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The Concept of Death Education on Children's Understanding of Death

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THE CONCEPT OF DEATH EDUCATION ON CHILDREN'S
UNDERSTANDING
OF DEATH

By

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ABSTRACT

THE CONCEPT OF DEATH EDUCATION ON CHILDREN’S UNDERSTANDING OF DEATH

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The purpose of this investigation was to determine if death education has an impact on children’s understanding of death. This study was a non-randomized trial of a single educational session on death concepts of 38 second grade children (mean age 7.78 years). The Smilansky Death Concept Questionnaire, a validated and published interviewing tool, was administered pre- and post intervention to all study subjects to evaluate their understanding of death. This intervention was a story on death and a peer group discussion.

Posttest scores were significantly higher than pretest scores for human death concept, and animal death concept, as well as on the total death concept. There were no significant relationships between demographic variables and the Smilansky Death Concept scores. It is recommended that elementary schools consider incorporating a death education program into their current curriculum.
Dedication

This thesis is dedicated to my husband, Greg and my daughters, Katelin and Kristen. Without their love, understanding, and sacrifices my dream may never have become a reality.
Acknowledgments

I have many people to grateful to for supporting and encouraging me through my masters program. I would like to express my deepest appreciation to my committee. Their support and availability has enabled me to meet my goals and complete this project. I would also like to thank Linda Scott R.N., M.S.N., PH.D. Candidate, for her never ending patience, expertise, and availability.

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CHAPTER 1

INTRODUCTION

Death is a reality that all human beings must endure at one time or another. As adults, death is complex and difficult to fully comprehend. Children have fewer life experiences and limited cognitive developmental skills to integrate death. Children require intellectual understanding of death before they can effectively process it emotionally. This understanding of the meaning of death is essential for the grieving process to progress (Schonfeld & Kappelman, 1990). Age-appropriate education can help adults and children process and prepare for the death experience.

According to the wisdom of Buddha, we can actually use our lives to prepare for death. We do not have to wait for the painful death of someone close to us or the shock of terminal illness to force us into looking at our lives. Nor are we condemned to go out empty-handed at death to meet the unknown. We can begin, here and now, to find meaning in our lives. We can make every moment an opportunity to change and to prepare, wholeheartedly, precisely, and with peace of mind for death and eternity (Rinpoche, 1992, p. 257).

Parents want to protect their children from the emotional pain death causes. However, it is inevitable
that children are exposed to death. Children will need to accept and understand death as a natural process of life. Learning about death may help children to be better prepared to cope with their emotions and decrease their fears. Associated fears or anxieties can compound children's misconceptions about death. Death education can clear these misconceptions and help the children understand death at their developmental level (Labinowicz, 1980). Education could help children understand that the feelings they may have are normal. It may help them understand the behavior of others who have experienced a death (Jones, Hodges, & Slate, 1995).

A growing movement exists to implement death education programs in elementary and secondary schools. The growing number of deaths in school-age children supports this movement (Jones et al., 1991). The three leading causes of death in school-age children are accidents, suicide, and homicides that are usually sudden and unexpected (Jones et al., 1991). Many schools provide grief counseling for children after a tragic death occurs in a community as crisis intervention. For example, crisis intervention was provided when a local Michigan high school experienced three unrelated student deaths within one school year. In another Michigan school district, a fatal motor vehicle accident claimed
the lives of three grade school children. Each of the schools provided one day of grief counseling for their children, and further counseling was provided as appropriate for the children. The teachers fielded most of the questions, emotions, and tears in both situations. In an informal survey of seven elementary teachers, they felt that if their students had received death education prior to the loss, it might have helped them understand and grieve more effectively (M. Hayes, V. Charles, P. Reed, S. Dickerman, K. Wood, D. Southland, D. Dudack, personal communication, February, 1997).

The emotional and cognitive impact of death on children, who are experiencing normal developmental changes, creates enormous stress on those children. Frequent behavior changes, such as crying, irritability, hopelessness, sleep disturbances, aggression or a decrease in attention span occur in children who are having difficulty understanding death (Glass, 1991). Direct relationships between the stages of cognitive development, as proposed by Piaget, and children's understanding of illness and death, can be determined (Kalnins & Love, 1982). In a review of studies of children's understanding of health-related issues, Kalnins and Love determined that children's concepts of understanding were influenced by personality, family
history and their own state of health, in addition to cognitive development. Developmental stages, previous death experience and education, adjustment (adaptation) and effective coping skills must be considered when counseling a child regarding death issues (Glass, 1991).

Justification for death education in the schools is strong. Yet, it can also present ethical conflicts, such as religious beliefs and moral values. Death education also creates barriers by departing from traditional education, which requires curriculum changes and school board approval. Because of these barriers, opposition to these nontraditional programs exists. Death education programs are often seen as being intrusive into matters of family responsibility and faith (Glass, 1991).

For the programs to be successful, obtaining parental support is essential. Parents are likely to have misconceptions about a death and underestimate their children’s understanding of death (Jones et al., 1991). Opposition to death education may also occur because the parents do not want to accept their own mortality or fears. Often these anxieties are passed on to the children (Jones et al., 1991). It is highly important to educate not only the children about death, but to educate their parents about death and the importance of death
education for the children (Jones et al., 1991). In recognizing the effectiveness of death education, the parents, the health care provider, and the educator can provide support for the children trying to understand death issues.

**Purpose and Research Question**

The purpose of this study was to determine if death education has an impact on children's understanding of death. The following research question was addressed to gather information regarding children’s cognitive understanding of death and the effects of death education: What effect does an educational session, that includes a story addressing death and subsequent peer group discussion, have on school age children’s understanding of death? The findings of this study provide data useful for determining if death education should be included in school age children’s general curriculum.

**Nursing Implications**

Advanced practice nurses (APNs) are in a position to be advocates for children in promoting death education within the school system. Nursing experts may act as consultants for schools in establishing a curriculum that is developmentally appropriate. APNs can counsel parents who are assisting their child in understanding death.
understanding death. Finally, advanced practice nurses, through continued research, can investigate implications for children's understanding of concepts related to death. The effect that death education has on their development may then be further determined and applied in existing educational curriculums (Schonfeld & Kappelman, 1990).
CHAPTER 2

CONCEPTUAL FRAMEWORK AND REVIEW OF LITERATURE

Current research suggests that children's understanding of death evolves in a systematic predictable sequence, based on their cognitive developmental stage. This is consistent with Piaget's theory of cognitive development (Burback & Peterson, 1986). School age children do have an increased understanding of causality, are less egocentric and have an increased perception of time than in earlier stages. Their ability to understand death is limited; however, this school age group can identify death as being concrete (Glass, 1991).

Theory: Jean Piaget

Piaget saw cognitive acts as a process of organization of and adaptation to the environment. To understand the process of intellectual organization and adaptation, Piaget identified four concepts. These concepts are schema, assimilation, accommodation and equilibrium (Wadsworth, 1971). To further illustrate Piaget's concepts, a conceptual framework was developed
and can be seen in Figure 1 (see Appendix A) (Whaley & Wong, 1979).

Schema is a cognitive structure by which individuals intellectually adapt to and organize the environment. Assimilation is defined as incorporating perceptions of new experiences into the existing framework. Accommodation is modifying existing structures, new or old structures. Equilibrium is an active intellectual balance with the environment and is a complementary process operating (Wadsworth, 1971).

Figure 1
Piaget: Conceptual Framework

(Used with permission, Whaley & Wong, 1979, p. 68)

Piaget developed theories of stages that evolve directly from the previous developmental level. As
children grow and develop, Piaget stated that they progress through these stages. There are four developmental stages consisting of: sensori-motor stage, a period of sensory input and coordination of physical actions (0-2 years); pre-operational stage, a period of representational and prelogical thought (2-7 years); concrete operational stage, a period of concrete logical thought (7-11 years); and formal operational stage, a period of unlimited logical thought (11-15 years) (Labinowicz, 1980).

The developmental stage specific to the age group of interest in this study is the phase of concrete operational thought. During this period children’s reasoning becomes more logical. Children can process logical thought or operations and apply them to concrete problems. They can hold two or more variables at a time when evaluating data (Labinowicz, 1980). This means a complex issue can be evaluated by assessing each variable separately and comparatively. The child can then develop a conclusion.

At this stage, children are becoming more social and increasingly aware of others’ views. There is rapid growth in the ability to conserve properties of objects, such as numbers. It is also a time when the children can present mental images of physically absent objects, based
on memory. However the thinking process remains restricted to concrete things, rather than ideas (Labinowicz, 1980).

Piaget identifies children's concepts of death in each of his developmental stages. In the concrete operational stage or school age, there are three statements Piaget identified through studies on death conceptualization. "Death is irreversible but not necessarily inevitable. Death may be personified and viewed as destructive. Explanations for death are naturalistic and physiologic" (Wong, 1996, p. 546).

Piaget's concepts and conceptual framework can be used to develop a similar framework when studying children's understanding of death and death education variables. The views of death for developmental levels of children are seen as the schema. As children develop their schema they continue to process new stimuli (Wadsworth, 1971). Death is the new experience that is incorporated into the framework and must be assimilated. Death education is the mechanism of accommodation or modifying of structures to progress into equilibrium. Children's understanding of death then provides them with equilibrium or balance within their environment. Followers of Piaget have implied that a child's maturational sequence in the acquisition of the concepts
of death can be altered or accelerated through direct intervention (Schonfeld & Kappelman, 1990).

**Review of Literature**

The review of literature focuses on the influential background research that supports this study. This section includes studies that review death education programs and their influence on children's understanding of death-related issues. It also includes articles that review developmental levels and understanding of death at those levels. While there are many studies evaluating children's adaptation to death (Atwood, 1984; Brent & Speece, 1994; Cotton & Range, 1990; Normand & Mishara, 1992), few address the effect that death education can have on children's understanding of death.

**Studies on Developmental Levels and Understanding of Death**

Kane (1979) conducted the first of several studies that investigated children's perceptions or understanding of death based on developmental levels. Kane, using an open-ended questionnaire, studied the mental development of children ages 3-12 to determine their concepts of death and the impact of experience on those concepts. The sample consisted of 122 white, middle-class male and female students. She determined through her questionnaire that an understanding of death occurred by
age 6. This was much younger than Nagy’s (1948) estimate, who thought it occurred at age 9 (as cited in Kane, 1979). She also concurred that children’s concepts of death develop as a function of age and maturity as in Piaget’s developmental stages. Additionally, she found that children 8 years old and above were consistently showing adult concepts about death (Kane, 1979).

Kane believed, as Piaget, that children’s perceptions of death are developed in sequence and through a series of stages (Kane, 1979). Through her research, Kane established 10 categories that addressed children’s mental concepts of death. These concepts include realization, separation, immobility, irreversibility, causality, dysfunctionality, universality, insensitivity, appearance, and personification. To correspond with these stages, she identified three sequential developmental stages based on Piaget’s developmental stages that she felt were necessary for children to understand death. These stages are identified as (a) stage one, ages 3-6, (b) stage two, ages 7-9, and (c) stage three, ages 10-12.

Smilansky (1987) developed a questionnaire to evaluate the affects of children’s understanding of death after the loss of their parents. Her instrument, the Smilansky Death Concept Questionnaire, was based on five
concepts related to children's understanding of death: irreversibility, finality, causality, inevitability, and old age. The instrument was composed of 26 open-ended questions, 13 related to the death of humans and 13 to the death of animals. Smilansky included 948 children ranging in age from 4-12 years in her research study. There were 476 orphans, and 472 non-orphans who served as a control group. All of the children were interviewed with the Smilansky Death Concept Questionnaire. The interviewers also collected such demographic data as age, sex, and parent education. Intelligence testing (I.Q.) was also done.

The results of Smilansky's study showed that the non-orphan control group averaged scores of 23.5 (SD = 5), while the orphans averaged scores of 22 (SD = 4.7) in total conceptualization of death and in death of humans. However, there was no significant difference in these groups in the conceptualization of animal death as determined by computing t-tests (t = 1.94, p > 0.05). Smilansky felt that because all demographic data were similar between the two groups, the orphans could not reach a higher conceptualization of human death due to their personal, emotional experience with death. She felt that this was supported by the fact that conceptualization of animal death was similar in both
groups. Smilansky felt that families in mourning did not always help children understand death. She came to this conclusion through a series of interviews with adults, who had been orphaned as children. She theorized that experiencing the death of a parent aids orphans in total death conceptualization, only if adults help with this conceptualization process (Smilansky, 1987).

Speece and Brent (1992) conducted a study that focused on the acquisition of three key components of death conceptualization in children: universality, irreversibility and non-functionality. These components were determined by an evaluation of 50 similar studies. Ninety-one children, kindergarten through 3rd grade, were interviewed individually using a structured tool. This tool was developed by the researcher, but was modeled after several other established instruments, including the Smilansky Death Concept Questionnaire (Smilansky, 1987). Questions were developed to determine the understanding of all three components, and were very short, requiring simple answers. Example questions are: Is it alive?; can a dead person breathe?; and will they come alive if you give them medication?

Most of the children understood each component, but less than 50% achieved a mature understanding of all three components. The researchers felt that due to the
fact that only 50% of the subjects had a mature understanding of all three components, the process of achieving an understanding of death continues in children through age 10. Much of this study was concerned with sequential acquisition and concurrent acquisition, citing Piaget's theory as a basis for this. Through this study, it was determined that universality is understood initially, and that irreversibility and non-functionality are understood together in later development (Speece & Brent, 1992).

Cotton and Range (1990) were concerned with irreversibility, finality, causality and inevitability in their study. These researchers interviewed 35 children ages 6-12. Demographics were acquired and four questionnaires were used: (1) the fear of death subscale of the Fear Survey Schedule for children FSSC (Scherer & Nakamura, 1968); (2) The Hopelessness Scale for Children HSC (Kazkin, French, Unis, Esveldt-Dawson, & Sherick, 1983); (3) the Questionnaire for Examination of Human and Animal Death (Smilansky, 1987); (4) Three Piagetian Conservation Tasks and the Questionnaire for the Examination of Human and Animal Death QEHAD (Goldschmid & Bentler, 1968).

Pearson r correlations were calculated between 4 components and age, fear of death, conversation,
hopelessness, and experience with death. Conservation and experience were seen as predictors of accurate death concepts in school age children, but their relationships with death concepts were inversely related. The correlation coefficient for conservation was .47 and for experience it was -.40 (N = 35, p < .01). Cognitively maturing children may have difficulty understanding death concepts when given an euphemistic explanation, because this information counters to their developing conservation ability (Cotton & Range, 1990). The positive relationship of conservation ability and death concepts help determine that understanding death is more related to overall cognitive developmental ability than to age (Cotton & Range, 1990).

This study revealed through multiple regression that significant predictors of death concepts were cognitive levels, past experience, and fear of death (statistics were not available). Treatment implications for children dealing with death should reflect their cognitive developmental level and past experience, not just their age. Providing euphemistic explanations may only confuse the child’s concept of death (Cotton & Range, 1990).

Studies on Death Education and Its Effects

Children are increasingly exposed to death in our society. Professional literature indicates that there
are potential adverse effects of unresolved childhood
grief (Aspinall, 1996). Aspinall (1996) felt that these
facts alone were enough to identify the need for death
education in school curriculum. Aspinall conducted a
literary review of what is known about children's
understanding of death, how children grieve, and relevant
research. The researcher used current research to
develop an outline for a death education program that
incorporated developmental and theoretical principals on
children's grieving process. The goal was to provide
students with appropriate information about the life
cycle, to identify affecting issues associated with
grief, and to facilitate the development of effective
coping strategies for managing bereavement reactions all
at the appropriate developmental levels. Aspinall
determined, through personal observation and current
research, that a death education program may help
students to appreciate life more and see it as a natural
part of life. Schools could also be able to manage
deaths and other crisis more effectively if they have
developed a preventative curriculum to collaborate with a
crisis plan. By including death education in the
existing education curriculum, such as math or reading,
children can understand and cope with death situations
and have a sense of thriving in spite of adversity and unexpected disappointments (Aspinall, 1996).

Guy (1993) maintained through literature review that the amount of research that established the foundation for using children's literature to examine elementary-aged children's conceptions of death following a story presentation was limited. In Guy's study a small group (n = 31) of elementary children were read, in a random order, three contextual stories that reflected real-life situations adapted from children's literature about death. Group discussion followed each story and Kane's (1979) 10 components were used to structure the discussion. These components were realization, separation, immobility, irrevocability, causality, dysfunctionality, universality, insensitivity, appearance, and personification.

The results of Guy's study revealed that certain patterns of Kane's stages of death conception were evident in his study sample. The study recommended that consideration be given to investigating the therapeutic benefits of death education and bibliotherapy with young children and their conceptualization of death (Guy, 1993).

Glass (1991) developed a program to help school age students cope with and understand death more effectively.
This program consisted of students voluntarily attending, for a period of six weeks, a special interest course on death, which was taught by counselors. The children involved in this program were given a pretest and a posttest to determine the program’s effectiveness. At the posttest, the experimental group scored 22% higher than the control group on their understanding of death. This researcher developed many suggestions for parents and school counselors to help children with their understanding of death. The main suggestion was to educate children on death, so that they may be prepared to understand and cope with death as they experience it.

Edgar and Howard-Hamilton (1994) provide strong literary support for the need for death education in elementary students by citing studies completed by Gordon & Klass (1979), Baker, Sedney & Gross (1992), and Lewis (1992). They set out to design a program that would help children understand death and process it in a noncrisis setting. There were three goals for the program. The first was to give each child information about death, such as terms to express their feelings about death. The second goal was to clarify life and death values to reduce misconceptions about death. The third goal was to allow the children to grieve losses that they may have already experienced, and to help all children begin to
develop appropriate grieving behaviors (Edgar & Howard-Hamilton, 1994).

The program described by Edgar and Howard-Hamilton (1994) was a noncrisis course in death and dying offered to all children entering the 5th grade in a large elementary school in a university city located in southwest United States. For a 10-year period, approximately 1000 students participated annually in the program. Specially trained school psychiatrists and teachers taught the classes. The course lasted 4 weeks, meeting 2 times a week. A pre and post-test was given to all children who attended the program. This was to determine the effectiveness of the course.

Edgar and Howard-Hamilton reported that after 10 years with this program in place there has been both developmental and mental health benefits for the children enrolled. There was a 74% average increase between the pre and post-test on factual knowledge about the death process, life cycle, and mourning behaviors (Edgar & Howard-Hamilton, 1994). Long-term results were reported to the researchers through letters from students of family members who were later confronted with a loss. These letters expressed that the information the program provided helped the children to grieve and express their feelings. These researchers felt that by calmly
presenting reality rather than imagination, by helping children learn words that express their experiences, and by helping them find supportive and dependable networks, children are able to deal with the reality of death (Edgar & Howard-Hamilton, 1994; Fulton, 1987; Glass, 1991; Gordon & Klass, 1979; Guy, 1993; Wass, 1984).

Schonfeld and Kappelman (1990) believed that the young child’s immature understanding of the concepts related to death serves to elevate anxiety about death and interferes with successful adjustment to loss. The goal of their study was to determine whether a school-based educational program could successfully promote the development of a more mature concept of death in early elementary school-aged children. The stages in children’s acquisition of concepts of death are identified in the study as irreversibility, finality (non-functionality), inevitability, and causality (Schonfeld & Kappelman, 1990).

This study assumed that children acquire the concepts of death based on developmental stages. Inability to understand and process each of these concepts may cause a child to have difficulty proceeding through an appropriate mourning process. These concepts are compared with Piaget’s stages of cognitive development. Some argument is raised that concepts such
as life, birth and death are developed by natural process and may not be affected by intervention (Schonfeld & Kappelman, 1990).

The study used a randomized sample to determine the effectiveness of a three-week, pro-active, school-based death educational program. It focused on the promotion of the concepts of understanding death in 4-8 year old children. The Smilansky Death Concept Questionnaire (Smilansky, 1987) was administered to 184 children in an individualized interview style as a pre and post-test evaluation. The interventions consisted of (a) a series of six presentations about concepts of death, (b) teacher educational presentations, and (c) parent educational presentation.

The researchers' school-based intervention was found to advance a child's understanding of death and related concepts. Significant gains were noted in total death concept score, the total score for human death, the total score for animal death, causality, inevitability and old age. For the total death concept score the mean gain was 4.16 (SD = 5.11, p = 0.002). In the total score for human death the mean gain was 1.81 (SD =2.69, p = 0.015). The total score for animal death realized a mean gain of 2.35 (SD =3.28, p =0.002). The factor of causality reported a mean gain of 0.86 (SD = 1.57, p =0.0005). The
factors of inevitability and old age reported mean gains of 1.76 (SD = 2.88, p = 0.0002). Irreversibility and finality did not differ significantly. The gain in total death concept was seen as equal to the amount of cognitive conceptual development in one year without an intervention (Schonfeld & Kappelman, 1990). The results also indicate a "strong correlation of age with the level of conceptual development related to death (Pearson correlation coefficient = 0.515, N = 184, p = 0.0001)" (Schonfeld & Kappelman, 1990).

A survey done by Jones et al (1995) revealed the interest of parents in the development of death education in schools. In this survey 120 parents of fifth-graders were asked if they would support a death education program. A school counselor who had reported an increasing incidence of suicide and terminal illness in his district identified the need for the program. This survey determined that 71% of the parents felt that a death education program within the curriculum would be beneficial for the development of their children. The parents cited violence, teen suicide, and alcohol related motor vehicle accidents as primary reasons to implement the program (Jones et al., 1995).
Summary and Implications for Study

In summary, a review of the literature revealed that the study of the impact of death education on children’s understanding of death is increasing but continues to be limited. There is minimal research on how parents elect to educate children on death, or if they even address death at all (Schonfeld & Kappelman, 1990). Schools are the most logical site for death education to be conducted since children are required to attend, and it is an environment conducive to learning. It also provides a non-threatening atmosphere for an emotionally charged issue such as death.

Many of the studies addressed the cognitive level of children and how it affects their understanding of death. Only a few studies researched the effects of a formal death education session. Weaknesses of several of the studies reviewed are the limitations of the sample, such as size, geographic region and ethnic group. These limitations decrease the generalizability of the studies. Although all of these studies contribute valuable information to the literature regarding the effect of death education on children’s understanding of death, research in this area should be continued.
Hypothesis

Following an educational session and group discussion concerning death, children will have a better understanding of death concepts than prior to the intervention, as measured by scores of responses to the Smilansky Death Concept Questionnaire (Smilansky, 1987).

Definition of Terms

The following are definitions that provided clarity when reviewing this study.

Death. For the purpose of this study death is defined as the permanent absence of life.

Children. Children in this study are in concrete operational stage, specifically 7-9 years olds in second grade.

Death Education. This is a formal, proactive classroom instruction about the life process and death. Piaget’s developmental stages will be consulted and age appropriateness will be maintained.

Understanding of death. This understanding is the process of conceptualizing death and progressing through the natural developmental stages of a specific age group.
CHAPTER THREE
METHODS

Research Design

A quasi-experimental design was used to determine the impact of death education on children and their perception of death. Data were collected using the Smilansky Death Concept Questionnaire (Smilansky, 1987). The design was based on a partial replication of the Schonfeld and Kappelman (1990) study. That study’s purpose was to determine, using a randomized control trial, whether a school-based educational program would successfully promote the development of a more mature concept of death in early elementary school-aged children.

Threats to the validity of the study are both internal and external. The following internal threats were identified and controlled when possible. The children’s past history will affect their responses to the questionnaire. A child, who has had more direct experience with death, may perceive death in a more concrete manner than one who has no experience. Selection of the sample was limited due to the sensitive
nature surrounding death. Death is a topic that is often stressful to discuss and causes a variety of emotional responses.

A limitation to this study was that it used a convenience sample. A convenience sample may be atypical of the population studied regarding important variables being measured (Polit & Hungler, 1995). This was noted as a weakness in the study. Also, the children may feel compelled to answer the questions in a less than truthful manner to anticipate the correct or anticipated answer. To reduce this behavior the children were frequently reminded that "there are no wrong answers" and that all responses were confidential.

The major threat to internal validity was the instrumentation that was used. This was related to the researcher's inexperience and subjectivity of data and in scoring of the tool used. Attempts were made to ensure consistency and reliability. For consistency of scoring, the researcher conducted all the interviews. When the scoring was completed, a master's prepared elementary educator listened to the taped responses and also scored the responses independently. The researcher and the educator then reviewed all responses together, reviewed differences in scoring interpretation, and then
determined a final score for each student. This means of scoring provided an increased reliability to the study.

One external threat to validity was that the children in this age group are eager to please the adult and could have been easily influenced by the interviewer. The researcher is a regular volunteer in the school and has a child who attends the school. This relationship could have influenced the children's answers to the study. To avoid this, the children were encouraged to answer each question honestly and not necessarily answer in a manner that they believe the researcher would like.

Another threat may have been the opinions and the reactions of the children's parents about death. These could influence children's perception and responses of death. An example would be if the parent would become angry because of a personal loss, the child sees only anger when understanding death. Another limitation could be within the school system and the classroom instructor's code of ethics. These persons or systems could direct the outcome of the children's responses to the questionnaire. Children are influenced by their adult mentors through education, religious, or social contacts.

A final limitation or threat to validity arose from discomfort parents had in having their children educated
regarding death in the school system. Six parents returned the demographic form but declined to have their children participate in the study. All 6 forms returned cited that they felt this type of education was not appropriate in the classroom. This may have also been an influencing factor for the 8 parents who did not respond to the questionnaire. The researcher made attempts to educate parents on the importance of the issue and tried not to cause the parent discomfort or undo pressure.

Sample and Setting

Before data were collected and the study was implemented, the Grand Valley State University Human Research Review Committee (telephone consent April 1998, written consent June 1998, see Appendix B) and the elementary school principal and teachers (see Appendix C) involved approved the research plan. There were minimal anticipated risks identified in this study. These are identified later in this chapter.

The subjects for this study were children recruited from a rural elementary school. The sampling method for this study was a non-probability convenience sample. There was no attempt at randomized selection of these classes. A letter of explanation, consent, and a personal data questionnaire (see Appendix D, E, and F) were sent home with each child in the designated classes.
Second copies were sent to those who did not return the consents by the given deadline. Follow-up calls were made for those remaining outstanding consents.

The target population for this study was children ages 7 to 9. Criteria for this study were as follows: (a) second grade, (b) experience with death, (c) English speaking, and (d) parents, who agreed for the child to participate. There were several sample bias issues that were noted. The study represents only Caucasian students in traditional nuclear families. A second bias is that there was limited religious variation. The primary religious faiths within this community were Catholic and Methodist. Of the children in this study, 89% reported attending religious services. A third potential bias was the weakness of a convenience sample. Finally, the study is limited to one geographic location. All of these biases weaken the study by making it less generalizable to the general population.

With the exception of age, the demographic characteristics are summarized in Table 1. The age of the participants ranged from 6.92 years to 8.58 years with a mean of 7.78 years (SD = 0.625). The participants consisted of 50% female (n = 19) and 50% (n = 19) male.
Table 1

Characteristics of Subjects (N=38)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>50.0</td>
</tr>
<tr>
<td>Female</td>
<td>19</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Experience with Death:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Father</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>Grandparent</td>
<td>14</td>
<td>36.8</td>
</tr>
<tr>
<td>Sibling</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Friend</td>
<td>16</td>
<td>42.1</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>28.9</td>
</tr>
<tr>
<td>Pet</td>
<td>21</td>
<td>55.3</td>
</tr>
<tr>
<td>None</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td><strong>Attended a Funeral in last 3 years:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>57.9</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>42.1</td>
</tr>
<tr>
<td><strong>Attendance at Religious Services:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>15</td>
<td>39.5</td>
</tr>
<tr>
<td>At least monthly</td>
<td>6</td>
<td>15.8</td>
</tr>
<tr>
<td>Occasionally</td>
<td>13</td>
<td>34.2</td>
</tr>
<tr>
<td>Does not attend</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Level of Parental Education (n=76):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>High school graduate</td>
<td>16</td>
<td>42.1</td>
</tr>
<tr>
<td>Technical/college courses</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td>College graduate</td>
<td>25</td>
<td>65.8</td>
</tr>
<tr>
<td>Some master’s classes</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>Master’s/Ph.D.</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td><strong>Marital Status:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Married</td>
<td>37</td>
<td>97.4</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Thirty-six (94.7%) children had experienced a death of a person or pet in their nuclear or extended family. Twenty-two (57.9%) children had attended a funeral in the last three years. Fifteen (39.5%) attended church weekly, while only 4 (10.5%) children never attended religious services. Education levels of the children’s parents ranged from less than high school (n = 3) to a master’s or Ph.D. (n = 14). Of all the children’s parents 97.4% (n = 37) were married. There were no missing data on the demographic questionnaires.

Instrument

The Smilansky Death Concept Questionnaire was selected to evaluate children’s perception of death. The Smilansky Death Questionnaire was designed and written by Sara Smilansky. Permission to use the instrument was obtained from Dr. Smilansky (see Appendix G), with the help of Miriam Feinberg of the Board of Jewish Education of Greater Washington, who is a personal friend of Dr. Smilansky and served as translator.

The questionnaire is composed of two parts. The first 13 questions evaluate conception of human death, and the second 13 questions deal with conceptualization of animal death. All the questions directly examine children’s understanding of death and differ only in
reference to human or animal (see Appendix H) (Smilansky, 1987). The questionnaire was originally written in Hebrew but was transcribed into an English manual in 1987. Many influential researchers of children's understanding of death have since used Smilansky's questionnaire as a basis for developing their own instruments (Cotton & Range, 1990; Schoenfeld & Kappelman, 1990; Speece & Brent, 1992, Speece & Brent, 1993).

Smilansky developed the questionnaire based on conceptual categories related to children's understanding of death: irreversibility, finality, causality, inevitability and old age (Smilansky, 1987). To measure a child's understanding of the life process, the concept of old age was introduced.

Smilansky (1987) recommends that the questionnaire be administered to each child in interviews lasting 10 to 20 minutes. Scoring is based on quantity and the quality of the answer the child gives. An example of this would be if a child were asked, "if a person dies and has been in his grave, can he be a living being again?" A high scoring answer would be "no, a dead person can't come alive again, because he is old." Questions correspond to one of Smilansky's five concepts (previously stated) and are scored according to the correctness and explanation
of the answer. The five concepts are scored individually for both human and animals on a scale of 0 to 3. The more complete the conceptualization, the higher the score. A score of 3 would be given if the child has given a correct answer to the question and also an appropriate explanation. A score of 2 would be given for two correct answers and one correct explanation. A score of 1 would be given if the child has answered one question correctly, with one correct explanation. A score of 0 would be given if the child has answered both questions incorrectly or has failed to answer, or has answered one question correctly but its explanation is not correct (see Appendix I). Total scores for the animal and human perception related to the concepts is 0 to 15, a total death concept score obtained by combining the two scores (total of 30 points each). The data in this study were analyzed for significant differences in children’s understanding of death before and after a session on death education.

The Smilansky questionnaire has been used and validated with 1242 Israeli children. Construct validity of the instrument was established utilizing a factor analysis that yielded 4 factors that together accounted for 67% of the variance. The factors are identified as irreversibility of death, finality of death, causality of
death, inevitability of death and old age (Schonfeld & Kappelman, 1990). The reliability of the questionnaire has been examined by test-retest reliability and inter-item consistency. A random sample (124) of the same Israeli children were retested 4 weeks later after the original study. The coefficient of correlation between the total scores of these children on their first examination and the total scores of their repeat examination was 0.84. Since the children could not remember the answers to the 26 questions used in the study 4 weeks prior, a high coefficient of correlation indicates the effectiveness of the Smilansky Death Concept Questionnaire (Smilansky, 1987).

For this study, the researcher also examined internal consistency of the Smilansky Death Concept Questionnaire by calculating Cronbach’s alpha. The overall reliability coefficient for the instrument in the pre-test and post-test was 0.62 (p = 0.000). This test-retest score (pretest and posttest) indicated strong (.60) stability of measurement in the Smilansky instrument. Interitem consistency examined to what extent the individual items affected the general score. Reliability is based on interitem consistency as examined by Cronbach’s alpha, which is based on correlation between
the individual items and the total conceptualization of death. The questionnaire was scored separately for human and animal death. An alpha of .77 was obtained, indicating reliability of the Smilansky Death Concept Questionnaire (Smilansky, 1987).

Procedure

To obtain permission to conduct this study in a local elementary school, the researcher made arrangements to meet with the principal and two teachers whose classrooms would be involved. The researcher described the study including the purpose, consent form, demographic information sheet, the Smilansky Death Questionnaire, the intervention, and crisis intervention. After making changes on the demographic information sheet suggested by the school team, the researcher was granted permission to proceed with the study. It was agreed that data collection would take no longer than two weeks of class time. It was also agreed that the study would be initiated by April 1998 and completed by June 1, 1998.

The children’s parents were asked to complete a personal data form and sign a consent prior to their child’s participation in the study. This data provided past history and general information about the children. The parents of the children in the study were notified in the class newsletter when it was to take place. Copies
of the signed consent forms were kept on file at the elementary school and the researcher kept a second copy.

The Smilansky Death Questionnaire was administered to each child in an interview style, taking approximately 10 to 20 minutes per child. A script was developed and delivered to each child for consistency that was based on the same death concepts as the pretest (see Appendix J), the intervention (see Appendix K) and the posttest (see Appendix L). Each child was interviewed both before and after the intervention phase of the study. The interviews (pretest and posttest) were conducted privately outside of the classroom. Care was taken not to interrupt scheduled class events or curriculum by reviewing daily schedules with the teachers.

The children’s responses were recorded and scored with the explanation that is necessary to write their responses down and tape them so the researcher would not overlook anything. For consistency of scoring, the researcher conducted all interviews. When the tests were completed, a master’s prepared elementary educator, who had been trained by the researcher to score the questionnaire, listened to the taped responses and also scored the responses independently. The researcher and educator reviewed all responses together, reviewed differences in scoring, and then determined a final score.
for each student. Due to the subjectivity of the tool and its scoring, this means of evaluation provided increased reliability to the results of the study.

The pretesting was completed on each child in the study. Within 1 to 2 days after the testing, each class was read the story *The Fall of Freddy the Leaf*. The children who did not participate in the study were given extra computer time in the library. This story presents death through a life cycle perspective. After the story, the children were asked as a group what the story was about. They were encouraged to use creative thinking such as, what are all possibilities in the story, how did the story make them feel, how did the characters feel, and do they have experiences similar to the story.

Five questions were asked of the group to initiate conversation about death concepts. The concepts are the basis of Smilanky’s Death Questionnaire. These concepts are (a) finality of death (Does Freddie know what is happening to him?), (b) causality of death (What happened to Freddie?), (c) irreversibility of death (Can Freddie go back to living in the tree after he has fallen off?), (d) inevitability of death (Does the same thing happen to all of the leaves? Why?), and (e) old age (Which leaves get old? Why?). The children’s teachers were present during the intervention to assist with any children who
may have become distressed. Questions pertaining to the story were addressed without any religious or researcher bias. The purpose was to allow the children open discussion time with their peers to talk about their understandings of death. This session was audio taped for researcher review so that accurate accounts of the session could be obtained. This information could be used for review of the children’s responses or to support continued research on death education, bibliotherapy, and group discussion.

After the group intervention was completed a post-test interview was conducted within the following 1 to 2 days. The posttest was scored in the same fashion as the pretest. The second rater also scored the audiotaped interviews, and final scores were again agreed upon by conferencing. All audiotapes were erased after the data were analyzed.

Children whose parents did not want them to participate in the study (n = 14) were allowed to participate in a separate story session. The story that was read was The New Three Pigs. The researcher also spent individual time with those children reading from their daily reader. These children were given extra computer time while the study children were participating in the intervention.
CHAPTER 4

RESULTS

The purpose of this research study was to determine if death education has an impact on children’s understanding of death. This chapter includes a summary of findings in terms of the research question, “What effect does an educational session that includes a story addressing death and subsequent peer group discussions have on school age children’s understanding of death?” Data were analyzed using the software Statistical Package for the Social Sciences (SPSS) for Windows. An alpha of .05 was used to determine significance of statistical coefficients.

A total of 52 consent forms and demographic questionnaires were distributed to a rural, second grade class. Of those, 44 questionnaires were returned within the 2-week time frame for a return rate of 85%. Thirty-eight parents agreed to have their children participate in the study and 6 declined. All 6 sets of parents stated that the reason for not participating was that they felt that the children should have death education at home or in church. There was one case of attrition
from the study. This child participated in the pretest and the intervention. However, the child was absent for the posttest evaluation.

Table 2

Summary of Smilansky Death Concept Scores

<table>
<thead>
<tr>
<th>Conceptualization of Death</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Death Concept</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>12.76</td>
<td>1.22</td>
</tr>
<tr>
<td>Posttest</td>
<td>14.35</td>
<td>0.75</td>
</tr>
<tr>
<td>Animal Death Concept</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>12.90</td>
<td>1.20</td>
</tr>
<tr>
<td>Posttest</td>
<td>14.46</td>
<td>0.84</td>
</tr>
<tr>
<td>Total Death Concept</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>25.66</td>
<td>2.13</td>
</tr>
<tr>
<td>Posttest</td>
<td>28.81</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Scores in points for the Smilansky Death Concept Questionnaire were subdivided into human death concept (0 - 15), animal death concept (0 - 15), and total death concept (0 - 30). Scores for the human death concept ranged from 11 to 15 (M = 12.76, SD = 1.22) on the pretest and 12 to 15 (M = 14.35, SD = 0.753) on the posttest. Scores for the animal concept ranged from 10 to 14 (M = 12.9, SD = 1.20) for the pretest and 12 to 15 (M = 14.36, SD = 0.836) for the posttest. Total death concept scores ranged from 21 to 29 (M = 25.66, SD = 2.13).
2.134) for the pretest and 25 to 30 (M = 28.81, SD = 1.41) for the posttest. See Table 2 for summaries of these test scores.

In this study paired t-tests were used to assess the overall intervention effect on the total scores for human death, scores for animal death, and scores for total death concept. The differences between the pretest and posttest scores were used to determine if there was an improvement in understanding death in the children. The posttest scores in this study were significantly higher than the pretest scores indicating an increased understanding of death following the intervention (see Table 3).

Table 3
Comparisons of Pre- and Posttest Death Concept Scores

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Pretest</th>
<th></th>
<th>posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Total Death Concept</td>
<td>25.68</td>
<td>2.16</td>
<td>28.81</td>
<td>1.41</td>
</tr>
<tr>
<td>Human Death Concept</td>
<td>12.81</td>
<td>1.19</td>
<td>14.35</td>
<td>.753</td>
</tr>
<tr>
<td>Animal Death Concept</td>
<td>12.86</td>
<td>1.20</td>
<td>14.46</td>
<td>.836</td>
</tr>
</tbody>
</table>

T-tests were performed to determine if children with varying demographic backgrounds differed in their understanding of death. There were no significant
relationships between any of the demographic variables and the Smilansky Death Concept scores (see Table 4).

Table 4
Comparison of Demographics and Death Concept Scores

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Group of Children</th>
<th>t-test</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Pretest</td>
<td>.53</td>
<td>36</td>
<td>.602</td>
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<tr>
<td></td>
<td>Posttest</td>
<td>1.07</td>
<td>35</td>
<td>.290</td>
</tr>
<tr>
<td>Death Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet</td>
<td>Pretest</td>
<td>1.26</td>
<td>36</td>
<td>.215</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>.69</td>
<td>35</td>
<td>.492</td>
</tr>
<tr>
<td>Friend</td>
<td>Pretest</td>
<td>-.54</td>
<td>36</td>
<td>.594</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>.01</td>
<td>35</td>
<td>.995</td>
</tr>
<tr>
<td>Other</td>
<td>Pretest</td>
<td>.46</td>
<td>36</td>
<td>.650</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>.78</td>
<td>35</td>
<td>.440</td>
</tr>
<tr>
<td>Attended a funeral in last 3 years</td>
<td>Pretest</td>
<td>.54</td>
<td>36</td>
<td>.594</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>1.42</td>
<td>35</td>
<td>.163</td>
</tr>
<tr>
<td>Attended religious services</td>
<td>Pretest</td>
<td>-.27</td>
<td>36</td>
<td>.786</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>.41</td>
<td>35</td>
<td>.683</td>
</tr>
</tbody>
</table>

Parent education level varied for each child. The questionnaire was not specific in its directions regarding who should respond to its questions. Therefore it cannot be determined whether mothers' or fathers' education was reported. However, an analysis of variance (ANOVA) was used to determine if there were significant
differences in pretest and posttest scores with different levels of parental education. The levels of education were collapsed into high school and less, technical school, and college and above. Each of these groups were divided into parent education A and parent education B as listed on the demographic form and further evaluated by ANOVA. No two groups were significantly different with alpha designated as .05.

Other Findings of Interest

One point of interest noted when interviewing these children was that only a few mentioned the death of their classmate that occurred the previous year. At the time of the crisis, the children were repeatedly exposed to crisis intervention, several fund raising events were conducted, and many memorials were held. Although these children were extensively exposed to death issues, it was not significant enough for the children to recall during this study.

Another area of interest had to do with the children discussing death with their parents. They were encouraged to discuss the pretest and intervention with their parents. During the posttest only a few mentioned that they had discussed death issues with their parents. The researcher was unable to determine if the children in the study discussed death issues with their parents. The
researcher was also unable to determine if discussing death issues with their parents effected the children’s understanding of death. Further research is necessary to determine if discussing death with their parents has any effect on children’s understanding of death.

The children in this study had varied experiences with death as reported by their parents. Some of the children identified personal experiences with death, yet others did not. There were no questions that asked the children about personal death experiences. The children may have shared different experiences with the researcher, that may have been more significant to them, than the death experiences identified by their parents. In identifying these personal death experiences, the children may have reported a different level of understanding of death.
The purpose of this study was to determine if death education in elementary age children affected their understanding of death. Paired t-tests and ANOVA analysis were used to evaluate relationships between demographic data and Smilansky Death Concept test scores. This chapter includes a review of the demographics of the sample, a discussion of findings, implications for nursing, and recommendations for research and implementation of a death education program in existing school curriculum.

Discussion of Findings

Results of this study suggest that a death education program or session can increase a child’s understanding of death. After a death education intervention, the posttest revealed significant improvement in understanding compared to the pretest scores. These study results parallel the results by Schonfeld and Kappelman (1990) who found similar correlation with
children's understanding of death after a death education intervention (Pearson correlation coefficient = 0.515, p = 0.0001). The Schonfeld and Kappelman study also reported a strong correlation of age with the level of conceptual development was not seen in this study. The findings regarding death education and children's understanding of death agree with the Speece and Brent (1984) belief: Children's experiences with death, including their experiences with actual death as well as what they have been told about death, are probably crucial to their understanding of death (as cited in Schonfeld & Kappelman, 1990).

The children's average scores on the Smilansky Death Questionnaire in this study were higher than those recorded in the Smilansky (1987) study. The Smilansky study reported pretest and posttest mean scores of 22.6 and 23.5 respectively. This study reported means of 25.66 for the pretest and 28.81 for the posttest. One difference in the two studies was that the Smilansky's study did have a wider range of age than this study (4 - 12 years), which could be one explanation for the lower mean scores. Schonfeld and Kappelman (1990) reported gains similar to those of this study in the pretest and posttest mean scores.
An explanation for the higher death concept scores could be that these children as a group received grief crisis counseling 1 year prior to this study. The counseling was part of a crisis intervention after three local children were killed in a motor vehicle accident. Although only a few children in this group mentioned the death of their classmate during the interviews, the experience with death could have influenced how these children understand and process death. Four children's demographic forms reported no experience with a death, yet each of these 4 children were involved in the previous year’s crisis intervention. This could have indicated that even the parents of these children did not see these deaths as significant in their child’s life or that it was an issue that they had already processed.

Guy (1993) also used bibliotherapy as an intervention in his study of children’s understanding of death. Guy’s goal was to support the idea that bibliotherapy could encourage children to explore and express their feelings on death. Like this study, he used a pretest and posttest to evaluate the children. His study found that after children listened to a story on death they had a better understanding of death related issues (no statistics available). These results are similar to the results of this study. He also felt that
the children were better able to express their feelings about death after the bibliotherapy.

There were no significant relationships among any of the demographic variables and the Smilansky Death Concept Scores in this study. As previously mentioned, the small sample size may have contributed to this. A replication of this study with a larger sample might reveal that the demographics are related to children’s understandings of death.

Death education through bibliotherapy and group discussion in this study provided an increased understanding of death to the study group. It is not known if this increased understanding was based on knowledge or on the actual understanding of death. Further research needs to be conducted in this area. Factors influencing the increased understanding of death could have been due to the children’s discussions of death with their parents after being stimulated by the pretest and intervention. Some of the children reported that they did talk to their parents about death. These children were confident in their responses to the posttest. Overall the children were more open to discussing death issues in the posttest than in the pretest. It was the researcher’s goal to provide the children in the study the permission to discuss death,
the terms to use, and to develop their knowledge of the life cycle. Children in this study did meet some of the goals, however more research is needed to further determine this.

Death education was an influencing factor in this study group's increased understanding of death. It provided the children of this group comfort in discussing death as evidenced by the increased posttest scores on the Smilansky Death Concept Questionnaire. Some children also discussed death issues with their parents after being encouraged by the study intervention. Many of the children were even willing to be involved in the group discussion after the posttest. Death education may not be a vital part of the school curriculum, but it encourages the child to seek out more information. Their parents can then continue the collaborative process of helping their children understand death.

Although the scores did not reflect it, many of the children discussed death with religious affiliation. This may have had some effect on the increased mean scores. The children with more religious background may have had a more concrete understanding of death. More research is needed with a larger sample and more specific questions to determine if religion plays an active role in children's understanding of death. Additionally, the
Smilansky Death Concept Questionnaire, and other instruments like it would need to be evaluated for their effectiveness in evaluating children with strong religious backgrounds before these instruments should be used in these studies.

The death education intervention and Smilansky Death Concept Questionnaire were well tolerated. Most of the children verbalized that they enjoyed the study. Neither teachers nor children’s parents reported adverse effects. Many parents expressed interest in obtaining the study results from the elementary school’s office when they became available.

Relationship to Conceptual Framework

Children in Piaget’s developmental stage of concrete operational thought are curious and seek out further information, especially when stimulated with education (Aspinall, 1996). Death education is only the beginning of developing children’s understanding of death. During this transition, children seek out more information from their parents and mentors (Aspinall, 1996). The education process then becomes a collaborative process. This process assists the children to reach equilibrium (Labinowicz, 1980).

According to Piaget, children in the concrete operational stage see issues as concrete and do not
always identify with concepts that are necessary to understand death as a complex issue (Speece and Brent, 1992). Smilansky (1987) identified the concepts of finality, non-reversibility, causality, inevitability, and old age as necessary for children to understand death. Children have to process these concepts by adapting and organizing them to their environment (schema). They then have to incorporate death experience or education (assimilation) and modify it (accommodation) into their existing lifestyle and environment. This process provides balance (equilibrium) to the child’s life.

Although the children in this study are in Piaget’s concrete operational stage, their understanding of death as a complex issue was well developed. Speece and Brent (1994) felt that children develop their adult concept by age 8, which may explain why the children in this study scored high on the Smilansky Death Concept Questionnaire. Greater than 97.4% of these children had experienced a death of a person in their nuclear or extended family. This group of children also identified death as inevitable. All of these children identified death as a natural process of life.
Limitations of the Study

This study recruited a small, non-randomized convenience sample from a small rural elementary school. Small samples and individual data collection settings are less representative of the population being studied and limit the ability to generalize the findings (Polit & Hungler, 1995).

A convenience sample was used for this study. According to Polit and Hungler (1995) limitations to non-randomized convenience sampling is due to the use of available subjects, who may not be typical of the study population. Using a sample with only Caucasian, traditional nuclear families, no racial differences, no geographic valences, or religious variation also may increase the risk of bias and make the study less generalizable.

Another limitation to this study was that education level varied for each parent, but the questionnaire was not specific in its directions regarding who should respond to its questions. An appropriate revision of that instrument would ask for the parent to be specifically identified as mother, father, grandparent, or other caretaker to accurately identify a relationship between parent education and children’s understanding of death.
A weakness to this study, also shared by Schonfeld and Kappelman (1990), is that the educational intervention may have taught the children appropriate responses and not promoted an increased understanding of death. This could be avoided by having different individuals deliver the intervention and conduct the interviews, with directions to avoid using language from the questionnaire in the intervention.

Recommendations

Based on information gathered in this study and collected in the literature, the following recommendations are offered.

Research

The following recommendations are offered for nursing research. Research studies are needed to clarify the most effective means of death education in children. Future recommendations for research would be to conduct studies using a larger and more demographically varied sample. This would make the study more generalizable to the general public. The children in this study were drawn from a single, relatively homogenous rural community of white middle class families. Because of this, a second recommendation is to also extend the age range to both younger and older children to explore more transition
periods between levels of understanding (Speece and Brent, 1992).

In future studies, a more complex demographic evaluation of the parents and their views on death could give more insight to children's understanding of death. Children learn and develop concepts from their parents and mentors. If a parent were having difficulty understanding death concepts, then a child may also struggle with death concepts. Not only does the parent need the coping skills to effectively process death concepts, but also they need to convey those skills to their children. If they are unable to do so, it is important that they know where to find the resources to receive those skills for themselves and their children. Nursing could serve as an advocate for these people to help them find the education, resources, and help that they might require.

Although this study did not indicate religion as a factor in the children's understanding of death, research in this area is needed. Many of the children in this study referred to "God, going to Heaven, or a better place" during the interview process with the Smilansky (1987) questionnaire. In a large sample, religious background might be shown to have a significant
relationship with the children’s understanding of death and with death education.

Another recommendation for research is concerned with an alteration of the intervention phase of the study. The children of this study seemed to identify with the animal section of the Smilansky questionnaire. They showed more comfort when answering the animal section of the questionnaire. This finding suggests that children may be helped to understand death if a story that involved animals or incorporated animals were used as a part of a death education curriculum.

Extending the time frame of the study to 8 weeks is recommended. By increasing the time from which the intervention and the posttest are conducted, it may reduce testing effect. The children would have time to develop their understanding with help from other resources, such as parents, mentors, or clergy. It would also decrease the chances of children simply reciting what they learned during the intervention or death education phase.

A final recommendation would be to extend the study to a longitudinal one. By evaluating these same children at a later date, the researcher could determine if the death education session was effective, and if its effects were sustained. If these effects were sustained, it
would provide additional support for developing a death education program for school age children.

Nursing Education

Nurses can play a primary role in an organized death education program. Nursing has the knowledge base in children's cognitive developmental levels, including a wholistic view of caring for children, to develop this type of program. The results of this study indicate that a death education program would assist children in understanding death. Nursing possesses the expertise to promote, develop, and implement a preventative program in a current school's curriculum. This expertise also could be used to consult with school systems, advise parents on death issues, and incorporate death education into crisis intervention programs.

For any education program involving children to be successful, the parents have to be convinced there is an advantage for their children. It is important to involve the parents in this process of death education. The educator and the parent can collaboratively focus on the needs of the children. Death education is a multi-focus educational program. It is important to provide concrete information to children through the school system and religious beliefs in church. The parents can use the combination of the school education and the religious
beliefs to provide the children with the skills to better understand death and its concepts.

The research is limited on the children's understanding of death and death education (Aspinall, 1996). Many authors have theorized as to what would be an appropriate curriculum for children on death education. This data and the nursing process, provide an ideal framework to assess, develop, implement and evaluate a death education program for children. Nurses could specifically design a curriculum focusing on the developmental and situational needs of children. The curriculum could then be implemented and evaluated for its effectiveness. The nursing process helps to establish the effectiveness of a death education program in school age children.

Nursing Practice

Nurses in a practice setting have a unique opportunity to evaluate a variety of children. Both parents and children establish trusting relationships with nurses. Through this relationship, nurses can take time to evaluate and discuss death education with children, the children's understanding of death, and the views of their parents. Many times children present vague physical symptoms when they are emotionally distressed or are having difficulty coping with a loss.
The advanced practice nurse (APN) can evaluate the child holistically and provide counseling to the child as appropriate. The APN can also provide guidance to the parent of a child who may have experienced a death or who has questions about death. Nursing also has the expertise to evaluate children on their understanding of death and provide education to children and parents on death related issues as appropriate.

Nursing can develop public awareness about death education and its effects on children's understanding of death utilizing various community resources. If a practicing APN identifies a need in a community, such as a community with high incidences of cancer or suicide, presentations to parents on death education and children could be beneficial. These presentations could be given in schools, churches, or at conferences. When parents are informed they may be more willing to approve and utilize a death education program in the school curriculum.

Summary and Conclusion

In conclusion, for children to understand death in a manner that provides them with comfort at their developmental levels, more research and death education programs are needed. Nursing can bridge the gap between
what is known through research and what is actually being practiced in a school system’s curriculum.

Facing loss is a reality of life, and helping children understand this reality is not an easy task. Children possess some of the same feelings adults have, but lack the resources and cognitive development to understand them. Children can be helped to develop these skills through education. By educating children about death, they may have a better understanding of the death process, terms used, and more awareness of their feelings. This may possibly help children be more prepared for a loss. Incorporating a death education program into an existing curriculum would be a positive step for any school system to consider.
APPENDICES
APPENDIX A

Consent to Use Piaget Conceptual Framework
This is a request for the permission to use in my Nursing Masters thesis the conceptual framework by Piaget from your companies book titled "Nursing Care of Infants and Children", authored by Lucille Whaley and Donna Wong, copy write 1979, Page #68. Please fax the permission statement to fax number 314-523-4968, attn: Diana Schramm.

Thank you for your help,

Diana Schramm
APPENDIX B

Human Subjects Review
June 24, 1998

Diana Schramm
901 Boynton Ave. SE
Ada, MI 49301

Dear Diana:

The Human Research Review Committee of Grand Valley State University is charged to examine proposals with respect to protection of human subjects. The Committee has considered your proposal, "The Concept of Death Education on Children's Understanding of Death", and is satisfied that you have complied with the intent of the regulations published in the Federal Register 46 (16): 8386-8392, January 26, 1981.

Sincerely,

Robert Hendersen, Chair
Human Research Review Committee
APPENDIX C

Elementary School Approval
Diana Schramm  
901 Boynton  
Ada, MI 49301  

Dear Diana,

I am writing this letter to give you permission to conduct the student survey at Cherry Creek Elementary regarding death. You have indicated that you will be working with two 2nd grade classrooms; Mr. & Mrs.

I have reviewed all materials and the permission slips that will be used. Procedures seem to be in good order.

Sincerely,

Bill M

April 1, 1998
APPENDIX D

Letter to the parents
APPENDIX D

May 12, 1998

Dear Parent(s):

My name is Diana Schramm and I am a graduate student at Grand Valley State University in the family nurse practitioner program. In order to fulfill the requirements for a Master's degree in Nursing, I am conducting a research study with second graders of your child’s school on children’s understanding of death and the effects of death education. The second grade teachers, Mrs. D., Mr. G. and the principal Mr. M., have given their support and approval to proceed with this study. I selected these children because of their common loss of a fellow student in 1996, their age and accessibility. I believe that these children will prove to have an honest interest in the subject and will be willing to participate. I also feel that these children know me and will not feel threatened by the questions asked in the study. I hope that you will allow your child to participate in this study.

It is inevitable that children are exposed to death. Children will need to accept and understand death as a natural process of life. Learning about death may help children to be better prepared to cope with their emotions and decrease their fears about death when they do experience the loss of a loved one.

For this study, I will ask you to read and sign a consent form and complete a personal data sheet. I will then meet with the children separately and ask them 26 questions about death. An example would be: Can a dead animal drink or eat? This pre-test will evaluate your child’s understanding of death. The class will then be read the story “The Fall of Freddy the Leaf,” which is a story about the lifecycle. They will be asked in class about the meaning of the story. Five questions will be asked to the group to initiate conversation about death concepts. These concepts are (a) finality of death (Does Freddie know what is happening to him?), (b) causality of death (What happened to Freddie?), (c) irreversibility of death (Can Freddie go back to living in the tree after he
has fallen off?), (d) inevitability of death (Does the same thing happen to all the leaves? Why?), and (e) old age (Which leaves get old? Why?). Questions related directly to the story will be addressed without religious or researcher opinion. The children will again be asked the same 26 questions individually. All information will be kept confidential and only be used for this study. A small toy will be given to the children as a token of my appreciation. The individual interviews will be audio taped for accuracy. These tapes will be erased after the study is completed.

If you choose to have your child not participate in this study, I will be reading a story (The New Three Pigs) to your child for pleasure purposes only. They will have library time during the reading of "The Fall of Freddie the Leaf." I do not want these children to feel left out, so I also plan to spend individual time with each child reading from their accelerated reading books if they do not participate in the study. They will also receive a small toy as token of my appreciation.

In my experience, children of this age group have wonderfully optimistic views. They may not often have the opportunity to discuss issues, such as death, but are eager to express their ideas. The participation of your child in this study would be greatly appreciated. Please complete the data collection form and the consent form and return it by May 18, 1998 to your child’s teacher. If you have any questions you may contact me at the number below or Dr. Paul Huizenga at Grand Valley State University, 616-895-2472. I am also willing to meet with you if would like to receive further information on the study. Please return the questionnaire regardless of your decision, so that I can place your child in the appropriate group.

Thank you for your time and consideration

Sincerely,

Diana Schramm BSN, RN
901 Boynton Ave S.E.
Ada, MI 49301
616-682-9742
APPENDIX E

Consent Forms
APPENDIX E

CONSENT FORM

I understand that this is a study about children's understanding of death and the effect of death education on their understanding. There will be approximately 35 children in this study.

I understand that:
1. participation in this study will involve a pre-test assessing my child's understanding of death.
2. the book "The Fall of Freddy the Leaf" will be read to all of the children in the study. There will be a copy in the school office.
3. a post-test will be given to my child to again assess my child's understanding of death after being read a story involving death. A copy of questionnaire will also be kept in the office.
4. my child has been selected for participation in this study due to their age group, accessibility, and their common loss of a classmate.
5. it is not expected that this study will lead to any physical risk to my child. There will be minimal emotional risk and it could help him/her have a better understanding of death.
6. the information that my child provides will remain strictly confidential and the data will be coded so that identification will not be possible. This information will be audio taped. At the end of this study the tapes will be erased.
7. if my child exhibits any signs of distress or becomes upset the study will be discontinued, he/she will be consoled as needed and the parents will be notified.
8. a summary of the results will be made available for the group.

I acknowledge that:
"I have been given the opportunity to ask questions regarding this research study and these questions have been answered to my satisfaction."
"I have the right to ask questions that I may have at any time during the study."
"In giving my consent, I understand that the participation of my child in this study is voluntary and that my child or myself may withdraw them at any time for any reason, by contacting my child's"
teacher."
"The researcher has my permission to monitor my child's reactions and audio tape them during the study."
"I authorize the researcher to release information obtained during this study to scientific literature and have been assured that my child's name will not be used."
I understand that ____ elementary school is not responsible for any injury incurred during this study."
"I have been given the telephone numbers of the researcher and chairperson of Grand Valley State University Human Research Review Committee. I may contact any them at any time.

Participant's name

Parent's signature
APPENDIX F

Personal data sheet
APPENDIX F

Personal Data Sheet

ID#____

Your answers to the following questions will be helpful in determining if there are particular factors that affect your child’s perception of death. Please take the time to carefully answer these and return them with the consent form. As with the rest of this study, this information is confidential and will be used for group data purposes only.

Date: __________

1. What is your child’s birth date?________________________

2. Is your child 1. Male_______ or 2. Female_______

3. Has your child experienced a death?
   ___1. Mother
   ___2. Father
   ___3. Grandparent
   ___4. Sibling
   ___5. Friend (friend’s age:_______)
   ___6. Other______________________________
   ___7. Pet
   ___8. None

4. Has your child attended a funeral in the last 3 years?
   1. Yes____ 2. No____

5. Check the most appropriate answer regarding religious activities.
   ___1. Attends services weekly
   ___2. Attends services at least monthly
   ___3. Attends services occasionally
   ___4. Does not attend religious services

6. What is your highest level of education? Use A for parent and B for other adult caretaker.
   A. circle one: mother father grandparent step-parent other
   ___1. Less than high school graduate
   ___2. High school graduate
   ___3. Technical/college classes
4. College graduate
5. Some master’s classes
6. Master/Ph. D  B. circle one: mother father
grandparent step-parent other
1. Less than high school graduate
2. High school graduate
3. Technical/college classes
4. College graduate
5. Some master’s classes
6. Master/Ph.D

7. Your current marital status
1. Never married
2. Divorced
3. Widowed
4. Married
APPENDIX G

Consent from Dr. Sara Smilansky
June 4, 1998

Ms. Diana Schramm
901 Boynton Avenue SE
Ada, MI 49301

Dear Diana,

Dr. Sara Smilansky would like you to know that she is delighted that you will be using the Smilansky Death Concept Questionnaire in your study.

She wishes you great success in your work and looks forward to learning of the results.

Sincerely,

Miriam Feinberg
APPENDIX H

The Smilansky Death Concept Questionnaire
APPENDIX H

Questionnaire for Examination of Human and Animal Death Conceptualization of Children


The "Questionnaire for Examination of Human and Animal Death Conceptualization of Children" contains 26 questions relating to various aspects of death concepts. They deal with the following concepts: Irreversibility, finality, causality, inevitability, and old age. It was developed for children from ages 4 - 12. The questions are based on two criteria:

1. Significance of understanding each particular concept of death, to a child's mourning process and to his/her readjustment and coping in the new reality.

2. Relevant information from research analysis and results from it's authors empirical studies.

TOOL:

Demographics

Initials, age, date of birth, gender, date, faith, loss of family member by death

Concepts related to human death:

71
1. What does it mean to die? What is death?
2. How do people die? Reasons?
3. Who gets old? Does everyone get old?
4. What happens to a person who dies?
5. Does a dead person know that they are dead? Why?
6. Does a dead person feel pain?
7. If a person dies, can that same person become alive again? Why?
8. What if that person has not been buried yet? Why?
9. Can a dead person see? Why?
10. Can a dead person hear? Why?
11. Can a dead person move? Why?
12. Can a dead person come out of his grave? How?
13. Does everyone die? Will you die? Why?

Concepts related to animal death
14. Have you ever seen a dead animal?
15. How do animals die? Why?
16. Does an animal get old? Do all animals get old?
17. What do we do with dead animals?
18. Does a dead animal know he is dead?
19. Can a dead animal feel?
20. If an animal dies and its buried, can that animal live again? How?
21. If an animal is buried and is put in the trash
can it become alive again?

22. Can a dead animal see?

23. Can a dead animal hear?

24. Can a dead animal move?

25. Can a dead animal get out of a box by himself?

26. Do all animals die?
APPENDIX I

Smilansky’s Scoring Tool
3. Diagnostic Summary Record of an Individual Child's Conceptualization of Death

Sara Smilansky

Child's Name________________________ Age______Sex______
Examiner's Name____________________ Date______________

A. Child's Scores on Human Death

<table>
<thead>
<tr>
<th>CONCEPTS</th>
<th>Possible Score</th>
<th>Child's Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-Reversibility</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>2. Finality</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>3. Causality</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>4. Inevitability</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>5. Old Age</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>6. Total Score for Human Death</td>
<td>0 - 15</td>
<td></td>
</tr>
</tbody>
</table>

B. Child's Scores on Animal Death

<table>
<thead>
<tr>
<th>CONCEPTS</th>
<th>Possible Score</th>
<th>Child's Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-Reversibility</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>2. Finality</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>3. Causality</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>4. Inevitability</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>5. Old Age</td>
<td>0 - 3</td>
<td></td>
</tr>
<tr>
<td>6. Total Score for Animal Death</td>
<td>0 - 15</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX J

Pre-test Script
I will formally greet the group at the beginning of class. I will also re-introduce myself and explain the purpose of me being in their classroom.

"As most of you know my name is Mrs. Schramm. This week I am going to ask you to help me with a project that I am doing. I will be asking each of you to come back to the observation room one at a time. I will explain more about what we are going to do then."

I will then call the children, who are involved in the study, back to the observation room individually and close the door. They are comfortable with this routine because they use it for individual reading time with classroom volunteers.

"Good morning, (child’s name). I am very glad to see you this morning. I am a student just like you, except I am in college. I have an assignment to do that I need your help with. I’m going to ask you a few questions and I would like for you to answer them the best you can. There are no right or wrong answers, so anything you say is right. I am going to tape record what you say and I might write down a few notes. I am
doing this to help me remember what you say. I will not tell any of your classmates what you say. It does not take very long. After we are done you can go back to class. Do you have any questions? You can ask questions at any time during our time together. Are you ready? Great, let's get started”

After the questionnaire is complete the child will be given a small toy and thanked for their cooperation and honesty.

“You have done a great job. Because you have helped me with this project, I would like for you to take a toy as a reward. I would also like for you to remind your parents that you are helping me with my assignment today. I’m sure that they would like to hear about it.”
APPENDIX K

Intervention questions
APPENDIX K

SCRIPT FOR INTERVENTION QUESTION

I will greet the children, re-introduce myself to them, and review the purpose of my being in their classroom (see script for questionnaire). The following questions will be used after reading "The Fall of Freddie the Leaf" to generate information and direct the conversation around death concepts. These questions are based on Smilansky's five concepts of death from which the Smilansky Death Questionnaire was developed.

1. Causality of death - What happened to Freddie?
2. Finality of death - Does Freddie know what is happening to him? Why?
3. Irreversibility of death - Can Freddie go back to living in the tree after he has fallen off? Why?
4. Inevitability of death - Does the same thing happen to all of the leaves? Why?

Old age - What leaves get old? Do all the leaves get old?
APPENDIX L

Post-test script
APPENDIX L

SCRIPT FOR POST-TEST

After completing the intervention portion of this study, the children in the study will again be asked to come back to the observation room individually.

"Hello (child’s name). Do you remember when I asked you a few questions earlier in the week? Today we are going to ask a few more questions. The same rules apply to these questions. There are no right or wrong answers, so any answer you give is right. Try to be honest. Again, I will not share your answers with any of your classmates. It will only take a few minutes and then you can return to class. Do you have any question about the questions? Terrific, we will start when you are ready."

A post-test will be given to each child in the study. The post-test will be given using the same guidelines as the pre-test. The child again be thanked and offered another small toy.
References


comparison with manifest anxiety (CMAS). Behaviour Research and Therapy, 6, 173-182.


