



FAMILY DYNAMICS AND THE CHILD'S
CONCEPT OF DEATH

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CHAPTER I

INTRODUCTION

Death has been a topic of philosophical and moral reflection since the beginning of recorded history. Philosophers of ancient Greece, Egypt, and the Roman Empire tried to understand the meaning and consequences of death as part of an afterlife linked with an existence of the beyond (Kastenbaum and Costa, 1977). From early Christianity through the Middle Ages and the present; death has been viewed, studied, analyzed, and dealt with in numerous ways. Research has included the study of immortality, religious convictions, technological conquering of death, and systematic exploration of death-related problems such as suicide, psychological autopsy and euthanasia.

Even though death is a universal phenomenon, scrutinized for centuries, it also has been a major crisis family members face in their lifetimes. As Holmes and Rahe (1967) point out, the death of a spouse or a close family member causes tremendous stress and anxiety within that family. Individuals within the family which has experienced the death of a loved one may become pathologically depressed and develop psychological and physical ailments which can be real or imagined. In a study conducted by Schneidman (1971) it was found that death was rarely discussed within the immediate family circle. In addition, when death was discussed, it created emotional discomfort and anxiety among family members.

A major reason the family has difficulty coping with death or discussing it, centers around the fact that the family has had little prior experience in dealing with death (Goldberg, 1973). Several generations ago, the management of death was a family function. Even though the death and funeral of a loved one often took place in the home, it did not make such an event any less or more traumatic and it gave old and young alike a unique understanding of death. It enabled family members to psychologically and biologically place this natural phenomenon within the inevitable life cycle. More importantly, it allowed family members to grieve together. Each family member's emotional reactions were clearly visible to other family members. As children grew and developed, they were encouraged and supported in their grief as they were not excluded from the family's mourning (Plank and Plank, 1978). It was very natural for a person to die in the warm and familiar environment of the home (Doyle, 1977).

As Pine and Phillips (1970, p. 415) stated: "In American society, it is clear that the handling of illness and death are increasingly the responsibility of institutions other than the family." An awareness of death has been removed from the family as relatives and friends die in the remote environments of hospitals and nursing homes. With the almost total elimination of infant mortality and the medical advances over diseases, death is viewed as something which happens only to the aged. Because most families have little direct exposure or contact with death, families have difficulty coping and accepting the reality of death. Blauner (1966) suggests that by the time a person reaches 50 years of age, he or she has attended a maximum of one or two funerals. This separation and avoidance of death enables

families to rely on myths and mysteries as coping mechanisms (Pattison, 1976).

Today's cultural denial of death has caused families to view such an event as a major irreversible trauma causing severe stress. The lack of integration of death into the natural processes of life results in a sociocultural failure to develop attitudes of acceptance toward this natural phenomenon. The family's avoidance of death implies the formation of a dysfunctional situation in which children and family members are expected to deal with family myths rather than the actual death. Pattison (1976, p. 677) stated that family myths surrounding death have become, "a neurotic mechanism for family coping and homeostasis in the face of unresolvable conflict." These family myths have grown to outrageous proportions as they are perpetuated over the generations. The maintenance of these myths confuse, obscure and cloud the actual crisis situation allowing the family to hide from life's reality (Laing, 1965).

Throughout history and across cultures, the family has been a key instrument in shaping and molding its members' understanding of the life cycle which includes death (Paolucci, Bubolz, and Rainey, 1976). This has been accomplished through interpersonal communication within the family. The family can choose to accept death as a natural process of life or view it as a taboo topic. Unfortunately, death has become a forbidden subject shrouded in the unknown for many families (Miller and Ozga, 1973).

Statement of Problem

The literature suggests that parental control over children may

create a lasting influence reflecting sociocultural attitudes, beliefs and values (Kagan, 1973). Especially in a crisis situation, such as the death of a significant member, a child faces extensive tension and stress while needing parental support. A family death is generally considered one of the most stressful situations a family will encounter in a lifetime (Holmes and Rahe, 1967). Yet some parents forget that children have normal emotional feelings and need to experience and be helped through their own bereavement. Parents who want to help their children understand a crisis situation like death, must be sensitive to the child's developmental level, the role the deceased played in the child's life and the child's family situation (Kastenbaum, 1977). As Kastenbaum (1977, p. 258) suggests, the child's understanding of death "will depend to some extent upon the child's developmental level, the specific loss that has been experienced, and the pattern of family security and affection." No research to date has investigated the extent to which families include their children in the burial rites and how being included in the death related experience influences the child's understanding of death. In other words, what kinds of families include their children in the death related experience, in what experiences do they include them and how do these experiences affect the child's concept of death?

A review of the literature of children and death indicates that children's understanding of death has been equated with affective and cognitive components in their development (Kastenbaum and Costa, 1977). The child's stage of development has been viewed as an important indicator of the child's conceptual understanding of death (Koocher, 1974). One variable which has been absent in past research is the effect of

the family on the child's understanding of death. The influencing factor of the family in which the child grows may have a profound effect on that child's knowledge of the total life cycle from birth to death (Pattison, 1976).

Families vary in degrees of "cohesiveness" and "adaptability," presenting children with unique perceptual outlooks toward life. These outlooks may have specific implications for their understanding of death. Family cohesion refers to the degree of emotional bonding family members have toward one another, and family adaptability is viewed as the ability of a family system to alter its role relationships effectively in response to varying degrees of situational and developmental stress (Olson, Bell, and Portner, 1978). According to Olson, Russell, and Sprenkle (1979), families operating on either extreme of the cohesive or adaptability dimensions are often less functional as they become too rigid, too close, or too isolated. It is suggested that a "moderate degree" of family cohesion and adaptability is more conducive to effective family functioning and facilitation of individual development (Olson et al., 1979, p. 4).

With the turn of the twentieth century, influences of industrialization and urbanization dramatically changed the American family. Families were moving from general social stability to pervasive social instability, shifting from the extended family to the nuclear family as the basic kinship group and witnessed the demise of the patriarchal family to the democratic family giving women and children considerable freedom (Cremin, 1977). These changes had a major effect on the educative role of the family. No longer were parents the sole educators of their children. New institutional settings with trained

professionals were becoming the major educative force in the child's life which had been traditionally a family responsibility. But in matters concerning an interpretation of life cycle events, the family becomes an extremely important educative force helping its members understand the complexities of life (Paolucci et al., 1976). In fact, these authors envision the family as the "center of learning for living" for its members while Liechter (1977, p. 30) emphasizes that the family is the "central arena of education" for children concerning the life cycle.

Activities of family members are interlocked, which causes some members to suffer or benefit from the activities of other members. These activities and interaction patterns help members form goals, values, and make decisions about life, which includes understanding the birth-to-death process (Paolucci, Hall, and Axinn, 1977). The family becomes the bridge or mediator between the larger society's perception of living and the child's construction of reality and life (Pattison, 1976). Parents can equip their children with attitudes toward life, which includes an acceptance of death as well as an examination of fears and feelings toward death.

At the present, there is evidence to indicate families are educators of their members, but there is no empirical evidence to indicate the way in which family dynamics influence the child's inclusion in the death-related experience and how this may shape the child's conceptual understanding of death. This lack of evidence provides the basis for this research study.

Purpose of the Study

As children grow and develop, they may naturally observe and/or

hear about death. Their first personal experience may be the loss of a pet. Quite often the death of a pet gives children their first opportunity to visibly show definite signs of sadness and grief. As children mature, they could be confronted with the loss of a friend or a relative. But during these times of crisis, the child rarely shows outward signs of remorse (Glicker, 1978). In fact, many parents misinterpret these events by reporting that their children have no feelings and do not care during times of family stress (Plank and Plank, 1978). This occurs because many parents do not encourage or help their children learn how to grieve.

Since one of the most crucial situations facing a family is the death of a loved one, the child's understanding of this universal phenomenon may be important for a natural and healthy outlook toward life. Research indicates that children who are excluded from the family's mourning process do not successfully cope with the death of a significant loved one and are more likely to experience psychological problems during adulthood (Furman, 1974; Hilgard, 1969; and Bendirsen and Fulton, 1975). It has been suggested by Pattison (1976) that a family's successful coping with the death of a relative, which can be extremely stressful, may enable the child to cope with other stressful situations in the future. Yet researchers have found that many children have little understanding of death (Menig-Peterson and McCabe, 1978).

The purpose of this study is to investigate the extent to which selected aspects of family dynamics, e.g., cohesiveness, adaptability, and religiosity influence the child's participation in the family's death-related experiences, e.g., burial rites and mourning. This

research will also examine to what degree the child's inclusion in the death-related experience influences his/her understanding of death. Relevant child variables will also be explored, e.g., cognitive level, age, and sex. The degree of closeness between the deceased and the child will be considered in terms of emotional closeness, amount of contacts, and geographic proximity. More specifically, the research questions and hypotheses statements explore the relationship between the following variables and the death-experienced child's concept of death.

The theoretical rationale for the research questions to be addressed pertain to the following:

1. Are selected dimensions of family dynamics associated with the extent to which families include their children in the death-related experience?
2. Is there a relationship between a child's inclusion in the family's death-related experience and his or her understanding of death?
3. Is there a relationship between relevant child variables and the concepts of death held by children?
4. Does the degree of closeness between a child and the deceased influence his or her concepts of death?

Hypotheses

From the previously mentioned research questions specific hypotheses were developed. The following hypotheses related to children who are members of death-experienced families. These hypotheses are divided into family-related and child-related hypotheses.

Instruments which measure these variables are noted in parentheses.

Family Related Hypotheses

- I. Families with different levels of cohesion (Family Adaptability and Cohesion Evaluation Scales) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).
- II. Families with different levels of adaptability (Family Adaptability and Cohesion Evaluation Scales) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).
- III. Families with different levels of religiosity (Family's Religiosity Survey) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).

Child Related Hypotheses

- IV. Children with greater involvement in the family's death-related experience (Family's Death-Related Experience Survey) will have a greater conceptual understanding of death (Death Understanding Test).
- V. Older children will have a higher conceptual understanding of death (Death Understanding Test) than younger children.
- VI. Children who score higher on the Cognitive Developmental Test will have a higher conceptual understanding of death (Death Understanding Test).

- VII. Sex is unrelated to the child's conceptual understanding of death (Death Understanding Test).
- VIII. There is a relationship between the child's degree of closeness to the deceased [e.g., self-report of emotional closeness; frequency of contact; geographic distance; and sculpture distance (Kvebaek Family Sculpture Technique)] and the child's conceptual understanding of death.

Definition of Terms

For this study the following terms were defined:

Family Cohesiveness was defined as "the emotional bonding which members have toward one another and the individual autonomy that a person has in the family system (Olson et al., 1978).

Family Adaptability was defined as the ability of a family system to adapt its power structure, role relationships, and relationship rules in response to situational and developmental stress (Olson et al., 1978).

Circumplex Model provides the theoretical rationale for illustrating families on the dimensions of adaptability and cohesion. The circumplex model provides a circular representation of interrelated family variables as illustrated in Figure 2 (see p. 44). There are 16 possible family system types which may range from being highly cohesive (enmeshed) to low cohesion (disengaged) while also ranging from high adaptability (rigid) to low adaptability (chaotic). The middle ranges of both dimensions reflect the moderate or more balanced family system (Olson et al., 1979).

Cognitive Development reflects the child's direction and course of mental development. Inhelder and Piaget (1958) envision each child passing through various stages (preoperational, concrete-operational, and formal-operational) as they grow and mature. Each stage is dependent upon the child processing information obtained at an earlier stage.

Death Experienced Family is a family who had experienced the death of a close family relative or neighbor. The deceased family member included parents, siblings, aunts, uncles, first cousins, grandparents or an unrelated person living in the same household or in close proximity. Families with children ranging in age from 4 to 17 years old were interviewed from 1 to 44 months following the death of a family member.

FDS refers to the Family Dynamics Survey. This was a parent questionnaire which examined the concepts of family adaptability, cohesion, religiosity, various demographic variables, and the circumstances surrounding the family's death-related experience.

CIS refers to the Child Interview Schedule. A series of open-ended questions and gaming techniques were used to understand the child's concept of death, emotional closeness to the deceased, and cognitive developmental level.

Summary

Families are increasingly separated from the natural life processes surrounding birth and death events. The family's removal from direct participation in natural life processes such as death has caused the family to rely on outside organizational-institutional

decisions. Because families have little direct exposure to death, family members may easily avoid the acceptance of this natural phenomenon and rely on myths to obscure life's reality. Families have a choice of either accepting death as a natural process of life or viewing it as a taboo topic.

The family's environment in which a child grows and matures has a profound effect on that child's knowledge of the total life cycle. The family becomes the major educator in matters of life's complexities helping its members interpret life cycle events (Lichter, 1977). Since a child's understanding of this universal phenomenon is greatly influenced by family attitudes, beliefs, and patterns of behavior it becomes the purpose of this study to ascertain the relationship between various family-related factors and the child's inclusion and involvement in a death-related experience. This study will also explore the relationship among several child-related variables and the child's conceptual understanding of death.

CHAPTER II

REVIEW OF LITERATURE

Children's concepts of death have been studied using a variety of methodologies. These include, as Kastenbaum and Costa (1977) point out, clinical case studies, questionnaires, interviews, naturalistic observations, expressive-projective behavior and performance-type measures. Unfortunately, there is difficulty in comparing and synthesizing the findings and results from these many diverse methodologies. Past research on topics related to children and death should be recognized as being complementary in the sense of building and adding to the knowledge base rather than being directly comparable. The various sample sizes, experimental designs, and instruments used make it difficult to get a clear concept of the child's understanding of death. Reasons for this include the reliability and validity of self-report measures, interpretation of a child's perceptions and conceptions of death, and researcher bias in forcing data into "neat," consistent categorization schemes which does not allow for the possibility that a younger child may progress faster than an older child in death's understanding (Kastenbaum, 1977).

It was not until the twentieth century that the study of death became a concern for scientific inquiry. Even though the reason for such a heightened awareness of death is not entirely known, Kastenbaum offers the following suggestion. He visualized the rediscovery of

death occurring around the 1950's as the psychological and sociological concerns of the disasters surrounding war, along with a reevaluation of human values which were being felt in our "death-denying society." Since then, much of the past research concerning children and death has dealt with a series of issues such as: cognitive versus attitudinal-affective components in the child's death orientation; effects of death-related thoughts and experiences upon the child's developmental pattern; the extent of the child's understanding death related themes in children's play, songs, and games; of death at a particular time in his/her life; and the impact of television on the child's view of death (Kastenbaum, 1977).

The first section of this review includes studies of children's awareness of death. There also has been an attempt to distinguish between the cognitive and affective concepts of death. Other sections include the emotional impact of death and factors affecting a family's view of death. In order to grasp the ideas linking families and children with the child's conceptual understanding of death, the literature has been reviewed in terms of the above topic areas.

Children's Awareness of Death

Many questions have been raised as researchers are trying to uncover the process by which a child forms a concept of death. The overriding question most often asked is, when and how does the child begin to understand life's reality? Even though each child is a unique human being with different surrounding experiences, attempts have been made to understand the child's emergence of a realistic notion of death.

Most researchers turn to the classic study of Nagy (1948). This research was considered representative as children were selected from various social and religious backgrounds with an almost equal number of boys and girls. The sample was comprised of 378 Hungarian children ranging in age from 3 to 10 years. Each child was interviewed in the hope of understanding their death related thoughts and feelings. The older children were also asked to draw pictures and express their notions of death by "writing down everything that comes to mind about death." From Nagy's investigation of children's words, drawings, and expressions, she developed a three-stage categorization scheme of children's awareness of death.

The developmental stages set forth by Nagy (1948) can be characterized by: 1) a continuation or temporary stage where death was seen as a slower paced life, 2) as a personification stage where death was viewed as a person or thing, and 3) death was viewed as final and inevitable by the older children. More specifically in stage 1, children ages three through five, denied death. These children viewed death as a less active part of life or only a temporary cessation of living. The dead become, in effect, less alive as children see them as not hearing very well, not very hungry, sleeping a lot, and moving to the cemetery to live. Stage 2 begins around age six and continues through age nine, as children represent death as a person. Even though death is understood as final, the child will personify death in terms of a skeleton, angel, or other spirits who have command over death. Children older than nine are placed in stage 3. The child begins to have a more realistic view of death and now understands death to be personal, universal, and inevitable as well as final.

In another early study conducted in pre World War II Great Britain from 1937-39, Anthony (1971), in a revised publication of her original study, shows that children are aware of death related phenomenon. Using 128 children, normal and emotionally disturbed, she asked them to define the word "dead," gave them a story-completion test, and had their parents record their children's death-related experiences. Anthony (1971, p. 28) suggested that "children seemed to have spontaneously expressed ideas and beliefs 'concerning death' similar to those recorded of members of cultures remote from their own." This points to the fact that children continually pick up cues from their surrounding environment and try to interpret their thoughts of death into their everyday life.

In a more recent study, Plank and Plank (1978) showed that adults have vivid memories of childhood death-related experiences. Most adults can remember these stressful childhood events in great detail, even though their parents thought they had no understanding of what had taken place. In one instance, a child who was almost four years old when his mother died remembers the events of that day in minute detail many years later as an adult. In many cases, children become acquainted with death in the course of their development. It must be remembered that children are grasping concepts and ideas continually as they interact with family, friends, and outside environmental forces. These interactions, even at very young ages, begin to shape the child's thought processes.

Realizing that the child's concept of death may be independent of the child's chronological age, several researchers, e.g., Childers and Wimmer (1971) and Koocher (1974), began to investigate the

cognitive components related to the child's understanding of death. Childers and Wimmer (1971, p. 1299) tested the hypothesis that "the child can be rationally aware of death as universal and irrevocable, independent of 'chronological' age." The concepts of universality (all things must die) and irrevocability (death is final) were used to investigate the child's cognitive awareness of death. In this study, 75 children aged 4 through 10 were interviewed. Results indicate that the child's understanding of the concept of death is universally a direct function of age, supporting Nagy's (1948) and Anthony's (1971) findings. More importantly, it was discovered that a majority of each age group, even the 10 year olds, had an adequate understanding of death's irrevocability. Approximately a third of the 10 year olds had no understanding that death was a final stage of life. This points to the possibility that children understand death differently and cannot be easily grouped according to specific age classifications.

Melear (1973) discovered that children between the ages of 9 to 12 had a more realistic view of death's finality and irreversibility than younger children. In his study, 41 children ranging in age from 3 to 12 were interviewed to understand their ideas of death. Children's responses were placed along a four-point continuum from being completely ignorant of death to realizing that death was the culmination of all biological functioning. Similar to Childers and Wimmer's study (1971), Melear (1973, p. 360) discovered that several children between the ages of four and five "expressed realistic concepts of death while four subjects varying in age from approximately 5 to 10 years view death as final . . . but assigned life functions to the dead." The aforementioned studies show that there is a lack

of empirical data on the factors influencing the child's development of ideas about death.

Koocher (1974) tries to bridge the gap between the lack of empirical research explaining how the child's awareness of death develops and the general ignorance attributed to the child's understanding of death. Koocher hypothesizes that the child's level of cognitive development is a better predictor of death awareness than chronological age. Using a Piagetian classification of mental development, 75 children ranging in age from 6 to 15 years were first tested to determine their level of cognitive functioning. Three conservation tasks of mass, number and volume were used to classify each child according to a cognitive developmental level. According to Inhelder and Piaget (1958) intellectual development is a continuous process of organization and reorganization of structure, as the child integrates and builds on previous experiences. Koocher classified children according to the three Piagetian cognitive stages, 1) pre-operational, 2) concrete-operational, and 3) formal operational rather than using a chronological age categorization.

Each child in Koocher's study was asked four death-related questions, e.g. "What makes things die?", "How do you make dead things come back to life?", "When will you die?", and "What will happen then?" Responses to these questions were analyzed developmentally. As expected, children at the higher cognitive levels, e.g., formal operational and concrete-operational were more realistic and objective in their answers to the series of four death-related questions than children at the lower cognitive level, e.g., pre-operational. Interestingly, some younger children were classified in the higher

developmental stages and showed a greater understanding of death, while several older children were placed in lower developmental stages and consequently lacked a clear understanding of death. Koocher's (1974) observations suggest that the child's awareness of death are quite different at different age levels and that this wide diversity in understanding may be attributed to the ability of the child to draw on experiences of others.

Flesner (1977) interviewed 162 elementary school children to determine their concepts of death. A modification of Koocher's (1974) instrument was administered to all children. Findings indicate that many children had little or no knowledge of death. Of the responses to the question, "What makes things die?", over 50 percent of the children eight and nine years old gave pre-operational answers. These answers were similar to the responses given by the three and four year old children. To the question, "When will you die?", over 45 percent of all children gave no response. Well over 20 percent of the subjects had no response for the remaining two questions, "What happens after death?" and "How do you bring dead things back to life?" It was suggested that as children develop, a lag is experienced between intellectual reasoning and death cognitions.

The major hypothesis of previous research was that the child's perception of death was dependent on his or her stage of development. However, most of the above mentioned studies found children as old as 9 to 12 lacking a real understanding of death, while a number of children as young as four declared death to be final. It is rather surprising that not one of the studies investigating children and death considered the influence the family may have in shaping their

children's conceptual understanding of death. The influence of the family as a significant variable has not been included in previous research on children's understanding of death. A wide range of understanding among children of all ages indicates the need for further research in this area.

Emotional Impact of Death

Our culturally defined reactions to death are generally through emotional responses. These reactions can range from subdued resignation to complete hysteria. As Pine and Phillips (1970) indicate, the deceased becomes the focal point for the attention of the bereaved family, and the death provides the occurrence for varying degrees of grief and mourning within the family. How family members express their feelings of grief is partly determined by the initial impact of loss with the compounding socio-cultural and economic forces demanding immediate attention. This includes interacting and making arrangements with the funeral director, cemetery officials, lawyers, medical professionals, and giving emotional support to relatives and immediate family members.

Not only does the family become involved in interfacing with unfamiliar surrounding human support and regulatory environments but they are also trying to cope with inner feelings of stress and tension. The death of a family member not only interferes with the resolution of normal tensions encountered within the family, but new tensions are introduced into the family's ways of relating to one another (Davidson, 1975). Davidson indicates that when a death occurs, the person who has been the cause of this new-found tension

is now removed from participating in the family's attempts to resolve this stress. The process of resolving the stress caused by the loss of a loved one is referred to as "mourning." The emotional expression of this tension and stress is called "grief."

Bowlby and Parkes (1970) have identified four dimensions of the mourning process. They include shock and numbness, yearning and searching, disorganization and disorientation, and resolution and reorganization. Even though there is considerable overlap in these dimensions, they do occur generally in a sequential order soon after the family is confronted with the loss of a loved one. First, the family will experience shock and numbness as they are being confronted with feelings of intense panic, distress, or anger. This dimension is characterized by the exclamation, "This can't be!"

Secondly, the family is confronted with yearning and searching. This is marked by feelings of restlessness and ambiguity as each family member makes an attempt to cope with their concept of reality. It can be characterized by the questions "What does it mean?" and "Who is responsible?"

Thirdly, the family enters a phase of disorganization with feelings of depression and guilt. Family members begin to ask themselves "Why did this happen to me?" "Could I have done more?" Disorganization is healthy as each family member becomes aware of reality and begins to resolve his/her major conflicts. Once the family begins to resolve these conflicts and stresses, the disorganization turns into a reorganization. Each family member now starts to function and interact with other family members and outer environments with a sense of competence. The family has faced and coped with the most stressful

situation it may ever face, the death of a loved one.

When a death does occur within a family, parents try to protect their children from the mourning process. As Rudolph (1978, p. 45) indicates, most adults want to "protect their children, shield them from the experience of loss, from expression of grief, and from participation in mourning." But children are family members and should be involved in the family's emotional activities. To exclude the child from the family's grieving not only causes the child to feel isolated as a family member but is likely to cause confusion in the child's mind on how to cope with tragedy (Rudolph, 1978).

Kastenbaum (1977) also emphasizes that when a death occurs within a family, parental attention and support may be lacking when the child needs it most. The parents may be so involved in their own grief that they forget that their children also need emotional and physical support during times of crisis. The fact remains that many parents forget that their children have emotional needs while trying to protect them from the reality of death. This agrees with Ming-Peterson and McCabe's research (1978) which showed that children, when telling narrative stories about a death which occurred in their lives, rarely, if ever, indicated emotional reactions to the death. Many parents may not teach their children how to mourn or grieve.

The question arises "Is it healthy or advisable to shield a child from a crisis or tragic situation such as death?" Research indicates (Furman, 1974; Hilgard, 1969; and Bendirsen and Fulton, 1975) that adverse long-term effects of childhood bereavement do exist. Parents are encouraged to be sensitive and responsive to their children's feelings. The child's involvement in the family's mourning process

should not be taken for granted. Effects of childhood bereavement are rarely seen in childhood. Most physical and psychological effects of childhood bereavement are seen years later in adulthood. The loss of a significant other can be devastating on the child if parental support is not included in helping the child understand his or her own fears and feelings. As Kastenbaum (1977, p. 259) states "evidence continues to accumulate that the child who suffers loss by death of one or more parents is likely to be more vulnerable to emotional and physical problems throughout his/her entire adult life than the child who does not."

Children have a great curiosity and want to understand how surrounding environmental forces are affecting their lives. This endowed ability for observation and responsiveness should not be thwarted by parents in a crisis situation. There is a great need for sharing among children and parents when a death occurs.

Even the "saddest day" can be endured by children when the experience and suffering are shared. But when parents keep knowledge of death from children and deny them participation in funeral procedures the children will feel isolated and burdened by confusion and by unexpressed grief. Communicating the truth to children, fact and feeling, when death in the family occurs, encouraging their expressions of grief, and bringing children in on whatever religious, spiritual, or ethnic form of funeral are important in developing family feeling and respect for traditions. The personal experience with death can add to the strength and spirit in one's own life. (Rudolph, 1978, p. 69)

The evidence indicates that our society has allowed children to become excluded from the mourning process. Parents may feel their children do not understand concepts of death and mourning and should be sheltered from the entire grieving process. Such exclusion can cause severe psychological and physical ailments when the child

reaches adulthood. The general lack of understanding of the child's emotional reactions to death emphasizes the need for further study in this area.

Factors Affecting A Family's View of Death

As family members interact with internal and external environments, they have the ability to interpret and process information. Much of this information is not used immediately but is retained by the family to be recalled or used when appropriate. The family, in being viewed as a complex network of interrelated component parts, attempts to act in a stable manner over a period of time. When family members are faced with a crisis situation, such as death, they must draw on past experience and present relationships and interactions in order to successfully cope with the situation.

Using an ecological perspective, it is evident that children and parents do not live in a world in which they interact with only each other. Family members continually interface and receive information from the social, natural, and regulatory environments (Paolucci, Hall, and Axinn, 1977). Children are likely to turn to their parents for security in the hope of finding meaning in crisis events that are beyond their present and limited experiences (Jackson, 1965). A number of researchers have focused on possible factors affecting a family's reaction to a crisis situation. These areas of investigation have included family cohesion and adaptability dimensions (Olson, Russell, and Sprenkle, 1980; Olson, Russell, and Sprenkle, 1979; Russell, 1979; and Sprenkle and Olson, 1978), family religiosity (Alexander and Adlerstein, 1959; Chasin, 1971; Faunce and Fulton, 1958; Feifel, 1959;

and Stewart, 1975), the importance of parental influence (Goldberg, 1973; Kubler-Ross, 1976; and Lester, 1970), the types of death education family members receive on a formal or informal basis (Balkin, Epstein, and Bush, 1976; Klemmer, 1970; Martinson, 1970; Sommerville, 1976; Tallmer, Formanek, and Tallmer, 1975; and Wise, 1974), and demographic variables (Chasin, 1971). The following sub-sections, e.g., family cohesion and adaptability dimensions, religiosity, parental influence, death education, and demographic variables are discussed separately.

Family Cohesion and Adaptability

Concepts related to marital and family interaction patterns have been a primary source of investigation in the field of family therapy. Family dimensions of closeness and rigidity are influential in a family's behavioral patterns. Olson et al., (1979) have identified the cohesion and adaptability dimensions which integrate family behavioral patterns into a systemic model using general system theory as an underlying base. Sixteen family types have been described in which families can be classified along the dimensions of cohesion and adaptability on the "circumplex model" (Olson et al., 1979). The cohesion dimension ranges from the extreme categories of a great deal of closeness (enmeshed) through very little closeness (disengaged). The middle ranges of the cohesion dimension refer to moderate levels of separateness and connectedness. The adaptability dimension ranges from the extreme cases of high change (chaotic) to little change (rigid). The balanced levels of adaptability apply to family behavioral systems within the moderate levels of flexibility and

structuredness. The moderate ranges of the circumplex model identify more viable family systems while the extremely high or low areas describe the less desirable family types. Families in the outlying areas are more likely to possess detrimental behavioral patterns related to family functioning.

Recent studies (Olson et al., 1980; and Sprenkle and Olson, 1978) have used the circumplex model to identify various detrimental factors related to family functioning. These studies have compared the scores obtained between clinical and non-clinical families on the adaptability and cohesion dimensions. Sprenkle and Olson (1978) identified a sample of 50 couples, half of which were receiving marriage counseling while the other half were not. The clinical couples receiving counseling were compared to the non-clinical families on the adaptability dimension using the Simulated Family Activity Measure (SIMFAM). Couples basically role played various crisis situations under simulated stressful conditions. Findings support the adaptability dimensions of the circumplex model. The non-clinical couples under the created stressful circumstances, were better adjusted as they showed more equalitarian leadership patterns and were more supportive and responsive to each others' needs than the clinical families.

Russell (1979) tested the cohesion and adaptability dimensions of the circumplex model. A sample of 31 Catholic families with daughters ranging in age from 14 to 17 years participated in the SIMFAM technique and filled out a questionnaire measuring the dimensions of adaptability and cohesion. Findings supported the curvilinear hypothesis between family functioning and the circumplex dimensions.

Families scoring within moderate levels of each dimension were more functional than families scoring on the extremes.

Even though the circumplex model has been basically used as a diagnostic tool by family therapists, the usefulness of constructing family typologies can expand the social scientists' goals of exploring, describing and explaining real world phenomenon (Babbie, 1979). There is much evidence supporting the notion that family adaptability and cohesion are related to patterns of behavioral functioning. Family dimensions will vary as families experience various degrees of stress (Sprenkle and Olson, 1978). One of the most stressful situations a family will experience in a lifetime is the death of a spouse or close relative (Holmes and Rahe, 1967). The association between the circumplex dimensions and a crisis situation such as death is quite apparent.

Research to date has not investigated the possible linkages between the circumplex dimensions, the child's involvement in the family's death-related experience, and the child's concept of death. These interrelationships will be examined in the present study in order to gain a better understanding of a child's conceptual understanding of death.

Religiosity

No one variable appears to be more closely related to an individual's attitudes and concepts of death than a person's spiritual beliefs. Even though many researchers (Alexander and Adlerstein, 1959; Chasin, 1971; Faunce and Fulton, 1958; Feifel, 1959; and Stewart, 1975) differ in their interpretations as to "why" a person's

spiritual orientation affects a family's view of death, it is agreed that the variable of religiosity directly influences a family member's view of death.

Many studies have limited their analysis to the individual's attitudes toward a fear of death and his or her religious orientation. These studies have generally used samples of undergraduate college students. Alexander and Adlerstein (1959) used a sample of male college students of above average socio-economic status. The thrust of this study was to determine the relationship between death threatening words and the individual's religiosity. Death was perceived differently by those ranking high and low on the religiosity dimensions. Those subjects classified as "nonreligious" generally viewed death as the biological ending of life, valued the rewards of a successful life, and did not think of death very often. The "religious" subjects indicated having more vivid memories of death-related experiences, felt more at ease in discussing death, and indicated greater awareness of thoughts concerning death.

In a study conducted by Faunce and Fulton (1958) 104 college students were sampled. The subjects' fears and attitudes toward death were analyzed in relation to their religious orientation. The "spiritually oriented" subjects viewed death as the beginning of a new life and as a temporary state before entry into heaven. An interesting finding of this study was that the subjects ranking higher on the religiosity dimensions also were more fearful and frightened of death. This corresponds to Feifel's research (1959, p. 121) that the "religious person, when compared to the non-religious individual, is personally more afraid of death."

Chasin (1971) examined the affect of religious orthodoxy, e.g., degree of fundamentalism on church members' death attitudes. A sample of 324 church going members of an Iowa community returned a mailed questionnaire. Those subjects scoring higher on the religious orthodoxy inventory were more likely to have optimistic attitudes toward death. The less religious subjects feared death more and disliked discussing the topic. Chasin's findings are in contradiction to the findings of Feifel (1959) and Faunce and Fulton (1958). The discrepancy of these findings may be related to the methods used in these studies, i.e., college students responding to open-ended questions (Faunce and Fulton, 1958) and church members responding to a mailed questionnaire (Chasin, 1971).

In an attempt to explain the ambiguity already existing in past research, Stewart (1975) investigated the relationship between the individual's fear of death and religious behaviors and attitudes. A sample of 117 undergraduate college students were selected from introductory classes in religion, sociology, and psychology. Results indicated that subjects who actively participate in religious activities, perceive themselves as highly religious, and have a fundamentalist orientation, were less fearful of death than the non-religious subjects.

Even though research to date is contradictory, religious activities, attitudes, and orientations play a significant role in influencing a family member's view of death. Research has not studied the implications of the degree of a family's religiosity on the child's conceptual understanding of death. There is little evidence to indicate how the family's religious beliefs influence the child's

view of death. Research is needed to investigate these interrelationships.

Parental Influence

Each family member has a unique personality, yet a family interacts as a functioning unit. The values, goals, and attitudes of one family member is likely to influence the disposition of other family members. The activities of one family member are commonly interlocked with the activities of other family members. Each family member learns, suffers, or benefits from the activities of other members (Paolucci, Hall, and Axinn, 1977). Paolucci et al. (1977, p. 55) suggest that parental interpretation of available stimuli is "critical to the optimum development of children and ultimately, to broaden the base for family decisions."

Death is a crisis the family cannot easily handle. The unpleasant impressions family members have of death make it difficult for the families to cope with such events successfully. This has been attributed to the fact that human beings cannot accept or imagine an actual ending to their own life here on earth (Kubler-Ross, 1976). Kubler-Ross (1976, p. 2) emphasizes that most people attribute death to malicious intervention associating it "with a bad act, a frightening happening or something that in itself calls for retribution and punishment." The ultimate finality of human loss, its distasteful connotations, and the family's experience in coping with death suggest the need for parental guidance and interpretation of such events for their children (Goldberg, 1973).

Since death is seen as frightening, parents would rather shelter

their children, thinking they are protecting them from harm. Such a practice does not allow children to understand that death is final and a natural ending of life. By depriving children from an understanding of death and dying, parents are creating unnecessary fears in their children and allowing the topic of death to become a taboo subject (Kubler-Ross, 1975).

Few studies have considered the importance of parental influence on their children's understanding of death. Lester (1970) investigated whether the fear of death in young adults was similar to the fears of death of their parents. The sample was comprised of predominately nonresident white college females. Subjects were given a fear of death inventory questionnaire and asked to have their parents respond to the same instrument. Results show that the resemblance between fears of death and dying among family members were extremely similar. The relationships were significant between daughters and mothers but not daughters and fathers.

The importance of parental influence on shaping children's views of death and dying during a crisis situation is accepted by many researchers (Goldberg, 1973; Kubler-Ross, 1975; Lester, 1970; and Paolucci, Hall, and Axinn, 1977). Yet no research has fully investigated the linking dimensions of parental influence on the child's cognition of death. This lack of research provides the incentive for continued study in this area.

Death Education

Death is a significant emotional experience all families must face. Accepting the consequences and understanding the events

surrounding a crisis lessens the hardship and improves a person's chances of recovery (Martinson, 1970). Klemmer (1970, p. 307) suggests that the families' ability to successfully cope with inevitable crises will depend on "the preparation the family had made in advance for meeting just such emergencies." It is a well known fact that few families receive instruction or education concerning the crisis of death. Sommerville (1976) emphasizes that even though death is a universal experience, the advanced preparation a family makes is negligible.

Death education has been a neglected area in schools, as well as the home. Death is a topic which receives little attention in high school and college family texts (Sommerville, 1976). Texts used in elementary schools with younger children may contain only one sentence related to death, loss, or crisis (Hoeflin, 1960). Not only are classroom texts lacking substantive information on death and dying, but parents are literally afraid to discuss the topic of death with their children. Sommerville (1976, p. 112) states, "that death and sex are the two subjects parents find most difficult to talk about with their children."

Pattison (1976) using an indepth case study approach gives evidence that our culture has developed myths about death and engages in mystification mechanisms. An individual's view of death reflects that person's view of life. Pattison (1976, p. 677) states, "if we cannot admit that death is part of life, it may be that we cannot face the fundamental psychological issues of separation and individuation that contain the kernels of loss." Only when the family can deal with psychological loss can family members successfully manage a death in

the family. This includes discussing openly the topic of death and answering children's questions when appropriate.

Even though family members are unlikely to discuss topics of death and dying within the immediate family circle, children should be given the opportunity to discuss the subject in the classroom. Balkin, Epstein, and Bush (1976) interviewed individually 50 black inner-city children of low socio-economic background and 50 white suburban children of high socio-economic status. Each child was asked a series of questions related to their attitudes toward classroom discussion of death and dying. Results indicate that the child's racial-ethnic and socio-economic background influenced his or her attitudes toward discussing death in the classroom. Black inner-city students were more likely to express fearful attitudes toward death and were less receptive to classroom discussion. Balkin et al. (1976, p. 188) suggest that "this greater expression of fear of death by urban children may simply be a consequence of their greater exposure to gang related violence." White suburban children were more receptive to classroom discussion of death because it was envisioned as a better way to understand death, loss, and separation.

The fact remains that children do not receive adequate death education in the schools or at home. Yet many children will experience the sensationalism of death daily on the television screen. Safier (1964) and Tallmer, Formanek, and Tallmer (1974) have pointed out that the impact of television acquaints children with actual and fantasy displays of death at an extremely early age. Such pictorial representations can create an unrealistic view of death in many children's minds.

When children try to make sense of crisis experiences they turn to their parents for interpretation and meaning. As Jackson (1965, p. 51) mentions, "when a crisis like death comes along in life, the interpretation has to be geared to the special characteristics of the child." Children need parental support in times of crisis. Since the many fears a child may have of death are learned from parents, parents should try to cope with their child's reactions on the child's own cognitive level. This can serve to reduce the child's fears and misconceptions about death (Jackson, 1965).

It is not surprising that adults, as well as children, have difficulty coping with an actual death of a loved one. Young and old often try to cope with the myths and illusions surrounding a death instead of its reality. Because of the inadequacy of death education in the elementary and secondary school systems, children are allowing fantasies and misconceptions to be visualized as a part of reality. Childhood anxieties are likely to be perpetuated into adulthood as parents feel unqualified to speak to their children on topics of death and dying. The limited research on the ways in which parents educate and involve their children in death-related experiences emphasizes the need for further study in this area.

Demographic Variables

Death is a subject which generates much discussion linked with a diversity of attitudes among people. The attitudinal meanings attached to death are determined by the perceptions a family has concerning customs, death rites, practices, and beliefs toward various aspects of the burial process and the death-related experience

(Faunce and Fulton, 1958). Faunce and Fulton (1958, p. 205) view the families' perceptions of death as "a particular culture complex involving a group of interrelated cultural traits which function together in a more or less consistent and meaningful way." Viewing the cultural background of a family allows for greater insight into the meanings surrounding death for a particular family.

A family's socio-economic background, along with various demographic factors, will affect a family's beliefs and attitudes. Such considerations will influence a family member's perception of a death-related experience. Chasin (1971, p. 108) states, "we cannot be sure that variables such as sex, education, age, income, etc., would not influence the conditions . . . related to attitudes toward death."

Chasin discovered that a family member's income, sex, education, size of home town, and religiosity were interrelated in affecting a view of death. Findings associated with sex show that males ranking high on the religiosity dimension were more likely to see death as a "peaceful bliss." Females, at all levels of religiosity, were more fearful of death visualizing it with "sadness." Income and size of home town were variables influencing the association between evasive attitudes toward death and religiosity. For families with high incomes, religiosity was related to not being evasive about death. No relationship existed between religiosity and avoidance thinking with lower income families. Size of town influenced a family's awareness of death. Families living in smaller communities were more aware of death and less evasive toward death regardless of degree of religiosity than families living in larger cities.

Balkin, Epstein, and Bush (1976) sampled a group of 100 children

aged from 8 to 12 years. These children came from differing socio-economic, ethnic, and school backgrounds. The inner-city children were black and of low socio-economic status. These children were extremely fearful of death. Discussing death with these children brought up many unwanted emotions of sickness, violence, sadness, and personal harm. The suburban children were white and of high socio-economic status. Suburban children were less fearful of death and were willing to discuss the topic in school with teachers and classmates.

The child's sex also appears to have an effect on his or her perception of death. Flesner (1977) interviewed 162 children aged three through nine years. Not only were males more likely to give egocentric responses than females, but males were more verbal in their responses and gave more violent answers to questions concerning their understanding of death.

Relationships between various demographic variables are important in understanding the complexities involved in children's concepts of death. Many studies (Childers and Wimmer, 1971; Koocher, 1974; Melear, 1973; and Nagy, 1948) have not considered the consequences of demographic variables. Present interpretations may give an oversimplification of the actual conditions affecting the child's conceptual understanding of death.

Summary

The summary of related literature is relevant to the study of the child's conceptual understanding of death. Research was reported in relation to children's awareness of death, the emotional impact of

death, and factors affecting a family's view of death.

Research related to children's awareness of death has focused on the child's affective and cognitive concepts of death. The major hypothesis of previous research was built upon a developmental assumption. The older or more experienced the child becomes, the more abstract his or her concepts of death. While this has been accepted, much research (Childers and Wimmer, 1971; Flesner, 1977; Koocher, 1974, and Melear, 1973) indicates that other factors may be involved in influencing a child's view of death. It is suggested that the child's family environment plays a critical role in shaping the child's conceptual understanding of death.

The emotional impact of a death on a child can be extremely confusing and stressful. Children normally turn to their parents during crisis events for support and meaningful explanations of unfamiliar situations. The child's inclusion or exclusion in the family's death-related experience may shape the child's outlook toward death and dying. The emotional impact of the specific loss and the child's emotional reactions to the death of a family relative are possible determinants of the child's conceptual understanding of death.

Factors affecting a family member's view of death include family dimensions of cohesion and adaptability, religiosity, parental influence, death education, and selected demographic variables. These factors are important in influencing a family member's perception of death and dying. Past cultural traits, family influences, and environmental factors determine an individual's interaction with the environment. The child's understanding of death is heavily influenced by the child's past environmental interactions.

The review of literature indicates that there is a lack of evidence regarding the extent to which the child's concepts of death are influenced by internal and external environments. Research suggests that a relationship exists between family dynamics, emotional impact of loss, inclusion in the family's death-related experience, child variables, demographic factors, and the child's conceptual understanding of death. This relationship is influenced by the way the child perceives his or her surroundings.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study is to investigate specific factors which influence a child's understanding of death. A review of current literature suggests that significant relationships exist between patterns of family dynamics and the child's inclusion and involvement in the family's death-related experience. These issues along with the interaction of relevant child variables and the emotional impact of the loss will be studied in order to gain insight into the child's concept of death. Other factors include: family dynamics, emotional impact of loss, child's inclusion in death experience, child background variables and child's concept of death. The hypothesized relationships between the above mentioned variables and other relevant topics are illustrated in Figure 1.

Family dynamics can be viewed as an independent variable influencing the child's inclusion in the death-related experience. An assumption is that a child's inclusion in the death-related experience will influence the child's concept of death. In this situation, the child's inclusion in the death-experience can be viewed as both a dependent and independent variable. Family dynamics was measured in terms of three scales. These measures include conceptual scale items

related to cohesiveness, adaptability and religiosity. It was hypothesized that family dynamics would directly influence a child's inclusion in the family's death-related experience. A child's inclusion in the death experience was viewed as the degree to which each child participated, mourned, and decided to become involved in the death-related event.

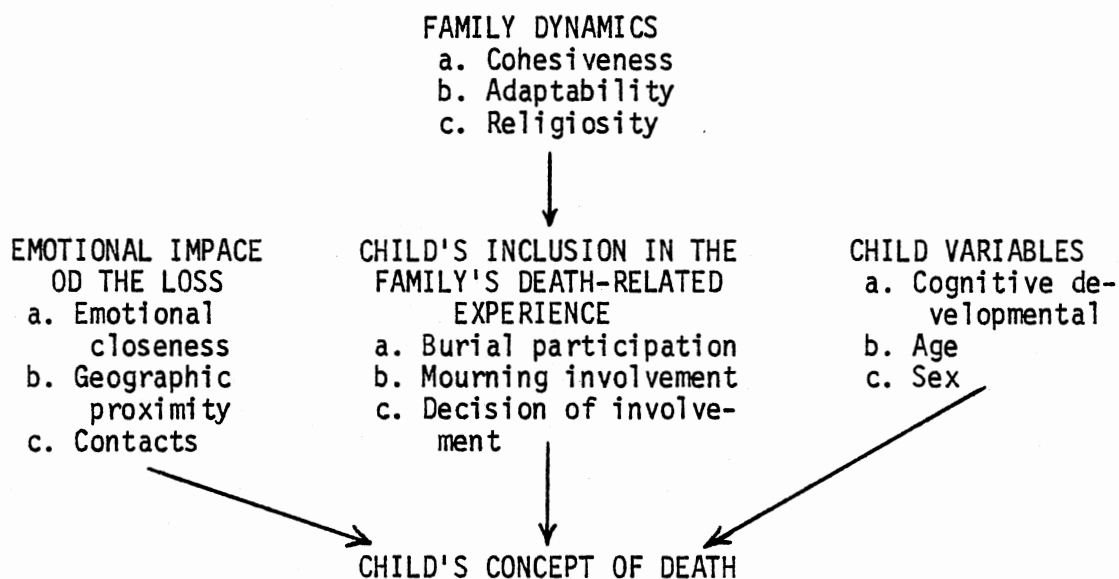


Figure 1. Relationship Between the Independent and Dependent Variables.

Other independent measures of a child's concept of death include selected child background variables and the emotional impact of the loss on the child. Selected child variables included a Piagetian classification of cognitive developmental stages, age, and sex. The emotional impact of the loss was measured in terms of emotional

closeness, geographic proximity and the number of contacts each child had with the deceased before death.

This chapter describes (1) preparation for data collection, (2) selection of subjects, (3) methods of data collection, (4) description of instruments, (5) data analysis and processing, (6) statistical procedures, and (7) analysis of hypotheses. The development of these procedures and the manner in which they were performed will be discussed.

Preparation for Data Collection

Multi-Method Procedure

The sensitive nature of the phenomenon under consideration made it necessary to utilize multi-method procedures and a variety of measurement instruments. According to Olson (1974), methodological limitations arise when only one method of data collection is used to investigate theoretical concepts and principles. A single method can initially restrict the variety of concepts which are measured while also limiting the rigor by which the collected data is analyzed. Olson encourages an expansion of the researcher's repertoire of methodological techniques in investigating real world phenomenon. Since multi-method techniques can enhance the validity of social science research, most variables chosen for this study are assessed by more than one method of measurement.

The two major instruments are the parent questionnaire (Appendix A, p. 145) which documents various aspects of family dynamics, and a child interview schedule (Appendix B, p. 153). The child interview schedule incorporates multi-method techniques such as (1) giving each

child the opportunity to sculpt his or her family on a game board (Kvebaek Sculpture Technique), (2) performing Piagetian based tasks (Cognitive Developmental Level Test), and (3) responding to open-ended questions related to his or her concept of death and emotional feeling toward the deceased (Table I).

Rationale for Instrument Selection

Instruments were selected based on established reliability and validity from previous studies and because of their usefulness in understanding the numerous factors influencing a child's concept of death. The parent questionnaire is used to analyze the concepts of family cohesion, adaptability and religiosity. The parent questionnaire is also used to evaluate the child's involvement and participation in the family's death-related experience. The child interview schedule is used to evaluate the child's concept of death, emotional closeness to the deceased, and cognitive developmental level. A detailed discussion of each of the instruments used in the present study is provided in the description of instruments section of this chapter.

Cohesion and Adaptability Scales

In order to evaluate family cohesion and adaptability, the Family Adaptability and Cohesion Evaluation Scales (FACES) developed by Olson et al. (1978) were used. Recent studies consistently demonstrate the validity of the cohesion and adaptability dimensions in family research (Druckman, 1979; Russell, 1978, 1979; and Sprenkle and Olson, 1978). Similar findings were achieved in the previously

TABLE I
 MULTI-METHOD TECHNIQUES USED TO INVESTIGATE
 THE INDEPENDENT AND DEPENDENT VARIABLES

Instruments	Demographic Variables	Family Dynamics	Emotional Impact of Loss	Child's In- clusion in the Death Experience	Background Variables	Child's Concept of Death
Family Dynamics Survey (FDS)	X	X	X	X	X	
Child Interview Schedule (CIS)		X	X		X	X
a. Cognitive Developmental Level Test					X	
b. Kvebaek Sculpturing		X	X			
c. Open-ended Interview			X		X	X

mentioned studies by sampling both clinical and non-clinical families. Clinical families experiencing stressful conditions consistently scored low on family cohesion and high on family adaptability. Non-clinical and treated families had more moderate scores on both dimensions. Past research shows that consistent results have been achieved through the use of cohesion and adaptability scales.

Sprenkle and Olson (1978) discuss the soundness of the cohesion and adaptability dimensions as related to extreme and moderate ranges which has been identified as the "circumplex model" (Figure 2).

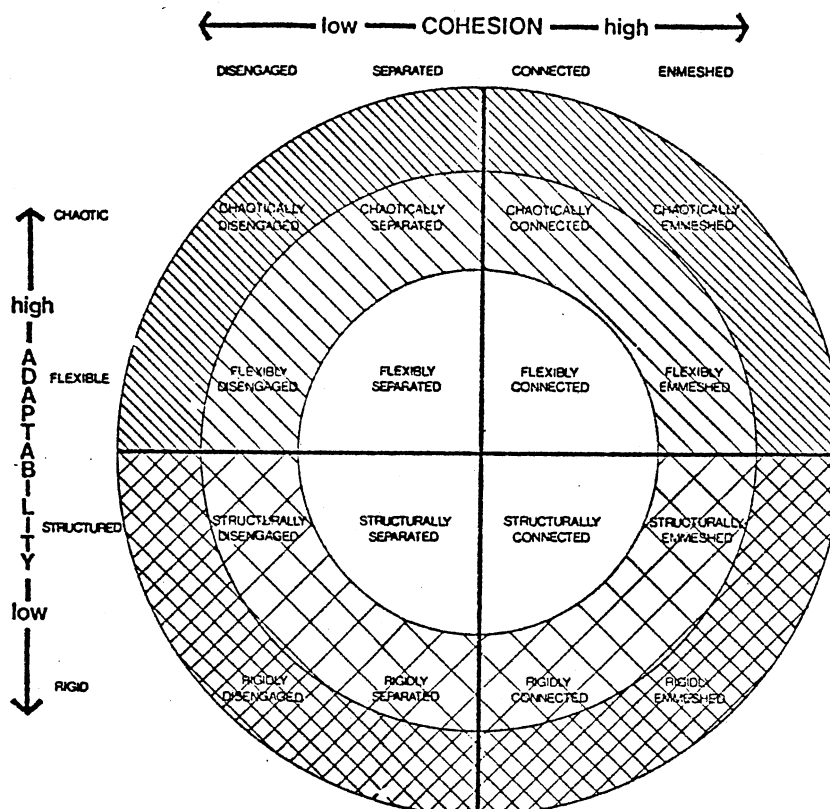


Figure 2. Circumplex Model

These authors (1978, p. 66) indicate that the dimensions of cohesion and adaptability are desirable in family research and that through various studies several measures have been developed. These measures have high reliability, coding details are clearly spelled out, and variables are related to a theoretical base. Content validity has been furnished by (Druckman, 1979; Russell, 1978, 1979; and Sprenkle and Olson, 1978). These empirical studies validated the cohesion and adaptability dimensions of the circumplex model by demonstrating that comparative testing procedures provided a direct measure for family behavioral patterns. These studies validated the notion that a curvilinear relationship exists between family functioning and the cohesion and adaptability dimensions. Clinical families experiencing stressful conditions are more likely to score extremely low or high on the cohesion and adaptability dimensions while non-clinical families generally scored in the moderate ranges.

Construct validity focuses on the extent or degree to which certain explanatory concepts are determined by a particular measure (Isaac and Michael, 1979). Construct validity checks on the theory underlying an instrument. Carmines and Zeller (1979, p. 23) emphasize that "construct validity is woven into the theoretical fabric of the social sciences, and is thus central to the measurement of abstract theoretical concepts." Construct validity of the cohesion and adaptability dimensions of the circumplex model were realized by Russell (1978, 1979). Russell (1978) used four behavioral measures of adaptability and one measure of cohesion. The four behavioral measures and one self-report measure of adaptability were conceptually related to adaptability by factor analysis. Likewise, the behavioral measures

of cohesion were also conceptually related to the theoretical concept of cohesion. Factor analysis procedures provided the empirical tests for linking cohesion and adaptability to identified concepts. Russell (1979) concluded that the cohesion and adaptability dimensions of the circumplex model are independent of each other and conceptually sound measures of family dynamics.

Religiosity Scales

The religiosity section of the parent questionnaire measured the degree of family and individual involvement or concern toward religion. As with other personal variables, religiosity is often hard to determine. One way to measure how religious a family perceives themselves to be is to understand such things as church attendance, spiritual commitment, amount of prayer, involvement in religious activities or organizations, participation in religious groups, involvement in revivals, crusades, or missions, and amount of discussion of religious beliefs within the family (Chasin, 1971). Such measures give an overview of the family's participatory religiosity. In order to evaluate family religiosity, items developed by Mindel (1974) were incorporated into the present study.

Emotional Impact of the Loss

Sections of the instrument relating to the emotional impact of the loss upon the child and the family's reactions toward the death were based on Parkes (1973) findings. The importance of understanding emotional reactions has long been of crucial importance and necessary in evaluating a family's response to a death related event (Kubler-

Ross, 1975, 1976; Parkes, 1973).

Parkes (1973) suggests that in order to understand the emotional impact of a loss, it is necessary to conceptualize the degree of closeness that a person has had with the deceased. The degree of involvement of a child in a family's death-related experience may be important in understanding that child's concept of death. Kubler-Ross (1975) emphasizes that children who are given the opportunity to express and discuss their feelings of death openly and actively participate in the family's grieving process are more likely to view death more calmly and serenely. To measure the psychological and emotional impact of a family member's loss, it is necessary to understand that person's unique response to the death (Parkes, 1973). This is generally measured in terms of assorted factors such as preoccupation with thoughts of the deceased, visual memory of the deceased, "pangs" of grief, and the overall affective disturbance caused by the death.

Questions in the parent questionnaire and child interview schedule were developed to allow an evaluation of the emotional impact on the child that was created by the death. In addition, items that assess understanding and the child's inclusion in the family's death-related experience were also included. The emotional impact of the loss as a variable, examined the child's emotional closeness, geographic proximity and the number of contacts the child had experienced with the deceased. Questions relating to the child's inclusion in the death-related experience pertained to burial participation, degree of family mourning, and the decision-making process of becoming involved. A section of the child interview schedule also included a game-like technique which evaluated the child's emotional and

psychological closeness toward the deceased family member.

Family Closeness

The technique of family sculpturing has been used with much success by American therapists and counselors (Constantine, 1977; Duhl, Kantor, and Duhl, 1974; Geddes and Medway, 1977; Papp, Silverstein, and Carter, 1973; Satir, 1972; and Simon, 1972). The traditional types of sculpting generally involve family members creating "a physical representation of their relationship at one point in time by arranging their bodies in space" (Simon, 1972, p. 49). The technique developed by Kvebaek (1973) and discussed by Cromwell and Fournier (1980) allows each family member to create a sculpture by placing figurines that represent each family member on a structured game board. Such an arrangement depicts a family profile which measures the perceived emotional distances between and among family members. Cromwell and Fournier (1980) illustrate that the Kvebaek Family Sculpture Technique has been very successful in evaluating, understanding, and treating clinical families. The primary purpose of having each child sculpt his or her family, which included the deceased person, was to evaluate the dynamics related to the child's emotional closeness to the deceased.

Cognitive Developmental Level

Another section of the child interview schedule was used to determine the child's cognitive level of development. The child learns to adapt to his or her surrounding environments through the complementary processes of assimilation, (e.g., incorporating the

surroundings into one's own activity) and accommodation, (e.g., adjusting to the surroundings) (Pulaski, 1971). The child's intelligence is determined by the adaptations made to new situations and the success of interacting with environmental forces. The course of cognitive development occurs in a sequential order for all children and is characterized by the formation of operational structures (Piaget, 1960). Piaget identifies an operation as an internalized action which is reversible, never isolated, always subordinated by other operations, and a part of a larger more inclusive structure. An example would be the mathematical operations of addition which can be compensated by subtraction, structured into sets, and built on the previously learned logic of groupings.

Piaget distinguishes four periods or stages of intellectual development. The first sensorimotor stage appears before language development as the child begins to coordinate movements and actions. Children in this stage of mental development were not used in the present study. Children in the three operational stages, ranging from ages 4 through 17 years were given the Cognitive Developmental Level Test which is a Piagetian based instrument for assessing mental development as discussed by Phillips (1969). Each child was classified according to the three Piagetian cognitive stages (1) preoperational, (2) concrete-operational, and (3) formal-operational. The operational periods are described by Pulaski (1971) and Bee (1978) as follows:

Preoperational: Children from approximately two to seven years of age are in a period of transition in which the child's thinking gradually becomes less egocentric, reasoning is less tied to specific

experience, and ability to classify concepts with objects becomes more complete. The child begins to symbolically assimilate the activities, roles, and ideas of the surrounding world.

Concrete-Operational: In a period of around 7 to 12 years of age, the child becomes able to make complex classifications and to perform various operations like addition, subtraction, and seriation on sets of objects or experiences. The child can operate in thought on concrete objects or their representations but is limited to his or her own experiences.

Formal-Operational: From early adolescence, (11 or 12 years of age) and after, the child becomes capable of deductive, as well as inductive reasoning. The child is able to think about thinking rather than concrete objects. At this stage the adolescent is capable of hypothesis testing in a deductive or inductive fashion of systematically exploring and searching the environment for answers.

The instruments selected were specifically designed to examine the child's concept of death. Each of the concepts as designated by the independent and dependent variables were incorporated into the parent questionnaire and the child interview schedule.

Pilot Study and Revision of Instruments

A pilot study was conducted by the researcher to appraise the adequacy of the instruments and testing procedures. The methodologies of informal interviews with children and self-report parent questionnaires for parents were deemed most appropriate in gathering data needed to test the specific hypotheses (see p. 8). The purpose of this pilot survey was two-fold. First, it was used to test the

readability and ambiguity within the parent questionnaire and child interview schedule. This included possible misunderstandings or misinterpretations of directions and wording of specific questions.

The second purpose of the pilot study was to give the researcher input into designing the parent questionnaire and the child interview schedule in a uniform and workable format to elicit nonthreatening and truthful responses. As Madge (1965, p. 243) indicates, "the primary purpose of a pilot survey is quite distinct from the main study." The purpose is to aid the investigator in elucidation and clarification of the instrument which is essential for accurately testing the designated hypotheses (Isaac and Michael, 1979).

The pilot study included 11 professional educators, graduate students, and faculty members at Oklahoma State University. The participants reviewed the readability of the first form parent questionnaire which referred to the Family Dynamics Survey (FDS). Also included in the pilot survey were 5 families in north central Oklahoma with seven children ages 3 through 18 who had experienced the death of a relative. These families were interviewed in their home. The parents were given the Family Dynamics Survey (FDS) and were asked to fill out the parent questionnaire and respond to the survey's clarity. The children were given a pre-test version of the Child Interview Schedule (CIS) allowing the investigator to study the child's responses and reactions to be able to improve the format and make it as nonthreatening as possible.

The comments and discussions with the professional educators and parents who had completed the FDS led to the following three revisions. (1) The instructions preceding several sections within the

questionnaire and various questions were revised. The ambiguities were corrected by rewriting unclear sections. (2) The questionnaire appeared to be extremely long. Fourteen of the 16 adults who responded to the parent questionnaire commented on its lengthy appearance and overall size. To remedy this situation, the questionnaire print was reduced to one-third of its original size and printed in an attractive pamphlet format. (3) Several respondents indicated a need to express their opinion about the death experience. Many of the respondents were very open and glad to talk about their feelings with the investigator surrounding the circumstances of the death. In order to accommodate this desire to express their impressions of the death experience, three open-ended questions were added to the end of the questionnaire. These questions relate to the family's support system during the crisis, lack of support systems, and recommendations for other families who have experienced a death.

Interviews with children in the pilot survey revealed several needs for alteration which were made to the Child Interview Schedule (CIS). The interview schedule included a Piagetian based cognitive test, family sculpture manipulation game, and a series of questions related to the child's emotional closeness to the deceased and concept of death. The CIS is explained in greater detail in the description of instruments section of this chapter.

It became apparent after conducting several child interviews that very young children could not give credible answers. Children three years of age and younger were concerned about playing with the apparatus involved in the cognitive tests or the sculpture figurines and did not appear to have the attention or cognitive skills needed

for responding. For this reason, only children four years of age and older were included in this study.

A second revision in the format of the interview schedule included the sequence of administering the instrument. In order to put the child at ease and win his or her confidence, the cognitive developmental level test was given first. In addition to being enjoyable, this procedure allowed the child to manipulate different types of research apparatuses. The child was then told he or she was going to be asked several questions about the deceased family member and some questions concerning death. Each child was told that there were no right or wrong answers. Questions could be answered as completely as each child deemed necessary. This segment of questioning gained vital information concerning the child's perceived emotional closeness to the deceased and concept of death. The last segment of the interview allowed the child to sculpt his or her family on a game board. This procedure permitted each child to place figurines which represent each family member, including the deceased, on the checker-style game board as he or she perceived the family relationship. The children became very absorbed in this procedure. In fact, the child was often anxious to discuss the family sculpture with his or her parents and the investigator.

The last revision of the CIS centered around having all the child questions answered in an open-ended manner. This was particularly true for questions related to emotional closeness. Several of these questions were originally designed to be answered along a 5-category continuum from "extremely close" to "not close at all." Children responded to the questions in individually unique ways which could not

be placed in a specific category at the time of the response. These findings led the investigator to utilize a tape recorder to insure that a child's responses could be content analyzed at a later point.

The pilot study proved to be extremely useful. It allowed the investigator to test the proposed instrument, make necessary corrections concerning the format and readability of the parent questionnaire (FDS) and child interview schedule (CIS). This procedure helped the investigator incorporate comments from parents and children into making the final instrument as reliable as possible.

Description of Final Instruments

Specific evaluation scales, interview schedules, and open-ended questions were used to measure and assess the independent and dependent variables. The Family Dynamics Survey (FDS) was used to measure selected family variables. The Child Interview Schedule (CIS) was used to assess specific child related variables. The Family Dynamics Survey (FDS) includes the following instruments: Part I: Family Adaptability and Cohesion Evaluation Scales (FACES); Part II Urban Family Life Interview Survey; Part III: Psychological and Physical Measures of Emotional Closeness; and Part IV: Family's Death-Related Experience Survey. The Child Interview Schedule (CIS) contained the following instruments: Part I: Psychological and Physical Measures of Emotional Closeness; Part II: Kvebaek Family Sculpture Technique; Part III: Cognitive Developmental Level Test; and Part IV: Death Understanding Test. The complete Family Dynamics Survey (FDS) and the Child Interview Schedule (CIS) are included in Appendix A and B respectively. A description of these instruments follows.

Measures of Family Variables

Family Dynamics Survey (FDS)

Part I. Family dimensions of cohesion and adaptability were measured along the high and low continuum of the cohesion and adaptability scales from FACES (Olson et al., 1978). Family Cohesiveness is that degree of emotional bonding family members have toward one another within the family system. It is measured along a continuum ranging from very low (disengaged) to very high (enmeshed). The selected sub-scales used to describe family cohesion were emotional bonding, independence, family boundaries, space, and decision-making. Each subject responded to 30 statements (six each of five sub-scales) on family cohesiveness. Response choices for each statement were as follows: (1) "true all the time"; (2) "true most of the time"; (3) "true some of the time"; and, (4) "true none of the time". The 30 questions were randomly distributed in the survey and were used to calculate a combined score for family cohesion. On this measure families scoring extremely high perceive themselves as very close (limited individual autonomy) while those scoring extremely low perceive themselves as having low emotional bonding (high individual autonomy). Those families in the middle ranges were scored as having a balance between separateness and connectedness.

Family adaptability refers to the ability of a family system to adapt to situational and developmental stress. This is viewed along a continuum ranging from very low (chaotic) to very high (rigid). The five selected sub-scale dimensions used to understand family adaptability were control, discipline, negotiation, rules, and system

feedback. The subject responded to 30 randomly assigned adaptability questions using the previously described four-point scale. A combined family adaptability score was calculated. Families scoring extremely low were considered chaotically organized with inconsistent rules, roles, and power structure while those scoring extremely high perceived themselves as rigidly organized. Those families with a middle range score were characterized as having a balance between stability and change.

Part II. Selected questions from the Urban Family Life and Education Interview Survey, developed by Mindel (1974) were used to provide demographic information and the degree of family religiosity for this study. Only one parent per family was required to complete the background demographic and religiosity information. That parent completed the survey questions concerning themselves, their spouse, their children and the entire family where applicable.

Demographic information included the following: parents' educational level, parents' ages, parents' occupation, hours worked per week, marital status, type of community residence, and approximate total family income. There was also questions for the parent which dealt with their children's sex, ages, and grade in school.

The demographic questions dealing with level of education, age, community type, and earnings were designed to have the parent check a specific category within a range of responses. An example is level of education which ranges from (1) attended graduate or professional school; (2) graduated from a 4-year college; (3) some college or technical school; (4) finished high school; (5) some high school;

(6) 5-8 years of grade school; (7) completed 0-4 years of grade school; and, (8) don't know. Other demographic data were presented in similar scaling formats. There were a total of five questions in this section.

Questions related to occupation, hours worked per week, and length of time living at current residence were all open-ended. This allowed the respondent to be as specific as possible in responding to these questions. There were three questions in this section.

The religiosity questions are divided into two sections. First the subject responded to four questions which designated the family's degree of church attendance, personal opinion toward religious commitment, and denominational preference. Responses to participatory questions include the following six categories: (1) at least twice a week; (2) once a week; (3) twice a month; (4) 3-4 times a year; (5) only for special occasions; and, (6) never. Personal opinion toward religious commitment was measured by four categories: (1) very religious; (2) somewhat religious; (3) not important; and, (4) opposed to religion.

Subjects also answered a series of 10 religiosity questions which measured the degree of religious involvement and commitment in revivals, crusades, groups, prayer, activities, and organizations. The responses to these questions were made along a five point continuum with the following range: (5) very often; (4) often; (3) sometimes; (2) almost never; and, (1) never. A combined family religiosity score was calculated.

Part III. Psychological and Physical Measures of Emotional Closeness to the deceased family member was measured in terms of

physical closeness, (e.g., contacts and geographic proximity), and emotional closeness, (e.g., feelings and thoughts). In order to understand the child's degree of physical closeness to the deceased family member, the parent listed the number of contacts and geographic proximity or distance between child and the deceased.

Three other questions were asked of the parent concerning the child's physical closeness to the recently deceased family member or neighbor. One question was intended to determine how far away from the family the deceased relative lived. Categories include whether the deceased lived in the same household, the same town or community, a close town or community within 100 miles, or a distant town or community more than 100 miles away from the child's residence. The second question was concerned with how often the child visited or saw the deceased relative while alive. Responses were recorded along five categories ranging from "at least once a day," "once a week," "once a month," "once a year," "less than once a year," and "never."

The third question was open-ended and requested the parent to give the approximate number of miles the family lived from the deceased. This allowed for a specific number of miles to be recorded.

Part IV. The Family's Death-Related Experience Survey was developed by the researcher. This section of the FDS was designed to understand the child's inclusion in the burial rites and the child's involvement in the family's mourning process.

The child's inclusion in the burial rites was obtained through seven questions related to the family's philosophy concerning this issue. The parent was requested to respond with either "yes," "no," or "not applicable" to statements about each child's participation in

the family's death-related experience. Questions covered a wide range of death-related events which the child may or may not have been involved or included as part of the family ritual. Areas of concern included visiting the funeral home, viewing the body, attending memorial services, attending grave side services, visiting the cemetery or memorial site since the death, touching the deceased before burial or cremation, and allowing the child to make up his or her own mind about involvement in the burial process. A total participation score was calculated for each child's involvement in the death-related experience.

To understand the child's involvement in the family's mourning process a series of five questions were asked. Two of the questions required the parent to judge his or her child's grief and sorrow which followed the death of the family member. Two additional questions pertained to the unity of crying together as a family and parental explanation of the circumstances surrounding the death to the child. A fifth question enabled the parent to respond along a five category Likert-type response scale. This question described the degree of grief and sorrow the child showed when the family member died. The five categories ranged from the child's showing (1) a great deal of sorrow; (2) much sorrow; (3) some sorrow; (4) little sorrow; and, (5) no sorrow.

The questionnaire concluded with three open-ended questions in which the respondent could express his or her inner feelings concerning the death experience. These questions related to who or what gave the family the most and least support during this crisis period. The final question asked for any recommendations they may have for

other families going through a similar situation. The responses to these questions were content analyzed.

Measures of Child Variables

Child Interview Schedule (CIS)

Part I. In order to understand the child's emotional closeness to the deceased, each child was interviewed and asked a series of three open-ended questions. The interviewer allowed sufficient time for the child to respond to the questions as fully as he or she wished. All responses were tape recorded. This technique assisted the investigator in classifying the content of the responses into five categories ranging from extremely close to not close at all. To measure the degree of emotional closeness between the deceased and the child, concepts related to preoccupation of thoughts, degree of affection, and feelings of closeness were assessed.

Part II. The Kvebaek Family Sculpture Technique is a method by which family members represent their relationships to other family members (Cromwell and Fournier, 1980). Family members symbolically create a family portrait designed to represent visually the structure of relationships involved in their family interaction. Distances between figurines on the test board are used to calculate distance scores of family structural interrelationships. Distance scores between the child and the deceased are calculated by counting the number of squares between each figurine and squaring that number. This calculation provides for distance scores reflecting a progression, such as 1 - 4 - 9 - 16 and so forth as figurines increase in distance

by one square. Diagonal distances are calculated by using the law of the right triangle, $h^2 = a^2 + b^2$. Cromwell and Fournier (1980, p. 19) suggest that "the squaring of distances provides greater variance to explain and facilitates identification of emergent and recurring patterns of perceived family relationships." Three conditions are necessary in order to calculate the distances between figurines. They are (1) that each square on the test board contain only one figurine; (2) the distance between each adjacent square is equal to 1; and, (3) as physical distances vary between figures, there are underlying psychological and social reasons for such spacing.

In order to adapt such a technique for the CIS, each child was given the opportunity to sculpt his or her family on a one meter by one meter test board. The test board is divided into 100 squares, a 10 by 10 grid (Appendix B, p. 153). Each child was shown a set of figurines. The child was then allowed to label each figurine as his or her father, mother, additional siblings, and deceased family member. As Cromwell and Fournier (1980) suggest, figurine labeling is a task for the respondent and can be highly projective. It allows the researcher to observe which person is labeled first, the sizes of the figurines picked, and the order in which they are placed on the test board.

After each figurine is identified as a representation of the child's immediate family, the child selects one figurine at a time and places it on the test board. The child, in illustrating his or her family sculpture is involved in the simple task of arranging the figurines as he or she actually envisions his or her family's interconnectedness. This represents the child's perception of his or her

family's present structure. The child is asked to place the deceased family member into the present family sculpture. Each child is asked to sculpt his or her family independently of siblings or parents. This is done to understand the child's own perceptions of the emotional closeness that is felt toward immediate family members and the deceased.

The instructions given each child follow the procedures outlined by Cromwell and Fournier (1980, p. 7). The researcher explains to each child the following:

I want you to play a game for us a couple of different ways. In front of you (point to them) I have different figurines which are to represent the people in your family. One represents father, one mother, and there are figures for the children (show them the figurines and provide name labels for each family member). (Have them say the names so you are clear who is who and have them place the name stickers on the top of each figurine).

In order to play this game, I want you to place the members of your family that we just described on this board. In placing them on the board, try to describe your family as it really is. In other words, place the figures on the squares in such a position as to indicate the actual relationship of yourself to the other people in your family. You can only put one person in each square, but you can use any of the squares on the board. There is no right or wrong way to do this, just try to show us how you see your family. Do you have any questions?

Part III. For the purposes of this study the methods suggested by Phillips (1969) and Inhelder and Piaget (1958) were used to classify the children into levels of cognitive functioning. The conservation tasks of mass, number, and volume were administered to the subjects in the study. Children failing one or more of these tasks were assumed to be preoperational. Those children passing all three conservation tasks but failing the hypothesis testing task were classified as concrete-operational. Only those children successfully

passing all three conservation tasks and the task of hypothesis formation were considered formal-operational. Table II illustrates the developmental comparisons between the operational levels and the conservation and hypothesis testing tasks of the Cognitive Developmental Level Test.

TABLE II
CRITERIA FOR CLASSIFICATION OF RESPONSES
ACCORDING TO COGNITIVE
DEVELOPMENTAL LEVEL

Operational Levels	Cognitive Developmental Level Test			
	Conservation Tasks			Hypothesis Formation
	<u>Mass</u> ^a	<u>Number</u> ^b	<u>Volume</u> ^c	<u>Archimedes Law</u> ^d
Preoperational	(Fails one or more tasks)			Fail
Concrete-Operational	Pass	Pass	Pass	Fail
Formal-Operational	Pass	Pass	Pass	Pass

^aMass - conservation of mass - clay balls.

^bNumber - conservation of number - colored disks.

^cVolume - conservation of volume - water in glasses.

^dHypothesis testing - Archimedes Law of floating bodies and volume displacement.

Part IV. In order to understand the child's concepts of death, a Death Understanding Test based on Koocher's original questions (1974) and revised by Flesner (1977) was administered to all children.

The questions are open-ended and designed to gain insight into the child's conceptual understanding of death. The four questions asked are as follows: (1) "What makes things die?"; (2) "Can you make dead things come back to life?"; (3) "When will you die?"; and, (4) "What will happen when you die?" Each child was given ample opportunity to respond to each question as fully as he or she deemed necessary.

Table III summarizes the variables, instruments, sample sizes and data sources for this study. In order to understand the child's concept of death, this study investigates the relationship between selected aspects of family dynamics and the child's inclusion in the family's death-related experience. This study will also examine the possible effects of the emotional impact of the loss and relevant child variables on the child's conceptual understanding of death.

Selection of Subjects

Since the topic of death is often difficult for families to discuss, selection of subjects was one of the most difficult processes in this study. The investigator realized that a randomly selected sample from a given population would be extremely difficult, if not impossible, to accomplish. With this in mind, the sample was gathered using several techniques. Some selection strategies which were explored in identifying a sample included discussions with a funeral director, systematic review of newspaper obituaries, and contacts with ministers, family counselors and a guidance center director in north central Oklahoma. While one approach was found to be beneficial, the others were not.

TABLE III
SUMMARY TABLE OF VARIABLES, SAMPLE SIZES,
INSTRUMENTS, AND DATA SOURCES USED

Variables	Sample Size	Instruments	Data Source
I. Demographic variables	50	Family Dynamics Survey (FDS)	Investigator Developed, 1979
II. Family dynamics			
Cohesion	62	FDS	<u>FACES</u> , Olson, Bell and Portner, 1978
Adaptability	62	FDS	<u>FACES</u> , Olson, Bell and Portner, 1978
Religiosity	62	FDS	<u>Urban Family Life Interview Survey</u> , Mindel, 1974
III. Child's inclusion in the family's death-related experience			
Burial rites	91	FDS	Investigator Developed, 1979
Mourning	91	FDS	Investigator Developed, 1979
IV. Emotional impact of the loss			
Emotional closeness, geographic proximity, contacts	91	FDS and Child Interview Schedule (CIS)	<u>Psychological and Physical Measures of Emotional Closeness</u> , Parkes, 1973
Emotional closeness	91	CIS	<u>Kvebaek Family Sculpture Technique</u> , Cromwell and Fournier, 1980
V. Child variables			
Cognitive developmental levels	91	CIS	<u>Cognitive Developmental Level Test</u> , Piaget, 1960
Age and sex	91	FDS	<u>Urban Family Life Interview Survey</u> , Mindel, 1974
VI. Child's concept of death	91	CIS	<u>Death Understanding Test</u> , Koocher, 1974; Flesner, 1977

The first avenue examined included discussing subject selection with a funeral director and family counselor who worked together in advising and counseling bereaved families. Meetings took place on several different occasions. The investigator had hoped that the funeral director could identify death-experienced families with school age children who might be willing to participate in the present study. Because of the type of record keeping and filing system in the funeral home it was impossible to identify young families with children. The investigator did participate in and attend three program sessions for bereaved parents which were jointly sponsored by the funeral home and family counselor. The investigator was allowed to present his research aims at these sessions. Considerable interest was expressed by several bereaved families but none had school age children. Even though the investigator was unable to identify a sample with the help of a funeral director, much valuable information was learned about families with a recent death experience.

The second avenue pursued was a systematic review of newspapers printed in a sixty (60) mile radius of Stillwater, Oklahoma. Out of the 27 towns in this designated area, 10 had daily newspapers (Luedke, 1979). All the deaths during two one-week periods, March 11 to March 16 and March 25 to March 31, 1979 were recorded from newspaper obituaries. This was accomplished by using microfilm readouts of the designated newspapers at the Oklahoma State University library. During this two-week period, 28 deaths were recorded.

The obituary column carried the person's name, birthplace, current residence, parents' names, spouse's name and surviving children (if married), and any surviving grandchildren if applicable.

The obituary columns did not identify by name the surviving relatives. Surviving relatives were identified as a spouse, son, daughter, or grandchild from a particular town or state. With the lack of referral information available, it became impossible to specifically identify the surviving relatives. Because of the complexity in not being able to trace exactly the surviving relatives or whether they had children of school age, newspaper obituaries were not considered as a viable alternative to identify a sample.

The third alternative considered was to receive referral information on families from a county guidance center. The investigator learned from the director of the guidance center that they operate under a strict code of family confidentiality. Families who participate in guidance center activities remain anonymous because of ethical consideration. Even though the guidance center director was extremely interested in the timeliness of the present study, it was impossible to identify a sample from this avenue.

The fourth means used to identify a sample involved making personal contacts with ministers in north central Oklahoma. An initial meeting was arranged between the investigator and four campus ministers at Oklahoma State University. These personal contacts were made with the campus ministers in order to get their reactions to the idea of approaching the clergy for the purpose of identifying a sample. Initial responses were very positive. The ministers indicated that the topic was indeed a much needed area for investigation. They also felt that most ministers would be willing to help identify death experienced families from their congregational rolls.

Due to the large number of Oklahomans who have church

affiliations, it was felt that selecting a sample through this method would adequately represent the general population. It should be noted that 55.1 percent of all Oklahomans and 55.8 percent of the population that is located in the 60 mile radius surrounding Stillwater are considered full-time church members (Johnson, Picard, and Quinn, 1974). The number of full-time church going members in the United States is over 42 million, approximately 49.6 percent of the population.

The investigator settled on a 60 mile area with 97 churches. These churches were sent letters explaining the present research study (Appendix C, p. 157). Along with a brief explanation on the importance and timeliness of the study, a fact sheet and brief news release that could be incorporated in a church bulletin were sent to the ministers (Appendix C, p. 157). After written contact was completed, personal phone calls were made and individual interviews were conducted with interested clergy.

During the period from May through August, 1979, 27 personal contacts were made with interested clergy. These encounters were very fruitful in identifying a sample. This process yielded a list of 44 death experienced families with school age children.

After these families were identified, two courses of action were attempted. First a prepared letter was sent to a designated family (Appendix C, p. 157) explaining how their name was selected, the purpose of the study, and that within a few days they would receive a phone call from the investigator. The second phase was the follow-up phone call to each designated family. During this initial contact, the investigator explained the purpose of the study, how they were

selected and inquired if they might be willing to participate. This first course of action was not deemed beneficial. The families who were first sent letters and then called all refused to take part in the study. Even though the letter that was sent to each family was carefully constructed and worded, two possible reasons for its ineffectiveness are presented. First, the letter which was on university stationery appeared very formal. No matter how discreet the actual content of the letter, it possibly represented a bureaucratic structure the subject was unwilling to encounter. Second, the very fact that a family received the letter followed by a telephone call could have given them ample time to develop anxiety about participation. The time period of when a family received the letter and when the telephone call was made ranged from three to four days. During this period many things could have happened within the family. Family discussion on the matter could have taken place. One family member could have decided it was not feasible, or a general feeling that a family death should not be talked about with strangers.

The second course of action, initial telephoning for the first contact was the method which proved to be most successful. Not one family contacted in this manner refused to take part in the study. Generally, once a family was contacted the interview was scheduled for that same day or the following day. A majority of interviews took place between 4:00 and 6:00 p.m. when the children first came home from school. The remaining interviews were scheduled evenings or on weekends. This method seemed to minimize anxiety on the part of the participants.

Families who participated in the study were enthusiastic about

the type of research being conducted. Many families who participated suggested friends, neighbors or relatives who might be willing to participate. Because of the previous difficulties in identifying a relevant and timely sample, this "snowballing effect" was considered a legitimate and useful way of selecting the remainder of the designated sample (McCall and Simmons, 1969). The investigator found that using these first families as personal references facilitated the identification of the remainder of the sample. The sampling procedures yielded a total sample size of 50 families in north central Oklahoma which included 91 children, 41 males and 50 females, ranging in age from 4 through 16 years. These families had experienced the death of a relative or close friend from 1 to 44 months from the time of the interview.

Families with children between the ages of 4 to 16 years were chosen in order to test children of different cognitive developmental levels. As Piaget (1961) envisioned, each child's development of intelligence progresses from one stage to another (preoperational, concrete-operational, and formal-operational) by construction of new operational structures. This accomplished over time as the child gradually becomes capable of dealing with broader ranges of problems by acquiring increasing strategies for processing environmental information. Even though there may be some overlap, researchers have generally agreed that children two to seven years of age are in the preoperational period, the period from seven to twelve years of age is the concrete-operational period, and after twelve years of age the child has entered the formal operational period.

Methods of Data Collection

Contact and Interview Procedures

The investigator used personal telephone calls as a means of introducing the designated families to the present study by (1) explaining why the study was being conducted, (2) the type of instruments which would be used, (3) the approximate time commitment involved, and (4) background information about the investigator. Telephone calls were made during the morning or early afternoon hours. If a family did not respond during this time frame, evening calls were made. The investigator only conveyed the pertinent information to parents. If a child answered the telephone and the parents were not home, the investigator would telephone back at a later time.

Once the initial information was passed on to the parents and the family agreed to participate in the study, a time was set for the interview. Using this personal contact technique, no family refused to participate in the study and all but three of the 50 interviews took place in the family's own home. Two interviews took place in the investigator's office at Oklahoma State University and one took place in the investigator's home.

Upon entering the family's home the investigator briefly explained the nature of the instruments and procedures which would be followed. Upon completion of the interviews, the investigator responded to any questions the family had regarding the procedures and the general nature of the study.

Data Gathering Procedures

The two instruments used to gather the data for the present study were the previously described Family Dynamics Survey (FDS) (Appendix A, p. 145) and the Child Interview Schedule (CIS) (Appendix B, p. 153). The FDS took approximately 30 to 40 minutes to complete. If both parents were present they were each asked to complete the questionnaire. Questionnaires were also left with families for the absent spouse to complete and return to the investigator. In addition to the initial 50 completed parent questionnaires, 12 additional questionnaires from absent spouses were collected, yielding a total of 62 completed parent questionnaires. The larger number of 62 was used to test the reliability and validity of the several subscales of the FDS. The FDS consisted of a survey technique in collecting information related to: (1) demographic family data; (2) family adaptability, cohesion, and religiosity; (3) the child's inclusion in the death-related experience; (4) the child's emotional impact to the loss; and, (5) selected child information.

The CIS contained three data gathering techniques. The first was a Cognitive Developmental Level Test which was used to classify children according to their cognitive stage of development. This was a Piagetian-based instrument in which the child was requested to perform several tasks. The second method of data collection included the previously described game-like procedure by which the child would sculpt his or her family members on a large checker board. This technique allows the child to represent his or her emotional closeness to the deceased and describe the child's perception of family dynamics as identified by the Kvebaek Family Sculpture Technique (1973). The

last method included open-ended questioning in which the child was allowed to express his or her opinions on emotional feelings concerning the loss and his or her concept of death. Open-ended questions were used to help the child conceptualize his or her understanding of death. Indirect probing is deemed more effective than the questionnaire or direct interrogation method with children (Menig-Peterson and McCabe, 1978). All children's responses were tape recorded to ensure accurate interpretation of comments. These responses were then transcribed to facilitate categorizing and studying the content of each response.

Data Analysis and Processing

Content Analysis of Death Understanding Test

The responses to each question on the Death Understanding Test were classified in relation to the child's cognitive level of reasoning and understanding. A panel of three early childhood educators presently enrolled in course work in the Family Relations and Child Development Department at Oklahoma State University scored the child's responses according to a Piagetian classification of cognitive development. The investigator expanded the three nominally scaled response categories developed by Koocher (1974) into a five category ordinal scale classification. The possible range of responses fell along a continuum from no reasoning to very abstract reasoning. The response classifications were as follows:

1. No Response - The child gave no indication that he or she knew how to respond to a question on the Death Understanding Test.

The child did not respond or had no understanding of the question asked.

2. Fantasy Reasoning (Relatively Egocentric Response) - The child used magical reasoning with varying degrees of symbolism relating to his or her own limited personal experiences. These responses were characteristic of the preoperational child (Koocher, 1974, p. 407).

3. Factual Reasoning (Specific or Concrete Response) - The child responded by giving specific items, happenings, events, inflections, or intentions surrounding death. These children were generally at the concrete-operational level (Koocher, 1974, p. 407).

4. Combined Reasoning (Factual and Abstract Response) - The child responded with specific items, events, and intentions while incorporating ideas that death is a part of the natural culmination of life.

5. Abstract Reasoning (Formal Response) - The child recognized that death is a natural process of life and the ending of all biological functioning. Responses were characteristic of the formal-operational child (Koocher, 1974, p. 407).

Table IV gives examples of responses a child would give as he or she answered the questions to the Death Understanding Test. Children of different cognitive levels were likely to give a wide range of responses.

Three judges read each child's response separately and categorized it for level of abstractness. The judge then marked on a scoring sheet the designated cognitive category into which the response fit. Each judge also indicated his or her level of confidence

TABLE IV
 EXAMPLES OF CLASSIFICATIONS OF RESPONSES
 ON THE DEATH UNDERSTANDING TEST

Response Categories	Death Understanding Test Questions			
	1 ^a	2 ^b	3 ^c	4 ^d
No Reasoning	No response	No response	No response	No response
Fantasy Reasoning	When you go swimming When God reads your name in the book When you meet the boogy man Uses magical thinking Your number comes up	Only sleeping Could be revived God does that In my prayers No - without an explanation In heaven	Will likely give very young or very old ages 5-10 or 300-400 years When God writes your name in his book When God decides	Just sleeping Go on a trip Come back to life My mom and dad will cry
Factual Reasoning	Eat rat poison Get shot Stabbed Gives specific ways things die Get old	Give them food Go to hospital Reincarnation Only plants	Likely to give middle year ages 30-40 years You get hit by a car Collapse of heart attack	Buried Cremated Judged by God Body to rest People will be sad Go to heaven or hell
Combined Reasoning	(Mixture of factual and abstract reasoning)			
Abstract Reasoning	Illness Old age, with explanation Life energy ends Body stops functioning	Realizes that death is the biological ending of life	65-87 years Has an accurate idea when human life is likely to end	Turn to dust You are no more Body functions end

^aWhat makes things die?

^bCan you make dead things come back to life?

^cWhen will you die?

^dWhat will happen when you die?

in making the choice that was made. Levels of confidence were marked on a three category scale ranging from high to low. The scoring sheet is presented in Appendix D, p. 163.

Table V shows the level of confidence that judges had in placing responses into one of the five cognitive categories. Question 1 on the Death Understanding Test was the easiest for the judges to categorize. Sixty-eight out of 91 possible responses were placed into their respective categories with a high level of confidence. This indicates that 74.7 percent of the responses to Question 1 were confidently placed into a cognitive category. The judges had the most difficulty categorizing responses to Question 2.

TABLE V
JUDGES LEVEL OF CONFIDENCE IN CATEGORIZING
CHILDREN'S RESPONSES TO THE
DEATH UNDERSTANDING TEST
(N=91)

	Death Understanding Test Questions			
	1	2	3	4
Percentage of Judges' responses having high level of confidence	74.7 (68)	68.1 (62)	69.2 (63)	69.2 (63)

After the three judges had the four questions of the Death Understanding Test categorized in one of the five cognitive categories, the variances were computed for each question. The variance is a

measure of dispersion of the data about the mean (Blalock, 1972). This statistic was used as a way of measuring how closely the judges agreed. In other words, how closely did the judges' responses cluster around the mean. Mathematically this statistic is the average squared deviation from the mean.

Calculations were made by taking the deviation of each score from the mean, squaring each difference, summing the results, and dividing by the number of cases minus one (Black, 1972). The variance was then calculated by using the following formula.

$$S^2 = \frac{\sum_{i=1}^N (X_i - \bar{X})^2}{N-1}$$

The variances for each of the judge's responses in categorizing a child's response to the four death related questions are presented in Table VI. A zero variance shows that all three judges scored a particular child's response within the same cognitive category. This indicates that the deviations about the mean for that particular response were zero. As Question 1 shows, all three judges scored 34 out of the 91 possible responses similarly. This indicated that 37.4 percent of the judges' classifications had zero variance. Variances of less than two were acceptable because at least two judges agreed totally while the other judge was similar to ratings made by the investigator. Responses that created variances of two or more were reevaluated by the investigator and a family specialist and categorized within one of the five cognitive categories.

TABLE VI
 VARIANCES OF JUDGES' CLASSIFICATION
 OF CHILDREN'S RESPONSES TO THE
 DEATH UNDERSTANDING TEST

Variances	Death Understanding Test Questions							
	1		2		3		4	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Zero	34	37.4	8	8.8	17	18.7	11	12.1
Less than one	16	17.6	19	20.8	42	46.2	53	58.2
Less than two	35	38.5	22	24.2	15	16.5	18	19.8
Two or more	<u>6</u>	6.5	<u>42</u>	46.2	<u>17</u>	18.7	<u>9</u>	9.9
Total	91		91		91		91	

Data Transformations

Questionnaire and interview data were converted into numerical codes representing attributes related to each variable. This code-book became a document describing the location and code assignments for each variable. All family and child data were coded on Fortran coding transfer sheets. Transfer sheets were ruled into 80 columns corresponding to computer data card columns and rows representing individual cards. The transfer sheets were used for the direct key-punching of computer data cards. After all data cards were key-punched, the investigator verified all punched data. The process of verifying punched data was a means of clearing and eliminating possible coding errors. This was accomplished by using three strategies. First, an 80/80 list of all raw data was produced using the Statistical Package for the Social Sciences (SPSS). This was used to

quickly spot miscoded values and column alignments for all coded data. Secondly, to clear for any possible keypunch errors, spaces were left at key locations between coded variables. This allowed for the checking of variable placement on each card and column location. Thirdly, a manual check was completed of all the raw data on the 80/80 list by using the original questionnaire and interview schedules. The transfer sheets were by-passed in this process in case any initial coding errors were made in the previous process. The contingency plans used to check the coded data guarded against possible data-processing errors.

From the coded data, four data files were created. The first file included all the family and child data from the 50 designated families. The second file included the 62 parents who responded to the FDS sections related to cohesion, adaptability, and religiosity. This data file was created in order to do reliability and validity checks on the previously mentioned scale items. A third file included all the responses on the CIS from the 91 children interviewed. The fourth file contained the sculpture coordinates of the Kvebaek Sculpture Technique for the 91 children who were interviewed.

A computer card file was created for each of the four data sets. For quick access and ease in computer analysis, the four data sets were stored on disk files maintained by the University Computer Center.

Reliability and Validity of Instruments

To what extent are the theoretical concepts of cohesion, adaptability and religiosity accurately measured? Two basic properties of

these empirical measures were evaluated. First, reliability was used because it relates to the extent that measuring procedures yield the same results on repeated trials (Carmines and Zeller, 1979). Measurement consistency increases the likelihood that an instrument is reliable. Secondly, the instrument's validity was examined. In other words, how well were the abstract concepts of cohesion, adaptability and religiosity accurately represented?

To further establish the reliability and calculate the scale items being used in the present study, Spearman-Brown's split-half and Cronbach's alpha were used. These statistics were generated by the reliability sub program in SPSS. The Spearman-Brown's split-half method takes the total set of items, divides them in half and correlates the scores on each half of items to obtain an estimate of reliability (Carmines and Zeller, 1979). The correlation coefficient which is produced will range from .0 to 1.0 and measures the extent to which the two halves measure the same idea. This method is often used as a substitute for the alternative forms approach to reliability in which successive administrations of two similar forms of the same instrument are given (Isaac and Michael, 1979).

Cronbach's alpha was also used as a reliability estimate. Unlike the split-half method, Cronbach's alpha requires only a simple test administration and provides one of the best and most widely used measures of internal consistency for an instrument (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). As Novick and Lewis (1967) have shown, the alpha is a lower bound to the reliability of an unweighted scale of N items. This suggests that the alpha is a conservative estimate of a measure's reliability. Alpha varies from

.0 to 1.0 and indicates whether items have no relationship with each other or are perfectly related.

Cronbach's alpha and the Spearman-Brown split-half coefficients were calculated by utilizing the SPSS program. As Table VII shows, an alpha and standardized alpha are reported along with the Spearman-Brown split-half coefficient for equal and unequal instrument items. The standardized alpha as Nie et al (1975) point out, is closely related to an alpha but the number of responses on each item are standardized by dividing them by the standard deviation of each item. The reliability statistics reported in Table VII for the cohesion and adaptability scales were initially done for all 30 items in each scale. By using a process of eliminating the worst items defining a particular measure, the reliability statistics for the best 25 items in each scale was also reported. The religiosity scale contained 10 items. None were deleted because of the extremely high correlation achieved.

As Tittle and Hill (1967) indicate, reliability coefficients between .35 and .59 are considered to represent moderate association while those above .60 can be considered highly reliable. Reliability coefficients of a greater magnitude are unnecessary for achieving and determining scale reliability for research purposes. Table VII indicates that the cohesion, adaptability and religiosity items were well within the acceptable range for research purposes.

In order to test the construct validity of the cohesion, adaptability and religiosity scales a factor analytic technique was used. The FACTOR program in SPSS enabled the investigator to confirm the expected number of significant items associated with the conceptual

structure of cohesion, adaptability and religiosity (Nie et al., 1975). A varimax rotational procedure was used to achieve simpler and theoretically more meaningful factor patterns.

TABLE VII
RELIABILITY MEASURES FOR THE COHESION,
ADAPTABILITY AND RELIGIOSITY SCALES

Scale Title	Alpha*	Reliability Coefficients		
		Standardized Alpha	Spearman-Brown Equal	Split-Half Unequal
Cohesion				
All 30 items	.618	.684	.622	.623
Best 25 items	.713	.723	.722	.723
Adaptability				
All 30 items	.405	.625	.561	.561
Best 25 items	.599	.684	.618	.619
Religiosity				
All 10 items	.854	.850	.849	.841

*Alpha calculation usually calls for an N of 10 respondents per item for accurate assessment. Since the N of cases in this study was less than optimal, these coefficients should be considered estimates.

The FACTOR program yielded communality estimates. The average communality estimates for the best 25 items in the cohesion and adaptability scales were .5411 and .6087 respectively. The average communality value of the 10 item religiosity scale was .5632. The communality of a scale is referred to as the total variance of a variable accounted for by the combination of all common factors or

items in that particular scale (Nie et al., 1975). The communality value shows the amount of the variance if a variable is shared by at least one other variable in the set of items (Nie et al., 1975).

The cohesion and adaptability scales consisted of five concepts respectively, with six items reflecting each concept. This created a 30 item cohesion and 30 item adaptability scale. An analysis of variance showed that the first six factors created using the cohesion dimension had an eigenvalue of greater than one. These six factors accounted for 79.2 percent of the variance in cohesion. The first eight factors employing the adaptability items had an eigenvalue of greater than one. These eight factors accounted for 87.4 percent of the variance in adaptability. In factor analysis, linear equations are solved simultaneously and the roots obtained in these solutions are referred to as eigenvalues (Kerlinger, 1973). The sum of eigenvalues equals the sum of communalities and become the factor loadings in the manipulated data (Nie et al., 1975). The religiosity scale contained 10 items. An analysis of variance revealed that one factor had an eigenvalue greater than four which accounted for 72.4 percent of the variance in religiosity.

Factor analysis demonstrated that the cohesion, adaptability and religiosity scales used in the present study empirically measured the theoretical concepts of family cohesion, family adaptability, and family religiosity. This test of construct validity demonstrated that the designated items in the cohesion, adaptability, and religiosity scales were highly related to their respective concepts.

Created Scales

In order to analyze the data in a concise meaningful manner, scales were created. Created scales included the items relating to cohesion, adaptability, religiosity, burial participation, and the average cognitive response to the Death Understanding Test. Created scales, number of items in each scale, created scale ranges and the theoretical scale ranges are presented in Table VIII.

TABLE VIII
ITEMS AND RANGES OF CREATED SCALES

Scales	Number of Items	Actual Scale Range		Theoretical Scale Range	
		Low	High	Low	High
Cohesion	30	326	522	0	810
Adaptability	30	354	488	0	810
Religiosity	10	20	46	10	50
Participation	7	0	16	0	16
Average Cognitive Response	4	1	5	1	5

Cohesion and Adaptability. The 60 questions measuring family cohesion and adaptability were grouped according to items that reflected low, medium, and high closeness and willingness to change respectively (Olson et al., 1978). Each question was weighted

according to the strength of the response given. Low and high questions were weighted the same way but in opposite directions according to the response categories which ranged from "true all the time" to "true none of the time." The medium ranged questions were weighted the same value for the "true all the time" and "true most of the time" categories and the "true some of the time" and "true none of the time" categories. All missing responses were given the average score for each individual on all other items. Table IX presents the weights used in creating the cohesion and adaptability scales. Low ranges on the cohesion scale represent the disengaged family while low ranges on the adaptability scale represent the chaotic highly changeable family. High scores on the cohesion scale reflect the enmeshed extremely close family while the high scores on the adaptability scale reflect the rigid less changeable family. Medium ranged scores represent the more viable family types. From the results in Table IX, families in this study tended to score in the middle range with some differentiation between moderately high and moderately low.

Religiosity. The ten religiosity questions measure the family's involvement and concern with religion. Each question ranged from (1) never to (5) very often. The 10 items were totaled giving a family a possible score ranging from 10 (not religious) to 50 (highly religious).

Participation. The child's participation in the family's death-related experience was measured by a series of seven questions. These questions were used to gauge the child's degree of participation in

such events ranging from attending the memorial services to touching the body of the deceased. Each question was weighted reflecting the magnitude of that particular event. Weights given to each question are presented in Table X. After all items were totaled, a child's score could range from 0 (no participation) to 16 (high participation).

TABLE IX
ASSIGNED WEIGHTS USED IN CREATING THE COHESION
AND ADAPTABILITY SCALES

Item Ranges	Assigned Weights	
	Cohesion	Adaptability
Low		
True all the time	27	27
True most of the time	18	18
True some of the time	9	9
True none of the time	0	0
Medium		
True all the time	12	12
True most of the time	12	12
True some of the time	*	*
True none of the time	*	*
High		
True all the time	0	0
True most of the time	9	9
True some of the time	18	18
True none of the time	27	27

*Missing items were assigned the average value for all other items in the scale that were answered by each individual.

TABLE X
 ASSIGNED WEIGHTS USED IN CREATING
 THE PARTICIPATION SCALE

Participation Items	Assigned Weights
Did not participate in a particular event	0
Attended memorial service	1
Attended grave side service	1
Viewed body	2
Visited memorial site since burial	2
Visited funeral home	3
Expressed opinion about being involved	3
Touched the deceased	4

Average Cognitive Response. As explained in the content analysis of the Death Understanding Test section, a panel of early childhood family specialists were used to categorize each child's response along a five category scheme. Each child's response to the four death understanding questions were totaled and averaged giving each child an average cognitive response ranging from (1) no understanding to (5) abstract reasoning.

Statistical Procedures

Data used for the statistical analysis were obtained from the FDS and CIS. The SPSS statistical program was used to analyze the specific hypotheses. Hypotheses were analyzed and grouped according to family related concepts and child related concepts. Family related hypotheses were I, II, and III while the child related hypotheses were IV, V, VI, VII, and VIII.

Four primary statistical procedures were applied to the data. Descriptive statistics (FREQUENCIES), measure of association (CROSSTABS), analysis of variance (ANOVA) and Pearson Correlation coefficients (PEARSON CORR) were generated by the SPSS statistical package at the Oklahoma State University Computer Center.

Descriptive Statistics

Descriptive statistics were used to reduce the large quantity of collected data into a manageable summary format for easy understanding in interpretation (Babbie, 1979). The FREQUENCIES subprogram was used to determine distributional characteristics of the data. Descriptive statistics were computed for each variable, created variable, and several scale items. These statistics provided information on the distribution, variability and central tendencies of each variable. Specific statistics produced by the FREQUENCIES subprogram included the mean, median, mode, standard error, standard deviation, variance, kurtosis, skewness, range, minimum, and maximum (Nie et al., 1975).

Measure of Association

A measure of association, the chi-square statistic, was used to understand the association or relationship which exists between two variables (Babbie, 1979). When data exists in the form of frequencies existing in a sample deviate significantly from a particular theoretical concept or some expected population frequency (Isaac and Michael, 1979). As Nie et al., (1975, p. 218) suggests, an indication of the strength in an existing relationship between two variables

"can be statistically analyzed by certain tests of significance, (e.g., the chi-square statistic), to determine whether or not the variables are statistically independent."

The subprogram CROSSTABS available in SPSS was used to calculate the chi-square statistic. The chi-square statistic was computed by measuring the squared deviations between observed and theoretical frequencies in each category. Chi-square was calculated by the following formula:

$$\chi^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

In the chi-square formula F_o equals the observed frequency in each category, and F_e represents the expected frequency in each category. The expected frequency was computed by multiplying the column totals by the row totals and dividing by the sample size.

Analysis of Variance

Analysis of variance is a statistical tool for testing the significance between variances of two or more groups (Kerlinger, 1973). As Isaac and Michael (1979, p. 140) demonstrate, analysis of variance is used to answer the question, "Is the variability between groups large enough in comparison with the variability within groups to justify the inference that the means of the population from which the different groups were sampled are not all the same?" If the difference between group variances are notably large, a significant difference is present in the data indicating that a relationship exists between the groups. The specific test of significance which determines if there is a significant relationship depends on the F-ratio.

The F-ratio is determined by the following formula:

$$F = \frac{\text{Between Group Variances}}{\text{Within Group Variances}}$$

When analysis of variance is calculated, the dependent variable usually is an interval scale item while the independent variable is an ordinal or categorical scale item. The ANOVA subprogram was used to calculate the effects of differences that existed in the data.

Pearson Correlation Coefficient

The Pearson product-moment correlation represented by 'r' serves two purposes (Nie et al., 1975). First, it can indicate the general "goodness of fit" to a linear regression line and secondly it provides evidence of the strength in a linear relationship between the independent and dependent variables. The independent and dependent variables are usually interval scales but evidence has been made for the use of ordinal-level data if it is cautiously analyzed (Labovitz, 1970).

A Pearson correlation coefficient can range in value from a +1.0 to a -1.0. The sign of the number indicates whether the relationship is positive or negative. A positive r indicates a positive correlation meaning that the independent variable (X) and dependent variable (Y) will increase or decrease in the same direction. A negative r suggests an inverse relationship in which the independent variable (X) will increase or decrease as the dependent variable (Y) decreases or increases respectively.

The strength and direction of a relationship is easily determined by Pearson's r. A value approaching zero signifies that there is

little or no relationship between the independent variable (X) and dependent variable (Y). As Pearson's r reaches +1.0 or -1.0 a strong linear relationship is proposed.

The computer program PEARSON CORR as specified in SPSS was used to calculate the Pearson correlation coefficients (Nie et al., 1975). The formula used was:

$$r = \frac{\sum^n (X-\bar{X})(Y-\bar{Y})}{\sqrt{\sum^n (X-\bar{X})^2 \sum^n (Y-\bar{Y})^2}}$$

In this formula the symbols are designated as follows:

X = Observations of the independent variable

Y = Observations of the dependent variable

n = Number of observations

\bar{X} = Mean of the independent variable

\bar{Y} = Mean of the dependent variable

Analysis of Hypotheses

Descriptive statistics and measures of central tendency were used to summarize the demographic data collected from the FDS and CIS. The demographic information collected pertained to a family's income, age, educational level, residency, community size, occupation, marital status, and family structure.

The chi-square statistic and analysis of variance were used to analyze the family related hypotheses I, II, and III. Data obtained from the FDS allowed for investigating the relationships between family cohesion, adaptability and religiosity on a child's physical and emotional involvement and degree of participation in the death-

related experience. Information gathered from the FDS and CIS provided the data necessary for testing hypotheses IV through VIII.

The chi-square statistic and analysis of variance were the statistical techniques used to analyze the child related hypotheses IV, V, VI and VII. Hypothesis IV tested the relationship between the scores on the child's degree of participation and the decision to become involved in the death-related experience on the child's conceptual understanding of death. The relationship between age and cognitive developmental level on a child's conceptual understanding of death were tested in hypotheses V and VI respectively. The child's sex was considered a factor influencing the understanding of death in hypothesis VII. Pearson correlation coefficients were also used to test the relationship present in hypotheses V and VI. Pearson correlation coefficients were used to examine the relationship present in hypothesis VIII. The relationship between a child's degree of closeness to the deceased and his or her understanding of death was tested with hypothesis VIII.

CHAPTER IV
ANALYSIS OF FAMILY DYNAMICS AND THE
CHILD'S CONCEPT OF DEATH

Description of Sample

The 50 families interviewed in this study were from north central Oklahoma. Each family had experienced the death of a close relative or neighbor within the last 44 months from the time they were interviewed. Children in each family ranged in age from 4 to 17 years. Parents can generally be described as highly educated, youthful, with rural backgrounds (Table XI). Parent characteristics also show that a majority of fathers held white collar executive-managerial positions and mothers who were employed outside the home were likely to be in secretarial-clerical work. Generally, the families interviewed were white, middle-class, suburban, religious, and were married couples with two children (Table XII).

Family Related Hypotheses

Family related hypotheses I, II, and III investigated the relationship between family dynamics and the degree to which the child was included in the death-related experience. Family cohesion, adaptability, and religiosity were used as indicators of family dynamics.

TABLE XI
CHARACTERISTICS OF PARENTS

Characteristics	Fathers	Mothers
	N=48	N=50
Education: Percent college graduates	85.4	50.0
Employment: Percent white collar		
executives, managers	57.4	16.0
Percent secretarial-clerical	4.0	26.0
Percent housewives	-	30.0
Mean hours worked per week	46.2	35.1
Childhood residence: percent rural		
background	64.6	56.0
Age: percent under 40	54.2	62.0

TABLE XII
CHARACTERISTICS OF FAMILIES

Characteristics	N=50
Race: Percent white	100.0
Marital Status: Percent currently married	72.0
Percent separated, divorced, widowed	28.0
Current Residence: Percent in small city (less than 50,000 population)	80.0
Mean length of years	6.3
Family Income: Mean category range	\$20,000-\$25,000
Family Size: Mean number per household	3.9
Religion: Percent attending church at least once a week	68.0
Percent classifying themselves as very religious	52.0

Family Cohesion and the Child's Inclusion
in the Death-Related Experience

Hypothesis I: Families with different levels of cohesion (FACES) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).

The cohesion dimension of the Family Adaptability and Cohesion Evaluation Scales (FACES) was used to measure the family's degree of autonomy and closeness. The child's involvement in the death-related experience relates to the degree to which parents allowed for decision-making autonomy and included each child in the grieving process and the burial rites. Decision-making autonomy refers to who made the decision for the child to become involved in the death-related experience, (e.g., the decision was the child's own, a parent-child joint decision, or a parent decision).

Since data indicated that nearly all parents included their children in the mourning process, descriptive statistics are presented (Table XIII). While most parents indicated that they had expressed feelings, grief and sorrow as a family and explained the circumstances surrounding the death to their children, fewer indicated that they had cried together as a family.

Chi-square analysis was used to test the relationship between family cohesion and decision-making autonomy. The association between family cohesion and decision-making autonomy was highly significant at the .003 level (Table XIV). Of parents who made the decision for their children, 72.2 percent were from high cohesive families. Parents scoring higher on the cohesion scales were more likely to make the decision for their children about becoming involved in the death-

related event, while parents scoring in the medium and lower ranges were more likely to allow their children to make their own decisions. A majority of all families allowed their children to make a joint parent-child decision.

TABLE XIII
PERCENTAGE OF FAMILIES WHO INCLUDED THEIR
CHILDREN IN THE MOURNING PROCESS

Mourning Process	Percent of Families
Expressed emotional feelings as a family	92
Expressed grief and sorrow as a family	96
Explained circumstances of death to children	100
Cried together as a family	62

Analysis of variance was used to test for differences between degrees of family cohesion and the child's total participation score for the death-related experience. Mean scores for the child's participation in the death-related experience and degrees of family cohesion revealed that the higher or lower the family's cohesiveness the less the child participated in the death-related event (Table XV). Although the relationship was not significant (Table XV), there was a trend suggesting that a relationship may exist between family cohesion and the degree to which children participate in the death-related experience.

TABLE XIV
THE DEGREE OF FAMILY COHESION AND THE
CHILD'S DECISION-MAKING AUTONOMY

Family Cohesion	Decision-Making Autonomy					
	Parent Decision		Parent-Child Decision		Child Decision	
	N	%	N	%	N	%
Low	3	16.7	8	20.5	3	33.3
Medium	2	11.1	18	46.2	6	66.7
High	<u>13</u>	72.2	<u>13</u>	33.3	<u>0</u>	0.0
Totals	18		39		9	

$\chi^2 = 15.447$, $df = 4$, $p < .003$

Missing observations = 25

TABLE XV
PARTICIPATION SCORE FOR THE DEATH-
RELATED EXPERIENCE AND DEGREE
OF FAMILY COHESION

Family Cohesion	N	Mean Participation Scores	F-Ratio	Significance of F
Low	23	7.48	2.834	.064
Medium	33	8.00		
High	<u>35</u>	5.23		
Total	91			

Family Adaptability and the Child's Inclusion
in the Death-Related Experience

Hypothesis II: Families with different levels of adaptability (FACES) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).

The adaptability dimension of the FACES instrument was used to measure the degree to which the family can change or adapt in stressful situations. The child's involvement in the death-related event was measured by (1) decision-making autonomy and (2) the child's participation score for the death-related experience.

Chi-square analysis suggested that there was no relationship between family adaptability and decision-making autonomy ($X^2 = 6.953$, $df = 4$, n.s.). Therefore, families in the high, medium, or low ranges of adaptability were equally as likely to make the decision for the child or allow the child to make his or her own choice concerning involvement in the death-related experience.

Analysis of variance was used to test the significance between family adaptability and the child's mean participation scores for the death-related experience. Mean participation scores are presented in Table XVI and analysis of variance indicated that differences between these means were not significant. Results suggest that children of families with varying degrees of adaptability participated in the death-related experience similarly, which does not support the relationship presented in hypothesis II.

TABLE XVI
 PARTICIPATION SCORES FOR THE DEATH-
 RELATED EXPERIENCE AND DEGREE OF
 FAMILY ADAPTABILITY

Family Adaptability	N	Mean Participation Scores	F-Ratio	Significance of F
Low	29	6.72	.014	n.s.
Medium	26	6.73		
High	<u>36</u>	6.92		
Total	91			

Family Religiosity and the Child's Inclusion
in the Death-Related Experience

Hypothesis III: Families with different levels of religiosity (Family Religiosity Survey) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).

Chi-square analysis indicated that there was no association between family religiosity and the child's decision-making autonomy ($\chi^2 = 5.202$, $df = 4$, n.s.). Families at all levels of religiosity were equally likely to make the decision for the child, permit a joint parent-child decision, or allow the child to make his or her own choice concerning involvement in the death-related experience.

Analysis of variance was used to examine the differences between family religiosity and the child's participation in the death-related experience. The child's mean participation scores in relationship to family religiosity are presented in Table XVII. A significant

difference existed between the child's participation mean scores and family religiosity (Table XVII).

TABLE XVII
PARTICIPATION SCORES FOR THE DEATH-RELATED
EXPERIENCE AND DEGREE OF
FAMILY RELIGIOSITY

Family Religiosity	N	Mean Participation Scores	F-Ratio	Significance of F
Low	24	4.29	4.532	.01
Medium	34	8.21		
High	<u>33</u>	7.18		
Total	91			

The highest participation rates were in families with a medium level of religiosity. This trend suggests that families with a medium ranged religiosity score will be more likely to have children who participate in various aspects of the death-related event. The results presented support hypothesis III, that a relationship does exist between a family's religiosity and the child's degree of participation in the death-related experience. Furthermore, it was shown that families scoring in low ranges of religiosity were less likely to have children participate in the death-related event. Families who rated low on religiosity had lower participation scores.

Child Related Hypotheses

Child related hypotheses IV, V, VI, VII, and VIII investigated the relationship between (1) the child's degree of involvement, (2) various child related factors, and (3) aspects of physical and emotional closeness and the child's concept of death. The child's involvement was measured in terms of decision-making autonomy and each child's overall involvement and participation in various aspects of the death-related experience. The various child related factors are age, cognitive developmental level, and sex. Aspects of physical and emotional closeness to the deceased pertain to a self-report of emotional closeness, frequency of contact, geographic proximity, and degree of closeness as presented by the Kvebaek Family Sculpture Technique. The child's concept of death was measured by the average cognitive response level of each child on the Death Understanding Test.

The Child's Involvement and Concept of Death

Hypothesis IV: Children with greater involvement in the family's death-related experience (Family's Death-Related Experience Survey) will have a greater conceptual understanding of death (Death Understanding Test).

Chi-square analysis was used to test the existing relationship between decision-making autonomy and the child's concept of death. Since the relationship was not significant at the .05 level ($X^2 = 3.343$, $df = 4$, n.s.) it appears that no association existed between decision-making autonomy and the child's average cognitive response level.

Analysis of variance was utilized to investigate the statistical

significance between the child's degree of participation in the death-related experience and his or her average cognitive response level. The direction of the means for the average cognitive response level suggests that the greater a child's participation in the death-related event, the greater his or her average cognitive response level (Table XIII). This relationship between a child's degree of participation and his or her average cognitive response level was significant ($F = 3.755$, $p < .02$), supporting hypothesis IV (Table XVIII). Even though the decision to become involved in the death-related event was not related to the child's concept of death, the degree of participation was significantly associated with his or her average cognitive response level.

TABLE XVIII
COGNITIVE RESPONSE LEVELS FOR THE DEATH
UNDERSTANDING TEST AND THE CHILD'S
DEGREE OF PARTICIPATION IN THE
DEATH-RELATED EVENT

Child's Degree of Participation in the Death-Related Event	N	Mean Cognitive Response Level for the Death Understanding Test	F-Ratio	Significance of F
Low	44	3.11	3.755	.02
Medium	19	3.37		
High	<u>28</u>	3.61		
Total	91			

The Child's Age and Concept of Death

Hypothesis V: Older children will have a higher conceptual understanding of death (Death Understanding Test) than younger children.

Analysis of variance was used to test for differences between the child's average cognitive response level and the child's age. The cognitive response levels for the 91 children who were interviewed are presented in Table XIX. There was a highly significant difference ($F = 11.909$, $p < .0001$) between the child's average cognitive response level and his or her age (Table XIX).

TABLE XIX
COGNITIVE RESPONSE LEVELS FOR THE DEATH UNDERSTANDING
TEST AND THE CHILD'S AGE

Child's Age	N	Mean Cognitive Response	F-Ratio	Significance of F
Youngest Children 49-111 months	30	2.83	11.909	.0001
112-156 months	30	3.43		
Oldest Children 157-208 months	<u>31</u>	3.68		
Total	91			

The relationship between age and the child's average cognitive response level signifies that older children are more likely to give a more abstract response for the Death Understanding Test than younger

children. This supports hypothesis V that a relationship exists between age and the child's concept of death.

Pearson correlation coefficients were used to test the strength and direction of association between the variables of age and the child's concept of death. Age was significantly correlated with the degree of abstractness in responding to the four death-related questions of the Death Understanding Test and the child's average cognitive response level (Table XX). A high positive correlation coefficient existed for each of the four death-related questions and the child's average cognitive response level, adding additional support to hypothesis V (Table XX).

TABLE XX
CORRELATION BETWEEN AGE AND CHILD'S
CONCEPT OF DEATH

Dependent Variable Concept of Death	N	Correlation Coefficient (r)	Level of Significance
Death Understanding Test			
Question 1	91	+.6243	.0001
Question 2	91	+.2585	.007
Question 3	91	+.2969	.002
Question 4	91	+.4331	.0001
Average Cognitive Response Level	91	+.4841	.0001

Post hoc analysis showed that older children (157 to 208 months of age) were significantly more likely to participate in the death-related event ($F = 3.301$, $p < .04$). When controlling for age it was found that 73.3 percent of younger children (49 to 134 months of age) were likely to have had low and medium ranged cognitive response levels while 63.0 percent of older children (135 to 208 months of age) had the highest cognitive response scores on the Death Understanding Test.

The Child's Cognitive Level and Concept of Death

Hypothesis VI: Children who score higher on the Cognitive Developmental Level Test will have a higher conceptual understanding of death (Death Understanding Test).

Children were classified according to Piagetian cognitive developmental stages (e.g., preoperational, concrete-operational, and formal-operational) as indicated by the Cognitive Developmental Level Test. The average cognitive response levels for the Death Understanding Test and the child's cognitive developmental level are presented in Table XXI.

Analysis of variance was used to test the significance of the differences present in hypothesis VI. There was a statistically significant difference ($F = 7.337$, $p < .001$) between the child's average cognitive response level and his or her cognitive developmental level (Table XXI). This relationship between the child's cognitive developmental level and his or her average cognitive response level implies that children in higher developmental stages are more likely to provide responses with a higher level of abstraction than children in

lower developmental stages. This supports the relationship presented in hypothesis VI.

TABLE XXI
COGNITIVE RESPONSE LEVELS FOR THE DEATH UNDERSTANDING
TEST AND THE CHILD'S COGNITIVE
DEVELOPMENTAL LEVEL

The Child's Cognitive Developmental Levels	N	Mean Cognitive Response Level for the Death Understanding Test	F- Ratio	Significance of F
Preoperational	30	2.93	7.337	.001
Concrete-Operational	39	3.41		
Formal-Operational	<u>22</u>	3.68		
Total	91			

Pearson correlation coefficients were used to identify the direction and strength between the child's cognitive developmental level and the child's concept of death. The child's cognitive developmental level was significantly correlated with the degree of abstractness in three of the four death-related questions of the Death Understanding Test and the child's average cognitive response level (Table XXII). A positive correlation existed for each of the four death-related questions and the child's average cognitive response level, supporting the relationship in hypothesis VI (Table XXII).

TABLE XXII
CORRELATION BETWEEN COGNITIVE DEVELOPMENTAL LEVEL
AND THE CHILD'S CONCEPT OF DEATH

Dependent Variable Concept of Death	N	Correlation Coefficient (r)	Level of Significance
Death Understanding Test			
Question 1	91	+.2526	.008
Question 2	91	+.1216	.125
Question 3	91	+.3289	.001
Question 4	91	+.2697	.005
Average Cognitive Response Level	91	+.3723	.0001

Sex and the Concept of Death

Hypothesis VII: Sex is unrelated to the child's conceptual understanding of death (Death Understanding Test).

The average cognitive response scores were classified according to a Piagetian breakdown from the least abstract responses to the most abstract responses (e.g., no response, fantasy response, factual response, combined response, and abstract response). Chi-square analysis was used to test the relationship between the child's sex and the child's average cognitive response level. Results indicate that there was no significant difference at the .05 level ($X^2 = 4.796$, $df = 2$, $p < .09$) supporting hypothesis VII that sex is unrelated to the child's conceptual understanding of death (Table XXIII).

Although the relationship presented in Table XXIII is not significant, an apparent trend suggests that males are more likely to give

a factual verbal response than females. This does partially support previous research. Koocher (1974) and Flesner (1977) discovered that females were likely to give a more abstract verbal response while males gave factual verbal responses to the Death Understanding Test. Research suggests that females in higher cognitive developmental levels are likely to have a more abstract concept of family than males (Moore, 1977).

TABLE XXIII
SEX DIFFERENCES ON THE DEATH
UNDERSTANDING TEST

Cognitive Response on the Death Understanding Test	Male		Female	
	N	%	N	%
No response and fantasy	3	7.3	10	20.0
Factual response	21	51.2	16	32.0
Combined and abstract response	<u>17</u>	41.5	<u>24</u>	48.0
Totals	41		50	

$$\chi^2 = 4.796, df = 2, p < .09$$

Even though results suggest that males and females are likely to give an abstract verbal response to the Death Understanding Test, females are more likely to give a less abstract response to the Cognitive Developmental Level Test. Chi-square analysis was utilized to test the association between sex and the child's cognitive

developmental level. Results clearly show that females are significantly ($\chi^2 = 8.979$, $df = 2$, $p < .01$) more likely to give a preoperational or concrete-operational response to the Cognitive Developmental Level Test while males are more likely to give a formal-operational response (Table XXIV).

TABLE XXIV
SEX DIFFERENCES ON THE COGNITIVE
DEVELOPMENTAL LEVEL TEST

Stage of Cognitive Development	Male		Female	
	N	%	N	%
Preoperational	11	26.8	19	38.0
Concrete-Operational	14	34.1	25	50.0
Formal-Operational	<u>16</u>	39.0	<u>6</u>	12.0
Totals	41		50	

$$\chi^2 = 8.979, df = 2, p < .01$$

Degree of Closeness to Deceased
and Concept of Death

Hypothesis VIII: There is a positive relationship between the child's degree of closeness to the deceased [e.g., self-report of emotional closeness; frequency of contact; geographic distance; and sculpture distance (Kvebaek Family Sculpture Technique)] and the child's conceptual understanding of death.

The self-report of emotional closeness pertained to the child's

thoughts, love, and feelings toward the deceased which was categorized along a continuum ranging from "extremely close" to "distant." Frequency of contact applied to the number of visits between the child and the deceased. Frequency of visits ranged from "daily" to "never." Geographic proximity was measured in terms of actual miles living from the deceased, and community location referred to whether or not the deceased had lived in the "same house," "same town," "close town," or "distant town." The Kvebaek Family Sculpture Technique was employed in order to gain insight into the child's underlying feelings of closeness toward the deceased. With the use of descriptive statistics it was discovered that the mean age of the deceased was 61.7 years, and 44 percent of the children interviewed lived either in the same house or same town as the deceased. It was also noted that 40 percent of the children lived within five miles of the deceased.

The relationship between closeness and the child's concept of death was assessed by both chi-square analysis and Pearson correlation coefficients. Using chi-square analysis it was noticed that various aspects identified as measures of physical and emotional closeness were not significantly associated with the child's average cognitive response level (Table XXV). Chi-square analysis indicated that a child's degree of closeness to the deceased was not associated with his or her conceptual understanding of death.

In order to test the strength and direction between the independent and dependent variables in hypothesis VIII, Pearson correlation coefficients were used. Higher scores on the child's degree of physical and emotional closeness indicate more thoughts, greater love,

closer feelings, greater frequency of visits, farther distances, and greater number of miles in relation to the deceased (Table XXVI). Higher scores on the Death Understanding Test indicate a greater understanding of death concepts. Significant positive correlations were present between the child's degree of self-reported emotional closeness and the child's concept of death. The positive correlations must be interpreted carefully because of their minimal strength suggesting low explained variances. Even though negative correlations were present, no relationship existed between the child's degree of physical closeness and the child's concept of death.

TABLE XXV

THE CHILD'S DEGREE OF PHYSICAL AND EMOTIONAL
CLOSENESS TO THE DECEASED AND THE CHILD'S
CONCEPT OF DEATH

The Child's Degree of Physical and Emotional Closeness	N	Chi-Square Value	DF	Level Significance
More thoughts of deceased	91	10.547	8	.228 n.s.
Greater love for deceased	91	7.815	8	.451 n.s.
Closer feelings toward deceased	91	3.119	8	.926 n.s.
Greater frequency of visits to deceased	91	2.805	6	.832 n.s.
Greater number of miles from deceased	91	3.016	4	.555 n.s.
Community location (farther distances from deceased)	91	3.892	6	.691 n.s.

TABLE XXVI
CORRELATION BETWEEN THE CHILD'S DISTANCE
FROM THE DECEASED AND THE CHILD'S
CONCEPT OF DEATH

The Child's Degree of Physical and Emotional Closeness	N	Correlation Coefficient (r)	Level of Significance
More thoughts of deceased	91	+.2471	.009
Greater love for deceased	91	+.1692	.050
Closer feelings toward deceased	91	+.2774	.004
Greater frequency of visit to deceased	91	+.1856	.039
Greater number of miles from deceased	91	-.0525	.311
Community location (farther distances from deceased)	91	-.0799	.226

The results of the Pearson correlation coefficients suggest to some degree that the closer and more involved the child was with the deceased, the more likely he or she would score higher on the Death Understanding Test. Results also imply that the greater number of miles and farther distances the child lived from the deceased had little impact on the child's average cognitive response level score.

The Kvebaek Family Sculpture Technique was used to evaluate the child's perceived emotional closeness to the deceased. The higher the sculpturing score the greater the distance which existed between the child's figurine placement of self and the deceased. Pearson correlation coefficients were used to test the strength and direction

of association between sculpture distances of the child and the deceased and the child's concept of death. A significant positive correlation exists between the child's sculpted distance to the deceased and the child's average cognitive response level for the Death Understanding Test (Table XXVII). The results suggest that the farther the child describes him/herself from the deceased, the more likely he or she would have scored higher on the average cognitive response level for the Death Understanding Test. Correlations of three of the four death-related questions were also positive, indicating that children with higher sculpture scores had higher cognitive responses.

TABLE XXVII
CORRELATION BETWEEN THE CHILD'S DISTANCE
FROM THE DECEASED AND THE CHILD'S
CONCEPT OF DEATH

Dependent Variable	N	Correlation Coefficient (r)	Level of Significance
Death Understanding Test			
Question 1	91	+.1237	.121
Question 2	91	-.0747	.241
Question 3	91	+.1166	.135
Question 4	91	+.2266	.015
Average Cognitive Response Level	91	+.1957	.032

In studying the relationships presented in hypothesis VIII, the results obtained from the child's responses concerning closeness to the deceased and the emotional closeness as measured by the Kvebaek Family Sculpture Technique conflict with each other. These results show that the child's self-reported emotional closeness was positively correlated with the child's conceptual understanding of death. However, sculptured distances were also positively correlated with the child's conceptual understanding of death. The contradiction arises in that self-reports of emotional closeness indicate greater cognitive understanding of death, while greater emotional distance (sculpture technique) is also positively related to greater understanding of death. These results emphasize the essential need for multi-method procedures. The apparent discrepancy in results obtained from different research methodologies verify the complexity of human behavior and highlight the difficulty in interpretation of results.

In exploring possible explanations for these conflicting results, Pearson correlation coefficients were calculated for the child's degree of emotional distance to the deceased and the child's sculptured distance to the deceased (Table XXVIII). The three measures of the child's self-reported emotional closeness were negatively correlated with sculptured distances. This suggests that children who had more thoughts, feelings, and greater love for the deceased also placed the figurine representing the deceased at closer distances from themselves on the sculpture board. Children reporting more visits with the deceased were likely to have lower sculpture scores (emotionally close) while children living at greater distances from the deceased were likely to have higher sculpture scores (emotionally distant).

However, only two of the six measures of physical and emotional closeness were significantly correlated with sculptured distances at the .05 level. These two measures related to the child's self-reported feelings toward the deceased and community location.

TABLE XXVIII

CORRELATION BETWEEN THE CHILD'S DEGREE OF
PHYSICAL AND EMOTIONAL CLOSENESS TO THE
DECEASED AND THE CHILD'S SCULPTURED
DISTANCE FROM THE DECEASED

Child's Degree of Physical and Emotional Closeness	N	Correlation Coefficient (r)	Level of Significance
More thoughts of deceased	91	-.0630	.277
Greater love for deceased	91	-.1400	.093
Closer feelings toward deceased	91	-.2457	.009
Greater frequency of visits to deceased	91	-.1132	.143
Greater number of miles from deceased	91	+.0461	.332
Community location (farther distances from deceased)	91	+.1839	.041

Post hoc analysis suggests these conflicting results may be interpreted in relationship to the child's age. Older children (e.g., 157 to 208 months of age) were significantly more likely to participate in the death-related event ($F = 3.301, p < .04$) and also have significantly higher average cognitive response level scores ($F = 11.909, p < .0001$) suggesting a more realistic view of life. Children scoring higher were significantly more likely to have greater sculpture distance scores ($T = -2.81, p < .007$) than children scoring lower on the Death Understanding Test. It is possible that older children have a greater understanding of death's finality and are more likely to view the deceased as no longer a permanent member of the immediate family.

Summary

Descriptive statistics, chi-square analysis, analysis of variance, and Pearson correlation coefficients were applied to data obtained from the FDS and CIS. The statistical techniques were utilized to test the designated hypotheses at the .05 level of significance.

The findings and results were discussed in the order in which the hypotheses were presented in Chapter I. The findings presented in this chapter were based on 91 children from 50 death-experienced families in north central Oklahoma. The results from this particular study should not be considered representative of all children from death-experienced families.

Death-experienced families in this sample were generally classified as white, middle-class, suburban, highly educated, religious and

youthful. The deceased family member or neighbor was generally in their early sixties but ages ranged from 9 to 92 years. Over 40 percent of the children interviewed lived within a radius of five miles from the deceased.

The child's involvement in the death-related experience was affected by several independent measures. Chi-square analysis showed that families with higher cohesion scores were significantly more likely to make the decision for their children to participate in the death-related experience. Family adaptability and religiosity were not associated with the child's decision-making autonomy.

Analysis of variance suggested several trends. As the family's cohesion score increased children participated less in the death-related event. Families scoring within medium ranges of cohesion and religiosity had children who were significantly more likely to participate in the death experience. Families scoring low on religiosity had children who were less likely to participate in the death-related experience. There was no significant difference between family adaptability and the child's degree of participation in the death-related experience.

The child's concept of death as determined by the average cognitive response level for the Death Understanding Test appears to be influenced by several factors. Analysis of variance was used to show that there was a significant difference between several independent assessors and the child's conceptual understanding of death. These independent variables were the child's (1) degree of participation in the death-related experience, (2) age, and (3) cognitive developmental level. Results showed that greater participation of

children in the death-related event, older children, and children with higher cognitive developmental levels had higher average cognitive response level scores on the Death Understanding Test. Pearson correlation coefficients indicated that a strong positive relationship existed between the independent measures of age and cognitive developmental level and the dependent variable, the child's average cognitive response level for the Death Understanding Test.

Chi-square analysis was utilized to verify that sex was not associated with the abstractness of a child's average cognitive response level. The relationship did approach significance suggesting that males may give a more concrete verbal response than females. It was also shown that there was no relationship between the child's decision-making autonomy and his or her average cognitive response level score for the Death Understanding Test.

Pearson correlation coefficients were used to show that positive correlations existed between various independent assessors of the child's degree of emotional closeness to the deceased and the child's average cognitive response level. Results suggested that as the child's self-reported emotional closeness to the deceased increased, he or she was significantly more likely to have had a higher average cognitive response level score on the Death Understanding Test. Pearson correlation coefficients also showed that a positive correlation existed between the child's perceived distance from the deceased as indicated by the Kvebaek Family Sculpture Technique and the child's average cognitive response score. Results imply that children with higher sculpture scores also had a significantly higher average cognitive response level.

Post hoc analysis indicated that older children were significantly more likely to participate in a death-related experience. Children who had higher participation scores had significantly higher cognitive responses on the Death Understanding Test. Those children who had higher average cognitive response levels had significantly greater sculpture distance scores than children with lower cognitive response scores.

To summarize, family related hypotheses I and III suggesting a relationship between family cohesion, religiosity, and the degree to which children are included in the death-related experience were supported. Family related hypothesis II was not supported since family adaptability was not associated with the degree to which children were included in the death-related event. Child related hypotheses IV, V, VI, and VII were verified. Children who were more involved in the death-related experience were older, and had a higher cognitive developmental level while also having a greater conceptual understanding of death. Sex was unrelated to the child's understanding of death.

Multiple methodological techniques of measuring closeness were used to assess family related hypothesis VIII. Various measures relating to the child's self-reported emotional closeness to the deceased were positively correlated to the child's conceptual understanding of death. At the same time, greater emotional distance scores between the child and the deceased on the sculpture technique were also positively correlated to the child's conceptual understanding of death. These conflicting results emphasize the necessity for the use of multi-method procedures when investigating complex

human behavior. Such results may yield a more complete and comprehensive view of human behavior.

CHAPTER V

SUMMARY AND DISCUSSION OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND PROBLEMS FOR FURTHER STUDY

The death of a spouse, parent, or close relative is one of the most stressful situations a family will encounter during a lifetime (Holmes and Rahe, 1967). Even though all families will experience birth and death throughout the family life cycle, institutions have largely replaced families in the decision-making processes surrounding birth and death events (Grollman, 1976). Contrary to the recent past, the majority of people are not born in the family home and are not surrounded by family at the time of death. This detachment from natural life conditions has required families to rely on outside organizational-institutional decisions made by doctors, lawyers, social workers, ministers, and funeral home directors (Kubler-Ross, 1976).

As times change, not only have the circumstances surrounding death been taken out of the hands of the family, but death has become a taboo topic that parents are reluctant to discuss with their children. Besides the topic of sex, death is the next major topic that parents feel inadequate to discuss with their children (Anthony, 1971). Many parents are not aware that children under 10 are interested in discussing death. Most believe that children would not understand an adult's feelings concerning a death-related event. Some

parents will either explain the circumstances of a death-related experience to their children in very technical language or in the height of their emotional grief (Grollman, 1976). In both conditions, the child may neither understand nor be able to make sense from the explanations given. Children are likely to rely on their own limited experiences and misconceptions in order to make sense of crisis events such as a death.

The child's understanding of a death-related experience appears to be influenced by multiple factors. Often parents and children are unaware of the extent to which these interrelated factors determine the understanding the child has about a crisis situation. The hypothesized factors of concern in this study are illustrated in Figure 3.

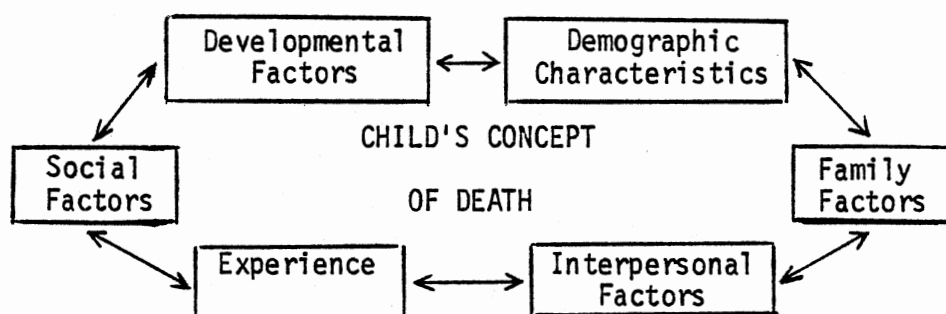


Figure 3. Hypothesized Factors Influencing a Child's Concept of Death

The purposes of this study were: (1) to investigate the relationship between various family related factors and the child's

participation in the death-related experience, and (2) to ascertain the existing relationship between a series of child related factors and the child's conceptual understanding of death.

More specifically, answers to the following questions were sought:

1. To what extent do selected family factors such as cohesion, adaptability, and religiosity influence a child's decision-making autonomy and degree of participation in the death-related experience?
2. What is the extent of a child's decision-making autonomy and degree of participation in the death-related experience on the child's conceptual understanding of death?
3. To what extent are the selected child factors of age, cognitive developmental level, and sex related to a child's conceptual understanding of death?
4. What is the extent of the child's degree of physical and emotional closeness to the deceased on the child's conceptual understanding of death?

The following hypotheses were tested:

- I. Families with different levels of cohesion (FACES) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).
- II. Families with different levels of adaptability (FACES) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).

- III. Families with different levels of religiosity (Family's Religiosity Survey) will differ in the degree to which children are included in the family's death-related experience (Family's Death-Related Experience Survey).
- IV. Children with greater involvement in the family's death-related experience (Family's Death-Related Experience Survey) will have a greater conceptual understanding of death (Death Understanding Test).
- V. Older children will have a higher conceptual understanding of death (Death Understanding Test) than younger children.
- VI. Children who score higher on the (Cognitive Developmental Level Test) will have a higher conceptual understanding of death (Death Understanding Test).
- VII. Sex is unrelated to the child's conceptual understanding of death (Death Understanding Test).
- VIII. There is a relationship between the child's degree of closeness to the deceased [e.g., self-report of emotional closeness; frequency of contact; geographic distance; and sculpture distance (Kvebaek Family Sculpture Technique)] and the child's conceptual understanding of death.

Data were collected during the period from September, 1979 to March, 1980. Each of the 50 death-experienced families had experienced the death of a close family member or neighbor from 1 to 44 months at the time of the interview. Ninety-one children from the death-experienced families ranging in age from 49 to 208 months were interviewed in their own homes. The Family Dynamics Survey (FDS) and Child Interview Schedule (CIS) were used to secure data for this

study (see Table III).

Summary and Discussion of Findings

Demographic characteristics of this sample of death-experienced families and children interviewed from north central Oklahoma revealed that a vast majority of parents were highly educated, young professionals, with rural backgrounds. These families can be generally described as middle-class, stable and highly religious. Each family had experienced the death of a close family member or neighbor within 1 to 44 months at the time of the interview.

Many of these children interviewed lived in close proximity to the deceased family member or neighbor. Over 40 percent of the children lived either in the same household or community at a distance not greater than five miles from the deceased. This suggests that many parents and children were not only physically but were also emotionally close to the deceased person. This might imply that these children who were extremely close to the deceased became distracted and confused because of emotional or overly technical explanations given by their parents (Grollman, 1976). Grollman emphasizes that parents who are extremely close to the deceased may unknowingly project their own unresolved problems upon their children. It must be remembered, however, that over 50 percent of the families lived in distant towns or communities from the deceased. This distance could mean that these families may not have been as emotionally involved in the death experience. Such an event could have allowed parents to discuss the death experience with their children more calmly as they made plans for travel and funeral arrangements. In any event, they

were more physically distant from the death experience when it occurred.

Family factors are extremely important in understanding a child's total involvement and participation in the death-related experience. Results indicated that family cohesion and religiosity were associated with the child's decision-making autonomy. There were significant differences between various aspects of family dynamics and the child's involvement in the death-related experience. Moderately enmeshed families were significantly more likely to make a unilateral decision for their children to participate or not participate in the death-related event and not leave such decisions to the child. It was also shown that cohesive families and highly religious families were less likely to have children who actually participated in various aspects of the death-related experience. Children from families with varying degrees of adaptability participated in the death-related experience similarly. Family factors are important in understanding why children participate or do not participate in crisis related events. Family types, which range from the high to low dimensions of various family dynamic factors, tend to support Kantor's and Lehr's (1976) view that family styles and processes will determine and significantly influence their children's socialization patterns. Post hoc results from this study revealed that family patterns are multidimensional. Highly cohesive families also tended to score higher on the religiosity scales, indicating that highly cohesive families also tended to be more religious.

Results imply that a child's age, degree of participation in a death-related event, and cognitive developmental level were

significantly associated with the child's conceptual understanding of death. Differences between mean scores on the Death Understanding Test indicated that children who participated to a higher degree, older children and children with higher cognitive developmental levels, were significantly more likely to have a greater conceptual understanding of death. A maturational hypothesis is supported by the extremely high positive correlations existing between age, stage of cognitive development and children's average cognitive response level scores on the Death Understanding Test. Post hoc analysis showed that older children (157 to 208 months of age) were significantly more likely to participate in the death-related event. When controlling for age it was found that a majority of younger children (49 to 134 months of age) were likely to have had low and medium cognitive response levels while a disproportionately large percentage of older children (135 to 208 months of age) had the highest cognitive response levels on the Death Understanding Test.

Results indicated that a significant relationship existed between the child's degree of participation in the death-related experience and the child's conceptual understanding of death. Children who reported greater emotional closeness to the deceased in the Child Interview Schedule were significantly more likely to have higher cognitive response levels on the Death Understanding Test. Children who lived at greater distances from the deceased were likely to have lower cognitive response levels. However, in regard to perceived closeness to the deceased, as measured by the Kvebaek Family Sculpture Technique, children who envisioned themselves farther from the deceased had higher average cognitive response level scores.

In trying to develop a comprehensive understanding of factors related to a child's understanding of death, it cannot be assumed that amount of participation and degree of closeness are related. In attempting to determine possible explanations for these results, it should be mentioned that there were two groups of children with high degrees of participation in the death-related event. These were (1) children living in the same household or community (not in excess of five miles from the deceased) and (2) children living in a distant town or community (in excess of 100 miles from the deceased). Parental emotional involvement and the type of explanation given children, even though not examined in this study, might be considered as a possible factor.

It may be easier for a child to cognitively deal with abstract ideas when there is less emotional involvement. Even though increased participation in a crisis related event may help a child cognitively evaluate the processes involved, highly emotional involvement may actually delay or decrease the child's ability to cognitively process information. In essence, the affect may over-ride the intellect. High involvement by parents and children in an emotional event may be detrimental to (1) the parents' ability to calmly explain the circumstances of the death-experience to their children and (2) the child's ability to interpret the circumstances being explained.

Another possible explanation for these conflicting results may relate to the idea that older children have a more realistic interpretation of life. Post hoc analysis showed that older children (157 to 208 months of age) were significantly more likely to participate and become involved in the death-related experience. Children

who had greater participation scores had significantly higher cognitive responses on the Death Understanding Test. Those children who had higher cognitive response levels had significantly greater sculpture distance scores than children with lower cognitive response scores. This may suggest that older children have a greater understanding of death's finality and are likely to view the deceased as no longer a permanent member of the immediate family.

Even though sex was not significantly associated with the child's conceptual understanding of death at the .05 level, there was an apparent trend for males to explain death in concrete terms while females tended to use greater abstract or fantasy verbal explanations. This is somewhat consistent with past research that indicates that younger females through age 10 are significantly superior in verbal abilities (MacCoby and Jacklin, 1974). Such a finding was re-evaluated by Moore (1977) who discovered that females had greater abstract concepts of family than males. This may suggest that females are better able to process and interpret verbal cues related to a crisis event. One of the limitations of this study is that determination of the child's level of death understanding is dependent on the child's verbal abilities. To what extent verbalization of a concept is equal to the actual concept is an open question.

These findings suggest that an understanding of the complex interplay of various factors is necessary in predicting and interpreting a child's concept of death. A child's conceptual understanding of a death-related experience will be affected by various developmental, family, interpersonal, and social factors, along with numerous demographic characteristics and the child's own experiences.

Due to the scope of this study, several limitations are noted. These limitations refer to (1) instrument selection, (2) sampling techniques, and (3) possible subjective biases.

1. Instrument selection was carefully considered when investigating the sensitive nature of a family's reaction to a death-related experience. The parent questionnaire (FDS) included understanding the family dimensions of cohesion, adaptability and religiosity. The families interviewed in this study scored within the middle ranges of cohesion and adaptability. Extremely high and low cases were not found in the subjects interviewed (refer to Figure 2, p. 44). The fact that differences were found between the middle high and middle low ranges suggest that the FACES instrument does provide a useful method of investigating the dimensions of family cohesion and adaptability.

The religiosity scale was a participatory evaluation of the family's involvement with various aspects of religious activities. Even though participation in such activities as church attendance, revivals, prayer meetings, and family discussions does not necessarily indicate a family's degree of religiosity, it is a highly useful predictor. The reliability of the religiosity scale was extremely high (Table VII, p. 82).

Children were asked to respond to a series of four death-related questions. The purpose of these questions was to understand the child's cognitive understanding of death. No attempt was made to evaluate the child's emotional feelings or emotional adjustment to the death-related experience.

2. Sampling techniques included a referral or "snowball" type of data gathering procedure. The procedure used included contacts with ministers who referred families in their congregation. Families who participated in the study also referred additional families. It must be remembered that this does limit the representativeness of the study. Since this study was exploratory in nature, generalizations to the population from the families identified were not as high a priority as description and identification of variable interrelationships.

3. This particular study was vulnerable to subjective biases. The extent to which subjective judgments may influence the researcher's coding of the child's responses to open-ended questioning was realized. Each child's response was tape recorded and coded by a panel of judges, limiting the extent of subjective bias.

Conclusions

Based on the data analyses for this study and limited by the extent to which data resulting from research procedures were both valid and reliable, the following conclusions were drawn. These conclusions must be read with the knowledge that methodological limitations existed in the sampling and data gathering procedures as discussed in Chapter III.

Family factors provide clues for evaluating a child's involvement and participation in crisis related situations. Factors of family cohesion, adaptability and religiosity are related to families' behaviors in crisis situations (Broderick and Pulliam-Krager, 1979). Highly cohesive and religious families are more

likely to make the decision for their children to participate or not participate in a death-related event. These families, scoring on the higher end of the cohesion and religiosity continuum, were also more likely not to have children participating in the crisis event. It may be concluded that children's opportunities for death-related experiences will vary according to the family's characteristics.

Developmental factors of age and stage of cognitive development were related to an increased understanding of the concept of death. Growth, maturity, and an increased awareness of surroundings allowed older children (157 to 208 months) and children scoring higher on the Cognitive Developmental Level Test (formal-operational) to indicate a more abstract concept of death. Therefore, it is concluded that stage of developmental growth is certainly a factor in a child's understanding of a crisis event.

Interpersonal and interactive factors between the child and the deceased are important in evaluating a child's conceptual understanding of death. Even though conflicting results were discovered, interpersonal and interactive factors of physical and emotional closeness to the deceased were significantly correlated with the child's conceptual understanding of death. Children who reported greater emotional closeness to the deceased had significantly higher cognitive response levels on the Death Understanding Test. However, children who sculptured themselves farther from the deceased, suggesting a perceived psychological and physical distance from the deceased, had higher cognitive response levels. Post hoc analysis indicated that older children participated to a greater extent than younger children in the death-related experience and had a significantly greater

conceptual understanding of death. This may indicate that older children have a greater understanding of life's finality by placing the deceased at greater distances from themselves as indicated by the Kvebaek Family Sculpture Technique. It is suggested that high emotional and physical contact with a dying person may lessen a family's objectivity. Such an experience may hinder a child's conceptual understanding of the crisis situation.

The child's own experiences as related to various degrees of participation and involvement in the death-related experience was significantly associated with his or her conceptual understanding of death. Children participating in numerous aspects of the burial-rites were more likely to have a greater conceptual understanding of death. This suggests that children who become involved in the death-related event are likely to gain in their understanding of the implications surrounding the death.

Another factor possibly associated with the child's cognitive understanding of death is the child's decision-making autonomy. Decision-making autonomy was not significantly related to the child's conceptual understanding of death at the .05 level. However, a trend was indicated suggesting that children who made either a joint parent-child decision or their own decision to become involved in the death-related experience had higher average cognitive response level scores than children whose parents made the decision for them. It has been suggested that family decisions are complex, dynamic processes whose outcomes often contribute to the maintenance and stability of the family unit (Scanzoni, 1979). Turner (1970) found that individuals who make a family decision become committed to the action of carrying

that particular decision to its completion. Such a commitment implies that children who become personally involved in making the decision, either with a parent or alone, are likely to see that decision to its completion, in this case, involvement in the death-related experience. It may be concluded that involving a child in family decision-making processes will lend itself to the child's commitment to the action of carrying that particular decision to its completion.

In this study, sex was unrelated to the child's understanding of death. A trend was present suggesting that males indicated a more concrete conceptual understanding of death than females. It may be suggested that female children may be more sensitive to interpersonal/social situations, while also being able to express ideas better than males.

Recommendations and Problems for Further Study

Based on the findings and conclusions of this study, the following recommendations are made:

Family styles and dynamics are important indicators in determining the nature of children's experiences. Family and child counselors must be aware that individual problems may be an outgrowth of larger family behavioral styles, especially during a crisis situation. Such a conclusion lends support for family versus individual therapy techniques.

Children who are very emotionally involved with a dying person must have support and love from parents and other relatives. Parents should take an adequate amount of time to explain the circumstance of the death to their children in as open and calm a manner as possible.

Participation in a death-related experience appears to assist a child in understanding the concept of death. A child will generally experience the death of a close family member, neighbor, or pet during his or her childhood. Parents should be aware that a child's participation in a crisis event may help that child cognitively develop a realistic concept of that crisis. However, participation in a death-related event should not be forced upon a child. Allowing the child to become involved in partial or meaningful family decisions concerning the death-related event may increase the child's participation. Parents should be helped to be sensitive to the importance of a child's decision-making autonomy during a crisis event.

Children are unique individuals. Educators and counselors can help parents to realize that each child will understand and cope with a death-related experience differently. There is a need for individualized decision-making and growth to take place by each child during a death-related experience.

As a result of this study, several related problems appear to merit investigation:

1. Further investigation should focus on the parents' emotional involvement in the death-related experience. The relationship between parental involvement and child emotional involvement would help uncover possible links between the child's understanding and involvement in the death-related event.

2. Understanding the processes involved in family decision-making during a crisis-related event would be helpful in examining the child's participation and cognitive understanding of the event.

Further investigation should consider degrees of parent and child

decisions made during a death-related event. This study did not consider relationships between the parent and child variables and the child's emotional coping with the death-related event. To what extent is there a relationship between the child's cognitive understanding and emotional coping with a death event? This problem needs to be explored further.

3. Instrument evaluation suggests that open-ended questioning of parents may be beneficial in allowing parents to discuss the death-related event. Discussion of the crisis-event may help parents vent any feelings or concerns about the experience. Such an experience could be therapeutic as well as investigative, depending on the purposes of the study.

4. Further research could explore the differences between the child's concept of death in death-experienced families and in families who had not experienced death. This dimension would assess the relationships between experience with death, cognitive developmental levels, and family factors.

5. Further investigation should evaluate family dynamics as interrelated factors influencing children's behavior. Possible interaction effects between family cohesion, adaptability, and religiosity should be studied. This would be beneficial in creating a model of how various family types affect children's behavior during a crisis-related event.

6. Future studies should investigate the association between parents' and children's perceptions of family relationships during a crisis related event. Family sculpturing, as demonstrated by the Kvebaek Family Sculpture Technique, is a useful technique in studying

family members' perceptions of interpersonal relationships. This technique could be further explored in studies of family and child experiences to crisis situations.

7. Future studies should use multi-method procedures when investigating complex human behaviors such as family reaction to death. Results obtained from various methodological instruments investigating similar behavioral patterns may yield a more complete and realistic view of human behavior.

Results of this study provide information about how certain family characteristics influence a child's opportunity to participate in and experience death-related events. It further suggests links between participatory experience and cognitive understanding. Those concerned with the emotional well-being of families and children can use this information to assist parents in making informed decisions regarding their role in helping children in death-related events.

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APPENDICES

APPENDIX A

FAMILY DYNAMICS SURVEY

Husband _____ Wife _____
Date _____

Family Dynamics Survey

This exploratory project will attempt to study the different aspects of a child's involvement, knowledge, and perception of crisis situations. In order to understand a child's concept of situations such as death, the following questions have been developed. A number of related aspects have been identified which may have an influence on the child's understanding of death.

Please complete the following questions concerning yourself, your spouse, or your children.

1. What was the highest grade or level of education completed? (Check the appropriate spaces.)

Self	Spouse		Self	Spouse
___	___	1. Attended graduate or professional school	___	___
___	___	2. Graduated from a regular 4-year college	___	___
___	___	3. Some college or technical school after high school	___	___
___	___	4. Finished high school	___	___
			___	___
			___	___
			___	___
			___	___
			___	___
			___	___

2. Please indicate the age range of you and your spouse. (Check the appropriate spaces.)

Self	Spouse		Self	Spouse
___	___	1. Under 25	___	___
___	___	2. 25-30 years	___	___
___	___	3. 31-35 years	___	___
___	___	4. 36-40 years	___	___
___	___	5. 41-45 years	___	___
			___	___
			___	___
			___	___
			___	___
			___	___

3. What is your present marital status? (Check one.)

___ 1. Married	___ 4. Divorced, remarried
___ 2. Separated	___ 5. Widowed
___ 3. Divorced, single	___ 6. Widowed, remarried

4. What is your current occupation? (Be specific.) _____

Number of hours worked per week _____

5. What is your spouse's occupation (if applicable)? (Be specific.) _____

Number of hours worked per week _____

6. How long have you been living at your current residence? _____

7. Indicate the kind of community for the following. The residence of your childhood, your spouse's childhood residence, and your current residence.

Childhood Residence Self	Childhood Residence Spouse	Current Residence	
___	___	___	1. Farm
___	___	___	2. Non-farm rural residence
___	___	___	3. Small town (population under 2,500)
___	___	___	4. Large town (population 2,500-24,999)
___	___	___	5. Small city (population 25,000-50,000)
___	___	___	6. Large city (population over 50,000)

8. Please indicate your approximate total family income for the last year. (Check one.)

___ 1. Under \$7,000	___ 3. \$10,000-\$14,999	___ 5. \$20,000-\$24,999	___ 7. \$30,000 and over
___ 2. \$7,000-\$9,999	___ 4. \$15,000-\$19,999	___ 6. \$25,000-\$29,999	

9. Please give the age, sex, and grade in school of your children from your oldest to youngest child.

	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6	Child 7
Date of Birth	_____	_____	_____	_____	_____	_____	_____
Sex (Circle one)	<u> </u> M / <u> </u> F	<u> </u> M / <u> </u> F	<u> </u> M / <u> </u> F	<u> </u> M / <u> </u> F	<u> </u> M / <u> </u> F	<u> </u> M / <u> </u> F	<u> </u> M / <u> </u> F
Grade	_____	_____	_____	_____	_____	_____	_____

10. How many individuals presently live in your household? _____ Total number

11. What was the relationship of the deceased family member to your children? (Check one.)

- | | |
|---|--|
| <input type="checkbox"/> Parent | <input type="checkbox"/> Maternal Great Grandparent |
| <input type="checkbox"/> Step-parent | <input type="checkbox"/> Paternal Great Grandparent |
| <input type="checkbox"/> Brother | <input type="checkbox"/> Maternal Niece or Nephew |
| <input type="checkbox"/> Sister | <input type="checkbox"/> Paternal Niece or Nephew |
| <input type="checkbox"/> Maternal Grandparent | <input type="checkbox"/> Maternal Cousin |
| <input type="checkbox"/> Paternal Grandparent | <input type="checkbox"/> Paternal Cousin |
| <input type="checkbox"/> Maternal Aunt or Uncle | <input type="checkbox"/> Other, residing in same household |
| <input type="checkbox"/> Paternal Aunt or Uncle | <input type="checkbox"/> Other (indicate relationship) |

12. What was the date of the death of the deceased family member? _____

13. What was the age of the deceased family member when he or she died? (Fill in the blank with the age of the deceased.) _____ years

14. How far away from the deceased did you live? (Check one and give approximate number of miles.)

- | | |
|---|---|
| <input type="checkbox"/> Same household | <input type="checkbox"/> Close town or community
Approximate number of miles _____ |
| <input type="checkbox"/> Same town/community
Approximate number of miles _____ | <input type="checkbox"/> Distant town or community (more than 100 miles)
Approximate number of miles _____ |

15. How often did each child visit with the deceased when he or she was alive? (Check appropriate spaces)

	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6	Child 7
At least once a day	_____	_____	_____	_____	_____	_____	_____
At least once a week	_____	_____	_____	_____	_____	_____	_____
At least once a month	_____	_____	_____	_____	_____	_____	_____
At least once a year	_____	_____	_____	_____	_____	_____	_____
Less than once a year	_____	_____	_____	_____	_____	_____	_____
Never	_____	_____	_____	_____	_____	_____	_____

16. For each of your children, who made the decision about their involvement in the burial rites? Which child decided to be involved in the burial rites on their own initiative versus your encouragement?

	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
Parental encouragement only	_____	_____	_____	_____	_____	_____
Parent and child's joint decision	_____	_____	_____	_____	_____	_____
Child's own initiative only	_____	_____	_____	_____	_____	_____
Not applicable _____ Please explain _____						

Please answer the following questions concerning your child's involvement in the burial rites of the deceased family member. (Check appropriate spaces.)

Did your child or children:

17. visit the funeral home?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
18. express an opinion about being involved in the burial rites?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
19. view the body of the deceased?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
20. attend the memorial services in a church or funeral home?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
Not applicable	_____	_____	_____	_____	_____	_____
21. attend the grave side services or cremation?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
Not applicable	_____	_____	_____	_____	_____	_____
22. visit the cemetery or memorial site since the burial?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
Not applicable	_____	_____	_____	_____	_____	_____
23. To your knowledge, did your child touch the deceased before burial or cremation?	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
YES	_____	_____	_____	_____	_____	_____
NO	_____	_____	_____	_____	_____	_____
Not applicable	_____	_____	_____	_____	_____	_____

Answer the following questions concerning how your family mourned the deceased family member.

24. We expressed our emotional feelings together as a family.

YES _____ NO _____

25. We cried together as a family.
 YES _____ NO _____
26. I (We) expressed our grief and sorrow to our child/children.
 YES _____ NO _____
27. I (We) explained the cause and circumstances surrounding the family member's death to our child/children.
 YES _____ NO _____
28. Using the expressions, great deal of sorrow, much sorrow, some sorrow, very little sorrow, and no sorrow, please describe to what degree of grief and sorrow your child showed when the family member died. (Check appropriate spaces.)

	Child 1 (Oldest)	Child 2	Child 3	Child 4	Child 5	Child 6
Great deal of sorrow	_____	_____	_____	_____	_____	_____
Much sorrow	_____	_____	_____	_____	_____	_____
Some sorrow	_____	_____	_____	_____	_____	_____
Very little sorrow	_____	_____	_____	_____	_____	_____
No sorrow	_____	_____	_____	_____	_____	_____

People express their religion in many different ways. Even people who do not attend church have personal opinions and feelings about religion. Please complete the following questions concerning your family.

29. How frequently do you attend services of worship at your church? (Check one)
- _____ At least twice a week _____ Three or four times a year
 _____ Once a week _____ Only for weddings and funerals
 _____ Twice a month _____ Never
30. How frequently does your child attend services of worship at your church? (Check one)
- _____ At least twice a week _____ Three or four times a year
 _____ Once a week _____ Only for weddings and funerals
 _____ Twice a month _____ Never
31. How religious would you say that you are?
- _____ Very religious _____ Religion is not important to me
 _____ Somewhat religious _____ I am quite opposed to religion
32. What is your current religious preference or denomination? (Give specific denomination)

Using the expressions: very often (5), often (4), sometimes (3), almost never (2), and never (1), please describe the ways in which your family is involved in religion. (Circle number)

	very often	often	sometimes	almost never	never
33. Religion helps our family cope with crisis situations.	5	4	3	2	1
34. Attend religious crusades, revival meetings or missions.	5	4	3	2	1
35. Attend religious services.	5	4	3	2	1
36. Listen to religious services over radio or television.	5	4	3	2	1
37. Sometimes pray, either privately or with family.	5	4	3	2	1
38. Ideas I have learned from religion sometime help me understand my own life.	5	4	3	2	1
39. I take part in various activities in my religious organization.	5	4	3	2	1
40. We discuss our religion with our children.	5	4	3	2	1

	very often 5	often 4	sometimes 3	almost never 2	never 1
41. Our children participate in activities sponsored by religious groups.	5	4	3	2	1
42. The religious beliefs I learned when I was young still help me.	5	4	3	2	1

Families express their relationships in many different ways. Even families who do not realize it, respond and behave differently with other family members. Using the expressions: true all the time (4), true most of the time (3), true some of the time (2), and true none of the time (1), please describe the ways in which your family relate to each other. (Circle number)

	true all the time 4	true most of the time 3	true some of the time 2	true none of the time 1
43. Family members are concerned with each other's welfare.	4	3	2	1
44. We often have spur of the moment guests at mealtime.	4	3	2	1
45. It is hard to know who the leader is in our family.	4	3	2	1
46. Family members are afraid to tell the truth, fearing harsh punishment.	4	3	2	1
47. Family members talk a lot, but nothing ever gets done.	4	3	2	1
48. There are times when other family members do things that make me unhappy.	4	3	2	1
49. In our family, we know where all family members are at all times.	4	3	2	1
50. Family members make the rules together.	4	3	2	1
51. It seems like there is never any place to be alone in our house.	4	3	2	1
52. It is difficult to keep track of what other family members are doing.	4	3	2	1
53. Family members do not check with each other when making decisions.	4	3	2	1
54. Family ties are more important to us than any friendship could possibly be.	4	3	2	1
55. Family members often answer questions that were addressed to another person.	4	3	2	1
56. The parents check with the children before making important decisions in our family.	4	3	2	1
57. Punishment is usually pretty fair in our family.	4	3	2	1
58. Family members discuss problems and usually feel good about solutions.	4	3	2	1
59. Family members are extremely independent.	4	3	2	1
60. Every new thing I've learned about my family has pleased me.	4	3	2	1
61. Our family has a strict rule for almost every possible situation.	4	3	2	1
62. We respect each other's privacy.	4	3	2	1
63. Once our family has planned to do something, it's difficult to change.	4	3	2	1
64. In our family, we are on our own when there is a problem to solve.	4	3	2	1
65. Family members do not turn to each other when they need help.	4	3	2	1
66. Family members make visitors feel at home.	4	3	2	1
67. Parents make all the important decisions in our family.	4	3	2	1
68. Parents and children in our family discuss together the methods of punishment.	4	3	2	1
69. We feel good about our ability to solve problems.	4	3	2	1
70. Family members are totally on their own in developing ideas.	4	3	2	1

	true all the time	true most of the time	true some of the time	true none of the time
71. When rules are broken, family members are treated fairly.	4	3	2	1
72. Family members do not enter each other's areas or activities.	4	3	2	1
73. Family members encourage each other's efforts to find new ways of doing things.	4	3	2	1
74. Family members discuss important decisions with each other, but usually make their own choices.	4	3	2	1
75. Home is one of the loneliest places to be.	4	3	2	1
76. Family members find it easier to discuss things with persons outside the family.	4	3	2	1
77. There is no leadership in our family.	4	3	2	1
78. Family members are not punished or reprimanded when they do wrong.	4	3	2	1
79. Our family does not discuss its problems.	4	3	2	1
80. Family members enjoy doing things alone as well as together.	4	3	2	1
81. It is unclear what will happen when rules are broken in our family.	4	3	2	1
82. When a bedroom door is shut, family members will knock before entering.	4	3	2	1
83. If one way does not work in our family, we try another.	4	3	2	1
84. Family members are expected to have the approval of others before making decisions.	4	3	2	1
85. Family members are totally involved in each other's lives.	4	3	2	1
86. Family members feel comfortable inviting their friends along on family activities.	4	3	2	1
87. Each family member has at least some say in major family decisions.	4	3	2	1
88. Members of our family can get away with almost everything.	4	3	2	1
89. When trying to solve problems, family members jump from one attempted solution to another without giving them time to work.	4	3	2	1
90. Family members understand each other completely.	4	3	2	1
91. It seems as if we agree on everything.	4	3	2	1
92. My family could be happier than it is.	4	3	2	1
93. There is strict punishment for breaking rules in our family.	4	3	2	1
94. Family members seem to avoid contact with each other when home.	4	3	2	1
95. For no apparent reason family members seem to change their minds.	4	3	2	1
96. We decide together on family matters and separately on personal matters.	4	3	2	1
97. Our family has a balance of closeness and separateness.	4	3	2	1
98. It seems there are always people around home who are not members of the family.	4	3	2	1
99. Certain family members order everyone else around.	4	3	2	1
100. Family members are severely punished for wrongdoings.	4	3	2	1
101. Family members feel they have no say in solving problems.	4	3	2	1
102. Family members are encouraged to do their own thing.	4	3	2	1
103. I do not think any family could live together with greater harmony than my family.	4	3	2	1
104. It is hard to know what the rules are in our family because they always change.	4	3	2	1
105. Family members find it hard to get away from each other.	4	3	2	1
106. Family members feel the family will never change.	4	3	2	1
107. Family members feel they have to go along with what the family decides to do.	4	3	2	1

As families face a crisis situation such as death, they often turn to other people, organizations or inner beliefs for support. These support systems generally help the family through the grieving process. I would like for you to give some of your reactions to the death situation you experienced.

108. When you experienced the death of the deceased relative, who or what supported you the most during this experience? (Be as specific as possible)

109. When you experienced the death of the deceased relative, who or what gave you the least support during this crisis situation? (Be as specific as possible)

110. If you had any recommendations for other families now experiencing the death of a family member, what would they be?

APPENDIX B

CHILD INTERVIEW SCHEDULE

CHILD INTERVIEW SCHEDULE

Cognitive Developmental Level Test

	Mass	Number	Volume	Archimedes Law
Name _____ Age _____ Sex _____				
Name _____ Age _____ Sex _____				
Name _____ Age _____ Sex _____				
Name _____ Age _____ Sex _____				
Name _____ Age _____ Sex _____				
Name _____ Age _____ Sex _____				

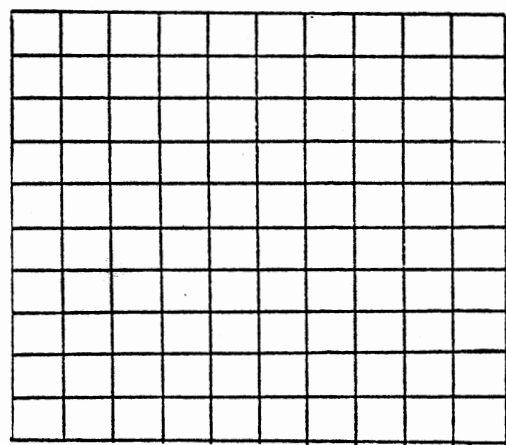
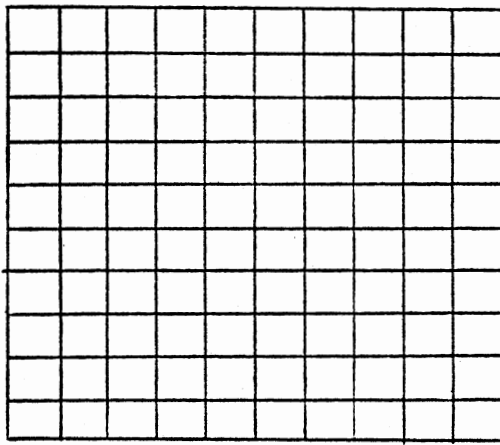
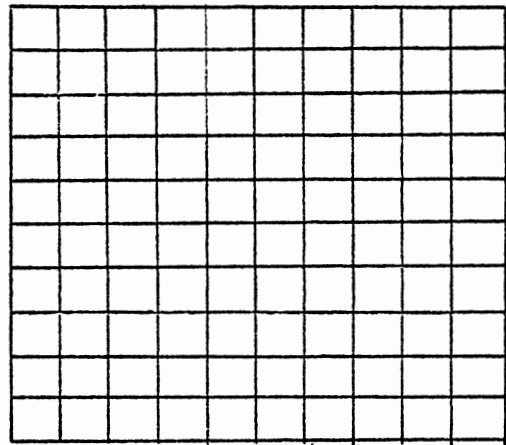
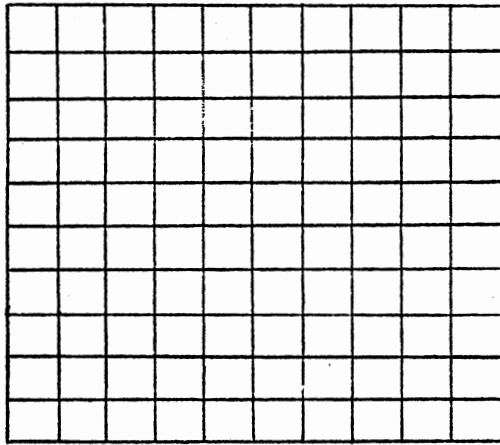
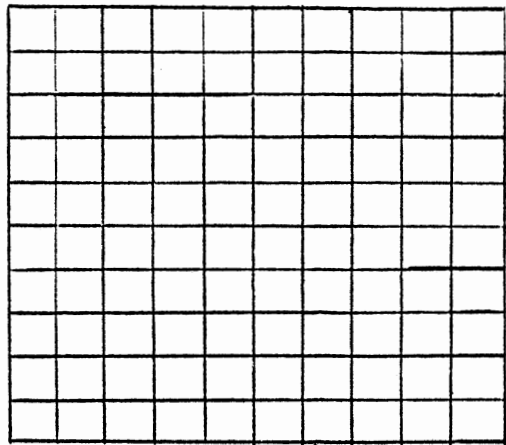
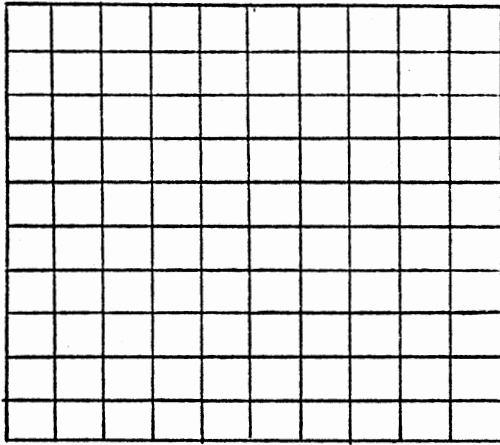
Child's Self-Report of Emotional Closeness

1. Do you ever think of (name of deceased)?
2. How much did you love (name of deceased)?
3. How close would you say you felt toward (name of deceased)?

Death Understanding Test

1. What makes things die?
2. Can you make dead things come back to life?
3. When will you die?
4. What will happen when you die?

KVEBAEK FAMILY SCULPTURE TECHNIQUE



KVEBAEK RECORDING FORM

	1	2	3	4	5	6	7	8	9	10	
A											A
B											B
C											C
D											D
E											E
F											F
G											G
H											H
I											I
J											J
	1	2	3	4	5	6	7	8	9	10	

FAMILY IDENTIFICATION: #

PROCEDURE: Individual or Consensus

RESPONDENT:

SCULPTURE: Real of Ideal

FIGURINES: (Family Members)

ORDER OF PLACEMENT	NUMBER OF TIMES MOVED	FINAL PLACEMENT

*Legend of movement = starting point; ○ = stops; ⊙ = final placement; movement and direction.

OTHER OBSERVATIONS

APPENDIX C

LETTERS AND CORRESPONDENCE

O K L A H O M A S T A T E U N I V E R S I T Y

DEPARTMENT OF FAMILY RELATIONS

AND CHILD DEVELOPMENT

The Department of Family Relations and Child Development at Oklahoma State University is currently involved in an important research study to understand how family members respond to difficult life crises such as death. Since very little is known about children's understanding of death, parent(s) and children, ages 4-16 are being interviewed about their thoughts and feelings regarding death. The results of these interviews will be helpful in designing new programs to assist families who have lost a close relative.

My name is Joe Weber and I will be project coordinator from the University. I have recently talked with your minister, _____ to describe the project and the importance of learning more about children's understanding of death. He was impressed with the importance of the study and was satisfied that participating families would not be inconvenienced by taking part in the project.

Your minister indicated to me that your family had experienced the death of a relative within the last three years and might be willing to talk with me. Your answers to several written questions and an interview with the child will take approximately 30-40 minutes. As with all university projects, your responses are confidential, your participation is voluntary, and interviews are made at times convenient for you. The interview can take place at your home or at the University, whichever you prefer.

Within the next few days I will get in touch with you by phone to answer any questions that you may have and to see if your family would be willing to help us with this project. If you have any questions before I call, please feel free to call either your minister or me. My office phone is 624-5055 in Home Economics West or home phone 624-8260.

Thank you for your time and consideration. I sincerely hope that you will be able to participate in this important effort.

Most Sincerely,

Joe Weber
Project Coordinator

David Fournier, Ph.D.
Project Adviser and
Faculty Representative

JW:wh

OKLAHOMA STATE UNIVERSITY
DEPARTMENT OF FAMILY RELATIONS
AND CHILD DEVELOPMENT

I would like to thank you for participating in this important study concerning family dynamics and the child's concept of death. Your cooperation and involvement was deeply appreciated. The encouragement and support I have received from parents and children has been very rewarding.

I am still collecting information on this topic and hope to complete it by Spring 1980. Data gathered will provide much needed information on children's perception of family interaction and crisis situation. The results of these interviews will be helpful in designing new programs to assist families who have lost a close relative.

At the completion of this study, I will send you a brief summary of the results.

Thank you again for your participation.

Sincerely,

Joe Weber
Project Coordinator

David Fournier, Ph.D.
Project Adviser and
Faculty Representative

O K L A H O M A S T A T E U N I V E R S I T Y

DIVISION OF HOME ECONOMICS

OSU Project for Families Who Have Experienced A Death

While all families eventually experience the death of close relatives, little is known about how family members cope with death and support each other through difficult times. Even less is known about how children understand the meaning of death. In an important study to identify ways to help families who have experienced death, the Department of Family Relations and Child Development at Oklahoma State University is currently interviewing parents and children aged 4 to 16 who have experienced death in the last 3 years. Information is confidential and will involve about 30 to 40 minutes of time. The parent(s) will be asked to respond to some written questions while children will play a board game, complete some skill activities and answer some short questions about death. Interviews can take place in your home or at the University whichever is most convenient. If you would like to help in this important project, please contact your minister or Joe Weber (OSU 624-5057) for further information. Thank you for your assistance.

FACT SHEET

Introduction:

The department of Family Relations and Child Development at Oklahoma State University is currently involved in an important research study to understand how family members respond to difficult life crises such as death. Since very little is known about children's understanding of death, parent(s) and children, ages 4-16 are being interviewed about their thoughts and feelings regarding death.

Investigator:

Joe Weber, Graduate Student, Family Relations and Child Development

Committee Members: Fran Stromberg, Judy Powell, Dave Fournier, Larry Perkins, and Sharon Nickols

Title of Study: "Family Dynamics and Children's Understanding of Death"

Office: Home Economics West, 624-5057 or 624-5055

Home: 112 E. Lakehurst, 624-8260

Purpose:

To look at the extent to which family dynamics influence the child's participation in a death related experience and their conceptual understanding of death.

Family Composition:

Identify families with children, ages 4 through 16, that have experienced the death of a close family member. The death should have occurred within the past year and may include a great grandparent, grandparent, aunt or uncle, cousin, sibling, or parent.

Design:

Interviews will take place at the family's home. Parents will be asked to fill out a questionnaire. The children will take part in a game board method of constructing family interactions, several skill tests for abstract reasoning and respond to questions related to their knowledge of death. The parent questionnaire will take approximately a half hour to complete while 15-20 minutes is the average length of time for the child interview.

Application:

Provide much needed information of children's perception of family interaction and crisis situations, such as death. The results of these interviews will be helpful in designing new programs to assist families who have lost a close relative.

Confidentiality:

All information is confidential, with no risk attached. Family names will not be used on any questionnaires or forms. This project has been approved and reviewed by the Research, Experimentation or Demonstration Board at Oklahoma State University for projects involving human subjects.

APPENDIX D

JUDGE'S SCORING SHEET

2
VITA

Joseph Alexander Weber

Candidate for the Degree of

Doctor of Philosophy

Thesis: FAMILY DYNAMICS AND THE CHILD'S CONCEPT OF DEATH

Major Field: Home Economics - Family Relations and Child Development

Biographical:

Personal Data: Born in Irvington, New Jersey, March 11, 1947,
the son of Joseph A. and Louise C. Weber.

Education: Graduated from Union High School, Union, New Jersey,
in June, 1965; received the Bachelor of Science degree in
Agriculture with emphasis in rural sociology from the
University of Missouri-Columbia in 1973; received the
Master of Arts degree in Sociology from the University of
Missouri-Columbia in 1975; completed requirements for the
Doctor of Philosophy degree in Home Economics with
emphasis in family relations and child development at
Oklahoma State University in May, 1981.

Professional Experience: Graduate research assistant, Sociology,
University of Missouri-Columbia, 1974-75; Area Youth
Specialist, University of Missouri Extension Division,
Macon, Missouri, 1975-77; graduate research assistant,
Family Study Center, Oklahoma State University, 1977-78;
graduate teaching assistant, Home Economics, Oklahoma State
University, 1978-81.

Professional Affiliations: Alpha Zeta and Gamma Sigma Delta,
agriculture honoraries; Phi Upsilon Omicron and Omicron Nu,
home economics honoraries; American Home Economics Associ-
ation, National Council on Family Relations; Oklahoma Home
Economics Association.