personal Association test (see Appendix) was used as a direct measure of time perspective (Wohlford, 1966). It permits separate or joint assessment of direction and extension of personal time as well as density (Wohlford, 1966). Each subject was asked to list as many ideas or events as he or she could remember thinking or talking about in the past week or two. The subjects were then requested to go back over their written list of Personal Associations and to write in the space provided after each item listed (1) whether that idea or event was connected more to the past, present or future, and, (2) how much time has passed since that idea or event has occurred or will pass until that idea or event happens. They were asked to give their estimate of time in years, months, weeks, days, hours, or minutes (Steindel, 1978; Wohlford, 1966). Subjects were then requested to rate the personal importance of each item as either very important, important, or not very important (Steindel, 1978).

The estimate of time passage since the idea or event was converted to scaled scores according to methods outlined in Wohlford's 1966 study. The scale was devised to provide a representative weight to each item according to what seemed to be phenomenally meaningful units of time to his undergraduate introductory psychology student subjects (Wohlford, 1966): 0=under 2 hours; 1=2 hours to under 1 week; 2=1 week to under 1 month; 3=1-4 months; 4=4-12 months; 5=1-4 years; 6=over 4 years. Anticipated events were scored for the average extent of time intervening between the present and most distant future personalized event, or protension, and past events were scored for the average extent of time intervening between the present and the most distant past event, or retrotension. The two scores were summed to obtain the value for total extension.

Future time perspective scores equaled the present plus the future association scores divided by the total number of present plus future associations. The past-present (versus future) time perspective scores equaled the number of past associations plus the number of present associations divided by the total number of past, present and future associations.

The number of events, or density, of the past, density of the present and density of the future was calculated by counting the number of events related to each time category. Future density scores were determined by the percentage of future associations in relation to the total number of

associations. Total density equaled the summed scores. The past-future distinction determined temporal direction as per Wohlford's (1966) study.

Because Wohlford's (1966) study included subjects involvement in an affect arousal procedure, half of each measure was given prior to the affect arousal procedure and the other half following the procedure. The split-half reliability coefficient of the Personal Association protension pretest was calculated by applying the Spearman-Brown formula to the correlation between its odd and even halves. The odd-even reliabilities of the total group's men's and women's PAT protension pretest were .74 (N=147), .78 (N=70) and .69 (N=77) respectively. Thus, the PAT protension measure had high internal consistency (Wohlford, 1966). In addition, two people independently scored all PAT responses from all 147 subjects. "The percentages of identical PA scores, considering men and women separately, ranged from 93 to 96%" (p. 561), suggesting the PAT measure of protension and retrotension had highly objective bases.

> The random assignment of subjects to the three pretest conditions provided an opportunity ....to obtain an additional check upon the PA measure. A two-tailed-t-test for the differences between independent means was used between pairs among the three conditions, three time indices, and three subject groups." (Wohlford, 1966, p. 561)

Only one of the 27 PA differences was significant: men under the unpleasant condition had shorter PAT retrotension than men under the pleasant condition. In general, the random assignment of subjects to the type of arousal condition led to comparable PAT pretest scores. "The lack of significant differences among the PA measures increases confidence in their stability and that differences obtained by them are not due to chance" (Wohlford, 1966, p. 561).

Thematic Apperception Test:

Six cards (Cards 1, 2, 6BM, 7BM, 13B and 13MF, omitting the girl in bed, for males, and Cards 1, 2, 7GF, 8GF, 13G and 17GF for females) of the 19-card set of the Thematic Apperception Test (TAT) were used as an indirect measure of time perspective (Wohlford, 1968). This set successfully discriminated on protension in Wohlford's (1968) study. The cards were reproduced on transparencies and presented by means of an overhead projector to each group following Atkinson's (1958, p. 837) (see Appendix) recommendations for group administration. Both the structured administration and the later order tended to lengthen retrotension and protension scores in Wohlford's (1968) study. Scoring was conducted using the Epley and Ricks (1963) (see Appendix) system for retrotension, protension, and overall extension.

Future time perspective scores equaled the sum of the TAT prospective scores. The past-present (versus future)

time perspective score equaled the mean retrospective score minus the mean prospective score.

Wohlford (1966) used the TAT in his study exploring the influence of an individual's emotional state on extension, the length of the time span encompassed by a cognition, and on personal time into the future, protension. One hundred forty-seven male and female undergraduate subjects were assigned to one of three affect arousal situations, anticipating a pleasant experience, an unpleasant experience, or personal death. The correlations of scores obtained by the two independent scorers of TAT protension and retrotension were .74 and .75 for the 147 subjects, reflecting, according to Wohlford (1966), a measure of protension and retrotension with a highly objective base. To check the TAT's internal consistency, a two-tailed-t-test, "for the differences between independent means was used between pairs among the three conditions, three time indices, and three subject groups. Seven of the 27 TAT differences were significant....Generally, the random assignment of subjects to the arousal condition led to comparable PA pretest scores, but did not lead to comparable TAT pretest scores" (p. 561). According to Wohlford (1966), "The significant between-condition differences in the pretest scores would invalidate the comparisons of these groups' change scores. Furthermore, these differences render the TAT method questionable, if not unreliable, as a measure of extension and its components" (p. 561). Overall

in Wohlford's study, the TAT data did not support the hypotheses that (1) positive affect tends to lengthen protension, and, (2) negative affect tends to shorten protension, while the PA data did. Wohlford (1966) felt that the results were influenced by the differences in the structure of the tests, the TAT instructions being more structured in specifying temporal direction, story form and stimulus cues than the PAT, in addition to the level of consciousness studied being indirect under the TAT conditions.

Wohlford (1968) again used the TAT (Cards 1, 2, 6BM, 7BM, 13B and 13MF, omitting the girl in bed, for males, and Cards 1, 2, 7GF, 8GF, 13G and 17GF for females) as an indirect measure of personal time. Subjects were again college undergraduates and the measure was administered under group conditions according to Atkinson's (1958, p. 837) recommendations with some modifications in the unstructured administration. Data were scored using Epley and Ricks (1963) system for retrotension, protension and overall extension. Later order and structured administration tended to lengthen retrotension, or extension into the past, and protension, or extension into the future, scores on the TAT. All cues in the final set correctly discriminated 75% or more of the subjects on protension. Epley and Ricks (1963) also used the TAT to investigate the possibility of using this method to measure future and past time span. A full set and an abbreviated set of TAT pictures were

administered to male undergraduate subjects with one year intervening. The two sets of TAT's were independently scored by two judges to estimate scoring reliability. Rank order correlations between the two judges were .66 for prospective span and .74 for retrospective span on TAT 1, .78 for prospective span and .79 for retrospective span on TAT II. Because of the time span involved between administrations, different examiners, and different types of pictures administered, the inter-test reliability of .33 for retrospective span and .46 for prospective span was considered to justify belief in the stability of individual time span.

The current study utilized Wohlford's (1968) procedures. Subjects were administered the six TAT cards that successfully discriminated on protension in a structured situation (Cards 1, 2, 6BM, 7BM, 13B and 13MF, omitting the girl in bed, for the males, and Cards 1, 2, 6GF, 8GF, 13G and 17GF for females). Atkinson's (1958, p. 837) recommendations for group administration were followed.

Death Anxiety Questionnaire:

The Death Anxiety Questionnaire (see Appendix) was used as a direct measure of death anxiety. It is a 15-item forced-choice measure developed by Conte, Bakur-Weiner, Plutchik, and Bennet (cited in Steindel, 1978). Subjects are required to choose among options: not at all, somewhat, and very much, indicating the degree of worry they

experience about certain thoughts about death and dying. "Not at all" was scored 0, "somewhat" scored 1, and "very much" scored 2. Scores can range from 0 (no reported death anxiety) to 30 (highest death anxiety). Death Anxiety Scores in the present study equaled the summed scores. This measure relates to death-of-self and includes questions regarding the impact of one's death on others. In the present study, a covariance matrix reliability analysis was conducted to establish reliability of the measure.

Personal Data Form:

The Personal Data Form (see Appendix) requested information regarding gender, age, place of residence and with whom resides, religious affiliations, and religious self-rating and beliefs in life-after-death, information regarding loss experiences, sources of information about death issues and to whom does the responder turn to answer questions about death or death-related issues. Items about the responders current health status and current physical functioning, such as eating and sleeping habits, were also included. A question regarding hopefulness about the respondent's future and why was also included.

A debriefing period was provided at the conclusion of each testing session. Subjects were informed that they could ask questions about the study or express feelings and/or ask questions about death-related issues in general. They were provided a written feedback sheet in addition to

verbal communication of the information on the sheet, and information regarding normal grief reactions.

Analyses: ANOVA was used to test for significance of Hypotheses 1, 2 and 3. A correlational analysis was conducted to determine whether or not the factors in Hypothesis 4 were related. Because of the exploratory nature of this study, the significance level was set at .10 in order to increase the probability of detecting existing differences.

Chapter IV

RESULTS

Due to the paucity of available information relevant to its use, a covariance matrix reliability analysis was first conducted on the Death Anxiety Questionnaire. Scale reliability was .72.

The first hypothesis predicted that subjects who had experienced the loss of a classmate or peer during adolescence would score significantly higher on the Death Anxiety Questionnaire than subjects who did not experience such a loss. ANOVA revealed no significant main effects or interactions, therefore providing no support for the hypothesis.

The second hypothesis predicted that subjects who had experienced the death of a classmate or peer would have a shorter future time perspective than subjects who had not. ANOVA of TAT scores revealed no significant main effects or interactions, therefore providing no support for the hypothesis.

Also regarding the second hypothesis, results of ANOVA on the Personal Associations Test (PAT) scores revealed no significant differences between the loss and no loss groups.

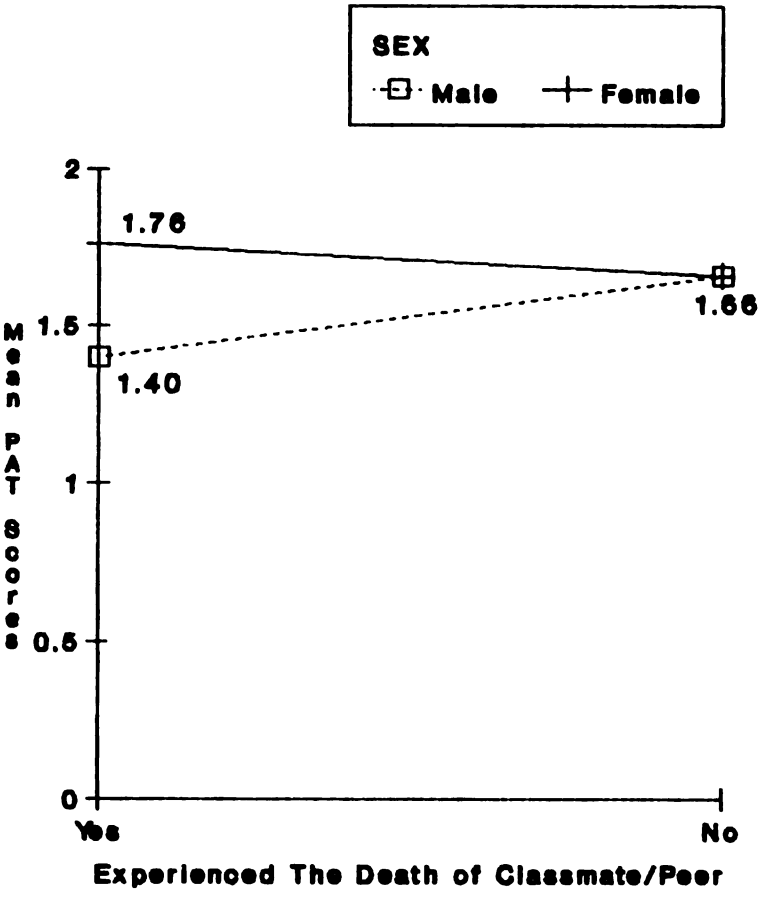

Figure 1

Personal Associations Test Mean Scores as a Measure of Future Time Perspective for Males and Females With and Without Death Experience

However, as shown in Figure 1, ANOVA of PAT scores revealed a significant main effect for sex [F (1,100)=2.82, p<.09] and a death experience by sex interaction [F(1,100)=2.88, p<.09]. The future time perspective of males who experienced the death of a classmate or peer (M=1.40, S.D.=.54) was significantly shorter than the future time perspective of females (M=1.76, S.D.=.51) who also experienced the death of a classmate or peer.

Hypothesis Two also predicted that subjects who had experienced the death of a classmate or peer would have a less dense future time perspective as measured by the PAT. Results of an ANOVA of PAT scores revealed a main effect for death experience [F(1,100)=2.95, p<.09]. However, contrary to prediction, subjects who experienced the loss of a classmate or peer had a significantly more dense future time perspective (M=.38, S.D.=.18) than subjects who hadn't experienced such a loss (M=.31, S.D.=.19). There were no significant main effects or interactions for gender by Density of future time perspective.

To summarize, the hypothesized differences between the loss and no-loss groups in length of future time perspective was not supported by either the TAT or PAT. However, for subjects who experienced a loss, the future time perspective of males was significantly shorter than that of females. Finally, and contrary to prediction, the loss group had a significantly more dense future time perspective than the no loss group.

The third hypothesis predicted that subjects who experienced the death of a classmate or peer would have a primary past or present time perspective rather than a future time perspective as indicated by TAT and PAT results. Analysis of TAT scores revealed no significant main effects or interactions. ANOVA of PAT scores revealed a main effect for death experience [$F(1,100)=2.95$, $p<.09$]. Subjects who experienced a loss ($M=.62$, $SD=.18$) were significantly less oriented toward the past or present than were subjects who did not experience a loss ($M=.69$, $SD=.19$), although all subjects had a primary past or present time perspective, lending some support to the hypothesis.

Hypothesis Four predicted that subjects with high death anxiety scores on the Death Anxiety Questionnaire would have shorter future time perspective scores than students with low death anxiety scores. Moreover, it was expected that high death anxiety scores would be related to less dense future time perspectives.

Analysis revealed a significant correlation (-.13, $p=.10$) between death anxiety scores and future time perspective scores as measured by the PAT, but not the TAT. That is, subjects with high death anxiety scores had a shorter future time perspective, as predicted. However, analysis showed no significant correlation between death anxiety scores and density as measured by the PAT.

POST HOC ANALYSES: Because of the exploratory nature of this study, it seemed appropriate to examine several factors not originally hypothesized to be related to time perspective.

Time Since Death Experience

Future Time Perspective: The first question of interest concerns the impact of length of time since subjects had experienced the death of a classmate or peer on length of future time perspective. Results of an ANOVA on TAT scores revealed no significant main effects or interactions for time since loss.

Results of an ANOVA on PAT scores revealed a main effect for sex [$F(1,94)=6.05$, $p<.02$] and a significant time by sex interaction [$F(4,94)=2.00$, $p<.10$]. As indicated in Table 1, the mean future time perspective scores of female subjects who have experienced the death of a classmate or peer increased linearly until the three-to-four year post-loss time period when it decreased slightly (.05) from the two-to-three year period. After the first year post-loss, the mean future time perspective scores of female subjects are larger than both males and females who have not experienced such a loss. Additionally, females with a death experience had larger mean future time perspective scores at each time period than did males. Regarding male subjects, only those in the one-to two-year post-loss period had a

mean future time perspective score larger (.02) than males or females experiencing no loss; in all other post-loss

Table 1

Mean Future Time Perspective Scores of Males and Females On The Personal Associations Test

	Male		Female	
TIME	Mean	SD	Mean	SD
No Loss	1.66	.69	1.66	.40
0-1 yr	1.47	.75	1.55	.50
1-2 yr	1.68	.66	1.78	.56
2-3 yr	1.07	.11	1.93	.51
3-4 yr	1.26	.40	1.88	.43

periods, male mean future time perspective scores were smaller than either males or females experiencing no loss. Results suggest that, in general, the mean future time perspective scores of males are foreshortened under the death of a classmate or peer condition. Results also suggest that the amount of time that has passed since the loss occurred may have a significant impact on future time perspective as measured by the PAT, but only when gender is a factor.

ANOVA of PAT scores revealed no significant main effects or interactions regarding time since loss in relation to density.

Past-Present Time Perspective vs. Future Time Perspective:

The second post hoc analysis question is related to the third hypothesis. Will time since the loss of a classmate or peer affect subjects' past-present versus future time perspective? Results of an ANOVA of TAT scores showed a significant main effect for time since loss [$F(4,95)=2.97$, $p<.02$].

As indicated in Table 2, regardless of loss status, all subjects had a future time perspective. However, the strength of the future time perspective varies. By the three-to-four year post-loss period, the loss group had lower mean scores than at previous post-loss periods. Scores at that time period were also lower than the no-loss group. Only during the one-to-two year post-loss period did loss subjects also have lower mean scores than the no-loss group.

Results of an ANOVA of PAT scores revealed no significant main effects or interactions for time since loss.

Table 2

Mean Past-Present Time Perspective Scores of Males and Females on the Thematic Apperception Test

Time since loss	Mean	SD
No Loss	-1.22	1.40
0-1 yr	-1.32	1.20
1-2 yr	- .54	.95
2-3 yr	-2.12	2.03
3-4 yr	- .30	1.50

Effects of Relationship

Future Time Perspective: The third set of post-hoc analyses examined the effect of degree of relationship on future time perspective. As shown in Table 3, results of an ANOVA of TAT scores revealed a main effect for relationship [$F(3,95)=2.90$, $p<.04$].

Simple effects tests indicated that there were significant differences between Best Friend and Friend [$F(3,95)=7.33$, $p< .001$], No Loss and Friend [$F(3,95)=6.87$, $p< .001$], and between Acquaintance and Friend [$F(3,95)=2.51$, $p< .100$). No other comparisons among the groups were significant.

Table 3

Mean Shorter Future Time Perspective Scores on the Thematic Apperception Test As A Function of Degree of Relationship

Relationship	Mean	SD
No Loss	21.28	10.61
Best Friend	26.54	8.22
Friend	15.24	7.39
Acquaintance	20.14	8.92

Results of ANOVA for PAT scores revealed a main effect for relationship [$F(3,94)=2.60$ $p < .06$], a main effect for sex [$F(1,94)=5.94$ $p<.02$], and a relationship by sex interaction [$F(3,94)=3.35$ $p<.02$]. Table 4 shows means and standard deviations for males and females as a function of relationship.

Simple effects tests revealed no sex differences within the No Loss group, the Acquaintance Loss group, nor the Best Friend group. However, simple effects tests did reveal a highly significant difference [$F(3,94)= 11.96$, $p.< .001$] between males and females who experienced the death of a Friend.

Post hoc analysis of PAT scores for relationship, revealed no significant main effects or interactions for density.

Table 4

Mean Future Time Perspective Scores on the Personal Associations Test as a Function of Degree of Relationship

	Male		Female	
Relationship	Mean	SD	Mean	SD
No Loss	1.66	.69	1.66	.40
Best Friend	1.53	.43	2.08	.61
Friend	.96	.13	1.74	.55
Acquaintance	1.74	.59	1.73	.34

Past-Present Time Perspective vs. Future Time Perspective: ANOVA of TAT scores revealed a main effect for relationship [$F(3,95)=2.95$, $p<.04$]. (See Table 5).

Although all subjects were future oriented, subjects who experienced the loss of a friend were least future oriented, whereas subjects who experienced the loss of a best friend were the most future oriented. Simple effects tests revealed significant differences between Best Friend and Friend [$F(3,95)=8.91$, $p.<.001$], Best Friend and Acquaintance [$F(3,95)=4.11$, $p.<.01$], Friend and No Loss

[F(3,95)=4.50, p.<.01], and between Best Friend and No Loss [F(3,95)=3.59, p.<.05].

Table 5

Past-Present Time Perspective on the Thematic Apperception Test

Relationship	Mean	SD
No Loss	-1.22	1.40
Best Friend	-2.35	1.36
Friend	- .49	1.12
Acquaintance	-1.00	1.41

Post hoc analyses of PAT scores for relationship revealed no significant main effects or interactions.

Additional Analyses: Further post-hoc analyses considered the impact of city vs. rural primary residence, church affiliation, self-rated strength of religious belief, religion's belief in life-after-death, personal belief in life-after-death, talking with someone about feelings after the loss, and previous loss experience on death anxiety scores. The only significant effect was that attributed to place of residence [F(1,102)=3.06, p.<.08]. Subjects whose primary residence was in a rural environment (Mean=14.06, SD, 4.86) scored significantly higher on the DAQ than subjects whose primary residence was in the city. (Mean= 12.29, SD, 4.85).

Chapter V

DISCUSSION

As stated in the introductory chapters, the purpose of this research was to enhance the understanding of how peer death might affect adolescents, and to add to the relatively sparse empirical knowledge concerned with adolescents and death, particularly the death of a classmate or peer. That these issues are of concern is clearly evident from the literature review. As currently as 1990, Wolfelt refers to adolescent mourning as an historically neglected topic in the grief literature, and Corr and McNeil (Corr and McNeil, 1986) indicate that little has been written about adolescent bereavement. Gordon (Corr and McNeil, 1986) lends credence to the idea that the death of a classmate or peer might logically have a significant impact on surviving adolescents. She states that the death of friends,

> rips asunder whatever fantasies of immortality that may still exist. The death of a peer forces a confrontation with one's own death at any age. For youth, it calls the logic of the natural order into question, challenges God's existence, and

violates the ideals of fairness, justice and goodness....." (p. 26).

The specific issues related to the hypotheses evolved as a result of literature that made connections between thoughts of death and thoughts of the future (Dickstein and Blatt, 1966; Doob, 1971; Kastenbaum and Aisenberg, 1976; Rando, 1984; Wohlford, 1966; Yalom, 1980), and the fact that the preponderance of the literature at least referred to the existence of death anxiety in adolescence. More specifically, Kastenbaum and Aisenberg (1976) suggest that apprehension about death may be a main factor in the adolescent's tendency to limit thoughts of the future to the near rather than to the distant future. Many authors (Austin and Mack, 1986; Dickstein and Blatt, 1966; Doob, 1971; Rando, 1984; Schneider, 1990; Wohlford, 1966; Yalom, 1980) suggest a relationship between death concerns and experiences to a primary present or past time perspective.

Hypothesized Results

The results of the study, even with the .10 level of significance used, revealed only one segment of two hypotheses to be significant. There was a significant correlation between high death anxiety scores on the Death Anxiety Questionnaire and shorter future time perspective scores as measured by the Personal Associations Test. Regardless of loss experience, as death anxiety scores increased, future time perspective scores decreased, as

predicted. This finding is consistent with Kastenbam's and Aisenberg's (1976) theory that apprehension about death may be a factor in the adolescent's tendency to limit thoughts of the future to the near rather than to the distant future, and their findings that subjects who have a longer future time perspective expressed lower manifest death concerns. However, given the significance level used, the relationship can only be taken as suggestive, rather than as hard evidence in support of their theory.

A portion of the third hypothesis predicting that subjects who have experienced the death of a classmate or peer will have a primary past or present time perspective rather than a future time perspective as measured by the PAT, was supported by the data. However, all subjects had a primary past or present time perspective, and the loss group was significantly less oriented toward the past or present than the no-loss subjects. This could be related to the percentage system used for scoring wherein loss subjects may have listed fewer total overall responses with a greater number being self-rated as "future."

Contrary to prediction, subjects who had experienced the loss of a classmate or peer had a significantly more dense future time perspective than subjects who had not experienced such a loss. However, density equaled the number of future associations in relation to the total number of associations. It is possible again that the loss group had fewer total responses. It may also be a result of

what subjects themselves classified as "future," "present," and "past," since these were self-determined responses. Also, since subjects were young college students who were tested in separate groups at different points during the term, this finding could perhaps be explained by what was occurring in their lives at that point in time, such as upcoming final exams, week-end plans, etc. It is also interesting to note that related to the third hypothesis, subjects were primarily past or present-oriented as measured by the PAT. So, even though the future may be more dense, the orientation is toward the present or past.

Though not predicted, there were significant results related to the hypotheses. While there were no significant differences between the loss and no loss groups on the PAT relative to length of future time perspective, there was a significant main effect for sex and a death experience by sex interaction. Findings suggest that on the PAT males who experienced the death of a classmate or peer have significantly shorter mean scores (shorter future time perspectives) than females who have also experienced such a loss. If this sex difference is related to death anxiety, it is difficult to explain since Keller et al. (1984) report that while they found no evidence to support systematic sex-related differences in death anxiety, more recent research indicates that females fear death more than do males. In their own research they found women to be more concerned than men about their own death.

The present research revealed no significant gender differences on the Death Anxiety Questionnaire. Again, given the scoring criteria, it could be that males tended to list fewer responses on the PAT measure than did females. It is possible that males have a shorter future time perspective than females. However, it also is possible that the future time perspective of males who have experienced this type of loss is more affected than the future time perspective of females. Regardless, the criterion adopted for significance requires caution in interpreting this sex difference.

Post Hoc Results

As mentioned in the previous chapter, because of the exploratory nature of this study, several additional factors were examined although they were not originally hypothesized to be related to time perspective.

Time Since Death

Significant Findings in Relation to Future Time Perspective

Results suggest that, in general, the mean future time perspective scores of males are foreshortened under the death of a classmate or peer condition. Only during the one-to two-year post-loss period did males attain a slightly higher mean future time perspective score than the male no-loss group. The 0-1 year post-loss period was the only

period during which females scored below the no-loss groups. It appears then that the amount of time that has passed since the loss occurred may have a significant impact of future time perspective as measured by the PAT, but only when gender is a factor.

Significant Findings in Relation to Past-Present Time Perspective vs. Future Time Perspective

All subjects had a primary future time perspective as measured by the TAT which is not surprising given Wohlford's (1966) comments about the TAT being more structured than the PAT in specifying temporal direction. "What will happen in the future" is a specific direction to responders in the instructions. It is perhaps interesting to note here that, related to the original hypotheses, all subjects had a primary past or present time perspective versus a future time perspective as measured by the PAT. Again, this difference is likely due to the nature of the measures utilized.

Results of an ANOVA of TAT scores also showed a significant main effect for time since loss. While this is perhaps one of the stronger outcomes of this research, it is important to keep in mind that all subjects had a primary future time perspective rather than a past or present perspective on this measure. However, the strength of the future time perspective was found to vary relative to time since the loss occurred. By the 3-4 year post-loss period,

the loss group had lower mean scores than at previous post-loss periods and when compared to the no-loss group. Only during the 1-2 year post-loss period did loss subjects also have lower mean scores than the no-loss group. Females showed a linear progression in strength of mean scores from the first year of bereavement until that 3-4 year post-loss period. While it is possible that the actual loss experience may be the catalyst for this finding, or that previously utilized defensive coping strategies are becoming less effective, it may just be a result of the fact that these young college students are adapting to the college environment, living away from home, studying, focusing on surviving in that environment, whereas during their high school years they were planning for their future college career. However, this does not explain the finding of the 1-2 year post-loss period. This may be the crucial period for bereaved adolescents in relation to the loss of a classmate or peer. Aside from the possibility that these adolescents may not be legitimized as grievers, it is also a time period during which most of society as well as the bereaved adolescent would believe that everything is back to "normal," everything is O.K. If adolescents during that time period have no support systems and/or information, it certainly may effect a tendency for the bereaved adolescent to be less likely to turn to others and may impact their future time perspective.

Effects of Relationship

Significant Findings in Relation to Future Time Perspective

Results of an ANOVA of TAT scores revealed a main effect for relationship, and, again, was one of the more significant results of this study. Simple effects tests indicated that there were significant differences between Best Friend and Friend, and between No Loss and Friend. Subjects who had experienced the loss of a Best Friend had significantly longer future time perspective scores than did subjects who rated the loss as being that of a Friend. It may be that Best Friends receive more social support and recognition of their loss than do Friends, thereby being less subject to complicated grieving. Or, the results may be a function of self-rating, although only seven of the fifty-four loss subjects rated the loss as being that of a Best Friend. It is also possible that the loss of a Best Friend might motivate the bereaved survivor to accomplish future goals not only for themselves but also for their Best Friend or in their Best Friend's memory. This same reason may also explain the significantly higher future time perspective scores for Best Friends when compared to the No-Loss group.

The results also reveal a significant difference, although less so, between Acquaintance and Friend. And, again, those who rated the loss as being that of a Friend scored significantly lower on this measure of future time

perspective than did those who rated the loss as being that of an Acquaintance. In fact, the Friend category had the lowest mean future time perspective scores of any group. The loss of an Acquaintance may not have that great an impact on future time perspective. The scores of the No Loss group and the Acquaintance Loss group were not significantly different, and, in fact, were the closest of any two groups (21.28 to 20.14 respectively). It may be that the category of Friend is most impacted because of the greater likelihood of lack of recognition of their grieving status and lack of social support. Whereas Best Friends may be able to channel their grief in productive ways and may receive more recognition and support of their grief, and Acquaintances may not feel the same impact from the loss. Friends are more in limbo.

Significant Results in Relation to Past-Present Time Perspective vs. Future Time Perspective

Again, the result of an ANOVA of TAT scores revealed a main effect for relationship. Although all subjects were future-oriented on this measure, subjects who experienced the loss of a Friend were least future oriented, whereas subjects who experienced the loss of a Best Friend were most future oriented. Simple effects tests revealed significant differences between Best Friend and Friend, Best Friend and Acquaintance, Best Friend and No Loss, and between Friend and No Loss. And again, the Acquaintance Loss group was not

significantly different from the No Loss group. This suggests that the death of a self-rated acquaintance is similar to not having lost a classmate or peer at all. Since the relationship issue does not take time since loss into consideration, it is possible that Best Friends have been most effective at integrating the loss into their lives, especially if some time has passed. It is also likely that Best Friends are more likely recognized as legitimate grievers than the Friend survivors, and that they receive more social support for a longer period of time. Wolfelt (1990) strongly suggests that legitimatization and support are lacking for adolescent grievers, in general. Investigation of these issues may further clarify what happens to adolescents when a classmate or peer dies.

Additional Analyses

Significant Findings

Because of the lack of findings in relation to death anxiety and the strong suggestion in the literature that death anxiety might have an impact on how an adolescent would perceive the future, several additional factors were considered in relation to death anxiety. These factors included urban versus rural primary place of residence, religious affiliation and beliefs, the issue of talking with someone after the loss, and previous loss experience. The only significant finding was that subjects whose primary

residence was in a rural environment scored significantly higher on the Death Anxiety Questionnaire than subjects whose primary residence was in the city. It could be that rural adolescents are more isolated and have fewer social support networks, fewer people with whom they can talk if they do have anxieties of this sort. It could be that in rural communities there is more of a stoical attitude toward death and anxiety that would predispose an adolescent to keeping these concerns inside. There is a possibility that rural adolescents would have had more exposure to death situations, such as with death of animals, etc., and their concerns were stimulated by the questions on the measure. Rural children may have been witness to suffering animals, to the fact that animals are likely sooner forgotten, and that when an animal dies it does not come back. Much more information would be necessary to attempt to explain this difference.

Summary

Findings suggest a relationship between death anxiety as measured by the Death Anxiety Questionnaire and future time perspective when measured by the PAT. Regardless of loss experience, as death anxiety scores increase, future time perspective scores decreased. The PAT was also apparently effective in determining that the loss group was primarily past-present oriented rather than future oriented, even though the loss group was less past-present oriented

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than the no-loss group. However, given PAT results in relation to density, contrary to prediction, the loss group had a more dense future time perspective than did the no-loss group.

In relation to PAT results, it appears that gender is an factor. The loss male group had a foreshortened future time perspective which was also impacted by the time since the loss occurred when compared with the female loss group. The male loss group also had a foreshortened future time perspective which was impacted by the relationship with the deceased.

The TAT results appear to be less affected by gender. There were significant main effects for time since loss and also for relationship with the deceased on future time perspective, and a significant main effect for relationship with the deceased on the past-present versus future time perspective issue.

There was a negative correlation between death anxiety scores and PAT future time perspective scores. There was also a significant main effect for primary place of residence, with rural subjects having a significantly higher Death Anxiety score than "city" subjects.

Implications for Future Research

Many authors have alluded to the difficulties they have experienced in completing projects that deal with the topic of death on a timely basis. It means coming to terms with

many of the investigator's own questions, concerns and anxieties related to the area of grief. In spite of my involvement in working with bereaved parents for several years prior to the initiation of the research, and my commitment to the area of grief support services, initially the literature review was emotionally draining making organization and progress difficult, at best. It has also been interesting to note that in my work and training in the area of bereavement it has become evident that many of the professionals in the area are involved due to their own experiences with grief. Therefore, it is advisable that individuals interested in research in the area of death and bereavement have at least some insight into their motivations, have made some attempts to come to a resolution of their own grief issues, and have support systems to which they can turn.

Secondly, and related to the previous cautions, future researchers must be prepared to meet with rejection and skepticism when working with death-related topics and attempting to recruit subjects. As cited early in this dissertation, the United States is generally considered a death-denying culture, and death studies have only recently become a "respectable field of inquiry (Shneidman, 1976, p. xxii)." The original intention of this research was to investigate the hypotheses related to high school students who had experienced the loss of a classmate or peer three months previously but within thirteen months of the loss.

This time frame was proposed in order to avoid the initial upset and reactions but to encompass the first year anniversary period. I contacted high schools within a fifty-mile radius of the Lansing area where there was a student death known to have occurred. Over a nine-month period, only one school was willing to cooperate, and, while it had, in previous years experienced the death of several students, it had not within that particular year. In addition, the contact person on the counseling staff at that school left suddenly and under unfortunate negative circumstances. Administrators, in general, were unwilling to cooperate. Comments ranged from the notion that, after three months, all of the students were "back to normal," to the contention that if the school were to allow this type of research (i.e., "death"), parents would be unwilling to approve of increased school millages. Efforts were frustrating, and, ultimately, fruitless. It was easy to understand why, as Yalom (1980) cited, of 2600 books and articles on death written prior to 1972, fewer than 2% reported empirical research. However, these events occurred in the mid-1980's; in my opinion derived from my experiences working as a grief counselor with community-wide contacts, many school personnel have become more aware of the need to understand adolescent grief reactions, particularly when a student in that school has died. Hopefully that awareness will lead to more cooperative efforts with researchers attempting to explore these types of issues. It is

important that the researcher know the community and the schools, and to be able to present oneself as a reliable, trustworthy member of the community.

Even though this research was intended to be exploratory, many things combined to lead me to believe that the hypotheses attempted to encompass too broad a focus, particularly given that there was no previous research specifically related to the hypotheses and the specific situation of a classmate's or peer's death. Very few, if any, of the issues related to the hypotheses were clear-cut and well-defined. Even in citing the lack of information relating to adolescents and death, authors refer to different labels without clear-cut definitions, labels that could be limited in perspective or that could encompass broad areas. Wolfelt (1990), and Laufer (1966) refer to adolescent "mourning," but it is unclear whether or not they are discussing the same phenomena. Wolfenstein (1966) refers to children's reactions to loss of a major love object, Kastenbuam (1974) to death cognitions, Yalom (1980) to death concerns. This diversity of definition makes it difficult to integrate the already sparse literature dealing with children and grief issues, and even more difficult to make generalizations based on the available information. And the preceding is not even delving into the question as to whether or not children "mourn," which has been another debate in the literature. So, to future researchers, a clear definition of the topic, or at least a consistent

definition of the topic, based on the limited available research is necessary.

A related issue is the definition of "adolescence." At least in common terminology, adolescence refers to that period of time beginning at thirteen and including nineteen. By way of more anecdotal information, it is also possible that adolescence really begins when a child enters middle/ junior high school and ends when s/he finishes high school. Is adolescence an all-inclusive term? Maybe that depends on the frame of reference. However, I believes that there are significant differences in many areas between early adolescence and later adolescence and believe that this is backed-up by research. Future research in this area, much as in the area of sexuality, must be specific to what age groups are encompassed in the study. It is also not generally clear from the literature whether or not references to "children" also includes adolescents. Because I was restricted, by virtue of difficulties encountered in recruiting subjects and the desire to investigate the hypotheses in relation to "adolescents," to using the subject pool of undergraduate introductory psychology students, all subjects were aged eighteen or nineteen. This age group may be significantly different from younger adolescents or even like-aged high school students. Only research specifically investigating these issues will illuminate differences if they exist.

It is generally accepted that adolescents have an adult-like death concept in that they recognize the universality and permanence of death (Becker, 1977; Dunton, 1974; Hagin and Corwin, 1974; Kubler-Ross, 1983; Kastenbaum, 1974; McGuire and Ely, 1984; Schowalter, 1970). While this fact seems likely to be true, I was unable to find research that specifically analyzed "adolescents'" death concepts. While it may be true that adolescents, in general, recognize the universality and permanence of death, are there other components that enter into death concepts for adolescents? For that matter, what are adult-like death concepts? Kastenbaum and Aisenberg (1976) caution that there is no consensus on what constitutes a mature death concept. They pose the possibility that a mature death concept is achieved relatively early in life, then a regression occurs to a more socially sanctioned position. Many authors (Becker, 1977; Feifel, 1974) have noted that the concept of death does not necessarily hold together as a unified, internally consistent structure. This appears to be a very important and very basic concept, the understanding of which warrants and requires exploration if any consensus is to be reached in the areas combining adolescents and death, and if any progress is to be made in understanding the adolescent death experience.

It is generally accepted, as previously noted, that adolescents have an adult-like death concept, which, again, requires definition. I found no empirical research that

substantiated that claim, although most of the authors supported the notion that death concepts at least modify developmentally, and that age alone correlates consistently and significantly with the stages of children's death concepts (Tallmer, et al, 1974). Most authors, if they proposed this notion, relied on Nagy's 1948 research to substantiate the claim. She found three major stages in the development of death concepts. In the third stage, ages nine to ten (plus), death was perceived as universal, final and inevitable. Her study included 378 three- to ten-year old Hungarian children, and did not include adolescents. These children likely had been exposed to the conditions of war in Europe at that time, and had likely suffered the consequences of that experience. Variables need to be explored. Do death experiences contribute to death concepts, are there cultural differences in death concepts? Unfortunately, the present research did not make a contribution to this question. It was assumed, in part due to the exploratory nature of the study, that the adolescent subjects had an adult-like death concept that included notions about the universality and permanence of death. While it is likely true that intellectually "normal" adolescents do cognitively recognize and understand the notions of universality and permanence in regard to death, do they recognize and understand these issues affectively as well? Perhaps this is where Kastenbaum's and Aisenberg's (1976) issues of understanding death-of-other and I-will-die

need to be explored. It is unlikely that empirical research alone will answer these questions. Anecdotal information is also important as is listening to adolescents' thoughts and ideas. Obviously, these are not issues for short-term research, but, rather, will take time to investigate. Individual differences may be significant.

Most authors allude to the existence of death anxiety. And, if it is true that death anxiety is heightened in adolescence as many authors suggest (Austin and Mack, 1986; Kastenbaum and Aisenberg, 1976; Kubler-Ross, 1983; Morrissey, 1965; Rando, 1984; Yalom, 1980), more effort must be undertaken to understand what variables are operational in death anxiety. On the Death Anxiety Questionnaire utilized in this study, only 7 subjects reported worrying about dying "very much;" the majority, 81, reported worrying about dying "sometimes," while 17 reported worrying about dying "not at all." Schneider (unpublished manuscript, 1990) reports that adolescent death anxiety focuses on sudden, unanticipated death and is often associated with fears of being unable to fulfill future goals. The second question asked, "Does it bother you that you may die before you have done everything you wanted to?" The responses lend some credence to Schneider's statement: Only 15 subjects indicated that they didn't worry about that issue at all, while 52 indicated that they worried about it "sometimes," and 38 reported that they worried about it "very much." There was no question related to dying suddenly. Related to

Peretz's (1970) notions that death anxiety involves separation from those who provide love and nurture and an awareness of being isolated and alone, question number 12 on the DAQ asked if the thought of leaving loved ones behind when you die was disturbing. Sixty subjects responded that they worried about that "very much." Only 10 subjects claimed that they didn't worry about it at all, and 35 said they worried about it "sometimes." It also seems that question 14 is related to the issue of separation: Does the thought worry you that with death you may be gone forever? Here, 45 subjects indicated that they never worried about that issue, with 30 subjects worried about it "sometimes" and "very much." This finding may be tied to the issue of death concepts, or it may be related to defensive strategies. Feifel (1990) reports that, "fear of death is not a unitary or monolithic variable. Various subcomponents are evident, for example, fear of going to hell, loss of identity, loneliness" (p. 539). In any case, future research must investigate the issue of death anxiety. Does it exist? Is it more prevalent in adolescence? What does it consist of? Are there differences between conscious and unconscious death anxieties? While this research did include a measure of death anxiety, it was a direct measure and did not attempt to explore unconscious thoughts and feelings that may exist. And, while there were significant differences between those students who listed their primary place of residence as being in the city versus those who

listed their primary residence as rural, there were only 33% of the students who listed their primary residence as rural. While there were few other significant findings in relation to death anxiety in the current study, if it does exist, it likely will have an impact on other measures used to study death-related issues, and must be taken into account when trying to understand adolescent's responses to death issues. Efforts must be made to develop measures that reflect adolescent death concerns. Kastenbaum and Aisenberg (1976) and Yalom (1980) are critical of research that fails to distinguish between one's fear of one's own death and the death of another, or the effects of one's death on others. Future research and measures also need to consider these issues.

In relation to previous literature, death anxiety issues should evaluate its relationship to intellectual ability, gender, and religiosity. The present research found no relation between death anxiety scores and gender or self-reported religiosity. However, there was only one self-rating question that asked the subject to rate the strength of his or her religious belief.

Even though no attempt was made to evaluate defensive strategies in this present research, the review of the literature would indicate that it is a worthwhile, and perhaps critical, area that warrants exploration. Gordon (1986) alludes to the adolescents' tendency to "deny the physical consequences and finality of actual death" (p.27).

Particularly in relation to the findings of significant differences between Best Friends and other groups in relation to time perspective, and the lack of clear-cut findings in relation to death anxiety, it is possible that denial-based defensive strategies are operating. Do subjects who lose a Best Friend delay their grieving? Wolfelt (1990) states that adolescents tend to suppress their grief and grief work is often delayed to adulthood. In addition to test results, what are the behavioral responses? Morrissey (1965) reports findings that older boys tend to act out death anxiety, while older girls are more likely to become depressed. Leviton and Forman (1974) cite avoidance and depression as two psychological defenses used by some youths against death anxiety, and include manifestations of guilt and anger, especially if the student is recently bereaved. At this stage, it is not clear that even if defensive strategies are operational that they are maladaptive or pathological. Since most of the literature that deals with defensive strategies relate defensive measures to death anxiety, it seems apparent that future research needs to evaluate defensive strategies and death anxiety in relation to loss when trying to understand what happens when an adolescent loses someone important in his or her life. Gordon (1986) states that, "the early adolescent becomes aware of death, and the late adolescent attempts to impart a meaning to death (as well as to life) that transcends everyday events and infuses the future with hope"

(p.28). Further, such research should not rely on objective or subjective measures alone, but should also include behavioral analysis. Defense mechanisms also need to be more clearly defined and operationalized.

Time perspective is another area that lacks a clear-cut, concise definition of the concept. Much like death concepts, the concept is multi-dimensional and highly variable. Previous theoretical literature and empirical research suggests that future time perspective may be impacted by an individual's present emotional state which, in turn, can be influenced by the individual's perceptions of the past and the future. The present study revealed a significant correlation between death anxiety and future time perspective on PAT results--as death anxiety scores increased, future time perspective decreased. It may be interesting to note also in relation to the findings of this study, that all students were future oriented on the TAT measure, and all but 10 of the 105 subjects reported feeling "hopeful" about the future. As an aside, TAT stories were subjectively rated by this examiner as being "negative", "positive" or "neutral" in relation to the outcome of the story. Of the 630 stories, 246 were "neutral," 212 were "positive," and only 172 were "negative." In addition to operationalizing the concept of future time perspective, future research needs to attempt to take into account or evaluate the subject's present emotional state and to consider the subject's perceptions of the past and future.

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Rabin (1976) notes measurement techniques for future time perspective are lacking, and a need exists for development of stable and reliable methods of assessment. Because of the exploratory nature of the present study, I used measures utilized by Wohlford in his 1966 study which was conducted ten years before Rabin's (1976) comments about the need for development of stable and reliable methods of assessment for future time perspective.

Although the TAT is a widely-used and time-tested measure, it did not differentiate between the loss and no-loss groups in this study. Relative to post hoc analyses of past-present versus future orientation when considering time since death, all subjects had a primary future time perspective. However, it did differentiate among the different time periods since the loss occurred, as well as among different self-reported degrees of relationship.

Analysis of PAT results revealed a negative correlation with death anxiety scores, and supported the hypothesis that loss subjects would have a primary past-present versus a future time perspective, although all subjects had a past-present perspective and the loss subjects less so. Analyses of PAT results, however, appeared to be more sensitive to gender, with significant differences between males and females in relation to length of future time perspective when comparing the loss, no-loss groups and when considering time since death and relationship. Contrary to prediction, subjects who had experienced the loss of a classmate or peer

had a significantly more dense future time perspective than the no-loss subjects.

It must be kept in mind that the two measures are different. The TAT is an indirect measure of time perspective whereas the PAT is a direct measure, and the TAT specifies temporal direction in the instructions. While the scoring of the PAT is specific to time intervals, whether or not the thought or idea relates primarily to the "past," "present," or "future" is self-rated by the subject. Wohlford (1966) found that the PAT results supported his hypothesis that an individual's affective state may causally influence his or her extension of personal time into the future, but the TAT results did not.

I am not necessarily condemning the use of these measures in future research. Perhaps what is needed is more research utilizing these measures in order to establish better reliability and validity. There also appears to be a need to establish what constitutes "present," "past," and "future," in relation to adolescents. Again, the terms need to be operationalized. The present study seems to indicate that the two measures may be sensitive to different variables, but this finding needs to be further evaluated. Also, and perhaps most importantly, subjects and their commitment to the project need to be considered. By the content of the responses, it was clear to me that some subjects took the tasks more seriously than others. If at all possible, it is recommended that other-than-subject-pool

subjects be used. While the subjects may have been motivated to receive extra credit, it is not clear that they were motivated to conscientiously complete the tasks required. This may severely limit the generalizability of the results even without taking the likely homogeneity of the group into account.

Also in relation to measures, the Death Anxiety Questionnaire may not adequately measure an adolescent's anxieties about death issues. Even though scale reliability was .72, it may not have been an adequate measure for adolescents. Attempts to contact the authors for further information were unsuccessful as was attempting to locate additional information regarding its use. Previous literature would also suggest that new measures be developed and researched, particularly differentiating between conscious and unconscious death anxiety (Kastenbaumm and Aisenberg, 1976; Yalom, 1980), and considering defense mechanisms in relation to death anxiety. It was interesting to note that, in the literature review, findings related to maturity of death concepts also related to defense mechanisms: denial, projection, personification, propitiation, dare-deviltry, substitution, contempt with laughter (Mauer, 1974). Many authors (Furman, 1970; Mauer, 1964; Peretz, 1970; Yalom, 1980) cite denial-based strategies, such as suppression, repression, displacement, belief in personal omnipotence, as well as religious beliefs and "genuine enjoyment of life (Mauer, 1964) as adaptive

coping mechanisms for death anxiety. Morrissey (1965) cites seemingly more maladaptive strategies such as older boys acting out death anxiety and older girls tendency toward depression. It is possible that the findings in relation to loss of a Best Friend in the present study relate to defense mechanisms. Much more study would have to be conducted, however, before this kind of assertion could be made. Before determinations can be made about the effects of loss in relation to death anxiety, efforts must be made to establish the variables related to death anxiety, and, again to operationalize the definition. Are adolescents different from children and from adults? Are there differences between early and late adolescence? Schneider (unpublished manuscript, 1990) reports that adolescent death anxiety focuses on sudden, unanticipated death and is often associated with fears of being unable to fulfill future goals; According to Peretz (1970), death anxiety studies indicate that death is represented in the imagination as separation from those who provide love and nurture, and with an awareness of being isolated and alone; Feifel (1990) cites, "fear of going to hell, loss of identity, loneliness" (p. 539).

Given the nature of and the volunteer status of the subject population as well as limitations of the present study, generalizability of the results is very limited. However, the goal of adding to the sparse empirical research was met. Also, hopefully some clarification was made of

what happens to an adolescent when a classmate or peer dies, although there is absolutely a need for further research. Perhaps this study will lead to the delineation of some of the variables that seem to occur.

The results of the present research were somewhat disappointing in relation to the few significant findings specifically related to the hypotheses. However, these findings coupled with significant results related to post-hoc analyses certainly do illuminate the glaring need for not only empirical research in the area of adolescence and death, but also for a commitment from all those working with grieving adolescents to listen and learn, and hopefully to share that knowledge.

Conclusion

Related to the hypotheses, only two findings were significant in the predicted direction. There was a negative correlation between scores on the Death Anxiety Questionnaire and future time perspective scores on the PAT, and the loss subjects had, in fact, a present-past time perspective rather than a future time perspective, even though the loss group had a less present-past time perspective than did the no-loss group. Contrary to prediction, loss subjects had a more dense future time perspective. Post hoc analyses suggested that gender appeared to be a significant variable in relation to the

PAT, and both time since loss and relationship seemed to have an impact on TAT results.

Clearly the measures utilized had shortcomings, and future research either needs to refine these techniques or develop new measures. Research needs to utilize not only objective measures but also subjective measures, and listening to and learning from bereaved adolescents must occur if this area is to be clarified. Concepts related to the area of death studies and time perspective need to be analyzed and operationalized, and the results incorporated into future research.

Perhaps the present study raises more questions than it answers. However, as Kastenbaum (1986) advises, caution must be taken against including only information that results in an ego-syntonic construct when considering adolescence and death together. He clearly states that all of the facts and limitations of our knowledge must be examined. And Feifel (1990) states that psychologists must, "expand our information base so that application does not outrun knowledge" (p.540). Given the apparent increased interest in and concern about what happens to classmates when an adolescent dies, at least in some local schools, it appears mandatory that our information base be expanded, and quickly, in order to most effectively benefit bereaved adolescents.

Again, Feifel (1990) very recently notes that appropriate and meaningful responses to individuals who are

grieving is not only necessary to benefit the immediately involved survivors, but the community at-large as well. According to Feifel, ..."there is growing comprehension that community sharing of grief decreases feelings of guilt and depression in survivors and minimizes the break in the societal fabric" (p.540). Hopefully this study has forged a beginning. It clearly is not the end.

APPENDICES

APPENDIX A

PROCEDURE FOR SCORING TIME-SPAN IN TAT STORIES

1. When to Score

A. Do not score stories containing 1) irreal beings, plants and animals; 2) impossible actions and events.

Some examples of (1) are: legendary figures (vampires, dragons, witches, devils, classical gods, and assorted monsters); theriomorphic beings (half-man half fish, a woman who turns into a panther, animals with human intelligence); personified plant life (flowers that eat human flesh, drink blood); ghosts or ghostly, bodiless voices or limbs (bodiless hands, huge, saucer-like eyes in the sea; ghostly clouds or storm); science fiction, flying saucers, space-travel and paraphernalia beings from outer space, radio messages from other planets, travel to other planets).

Examples of (2) are: otherwise realistic persons who defy limitations of space and time by possessing or being possessed by supernatural powers (allowing them to fly, live under water, pass through walls, control another's will, prophecy the future); by returning from the dead; by an unusual growth process (reversed growth, quick growth, aging without awareness (Rip Van Winkle); by supernatural speed (in work, achievement, translocation).

These stories manifest a quality of the dream and often occur in the story as a dream from which the protagonist awakes at the climax.

B. Do not score vague plots. A plot is often vague when the person actually describes details of the picture without really composing a plot, or when he discusses the feelings and thoughts of the principal figures without weaving them into a plot, or when he interprets the picture as symbolizing something else (man's struggle against nature, against himself). Sometimes, even when there is a plot, the span of the actions described may be so open to conjecture as to defy any reasonable classification. Since most people tell at least ten scorable stories--enough for a wide range of separate spans--it is not necessary to risk a mistake by scoring ambiguous ones.

C. Do score stories containing 1) realistic beings, plants and animals; 2) possible actions and events.

The range of the possible is limitless, but while there are innumerable ways for a person to manifest any length of span, a few general classes seem to describe the most frequent ones. Passing from the short to the long: 1) All of the action may take place either before or after mention of the situation depicted in the card. That is, the entire story may occur exclusively in retrospect or in prospect.

1a. The plot may be laid in the past with the present in the story (defined as description of the picture) as the climax; or,

1b. It may end as a horrible impasse, an unresolved conflict, or statement of uncertainty and impending choice between several alternatives. (In such cases, the neglected zone is scored as absent ("O") for that story).

2) The main plot of the story may be a simple proceeding performed by the protagonist alone (he paces the hall of a maternity ward, strolls along a street, chops down a tree); or the protagonist may do something alone (practices his violin) and then go to join others (runs off to play ball).

2a. The central plot may be a transaction between two or more people (the hero asks for assistance and receives it or is rebuffed; he tells his mother about a nightmare and receives consolation; he presents a law case to a court and is successful; he loses his job and asks for it back; he is wounded in battle, he commits suicide, or murders another person).

3) The story may center about a prolonged translocation or transportation (a voyage, a quest, an expedition). 4) The main plot of the story may concern a serial process (series of proceedings) of degeneration, decomposition, and regressive, destructive change (dissolution of a promising career; decomposition of a marriage and family; gradual loss of virility; gradual physical decomposition through disease, especially syphilis; a process of mental deterioration leading to insanity). 5) The story may concern a serial endeavor or a continuous process of growth, development, and progressive, constructive change (development of a career: the hero undertakes and successfully performs work of increasing difficulty and importance; deepening of a relationship; mutual understanding and love in a friendship or marriage through long association and many crises; raising of children; growth of a business; continuous competitive struggle for status, prestige, success and material symbols; scientific experimentation and research; spiritual and intellectual development of people over a life-span; a lifetime of devotion to a cause; fighting against the spread of communism, a struggle to subdue nature; organizing a beneficent government bureau; building a machine or a violin; writing a novel.

II. How to Score

Unless the criteria for a realistic story are met, other kinds of time are involved, so do not look for time-span. When the criteria do apply, however, use the following scale:

1. span less than hour
2. span greater than hour, less than day
3. span greater than day, less than week
4. span greater than week, less than month
5. span greater than month, less than half-year
6. span greater than half-year, less than year
7. span greater than year, less than four years
8. span greater than four years, less than decade
9. span greater than decade, less than life (career)
10. life span

Two variables are scored with this scale: retrospective span, the span from the beginning of a described action to the present in the story (description of the picture); and prospective span, the span from the present to the end of the action. In a single story, one variable may be scored without the other, both may be scored at different length, or neither may be scored; and when the separate averages are taken, unscorable stories are not taken into account.

III. General Comments

1. We are oriented, in the main, toward the actions and interactions of a protagonist; however, it seems quite permissible to score a story that deals primarily with a relationship between two people or two groups of people, or with the growth or destruction of a people.

2. It is important to distinguish between the setting, situation or temporal location of the story as described, and the actions that take place within the setting. For example, a story may be located in Sophocles' Greece, in the Germany of World War II, in Orwell's 1984, in a Communist Utopia. But we are principally concerned with the actions of the central figures in relation to their time and place, and not to the time and place of telling the story; so that, instead of scoring a span of 2500 years in the first case, if the person described the rise to prominence of a Greek acrobat, only his career would be scored.

3. The time-span a person receives for any particular story depends half on what he has put there, and half on the extent to which the scorer's knowledge approximates his. This is to say that to assign a score the scorer must share with the person a common knowledge of socially-fixed spans. For example: the college span is four years and graduate

school is between four and ten years; for a draftee, the army is either six months or two years; a professional career in business or in the academic world is ordinarily between twenty-five and forty years, a battle may last between a few hours and a few days, a campaign six months to a year, a war from a year to four years. It takes a few minutes to stroll around the block; a day to cross the continent by plane, four days by train; a murderous act may be over in a few seconds; and so forth.

There is also a whole class of spans (endeavors) more difficult to appraise. The time required for one man to write a novel may be quite different from another man's span: one might dash it off in a month, another need a lifetime. Consider two scientists pursuing their vocation, the first content to make a discovery and then to move quickly on to something new, the second pursuing over a long period all the implications of one insight. Unless there is a specific reference in the story to the duration of the serial, these personally flexible activities may appear to defy classification. However, within the twenty-story context of a protocol, it is often possible for the scorer to get a pretty fair intuitive grasp of a person's span, and in uncertain cases this may help to assign a score.

4. For the sake of consistency in scoring among a group of person's, it is a good idea to set an arbitrary span for some types of vague, or idiomatic statements. For example: score #7 (4 years) for a "a few years," and #8 (10 years) for "quite a few years"; if doubtful from the context, score #4 (a month) for "soon after"; and also score #4 for the span "getting over" a refusal, death or failure; and stick to these arbitrarily unless they blatantly contradict one's intuition.

5. It is my experience that stories with fairy-tale endings ("and they lived happily ever after," "they parted and never saw one another again") do not indicate prospection, but just the opposite: a disregard for the reality of outcomes. When these occur, score the action up to that point and then quit.

APPENDIX B

DEATH ANXIETY QUESTIONNAIRE

Listed below are a number of questions concerning thoughts that people sometimes have about death and dying. Please indicate how much you worry about the things described by each of the questions by placing an "X" in the appropriate category.

	Not at All	Some-times	Very Much
1. Do you worry about dying?.	_____	_____	_____
2. Does it bother you that you may die before you have done everything you wanted to?.	_____	_____	_____
3. Do you worry that you may be very ill for a long time before you die?	_____	_____	_____
4. Does it upset you to think that that others may see you suffering when you die?.	_____	_____	_____
5. Do you worry that dying may be very painful?	_____	_____	_____
6. Do you worry that the persons most close to you won't be with you when you are dying?	_____	_____	_____
7. Do you worry that you may be alone when you are dying?.	_____	_____	_____
8. Does the thought bother you that you might lose control of your mind before death?	_____	_____	_____
9. Do you worry that expenses connected with your dying will be a burden for other people?	_____	_____	_____
10. Does it worry you that your instructions or will about your belongings may not be carried out after you die?	_____	_____	_____

	Not at All	Some-times	Very Much
11. Are you afraid that you may be buried before you are really dead?	_____	_____	_____
12. Does the thought of leaving loved ones behind when you die disturb you?	_____	_____	_____
13. Do you worry that those you care about may not remember you after your death?	_____	_____	_____
14. Does the thought worry you that with death you may be gone forever?	_____	_____	_____
15. Are you worried about not knowing what to expect after death?. . . .	_____	_____	_____

APPENDIX C

CONSENT FORM FOR ADOLESCENTS

1. I freely consent to take part in a scientific study being conducted by Elizabeth DeRath, M.S., under the supervision of Hiram Fitzgerald, Ph.D., Professor and Associate Chairperson of the Department of Psychology at Michigan State University.

One part of this research will require that I complete a test called the Personal Associations test. On that test, I will be required to list ideas or events and how they relate to past, present or future time. Another part of this research will involve viewing and telling a story about six picture cards of the Thematic Apperception Test (TAT). The Thematic Apperception Test is a test that is made up of a series of pictures; one example is a picture of a young boy looking at a violin that is lying on a table in front of him; another is a picture of a female with books in her arms standing in front of a background where a man is working in the field and a woman is looking on. A third part of the research will require that I answer a fifteen item questionnaire which asks questions about death and dying that I will answer, "Not at all," "Sometimes," or, "Very Much." An example of a question is, "Do you worry about dying?" I also understand that I will complete a twenty-five item Personal Data Form on which I will answer questions about myself, such as age, grade, place of residence.

Students who have experienced the death of a classmate or friend will also answer several questions regarding their relationship to the deceased classmate or friend. For those students, your signature and willingness to participate in this study implies your willingness to respond to these questions.

Following the assessment phase of the study, I will participate in a debriefing session which will allow me to ask questions about the study and/or to express concerns and feelings I've experienced as a result of participation. I will also have an opportunity to talk about issues related to the death of my friend or classmate and/or death issues in general. I further understand I will not be required to talk or participate in this debriefing session, but my attendance will be requested. I also understand that information about normal grief reactions will be presented during the debriefing session.

Participation in this research will involve approximately two hours of my time. The debriefing session will be one hour, or longer if necessary or requested.

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

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

4. I understand that the results of the study will be treated in strict confidence and I will remain anonymous. Without these restrictions, results of the study will be made available to me on my request.

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

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

_____ _____

(Name) (Date)

APPENDIX D

PERSONAL ASSOCIATIONS

List below as many ideas or events you can remember thinking or talking about in the past week or two.

___ 1. _____ / _____

___ 2. _____ / _____

___ 3. _____ / _____

___ 4. _____ / _____

___ 5. _____ / _____

___ 6. _____ / _____

___ 7. _____ / _____

___ 8. _____ / _____

___ 9. _____ / _____

___ 10. _____ / _____

___ 11. _____ / _____

___ 12. _____ / _____

___ 13. _____ / _____

___ 14. _____ / _____

___ 15. _____ / _____

___ 16. _____ / _____

___ 17. _____ / _____

___ 18. _____ / _____

___ 19. _____ / _____

___ 20. _____ / _____

___ 21. _____ / _____

TIME OF OCCURRENCE OF PERSONAL ASSOCIATIONS

Now, go back over your list of PERSONAL ASSOCIATIONS written on the previous page(s).

Each of the ideas or events listed is related specifically to a past, present, or future occurrence.

In the space provided AFTER each item listed, please write

(1) whether that idea or event is connected more to the PAST, PRESENT, or FUTURE
AND
(2) how much TIME has passed since that idea or event has occurred or will pass till that idea or event happens. Give your estimate of time in YEARS, MONTHS, WEEKS, DAYS, HOURS, or MINUTES.

Do this for every association you listed. If you feel the item listed belongs to more than one time category, indicate whether it is most closely related to the past, present, or future.

APPENDIX E

INSTRUCTIONS FOR TAT

Picture Interpretations: Instructions

"You are going to see a series of pictures, and your task is to tell a story that is suggested to you by each picture. Try to imagine what is going on in each picture. Then tell what the situation is, what led up to the situation, what the people are thinking and feeling, and what they will do.

"In other words, write as complete a story as you can--a story with plot and characters.

"You will have 20 second to look at a picture and then 4 minutes to write your story about it. Write your first impressions and work rapidly. I will keep time and tell you when it is time to finish your story and to get ready for the next picture.

"There are no right or wrong stories or kinds of pictures, so you may feel free to write whatever story is suggested to you when you look at a picture. Spelling, punctuation, and grammar are not important. What is important is to write out as fully and as quickly as possible the story that comes into your mind as you imagine what is going on in each picture.

"Notice that there is one page for writing each story. If you need more space for writing any story, use the reverse side of the paper."

On each story sheet these four questions are printed with about a three-inch space for writing following each question: 1. What is happening? Who are the persons? 2. What has led up to this situation? That is, what has happened in the past? 3. What is being thought? What is wanted? By whom? 4. What will happen? What will be done?

The picture is presented for 20 seconds and then removed. Four minutes are allowed for writing the story. At the end of each minute, the investigator says informally, "It is about time to go on to the next question." About 30 seconds before the end of the fourth minute, the investigator says, "Will you try to finish up in about 30 seconds?" At the end of four minutes he says, "All right, here is the next picture." (Review other statements of this procedure in [272, Ch. 3] and in the various chapters of this volume.)

APPENDIX F

PERSONAL DATA FORM

Student Number _____

1. Sex: (1)Male _____ (2)Female _____

2. Age: (1)15 ___ (2)16 ___ (3)17 ___ (4)18 ___ (5)19 ___

3. Grade: (1)9 ___ (2)10 ___ (3)11 ___ (4)12 ___ (5)College ___

4. Primary place of residence: (1)City ____ (2)Rural ____

5. When you are not at school, do you live with:
   (1) both parents ____
   (2) mother ____
   (3) father ____
   (4) someone else ____ who? _____

6. Do you belong to a church? (1)Yes ____ (2)No ____

7. Please estimate the strength of your religious belief on a five point scale, i indicating you are not at all religious and 5 indicating you are extremely religious:

   not at all extremely

   1 2 3 4 5

8. Does your religion endorse a belief in life-after-death?

   (1)Yes ____ (2)No ____ (3)Don't Know ____

9. Do you endorse a belief in life-after-death?

   (1)Yes ____ (2)No ____ (3)Uncertain ____

10. Have your parents talked with you about death?

    (1)Yes ____ (2)No ____

11. What or whom do you consider your most important source of information concerning your knowledge about death?

    (1)Mother ___ (2)Father ___ (3)Teacher ___
    (4)Friends ___ (5) Priest/Minister/Rabbi ___
    (6)Other ___ (7)Don't Know ___

For those students who have not experienced the death of a classmate or friend, go to Number 16. If you have experienced the death of a friend or classmate from your sophomore year in high school, please answer the following questions.

12. Think of all your friends and acquaintances. Rate your very best friend(s) number 3; rate a friend(s) number 2; rate an acquaintance(s) number 1, and someone you don't know rate a 0. Write it down however you want if that will help you remember. Please rate your relationship with your deceased friend or classmate using your list above as a guideline. Was your relationship with your deceased friend or classmate most like your relationship with the person you rated number 3, 2, 1, 0?

13. Did you expect your friend or classmate's death?
(1)Yes ____ (2)No ____

14. How long has it been since his or her death?
(1)1 year or less ___ (2)1-2 years ___
(3)2-3 years ___ (4)3-4 years ___

15. Have you talked with anyone about your feelings about your friend/classmate's death? (1)Yes ___ (2)No ___

If yes, whom?
(1)Father ___ (2)Mother ___ (3)Both parents ___
(4)Brother/sister ___ (5)Other relative ___ Who?___
(6)Teacher ___
(7)Counselor: (a)School ___ (b)Mental Health ___
(c)Private ___
If you talked to a counselor, were you talking with this counselor prior to the death? (1)Yes ___ (2)No ___
(8)Friend(s) ___ (9)Priest/Minister/Rabbi ___

16. Have you ever experienced the death of someone close to you before?
(1)Yes ___ (2)No ___ If yes, who? _____

17. Please estimate your current health status:
(1)Poor (2)Fair ___ (3)Good ___
(4)Very good ___ (5)Excellent ___

18. Do you have trouble eating? (1)Yes ___ (2)No ___

19. Are you gaining weight? (1)Yes ___ (2)No ___

20. Are you losing weight? (1)Yes ___ (2)No ___
21. Do you have trouble sleeping? (1)Yes ___ (2)No ___

22. Do you feel tired for no reason? (1)Yes ___ (2)No ___

23. Do you feel hopeful about the future?
(1)Yes ___ (2)No ___

24. Please explain why you do or you do not feel hopeful about the future:

APPENDIX G

WRITTEN FEEDBACK SHEET

My interest in the area of death, dying and bereavement has evolved through my role as Professional Advisor to a group of parents who have lost children. It was of interest to me that parents reported that friends and classmates of the deceased child frequently maintained contact with them over long periods of time, while school personnel appeared to aid students in coping primarily with the immediate crisis of the loss. In talking with adults and adolescents, I discovered the loss of a friend, classmate or peer often has a significant impact on the survivors. Review of the literature revealed sparse empirical studies concerning adolescents and death, and particularly the death of a friend or peer. Several authors suggest adolescents experience death anxiety and that that death anxiety may increase when a peer dies. It is also suggested that death anxiety in adolescence may contribute to an adolescent's relatively short future time perspective.

While it is my desire to add to the empirical research data through this study, it is also my hope that the results will help professionals and others who are working with bereaved adolescents to better understand the grief process in adolescence. To these ends, you have been requested to complete a Death Anxiety Questionnaire, a Personal Associations Test, several cards of the Thematic Apperception Test set, and a Personal Data Form. You will also be provided information regarding normal grief reactions, an opportunity to discuss your own experiences or feelings regarding death issues and/or grief, and follow-up referral information should you so desire. A copy of the references will be available per your request.

Thank you for your participation.

Elizabeth A. DeRath, M.S., Investigator
517-349-2011

Hiram E. Fitzgerald, Ph.D., Faculty Supervisor
517-355-4599

As explained on the feedback sheet, my interest in the area of death and dying has evolved through my role as professional advisor to a group of parents who have lost children. I have learned through that group that friends and the deceased child often maintain contact with that child's parents. In talking with adolescents and adults who have experienced the loss of someone their own age, I found that that loss often has a significant impact. However, in reviewing the literature, I found little information in general about how loss by death affects adolescents, and less than that about what happens when an adolescent loses someone close in age--a friend, classmate, etc.

Often "grief," "mourning," and bereavement are used interchangeably. Grief involves not only psychological reactions, but somatic (physical) and social, as well. It is a process of letting go of what was and being ready for what is to come. Mourning refers more specifically to internal, intrapsychic processes, conscious or unconscious and implies, also, a cultural response. Bereavement is more specifically the state of having suffered a loss.

One does not have to experience loss by death--divorce, separation, argument, etc.--can all induce a state of bereavement. Although there are some common features associated with grief, much of the process is individualistic. It is important to remember that grief is a NATURAL reaction to loss--it is not necessarily pathological. Grief is also not a static process, but neither do most people progress at an even, steady pace through the experience. The work of grief is to separate from the lost person, readjustment, and finally the desire to form new relationships. It is also important to realize that there is no set period of time in which to resolve grief. To a certain extent, it is dependent on the individual and the impact of the loss.

Initially, people may respond to the death of someone with disbelief and shock--they may tend to deny that the death has occurred. Some people may experience physical pain--"heartache," stomach aches, headaches, etc. Feelings of great sadness are also common, again somewhat dependent on the degree of closeness of the relationship. This sadness may be more likened to a feeling of overall depression--people may experience eating disturbances, sleep difficulties (insomnia, early awakening), and in general not feeling very hopeful or optimistic about the future. Social withdrawal often occurs. Anger is also another common response to the death of someone you know. People are often angry at hospitals, doctors, drunk drivers, or in the case of a murder or accidental death, at the person who was responsible. In suicide, there is often anger toward the person who committed suicide. People are even often angry

at God. Inability to concentrate (grades), not displaying emotion, hyperactive--these are all normal reactions. You can't go around, over or under grief--it is important to go through grief to successfully get to the other side in which there is finally acceptance and a desire to get on with your own life with a view to the future. Any questions or comments?

If any one is interested in references, please contact me. Also, if anyone feels a need for further consultation or if anyone experiences anxiety or upset particularly with regard to the completion of these measures here tonight, please feel free to contact me. Thank you all very much for your time, help, and cooperation.

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