

https://dspace.org/

Children's perceptions of death: A Piagetian Perspective

Symons-Bradbury, Janice

2006-04-24T07:22:17Z
http://hdl.handle.net/10539/344

Downloaded from a DSpace repository. https://dspace.org/

CHILDREN'S PERCEPTIONS OF DEATH: A PIAGETIAN PERSPECTIVE

By

JANICE SYMONS-BRADBURY

A dissertation submitted for the degree of Master of Arts in Community Counselling Psychology in the Faculty of Humanities at the University of the Witwatersrand Johannesburg

2004

DECLARATION OF ORIGINALITY

I hereby declare that this thesis is my own original work, and that it has not been submitted for any degree at another university.

_____

Janice Symons-Bradbury
University of the Witwatersrand
Johannesburg
2004

Submitted _____ day of January 2005

ACKNOWLEDGMENTS

I wish to express my greatest appreciation to my supervisor, Dr Kate Cockcroft, for her reliability and her support and encouragement over the last two years.

I would also like to thank my husband, Michael Bradbury for his unending patience and assistance as well as my mother and sister for their ongoing support throughout the production of this thesis.

Lastly I would like to convey my gratitude to my late father, Basil Symons, for his financial and emotional support throughout my academic career and for his incredible pride and faith in my abilities in becoming a psychologist.

ABSTRACT

This study explored children's perceptions of death from a Piagetian perspective. While a few international studies exist which have explored this issue, it was deemed useful to evaluate the perceptions of South African children. It seems that many researchers have not taken into account the importance of broader contextual experience in children's perceptions of death, and it was felt that the current high death rate in South Africa may impact on both or either the rate and level at which children start to engage with and understand the concept of death. The participants of the current study were between the ages of five and twelve years, and were drawn from a Gauteng Place of Safety and a preschool. Individual, structured interviews were conducted on this cross-sectional population. The interviews contained questions adapted from Koocher's (1973) research in this area, and responses were analysed by means of a traditional content analysis. It was found that children had a basic understanding of death concepts by the age of approximately seven years old. It was also found that the youngest age group of children possess an awareness of death, but tend to view it as reversible and not final. An understanding of the finality of death emerges around the age of seven. In general, the participant's responses showed a close relationship between Piaget's stages of cognitive development and how the young child reasons about death.

TABLE OF CONTENTS

CHAPTER 1 ..... **9**

INTRODUCTION TO STUDY **9**

CHAPTER 2 ..... **11**

LITERATURE REVIEW **11**

2.1 THE THEORY OF JEAN PIAGET 12
2.2 SPEECE AND BRENT'S (1991) SUBCONCEPTS OF DEATH 23
2.2.1 Universality *24*
2.2.2 Irreversibility *28*
2.2.3 Non-functionality *31*
2.2.4 Causality *32*

CHAPTER 3 ..... **45**

RESEARCH METHOD **45**

3.1 RESEARCH QUESTION 45
3.2 THE SAMPLE 46
3.3 PROCEDURE AND DATA COLLECTION 48
3.4 ETHICAL CONSIDERATIONS 51

CHAPTER 4 ..... **53**

DATA ANALYSIS AND RESULTS **53**

4.1 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS 54
4.2 DATA ANALYSIS 56
4.3 SYNOPSIS OF CATEGORIES AND SUBCATEGORIES 60

CHAPTER 5 ..... **70**

INTERPRETATION AND DISCUSSION OF RESULTS **70**

5.1 THEMES RELATING TO DEATH CONCEPTS 71
5.1.1 Category 1: Non-functionality *71*
5.1.2 Category 2: Causality *78*
5.1.3 Category 3: Irreversibility *90*
5.1.4 Category 4: Universality *95*

CHAPTER 6 ..... **99**

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH 99

REFERENCES 104

APPENDIX A 113

LETTER OF CONSENT 113

APPENDIX B 116

INTERVIEW SCHEDULE (BASED ON KOOCHER'S (1973) QUESTIONS) 116

APPENDIX C 116

TRANSCRIBED INTERVIEW SCHEDULE 117

APPENDIX D 141

ETHICAL CLEARANCE CERTIFICATE 141

LIST OF TABLES

TABLE 1: Demographic Description of Participants ……55

TABLE 2: Results of the Content Analysis ……61

CHAPTER 1

INTRODUCTION TO STUDY

The current study arose out of an interest in the cognitive development of children and a curiosity about the understanding of death in relation to their intellectual development. Having experienced the loss of a parent and progressing through the stages of bereavement and loss it appeared that many questions became prominent in my thinking. Having a keen interest in the development of children it seemed of interest to ascertain whether children too are faced with similar questions to those of adults in the bereavement process, or whether these differ depending on their developmental level. Another motivation for researching children's perception death was that living in South Africa, with the high prevalence of AIDS and the high murder rates, it was hoped that the findings would be useful in assisting professionals working with bereaved children. Although a large body of research has been conducted in the area of children's reactions to death and the stages of grieving, not many researchers have attempted to explain the death perceptions of children in South Africa. The possibilities for misinterpretations and ill feelings based on the child's limited conception of death are considerable, especially if the adults on the scene fail to understand how the child is likely to interpret death-related phenomena.

In assessing children's understanding of death, it is important to take into account the events young people have experienced, their interaction with adults, the wider culture, and exposure to losses. All of these factors influence children's developing understanding of death, with the four main areas having been identified, namely: universality (inevitability), irreversibility (finality), non-functionality (cessation of bodily processes) and causality (objective causes) (Rowling, 2003).

The present study aimed to explore the perceptions that children at different stages of cognitive development may have of death and dying. Consequently, the theoretical framework adopted for this study is a Piagetian one. Due to the high mortality rate of people suffering from various illnesses as well as the high murder rate in South Africa, many children are likely to have had some exposure to death and dying.

In the following chapter of this thesis literature pertinent to the children's perceptions is reviewed. As already mentioned, the theoretical focus of the study is Piagetian, with the focus on the preoperational and concrete operational stages as these are pertinent to the sample. The subconcepts of death identified by Speece and Brent (1984; 1991) are discussed with the four concepts (universality, causality, irreversibility and non-functionality) becoming a main focus of the study.

Following this literature review and its relevance to children's understanding of death, the thesis progresses to a discussion of the method of study employed. Since the study entailed a qualitative design and encompassed traditional content analysis, Chapter 3 provides the conceptual rationale for the utilisation of such an approach and its implications. The next chapter presents the results obtained from the content analysis, while Chapter 4 provides a structured summary of the categories and the subcategories that emerged in the course of the content analysis.

Finally, a comprehensive discussion and interpretation of the data is provided. The main body of the discussion serves to elucidate the categories and subcategories with particular reference to the four sub-concepts of death obtained from the review of the literature and how these relate to the Piagetian stages of cognitive development. Following this in-depth exploration of the categories, a commentary of the limitations and implications for further research is provided. The thesis concludes with a critical evaluation of this research endeavour.

CHAPTER 2

LITERATURE REVIEW

Fear of death is universal. Both adults and children experience feelings of anxiety, guilt, and abandonment when confronted with their own death or the deaths of those around them. Although adults have a cognitive understanding of the irreversible nature of death, children's understanding of death is dependent on their level of maturation and learning. One of the many problems in dealing with children and death is the tendency of adults to equate their own adult perceptions of death with the child's perceptions. In scrutinizing children's reactions to, and their perceptions of death, it becomes clear that members of the helping profession must recognise and understand the child's own perceptions in order to deal more effectively with the bereaved child. Through the process of exploring children's perceptions of death it is hoped that it will become easier to understand and describe the thought processes of the bereaved child, and consequently to provide effective counselling to such a child

In the past it was thought that children have little concern with death and little fear of it (Wass & Corr, 1984). It was also assumed that the idea of one's own death was unthinkable before one reached middle or late adolescence. Today, however, health professionals and others involved with terminally ill children give credence to the view that the child's understanding of death is sequentially and developmentally driven (Anthony, 1971; Kastenbaum, 1974; Nagy, 1948; Towmnley & Thornburg, 1980). According to Sternlicht (1980), not many researchers, prior to 1980 had considered the relationship between the development of an understanding of death and the child's overall intellectual development. Today it is acknowledged that the child's cognitive developmental level is likely to influence his or her understanding and perception of death. Consequently, Piaget's theory of cognitive development has been identified as a

useful model for studying children's understanding of death (Corr, 1995a; Pritchard & Epting, 1992). For the purposes of this study the second (preoperational) and third (concrete operational) stage of Piaget's stages of cognitive development will be addressed in more detail, as these are deemed relevant for the particular ages of the participants who range from six to twelve years. Furthermore, a discussion of the stages of cognitive development will be provided within the context of the subconcepts of death that have been identified by Speece and Brent (1991).

2.1 The Theory of Jean Piaget

According to Jean Piaget, human cognition is as an integrated set of reasoning abilities that develop together and can be applied to any task (Flavell, 1963; Piaget, 1955; Piaget & Inhelder, 1969). His cognitive developmental stage theory is one of the most dominant twentieth century positions on cognitive development. In his earliest investigations, Piaget was most concerned with the role of language in cognitive development (Berk, 1997). He later concluded that language was relatively unimportant in spurring the young child's thinking forward. Instead, he argued that major cognitive advances take place as children learn about their physical world by trial-and-error, discover shortcomings of their current thinking, and revise them to create a better fit with external reality (Piaget, 1955).

Piaget (1955) believed that specific psychological structures or schemas change with age. At first, the infant's schemas consist of motor action patterns. Soon after this, the infant moves from an action-based understanding of his or her physical world, to a mental level where the child begins to show evidence of thinking before acting on situations. This change marks the transition from sensorimotor to preoperational thought (Cowan, 1976; Boyle, 1969; Inhelder, 1979).

Piaget also believed that children have the natural ability, or tendency, to exercise their schemes repeatedly until they have learnt a new or more correct way of understanding their reality (Boyle, 1969; Flavell, 1963). Therefore, as schemas are rehearsed, the child comes into contact with new information and once they have become aware of the gap between their present schemas and external reality, they then try to reduce this incongruity. It is through this process that cognitive development occurs (Flavell, 1963).

Children's intellectual structures are seen as markedly different to those of adults and are thought to develop in a hierarchical sequence, eventually becoming adult-like (Wass, & Corr, 1984). The brain builds hypothetical structures or systematic ways of making meaning of experience, which allow it to adapt to the external world (Berk, 1997; Richardson, 1998). In the process of acquiring knowledge, the child passes through four major stages, namely sensori-motor, preoperational, concrete operational and the formal operational stages, according to Piaget. The stages are sequential, but they are not rigid in that they integrate and extend on the previous stages and build on them at a higher level (Wass & Corr, 1984).

The work conducted in the area of child development has suggested that the pattern of perceptual and cognitive development during the first six or seven years of life is critical for later successful adaptations to life (Berk, 1997; Richardson, 1998). The first two years are aimed at strengthening simple motor responses. The next three years focus on language development and the use of symbolic representation in the world, along with the development of a visual awareness of the world. The period of middle childhood (about 8 years of age through to adolescence) is largely concerned with cognitive development, particularly the integration of sensory inputs and concepts about the world, logical reasoning, along with the search for personal identity (Lonetto, 1980).

The first major period in Piaget's theory, the sensori-motor stage, is a novel conceptualisation. He was one of the first theorists in the field of child development to suggest that intellectual development begins at birth with sensory and motor actions and that during infancy, these actions, through repetition, become established as schemata or behavioural sequences that form the basis for later intellectual structure and function (Piaget, 1955; Richardson, 1998). Like Piaget, Wass and Corr (1984) believe that infants are unable to form concepts and do not yet possess the language needed to communicate adequately. They also argue that infants are still becoming aware of themselves as separate entities (Wass & Corr, 1984).

The second major period in Piaget's theory includes the preoperational and the concrete operational stages, and is viewed as an intermediate period which prepares and organises concrete thinking, which in turn, prepares for the final period of formal thinking (Berk, 1997). The final period of formal operations, during adolescence, involves the integration and culmination of earlier periods in which the mature adult level of cognitive structure and function is obtained (Richardson, 1998). In very simple terms, "Piaget views intellectual development as growing from undifferentiated to differentiated, from simple to complex, from ego-centred to ego-decentred, from concrete to abstract, from action to thought, from subjective to objective, and from non- or pre-logical to logical" (Wass & Corr, 1984, pp. 4-5).

The first fundamental component of Piaget's theory is that of natural growth or maturation, including the maturation of the biological systems, for example, the nervous system. Maturation determines the stable order in the sequence of the child's intellectual development. In addition, Flavell (1963) highlights the important role played by both the social and physical milieu, and the experience or practice needed in the development of cognitions. Therefore, mental growth happens in constant and close interaction between the child and the environment. Piaget focused his attention almost

solely on intellectual development in an optimum and constant environment and not on the effects upon the child's development of extreme and unstable environments (Wass & Corr, 1984).

The understanding is, that those from birth to approximately twelve years of age, the process of internalising experiences about the world are completed and thereafter only increases in quality, but not quantity (Piaget, 1955; Boyle, 1969). Piaget calls these internalised actions, 'operations', by which he means that intellectual growth develops through the process of operational thinking (Boyle, 1969). "Operational thinking" means that operations (that is, a specific kind of cognitive scheme) are used for thinking. The focus of the current study will be on the second and third periods of cognitive development, as they describe the evolution of thinking and extend from early childhood to adolescence, which is the age range of the sample. Consequently, only the preoperational and concrete operational stages of Piaget's theory will be discussed in detail.

The preoperational stage follows on from the sensori-motor stage, commencing at approximately 2 years and concluding around 7 years. It is important to bear in mind that the ages may differ somewhat and may also vary according to different cultures. Piaget's theory is a stage bound theory with sequential stages and broad age limits. (Flavell, 1963).

Piaget called his second period of cognitive development the preoperational period because there is as yet no operational thinking (Piaget & Inhelder, 1969). The preoperational period can be divided into preconceptual thought (two to four years) and intuitive thought (four to seven years) (Ginsburg & Opper, 1969; Louw, 1991). "Preconceptual thought" indicates that the child does not yet understand what a concept involves, that is, that a concept refers to a certain class of things which have a certain feature in common on the basis of which they can be grouped together, even if they

differ in other respects. Thus the concept “flower” refers to different types of flowers which differ from one another in certain respects, but which nonetheless have common features. “Intuitive thought”, on the other hand, refers to thinking that is not based on logic but on perceptions from which conclusions are drawn (Berk, 1997). There are a number of developments that the child in the preoperational stage needs to master at a cognitive level, which will be addressed below.

As noted previously, an operation can be defined as a thought that follows rules of logic, and preoperational thought does not yet follow such rules. Central to the understanding of the young child’s thoughts and perceptions during the preoperational stage is his or her egocentric orientation (Berk, 1997; Louw, 1991; Ginsburg & Opper, 1969; Piaget & Inhelder, 1969). According to Boyle (1969), egocentricity refers to the lack of differentiation between the internal world and the world around, between the children’s own point of view and that of others (Hopkins, 2002). This lack of differentiation leads to at least four types of thinking and conceptions characteristic of the child at this stage. These include finalism, animistic thinking, participation and magical thinking, and artificialism, and can be classified under the preschool child’s view of causality (that is, what causes events to happen) (Boyle, 1969; Flavell, 1963; Wass & Corr, 1984).

Finalism refers to the meaning that preschool children attach to “why?” questions. For young children the “why?” question can have two different meanings. Firstly, it may refer to the consequence of the action together with the underlying motives (for example, Why did you hit the dog?). Secondly, it may refer to the cause of something (for example, Why is it raining?). “Why?” can thus refer to either the cause or the effect. The preoperational child is, however, unable to distinguish between the cause meaning and the effect meaning of “why”, with the result that an adult can almost never give a satisfactory answer. Children in this period of development also believe that

everything, including death, must have a cause no matter how insignificant, even if it happens by chance (Piaget & Inhelder, 1969). This leads to the discussion on the animistic thinking of the child in the preoperational stage of cognitive development.

Animistic thinking is the attribution of life and consciousness to inanimate objects. The preoperational child may believe, for example, that the sky can cry, trees laugh and sleep, the wind knows it is blowing. Initially, all objects that can move, such as the sun, moon, clouds and bicycles may be described as being alive. At a later phase of development, within the preoperational stage only objects that move spontaneously, such as clouds and sun, but not bicycles or cars, are endowed with life. It is only during the stage of concrete operations that the child will have learned to attribute life correctly only to people, animals and plants (Berk, 1997; Ginsburg & Opper, 1969). This may have implications for the child's understanding of death as the child in this stage will not be able to understand that the death of something will mean that it no longer has life and movement at its disposal. Another concept the preschool child struggles to understand is that inanimate objects do not possess life, as humans do, for example. This is known as artificialism, according to Piaget (1955).

Artificialism refers to the child's belief that all the physical phenomena in the world are produced by people, for the use of people. Things therefore act for the benefit of people, for example, the sun is there to provide warmth for people, and we can take part in this magic by our own actions (Florian & Kravetz, 1985; Glass, 1991; Wass & Corr, 1984). Although this is in direct contrast to animistic thinking, this does not concern the child, and both kinds of thinking may exist at one time because the child does not possess the ability to test the logic of this kind of thinking. This dichotomy may be of interest when understanding children's perception of death if one is to consider current medical and technological advances and how they enable us to replace parts of the body with artificial parts, such as pacemakers, artificial breast, and limbs.

During the preoperational stage, objects are thought to have intentions, wills, and forces of their own as well as being subject to the child's own wills, intentions and forces. Therefore objects can both command and obey, and children also command and obey. They need and demand food, shelter, love and attention, to name a few. They also learn to obey and to submit to many things. Objects and events are believed to make other objects and events obey. Thus, for example, the wind pushes the clouds, the sky makes the stars fall and so on. Artificialism, with regard to an understanding of death may manifest itself when the child has not received any religious instruction from his or her parents that would replace such artificial ideas with other beliefs (Piaget & Inhelder, 1969).

Another type of egocentric thinking characteristic of the preoperational child is that of participation. Participation refers to the child's belief that natural phenomena are the result of the interplay between people's actions and thoughts, and natural processes. Just as children believe they can make objects obey by their actions, it is also believed that they can control objects through their own thoughts or actions (Boyle, 1969). This is essential in understanding children's comprehension of death, as children may often believe that by wishing someone dead, they have indeed killed them with the power their thought may have (Florian, 1985; Gaffney, 1988). Such notions of magical causality are of particular interest and importance in relation to the child's fears of death. Most small children have at one time or another wished their parents or siblings were dead. Sometimes when a parent or sibling actually dies, the child may carry a heavy burden of guilt believing that he or she actually brought about the death. Children usually abandon this kind of thinking when they enter concrete operations and come to understand and acknowledge the idea of physical causality, the idea that objects and events obey physical laws (Wass & Corr, 1984). It is interesting to note how the child in the stage of preoperations uses magical and other pre-logical thinking to explain the

mystery and surprises in the his or her world. There are no random events, rather, everything is caused by something, and even more so if two events happen to coincide together in time and space, making them causally related in the child's mind (Louw, 1991).

Many of the characteristics of preoperational thought are related to egocentricity. Piaget and Inhelder (1969) have, however been criticised for using a task that is too difficult in attempting to evaluate the presence of egocentricism (Lonetto, 1980). When an easier task was given by Flavell (1963), it was found that all of the children in the study showed less egocentrism and it was concluded that the nature of the task plays an important role in determining whether egocentrism will be manifested (Louw, 1991). Having said this, however, this study nonetheless assumes Piaget's position that the preoperational child's thinking is largely egocentric in nature.

Children in the preoperational stage of cognition need to create some sort of order in terms of how the world works and very often the causal connections they make are not logical (Piaget, 1955). This type of thinking may also influence the way in which the child makes sense of death. Researchers have found that very often children in this phase may be aware of the word 'dead' but do not understand the true meaning because the term is too abstract. This is because children in the stage of preoperations understand only what they can directly observe and experience (Wass & Corr, 1984). Another example is that the preschool child usually does not recognize that death is final. Death is seen as a part of being alive and, death is defined as sleep or departure, and as being gradual and temporary, and is due to the fact that they have not yet reached a cognitive understanding of the concept of time (Lonetto, 1980).

Studies have shown that children at this stage see death as reversible, temporary and caused by an external force (Nagy, 1948; Koocher, 1973). The preschool child cannot

understand the irreversibility of death, and may think that if he or she shouts loudly enough he or she can awaken the deceased person, whom he or she believes is only sleeping (Deveau, 1995). The child in this stage thus uses literal thinking and may sometimes distort reality to confirm his or her idiosyncratic understanding, despite the logical contradictions (Boyle, 1969). In addition, the child who has not yet developed a sense of time and space may tend to concentrate on only one aspect of the situation in the here and now and ignore others. This focusing on one event and then jumping to another event, and the use of magical thinking often results in the preschool child to generate incorrect cause and effect conclusions (Wass & Corr, 1984). A movement to more logical ways of thinking characterises the concrete operations stage.

Piaget named the period from six to the age of eleven or twelve the concrete operational period because although the child is capable of operational or logical thinking, this thinking is still concrete and not abstract. The child's thinking is considered to be "concrete" in nature because the operations he or she carries out are based on physical objects and not on hypotheses that have been abstractly expressed in words (Piaget & Inhelder, 1969). The thinking of the concrete operational child differs from that of the preoperational child in that most of the shortcomings of the latter, such as egocentricism, centration, transductive reasoning, finalism, participation, animism, artificialism, realism and the inability to understand numbers, serialisation and conservation have now been overcome (Berk, 1997).

The child between six and eleven years of age can successfully make use of logic in his or her thinking. This can be seen in understanding of the rules of arithmetic, for example. At this stage of development the child no longer lacks the ability to differentiate between internal and external worlds, hence the presence of egocentrism decreases gradually and now so do animistic, magical and artificialistic thinking (Wass & Corr, 1984). With this decrease in seeing the self as central to the world, comes the ability to understand other's viewpoints, and social competence also develops (Piaget,

1966). Through interaction with their environment, children discover the existence of their own thought and thinking as distinct from the world of objects and from the things themselves (Berk, 1997; Louw, 1991). Where preoperational children would have previously thought of their own views as absolute and shared by all, the concrete operational child comes to realise the personal nature of his or her views. At this stage, children are able to use language as a bond between thought and word. Verbal skills are refined, vocabulary increases, and thought becomes more socialised as children learn to communicate more effectively (Piaget, 1926).

The child's thinking has also started to become more logical as he or she discovers and uses the laws or rules of logic, such as the rule of reversibility, that is, the rule that every thought or series of thoughts can be reversed or negated. The child also acquires the major concepts of conservation, also referred to as permanence, and which includes segmenting, partitioning and reunion, adding, displacement by spreading out and concentration, all with respect to matter. These major concepts are needed to gain a logical understanding of physical objects and events (Piaget & Inhelder, 1969).

This stage is referred to as concrete operations because the child is interested in real objects or objects he or she can easily imagine. Therefore, during this stage children's thinking is more concerned with the concrete than with abstractions, and with the actual more than the hypothetical (Florian & Kravetz, 1985). The reasoning of the child at this stage is therefore also connected with actual belief that is based on direct observation as far as possible. The child's thinking becomes more flexible and mobile than during the preoperational stage. However, the child is not yet able to generalise beyond that which is finite, visible, and tangible. So, the concrete operational child is most likely to be interested in the "how?" of things (Berk, 1997).

Preoperational ways of thinking disappear gradually over the stage of concrete operations, and the child who is in the early phase of the latter stage may still share some characteristics of preoperational thought. Within the concrete operational period there are two further stages of animism that occur. During the first of these two stages, anything that can move on its own is seen as living and having consciousness. For example, a ten-year-old interviewed by Piaget (1955) stated that clouds could feel warmth because they are living things and they are alive because they can move without people having to do anything to make them move. In the second stage of animism (reached at approximately the age of eleven or twelve) children's view of what is alive and has consciousness is the same as that of adults. Therefore plants, animals, people and insects are viewed as having life. Louw (1991), however, cautions that most seven to eight year old children show significantly lower levels of animistic thought than was found by Piaget.

According to Piaget, the child between seven to approximately eleven years of age, according to Piaget, is in the interactive phase of cognitive growth (Cowan, 1976). This is a phase characterised by the child's ability to think in terms of classifications of subjects and perceived relationships between them, yet children tend to remain aware that they are imposing an order on the objective world. This is when the child starts to ask "what" questions instead of "why" questions. Therefore in relation to the child trying to understand death, the child may ask, "what is death?" rather than the preoperational question, "why do people die?"

The concrete operational child starts to comprehend the finality of death, and realises that it is not reversible (Wass & Corr, 1984). When confronted with death, the child realises that it cannot be accounted for by magical explanations, as he or she starts to understand cause-and-effect relationships, like the relationship between illness and death. It is also at this point that death is understood as a universal phenomenon, which

happens to all people. Although the concrete operational child has grasped these concepts, he or she has still often not understood that death is inevitable and may think that death can be eluded if clever or lucky enough (Nagy, 1948). For children living with the death of a parent, the inevitability of death may be grasped at a younger age and this may be clarified in the current study. When these concepts have been mastered, children can accept that the deceased will never come back (Deaton & Berkon, 1995; Glass & Conrad, 1991; Holland, 2001). As a result, school-going children may have deep emotional reactions of sadness and depression upon the death of a loved one (Pennells & Smith, 1995).

In the 1940's, Nagy (1948) and Anthony (1971) established the basis for viewing the child's understanding of death as a developmental phenomenon. Further evidence has emerged since the 1960's supporting a developmental focus on the understanding of death concepts and explaining these from a Piagetian perspective (Kane, 1979; Koocher, 1973; Lonetto, 1980). This research has shown that death concept development corresponds with development in other cognitive areas (Jenkins & Cavanaugh, 1985). Studies have shown that death concept formation parallels the emergence of operational thinking. Consequently, Piaget's stage theory has been discussed to provide a framework for interpreting the child's understanding and perceptions of death. A discussion of the subconcepts of death proposed by Speece and Brent (1991) follows. Thereafter a brief review of the literature on children and death will be provided.

2.2 Speece and Brent's (1991) Subconcepts of Death

The concept of death is multidimensional and obviously some aspects of death are more complicated for children to comprehend than others (Orbach, Talmon, Kedem & Har-Even, 1987). Speece and Brent (1991) reviewed more than one hundred research studies

conducted between 1934 and the early 1990's to investigate children's understandings of death. Their review has revealed, that, in order to achieve an understanding of the concept of death in children, one needs to take cognisance of the complicated nature of the topic of death. It is for this reason that the child's concept of death might be better understood by examining the several subconcepts of death which these researchers have identified. Each of these subconcepts is a central element to children's master concepts of death (Corr, 1995b; Speece & Brent, 1984; Speece & Brent, 1991). Speece and Brent (1991) found that children possess at least four, and perhaps even five, principle concepts. These are universality, irreversibility, non-functionality and causality and are discussed below.

2.2.1 Universality

When children attempt to grasp the subconcept of universality with regard to death, they face the challenge of recognising that all living things must eventually die. According to Corr (1995b), this involves bringing to their awareness three related notions, namely the all-inclusiveness, the inevitability, and the unpredictability of death. As previously mentioned, the child facing the challenges of the preoperational stage of development is likely to struggle to understand the universality of death. The reason for this may be attributed to the fact that children in this stage have not yet consolidated their language and reasoning abilities, and so the child in this stage is still driven by animistic and magical ways of reasoning about his or her world (Deveau, 1995). However, the child in the concrete operational stage is likely to have grasped the universal nature of death to some extent. The first notion of the all-inclusiveness of death as part of the concept of universality will now be addressed.

All-inclusiveness refers to the fact that death applies to all living things. Therefore the most frequently asked question by children in this regard is, Do some /many /most/ absolutely all living things have to die? As discussed previously, according to Piagetian

theory, the young child in the preoperational stage will not have developed the cognitive advancement to understand this subconcept of death, and is likely to think that certain people and/or animals are exempt from dying. Common questions asked by preoperational children trying to grasp the universality and all-inclusiveness of death may be: “Does everyone die?” “Do children or animals also die?” “Can some people escape death?” and “Could I or the people I love find a way of not dying?” Once the child reaches concrete operations, the child will start to understand the answers to the above questions.

Before a child has learnt the different classifications and characteristics of living things, he or she will be unable to comprehend the all-inclusiveness of death (Richardson, 1998). For example, the child in the preoperational stage of cognitive development is still likely to ask animistic questions relating to for example, whether the moon can cry or not, therefore being unaware of the inanimate nature of the moon. Consequently, a child at this stage may reason that inanimate objects can also die.

Children in the preoperational phase need to create some sort of order to understand how the world works and very often the causal connections they make are not logical (Piaget, 1955). This may also influence the way in which the child makes sense of death. Researchers have found that very often children in this phase may use the word ‘dead’ but do not understand the true meaning of the word, particularly its inclusive nature, because the term is too abstract (Speece & Brent, 1991; Stambrook & Parker, 1987; Wass & Corr, 1984). Since children in the preoperational stage understand only what they can directly experience, they base their reasoning on the concrete, real things, which they can see (Wass & Corr, 1984). Other studies have, however, shown that factors such as exposure to death, the cause of death and the gender of the child may result in such children showing different perceptions and understandings of death to what one would expect of them developmentally (Currer, 2001; Morin & Welsh, 1996).

The latter factors are relevant to this study as many children in South Africa are being exposed to multiple deaths caused by illness and high murder rates at a relatively young age.

The second subconcept related to the universal nature of death identified by Speece and Brent (1991) is inevitability. The inevitability of death refers to the fact that death is unavoidable for living things. Many children are aware that particular individuals can and do sometimes avoid particular causes of death. For example, in cartoons and in reality, familiar persons may evade or be resuscitated from a specific threat of death. This makes understanding the inevitability of death more complicated as the child must understand that, although death has been, or can be avoided in specific cases, no living individual can ultimately avoid death indefinitely (Florian, 1985; Krementz, 1992; Willis, 2002).

When children try to understand the inevitability of death, they ask themselves and others questions that are similar to the questions they pose in trying to understand the subconcept of all-inclusiveness, for example “Does everybody have to die? Do you have to die? Do I have to die? And is death something that must happen to living things?” The child usually starts to ask these questions after the age of six years. Since the child younger than six has not yet understood the inevitability of death and, as mentioned, often believes that some people can elude death.

The third subconcept found within the universality of death is the unpredictable nature of death (Speece & Brent, 1991). Unpredictability is an apparently paradoxical element associated with the universality of death (Cook, 1974; Corr, 1995a; Deveau, 1995; Speece & Brent, 1984; Willis, 2002)). If death is all-inclusive and inevitable, a young child might reasonably conclude that its timing would also be certain and predictable. Reaching an understanding of the universality of death includes understanding the

notion that death is an inevitable, but not a predictable outcome in the life of living things. However, children at the early part of concrete operations are likely to battle to grasp this.

Attempts to come to terms with the unpredictable nature of death may be reflected in concrete operational children's concern with the exact timing of death. They may ask questions related to when things or people die, when the child herself/himself will die and also when will the significant person/s in the child's life will die. With these types of questions it becomes a societal response to want to reply with "Not for a very long time". This may partly account for the belief that many concrete operational children have that death can be avoided or that it is something that only concerns very old people (Anthony, 1971; Kane, 1979; Nagy, 1948).

When the child understands the unpredictability of death, he or she is inevitably faced with more difficult existential questions regarding the uncertainty around the timing of death (Cook, 1974; Smilansky, 1987). A child faced with these concerns will start to understand the reality that any living person or thing can die at any time, including himself/herself and other people he or she knows. This level of understanding is reflective of the later concrete operational stage of cognitive development. At this point the child will start asking questions directed toward the physical workings of living things and how they cease to exist externally (Corr, 1995a, Koocher, 1973; Nagy, 1948). The child is also now more able to make logical conclusions based on observations, rather than on actual objects in their immediate environment, characteristic of the preoperational child (Ayyash-Abdo, 2001; Deveau, 1995; Willis, 2002). These qualities also enable the concrete operational child to understand another concept of death, namely the irreversible nature of death.

2.2.2 Irreversibility

When children attempt to understand the subconcept of the irreversibility of death, they recognise that once the physical body of a living thing is dead, it can never be alive again and that death is a state from which there is no return or recovery. Understanding the irreversible nature of death enables the child to grasp the finality of death (Corr, 1995b; Florian, 1985; Nagy, 1948; Speece & Brent, 1991; Smilansky, 1987; Willis, 2002). Speece and Brent (1984) have explained that the irreversibility of death includes both the processes, which distinguish the transition from being alive to being dead, and the state which results from them. Therefore, the unconditional, irreversibility of death means that the physical body can no longer be restored to its former living state. Understanding the irreversible nature of death also involves giving up the deceased as a living person, recognising that changing the course of biological life is impossible and that the person can never return to the previous, living state once dead (Deveau, 1995; Smilansky, 1987).

Studies have revealed that children in the preoperational stage of cognitive development generally understand death as being reversible, temporary and caused by an external force (Koocher, 1973; Nagy, 1948; Smilansky, 1987). The preschool child cannot understand the irreversible nature of death, and may think that if he or she shouts loudly enough he can awaken the deceased person, whom he or she believes is only sleeping (Kastenbaum & Aisenberg, 1972). This is also evident in preschool children's play, when people get killed and then "fixed" again. The child in this stage thus uses literal thinking and may sometimes distort reality to confirm their idiosyncratic understanding, despite logical contradictions (Boyle, 1969). In addition, the preoperational child, who has generally not yet developed a sense of time and space, may concentrate on only one aspect of the situation, in the here and now, and ignore other aspects of a situation. Focusing on one event and then jumping to another event often causes the preschool child to generate incorrect cause and effect conclusions, so that if the death of a person

co-occurred with another event, the child may assume that the event caused the death (Kane, 1979; Wass & Corr, 1984).

In an attempt to understand the irreversible nature of death, children, are most likely to ask questions such as: “How long do you stay dead after you die? Once you have been “deaded” are you always dead? Can dead people become alive again after they are dead? If I was a good girl/boy, could the dead person come alive again? Can you or I come back to life again?” (Corr, 1995a). The child in the beginning phases of the concrete operational stage will most likely ask these types of questions as he or she has started to understand that death is final and not irreversible. In contrast, however, the preoperational child has not yet understood the final nature of death.

In a more recent review of the literature, Speece and Brent (1991), found that by the time they are seven, most children have a fairly mature understanding of the concept of death. Similarly, it was found that by the time children start school (at the age of approximately 6 or 7), most understand the finality of death and are beginning to grasp that even they may die someday (Florian, 1985; Silverman, 2000). Earlier studies, for example, Anthony (1971), Kane (1979), Koocher (1973) and Nagy (1948), revealed that most children only reach such an understanding at the concrete operational level, between the ages of seven and twelve, at a slightly later stage than proposed by Speece and Brent (1987). This may be due to an earlier introduction to death and dying through television and cinema.

Speece and Brent (1984) concluded that earlier studies on children’s perceptions of death assumed that children possess a mature adult concept of death namely that death is unconditionally irreversible. Thus, the underlying assumption has been that this mature adult concept is the end-state toward which the process of conceptual development is directed. In a later study, Speece and Brent (1991) contested the fact

that most studies of the development of children's understanding of death compared children's understanding to a presumed mature adult concept. They were particularly interested in the adult concept of irreversibility. In their study, one hundred and sixty five undergraduates took a self-administered questionnaire containing five questions concerning the irreversibility of death, that is, whether death can be changed once it has occurred. Interestingly, the adults, as a group, performed less well in their answers when compared to the presumed adult standard than did the children. However, the adult's explanations indicated that their lower conformation to the presumed adult concept was a by-product of their sophisticated efforts to conceptualise exactly what boundary marks the transition from life to death (Speece & Brent, 1991). Silverman (2000) identified how the advancements in medical knowledge and technology have interposed between the states of being unambiguously alive and unambiguously dead and the new state, that of being ambiguously alive, or being alive only by virtue of life-support measures. These developments in the nature of adult conceptualisations of the irreversible nature of death seem likely to also influence the development of contemporary children's perceptions of death (Aspinall, 1996; Deveau, 1995; Rowling, 2003; Smilansky, 1987; Speece & Brent, 1984; 1991).

Understanding the irreversible nature of death is not only important for children from a cognitive developmental position, but also from a mourning perspective. Kubler-Ross (1969) identified five phases of bereavement that most people experience after the loss of something or somebody significant in their lives, namely, denial, anger, bargaining, depression and lastly, acceptance of the loss. According to Smilansky (1987), it is important, in order to progress through the first stage of mourning, for the child to understand the giving up of the deceased. The mourning child may refuse to accept the fact, both emotionally and intellectually, that his or her loved one will not return to him or her ever again. Therefore he or she may try to recall the deceased by wishing or making magical promises (magical thinking) and by clinging to customs associated with

the returning of the deceased (for example, keeping the door open). Cognitive acceptance of the irreversibility of death is the first condition for preparing the child to accept his or her feelings about the eternal separation (Kubler- Ross, 1969; 1983; Moos, 1995; Smilansky, 1987). Another subconcept which Speece and Brent (1991) identified as central to children's understanding of death, is non-functionality, which is discussed next.

2.2.3 Non-functionality

While irreversibility refers to the inability to reverse the process of death, non-functionality refers to the final cessation of bodily functions (Florian & Kravetz, 1985). In attempting to understand the non-functionality of death, children need to realize that once a living thing is dead, all of the life-defining capabilities or functional capacities attributed to that living thing cease (Florian, 1985). This is related to the finality of death. According to Corr (1995b), the life-defining functions that children typically attribute to a living human being are of two types, namely external or observable functions, such as breathing, eating, walking or playing, and internal functions which are not directly observed but are inferred from what is observed or expected of a living thing, such as feeling, thinking, or dreaming.

A clear understanding of the non-functionality of the deceased includes understanding the cessation of both external and internal functions. The most common questions asked by children when attempting to grasp this phenomenon include "What do people do all the time when they are dead? Can you see anything, hear noises, taste food, when you are dead? and Can you still eat, play, sleep, and get angry or sad, when you are dead?" (Corr, 1995b). Kane (1979) suggested that children realise that certain functions cease at death before they realise that other functions cease. For example, she concluded that children first understand the cessation of the most visible aspects of non-functioning such as eating and speaking, and only later, at the concrete operational level, do they

recognise that more subtle cognitive aspects such as dreaming and thinking also end with death.

As a criticism of Kane (1979), Speece and Brent (1984) argue that such interpretations assume that the children that were studied already had an understanding of the states of being alive and dead as mutually exclusive, and therefore that their principal difficulty in understanding non-functionality was their uncertainty about which functions continue after death, rather than attributing life-like or animate qualities to the deceased. The last concept identified by Speece and Brent (1991), namely the causality of death, refers to the reasons children provide for why living things die and will be discussed below.

2.2.4 Causality

Children are challenged to understand what it is that really does or can bring about death, when trying to understand the subconcept of causality. For example, preoperational children often suggest magical causes, such as bad behaviour or wishing that someone would die, as well as specific or individual causes, such as an unusual event that caused a particular death and is limited to that individual context, such as being killed by a television character (Florian, 1985; Grollman, 1995; Ward, 1993).

For Smilansky (1987), understanding the causality of death relates to understanding the physical-biological factors that led to the death. It is therefore important for the child to first understand the causes of death in general. He or she must then know and understand the specific causes which led to the death of a person. This is important for the preoperational child, as he or she might make conclusions based on the illogical basis of events related in time and/or space. For instance, the child at this stage may think that he or she must stay away from eating an apple, as the last time the deceased person was alive was when they were eating an apple and now they have died from that. Therefore it is imperative that the child be provided with a clear understanding of what

the causes of death are in general as well as an explanation of the exact reason for the death of the loved one (Florian, 1985; Gaffney, 1988; Smilansky, 1980). A perception of the true causality of death will help the bereaved child to work through the second stage of Kubler-Ross's (1969) stages of grieving, namely the stage of anger and self-blaming. However, cognitive understanding is no insurance against guilt feelings in children (Krementz, 1992; Kubler-Ross, 1985; Smilanksy, 1987; Ward, 1993).

Many researchers (Boyle, 1969; Kane, 1971; Koocher, 1973; Nagy, 1948; Speece & Brent, 1984) believe that a mature understanding of the cause of death involves an abstract and realistic understanding of both external events, such as car accidents and internal events such as heart attacks, cancer, AIDS and so on that might bring about death. This view suggests that in order to comprehend the causes of death, one must understand that death can result from external causes, but that even when such outside factors are not present, it will ultimately result from internal causes, or at least from a combination of internal and external causes. Thus, death is always caused by physical-biological factors irrespective of the actual event that ensued to bring about the death, even if it appears to have had an external cause, such as an accident, ultimately the person's body was damaged and this caused the body to stop working as it were.

Understanding the causes of death once again raises existential questions pertaining to why people die, what causes death, what makes living things die, do people die because they are bad, and whether people can die merely because someone wished them to. In order to understand the causes of death, children need to be able to draw conclusions based on logic and an understanding of natural laws, a skill that the preoperational child has not yet developed (Corr, 1995a).

During the stage of concrete operations, the child is able to comprehend the finality of death, and realise that it is not reversible (Wass & Corr, 1984). When confronted with

death the child realises that it cannot be accounted for by magical explanations, since he or she understands cause-and-effect relationships, like the relationship between illness and death. It is also at this point that death is understood as a universal phenomenon, which happens to all people. Although the child has grasped these concepts, he or she has still not understood that death is inevitable and may think that death can be eluded if lucky enough (Nagy, 1948). For children who have experienced the death of a loved one, the inevitability of death may be understood at a younger age. When these concepts have been mastered, children accept that the deceased will never come back. As a result, school-going children may have deep emotional reactions of sadness and depression upon the death of a loved one while a preoperational child could appear relatively unconcerned about the death of a loved one (Kubler-Ross, 1969).

Studies have also shown that children in the concrete operational stage may initially explain why people die with reference to concrete, external factors, whereas later they attribute the cause to internal factors, such as, illnesses, as they are progressing to the formal operations stage (Prichard & Epting, 1992). This was found to be true in many studies conducted on the death perceptions of children by Anthony (1971), Kane (1979) and Koocher (1973). Many of the subconcepts of death identified by Speece and Brent (1991) are related to cognitive features of Piaget's stages of development. Several empirical studies have attempted to relate Piaget's theory to children's perception and understanding of death and the main ones will be discussed in the next section.

The work of Hungarian psychologist, Maria Nagy, is among the strongest contributions to empirical studies related to children and death (Kastenbaum, 1983; Koocher & O'Malley, 1981; Speece & Brent, 1991; Stambrook & Parker, 1987). Her stage-based theory, which is still used today, describes the evolution of children's understanding of the concepts of universality, irreversibility, and inevitability as they refer to death (Pritchard & Epting, 1992). According to Nagy (1948), the child is more concerned

with the separation aspect of death, due to the close relationship between death and departure.

Nagy (1948) invited 378 children, aged between 3 and 10 years, who had experienced death and war first-hand, to express their thoughts and feelings relating to death. The children that were selected to be representative of the Hungarian population came from a variety of social and religious backgrounds, with equal numbers of boys and girls. The older children were asked to draw pictures and to write down everything that came to their minds about death. Using Piaget's theory of cognitive development as a framework, Nagy (1948) proposed a three stage developmental model for understanding children's conceptions of death.

The first stage included the youngest or preschool children, from 3 years to approximately 5 years. These children, who would be at the preoperational stage of cognitive development, expressed the notion that death is a continuation of life but in a diminished form, implying that the dead were simply less alive and did not feel all the things as strongly as the living did. This stage differs significantly from the adult perception that death is not merely diminishment but the complete termination of life (Corr, 1995a). Children in this stage also differed from adults in that they saw death as something that is temporary and that it could be likened to a long sleep from which the dead may return. Therefore, Nagy (1948) found that children at this stage did not understand the notion of the finality of death. Death then was seen as partial and temporary and reminded the children of other kinds of separations, which usually had reunions.

Nagy (1948) also found that children at this first stage were very curious and asked many specific questions about the funeral procedure, the coffin, the cemetery and so on. Other researchers have often overlooked this fascination with the practical or concrete

aspects of death (Stambrook & Parker, 1987). Lonetto (1980) also found preschool children to show an interest in the cultural rituals associated with death and bereavement. On a developmental level, it is understood that children of these ages (that is 3 to 5 years) do understand that death is complete and final. In contradiction of the findings of both Piaget (1955) and Corr (1995a), Nagy (1979) found that some preoperational children are able to comprehend the irreversible nature of death.

According to Kastenbaum (1984), developmentalists have not appreciated how active children are in attempting to achieve an understanding of death. Nagy (1948) also found that even though these young children did not understand death adequately by adult standards, what they did think about death was powerful enough to arouse negative feelings.

The second stage identified by Nagy (1948) begins at approximately the age of 5 or 6 and lasts until about the ninth year. The most important advance in the understanding of death for Nagy (1948) occurred during this time. The child now recognised that death was final and the older the child within this stage, the more firm the conclusion was. This stage can be compared to the concrete operational stage of Piaget's theory. The child at this stage has started to understand the laws and rules that govern the world and has thus also learnt that all things must eventually die and that there is no action that can bring a dead thing back to life (Flavell, 1963). Nagy (1948) also found that many of the children saw death in the form of a person. In Nagy's (1948) study, children's personifications of death contained trait descriptions of the following nature:

> Death is scary, frightening, disturbing, dangerous, unfeeling, unhearing, and silent. Death takes you away. If you see death coming at you in time, you can escape. Death can be invisible like a ghost or ugly like a monster or it can be a skeleton. Death can be an actual person, or a companion of the devil, a giver of illness, or an angel (Lonetto, 1980, pp. 92).

These descriptions of death are some examples of how personifications help children to cope with death. The once-invisible skeleton is rendered visible and the child can now escape from its grasp. Through personifications, children can locate, identify, and, of great importance, elude death. Nagy (1948) found that approximately one third of the sample's personifications transformed death onto "the dead" person. Death was also associated with the aged or the sick. Personification not only makes death visible but it also makes it human-like in appearance (Lonetto, 1980). This visibility can be for a short period of time just before death carries the person away. If a person is agile and quick enough then death can be beaten and even tricked but the sick and the aged are not quick enough escape from the "death man" and therefore they are all caught and then die (Nagy, 1948). This is in line with Piaget's view of the child in the early stages of the concrete operational development where the child has not yet developed the ability to differentiate between reality and fantasy and also reasons on a concrete level (Berk, 1997). According to Kastenbaum (1984), personification is one of the most ancient modes of expressing the relationship with death. This representation has, however, not been found by other researchers (Anthony, 1971; Bluebond-Langner, 1977; Kastenbaum, 1984; Koocher, 1973).

According to Nagy (1948) children between the ages of five and nine personified death, keeping death at a reasonable distance so that they would have time for an escape from it. These views represent a maturation of the cognitions about death held prior to the age of five, which saw death as a reversible, temporary change, or a living on under different circumstances.

Although there have been few researchers who were able to replicate Nagy's findings on children's personification of death, Safier's (1964) study of 30 boys aged four to ten years gave some support to Nagy's (1948) findings. Safier (1964) found that six to eight

year olds saw both life and death as capable of being given and taken away by an external agent. Therefore, according to Piagetian theory, children in this study were cognitively unable to grasp the concept of the irreversibility of death or that death is universal and cannot be evaded (Piaget, 1955). Koocher (1973) was also unable to replicate the finding that children, in their description of death, preferred personifications. Rather, he argued that the absence of personification reflects a different form of coping mechanism to that which Nagy (1948) found in her sample. According to Koocher (1973), children in his study were inclined to use specificity of detail as a means of understanding and hence controlling death, rather than personification. He attributed this shift to a cultural change but failed to specify exactly what he meant by this. Lonetto (1980) was, however, able to replicate Nagy's (1948) observations of children's personifications of death despite a great difference in sociocultural exposure between the samples of the two studies. Since both Lonetto's (1980) and Nagy's (1948) data was based on children's drawings of death and their verbal descriptions thereof, the children may well have been induced to give death a form or shape and, hence, drew death as a person, while other studies which only entailed verbalisations about death are less likely to have found such personifications.

Continuing the discussion on the significant characteristics of Nagy's (1948) second stage, the realisation of death's finality was found to be accompanied by the belief that death may still have been eluded. Thus, children of this age tended to see death as an outside force or a personified representative, but did not yet recognize death as universal and personal. In response to this finding, Yalom (1980) reported that very young children know about death but that they deny death. Based on isolated reports of bereaved children younger than three, all of whom were reacting to some death experience in their environment, it was inferred that most children understood death to be final but they may deny this in order to defend against the anxiety that results (Stambrook & Parker, 1987; Yalom, 1980). In her study of *The Private Worlds of Dying*

Children, Bluebond-Langner (1978) drew attention to the ways in which the significance of life experiences helped children to understand and interpret death. At one point she proposed, “all views of death… are present at all stages of development” (Bluebond-Langner, 1978 pp.51). Corr (1995b) agrees that it is common logic that the life experiences of children influence and might even accelerate their development with regard to an understanding of death. This means that the stages of death proposed by Nagy, as well as the features of cognitive development described by Piaget, should not be regarded as absolute, since a child’s particular experiences with death could have a great impact on his or her perception of death.

The final stage that was identified by Nagy (1948) was found to begin at approximately 9 or 10 years of age. It was found that by this stage the child understood death to be personal, universal, and inevitable, as well as final. Nagy (1948) reported that children now also understood that all living things must die, including themselves. At this age, children are capable of discussing death in an adult manner. Children in Nagy’s (1948) final stage can be related to the child at the end of Piaget’s concrete operational stage, who is entering the stage of formal operations where he or she is able to think and reason in more abstract ways (Piaget & Inhelder, 1969).

Another prominent researcher in the field of children’s understanding of death is Sylvia Anthony (1971), who studied the relationship between death concepts and the age of the child. She explored children’s discovery of death by using parental records, by inserting children’s definitions of the word “dead” into the vocabulary scale of the Terman-Merrill form on the Binet scale, and by giving children a story completion exercise. Her study consisted of 128 children from different areas of London, England. The children’s ages ranged from five years to thirteen years, eleven months. In attempting to relate death concepts to the age of the child, the children’s responses were classified into five categories, which ranged from an apparent ignorance, by adult standards, of the

meaning of the word “dead”, to a general, logical, or biological definition or description of the word “dead.” It was found that children under the age of five were generally unaware of the meaning of the word “dead” and showed little interest in the word or the fact (Anthony, 1971). Anthony’s (1971) results are similar to those of Nagy (1948), who found that the child does not have much knowledge or interest in death and seems to be unaware of the true, “adult” meaning of what it means to die or to be dead.

Similarly to Nagy (1948) and Anthony (1971), Kane (1979), in her study of 122 children between the ages of three and twelve, also found that the child’s concept of death included immobility as well as separation. Using a content analysis technique of interview material, Kane (1979) categorised ten themes related to death, namely realisation, separation, immobility, irreversibility, causality, dysfunctionality, universality, insensitivity, appearance, and personification. Kane (1979) compared children who had experienced the death of a close person with those who had not experienced such a death. It was found that children who had experience of death reach a mature understanding of death at a much earlier age than predicted by Nagy (1948). Kane’s (1979) developmental research expanded on Piaget’s study of cognitive development by including children’s concepts of death (Lonetto, 1980). Kane (1979) found that children’s death concepts developed in three stages. The children in stage one seemed to think about death in terms of structure and realised death only in terms of the obvious, and in the immediate here and now much like the young child in Piaget’s preoperational stage. Kane (1979) also found that children in stage one tended to think in egocentric and magical ways and believed that they could make a person dead purely by their own behaviour or wishes.

Kane (1979) identified the way in which children in this first stage of cognitive development believed that they could effect separation of death by closing the eyes of the dead. This would apparently allow for either the dead or the child to disappear. In

other words it seems to be a universal finding that children in the stage of preoperational thinking do not yet have the cognitive capacity to understand the finality and the universality of death yet (Anthony, 1940; Kane, 1979; Kastenbaum, 1974; Nagy 1948; Piaget, 1955). In addition to the above it should also be noted that children in the stage of preoperational thinking are tied to the perceptual and are therefore only able consider one aspect of a situation at a time (Boyle, 1969). Therefore the children in Kane's (1979) study could only focus on the immediate context of death and were unable to reflect on the past happenings that may have caused death. Kane (1979) and Nagy's (1948) findings appear similar in nature in that they both found children to be unaware of the finality and the irreversible nature of death until approximately the age of six or seven years.

According to Kane (1979) children who were progressing from stage one to stage two thinking, began to understand death as being specific and concrete. Much like the child in Piaget's concrete operational stage, children in Kane's (1979) second stage start to explain death as being caused by a dysfunction of the body. As is typical of concrete operational thinking, children at this stage start to consider two aspects of a situation at the same time, thus they have accommodated their understanding of death to be less egocentric.

Children in Kane's (1979) second stage start to think in more realistic ways and also show the first signs of logical reasoning. Along with the development of logical reasoning comes the ability to understand that magical thinking on the part of the child cannot cause death. Rather, children in this stage begin to understand that death must be caused by something external and concrete and so it is at this point that children believe that death is caused mostly by illness and they seem to become overly concerned with the physical workings of the human body (Wass & Corr, 1984). Similarly, Kane (1979) found that children in the early part of stage two believed that death was externally

caused, but by the end of the stage they understood internal causes as well in terms of dysfunction. As children commenced in stage two, they realised only the most obvious features of death, for instance that the dead cannot eat, but as they grow older they start to realise the less obvious dysfunctions of the dead, such as the inability to breath and move.

By the time the children were able to interrelate the various components of death namely, realisation, separation, immobility, irrevocability, causality, dysfunctionality, universality, irrevocability, and appearance as specified by Kane (1979), they had progressed to stage three. In stage three, the children were found to be able to think of death in abstract ways. Much like formal operational thinking, Kane (1979) found the children in this stage were able to abstract, hypothesise, be logical, and to consider three aspects of a situation. In summary Kane's (1979) study concluded that by the age of seven years, children acquire ideas about death which are similar to those commonly held by adults. She also noted that, by the age of six years, the children in her study had added the concepts of causality, dysfunctionality, universality, and irrevocability to their developing understandings of death.

Another study that attempted to link Piagetian development with other cognitive theories was that of Klingberg (1957, cited in Lonetto, 1980). Klingberg (1957, cited in Lonetto, 1980) studied how 97 Swedish children ascribe life to nonliving forms and how tightly their animistic interpretations were bound to their cognitive development. It was found that children associate movement with the act of living more than with life itself. It was thus concluded that Piaget's developmental theory was not adequate enough in equating animistic conceptualisation with cognitive functioning (Lonetto, 1980). Rather, Klingberg (1957, cited in Lonetto, 1980) stated that animistic views could be seen as being influenced by both environmental and educational factors and refused to condense such findings into predetermined cognitive structures.

Koocher (1973) was mentioned earlier in this literature review and has studied children, between the ages of 6 and 15 years, and their perceptions of death. His study was designed to explore children's attitudes toward death from a cognitive developmental perspective. Koocher (1973) attempted to prove that children's concepts of death are related more to the developmental ages (assessed using Piagetian tasks), than to chronological ages. Using Piaget's conceptualisation of cognitive development, he analysed the attitudes of 75 children of average intelligence. Koocher (1973) asked the children in his study the following questions, 1) "What makes things die?" 2) "How do you make dead things come back to life?" 3) "When will you die?" 4) "What will happen when you die?" He found that these children's attitudes about death were closely related to their level of cognitive development. Realistic conceptions of death increased as levels of cognitive development advanced from preoperational to concrete operational to formal operational stages (Koocher & O'Malley, 1981). Koocher's (1973) four questions have been used in the current study, which attempts to understand children's conceptualisations of death in the South African context (See Appendix B).

In critically discussing the major researchers in the field of children and their perceptions of death, the following similarities and differences can be drawn. Sylvia Anthony (1971) made use of a variety of techniques and reported such a variety of observations that the complexity and results of her findings are not easy to summarise. However, her observations support several of Nagy's (1948) findings. The younger children in both Anthony's (1971) and Nagy's (1948) studies also tended to interpret death as sleep or temporary departure. Anthony's (1971) differing research methods also revealed that almost all children have spontaneous death-related thoughts, even if they had not had personal experiences with death nor understood the concept of war and what the implications were (Kastenbaum, 1984). This is in direct contrast with Nagy's (1948) research, which did not find that children spontaneously think of death or take it

seriously. In this instance it is difficult to separate developmental level from life experience and the latter may well have a greater influence on the child's perceptions of death. In Anthony's (1971) study, there is abundant evidence that children actively work on their understanding of death, whereas Nagy (1948) found children merely have a curiosity about death (Kastenbaum, 1984; Anthony, 1971). Anthony (1971) shows further that children will continue to deal with the challenge of death-related issues, by turning them over and over in their minds and raising them in their play until they have reached a sufficient conclusion.

Many of the studies reported here are fraught with methodological problems due to small samples, and the reliance on case studies or interviews, limiting their generalisability (Koocher, 1973; Stambrook & Parker, 1987). The other points to be drawn from the studies reviewed here are that there may be variations (sometimes quite vast ones) in the perceptions of death of children of similar ages and supposedly similar levels of cognitive development. Several studies (Koocher, 1973; Stambrook & Parker, 1987; Speece & Brent, 1991) found that children reach a mature understanding of death earlier than would be predicted by Piaget's cognitive developmental theory. This is believed to be, at least in part, due to the child's own life experiences, particularly his or her personal experience of death.

It can be concluded that developmental studies and observations made in natural and clinical settings all indicate that children are aware of death from an early age. The child does not begin with the realisation that death is inevitable, universal and final, but does quickly grasp the implications of separation and loss. Chronological age is generally used as an approximate indicator of the child's level of cognitive development and understanding of death. Since Piagetian theory emphasises the development of context-dependent reasoning abilities it will only provide a partial explanation for children's developing perceptions of death.

CHAPTER 3
RESEARCH METHOD

The present research study was located within a qualitative methodological approach. The common focus within the field of qualitative methodology is the interest in human subjectivity (Neuman, 1997). This approach therefore tries to harness and extend the power of language and expression to help us understand the society we live in and the rules that we are governed by (Berg, 1995; Terreblanche & Kelly, 2002). The current study made use of structured interview schedules which were administered to a cross-section of children of different ages.

3.1 Research Question

Due to the qualitative nature of the study, the research questions posed were exploratory and open-ended. Qualitative enquiry usually begins with a specific theory or understanding, which is, in this case Piaget's theory of cognitive development (Flick, 1998; Jones, 1985). Qualitative research generally attempts to explore or describe a phenomenon in depth rather than proving or disproving a certain aspect of the phenomenon being studied. Therefore it is uncommon to situate qualitative research questions in the form of formal hypotheses (Babbie & Mouton, 2002; Fife-Schaw, 1997). So, instead of testing an hypothesis, a qualitative analyst will attempt to illustrate that a theory, generalisation or interpretation is probable (Neuman, 1997). Qualitative research questions are therefore most likely to be phrased as a definition of the phenomenon of interest to the researcher. Consequently, the aim of this research was to:

Explore children's (between 5 and 12 years of age) perceptions of death from a Piagetian perspective.

From the studies and findings discussed in the literature review the following four main subconcepts of death were identified and form the basis for the investigation of the research question:

1. *The universality of death*
2. *The non-functionality of death*
3. *The irreversibility of death*
4. *The causality of death.*

3.2 The Sample

According to Miller (1997), there is a resistance within qualitative research to make use of the conventional terminology pertaining to quantitative research. Thus, the term, 'subject' is viewed as representing an unequal relationship between the researcher and those being researched. However it should be mentioned that qualitative research is not free of hierarchies between the researcher and the participants and this should be regarded as an important factor in the collecting and analysis of information. By merely changing the terminology, the nature of the informative exchange does not necessarily change (Fontana & Frey, 2000). In the present study it was decided to refer to the children interviewed as participants, a term most commonly used within qualitative research to describe what would previously have been viewed as the subjects of the study from a quantitative perspective (Miller, 1997).

According to Kelly (2002), the decision regarding "how many cases is enough" not only depends on the state of theoretical development in the field but also depends on how

much detail one is likely to gather in each case. Therefore due to the nature of the short, structured interviews in the current study, it was felt that a larger sample (*23 cases*) would allow for the collection of data encompassing the population of children within Piaget's preoperational and concrete operational stages adequately, hence allowing for sufficient variation. However no "hard and fast" rules apply when it comes to sample size and decisions about the number of cases are also determined by constraints imposed on the researcher by budgets and deadlines (Neuman, 1997).

Whether or not the participants had experienced the death of someone prior to the research was not of importance. Rather their developmental age was most relevant in order for the researcher to explore children's perceptions of death and relate these to Piagetian theory. Therefore, any *English- or Afrikaans - speaking, male or female children between the ages of 5-12 years* were able to volunteer for participation.

Participants were accessed through two different sources constituting what could broadly be termed as a form of *purposive or judgmental sampling* techniques. The participants were selected by both the Principal of a Gauteng Preschool and by the Director of a the Place of Safety for children in need of immediate removal from home in Gauteng, on the basis that they met the criteria for the ages needed for the study. In order to gain access to the Place of Safety, permission was obtained from the Department of Population and Social Development. This study consisted of a *cross-section* of children (male and female) between the ages of 5 and 12. The Director signed consent forms for each child before the interview could take place, while, at the preschool, consent forms were also signed by the parents of the children who had agreed to participate in the present study. The nature of the current study and the fact that data collection would involve the tape recording of interviews, which would then be transcribed, was explained to each child at the start of the interview. Each participant was also granted the opportunity to provide verbal consent to participate in the current

study. None of the children to be interviewed refused to participate in the study. Interviews were arranged at a time convenient for the children and their respective organisations.

3.3 Procedure and Data Collection

The data of qualitative research is most generally comprised of language usage and in the case of traditional content analysis, of texts. Typical forms of material collected include observations and interviews (Breakwell, 1997). Interviews in the current study became texts by way of transcription.

Interviews provide a number of advantages for collecting data. Rosnow and Rosenthal (1996) outline three: 1) they provide an opportunity to establish rapport with participants; 2) they provide the opportunity to help the participants in their interpretation of the questions; and 3) they allow flexibility in determining the wording of the questions by giving the researcher greater control over the interviewing situation (for example by allowing the interviewer to decide on the amount of probing or elaboration required).

Although interviews can be conducted telephonically or even via modern technological means, most qualitative psychological interviews are conducted face-to-face. An interview is an interaction between an interviewer and a respondent, and this interactional component should be acknowledged as having a significant influence on the process of collecting the data (Jones, 1985). Although this is an aspect of research that needs to be addressed through reflexivity, it should be noted that face-to-face contact allows for direct observation of the participant and for greater intimacy in the interview context (Fontana & Frey, 2000). In the current study, structured interviews

were conducted. The questions were all asked in the same way and were only elaborated upon if the participants did not understand the question clearly at first.

The present study made use of structured interviews conducted face-to-face with the participants by the same interviewer, which was the researcher in this case. Drawing upon the method employed in a similar study (Koocher, 1973), the four questions posed aimed to tap Piaget's developmental stages of preoperational thought and concrete operational thinking. These questions were purposely replicated in order to determine whether the results would be similar to those found by Koocher (1973).

The first question: "*What is the difference between being dead and being alive?"* was extracted from a study conducted on the literature of children's perceptions of death by Speece and Brent (1984). Their findings revealed that most of the studies on children's perceptions of death, up to 1984, showed that children did not really understand the difference between what it means to be alive and what it means to be dead.

The second question: "*What makes things die?"* is based on children's understanding of the *causality* of death and the reasons for things dying. Koocher (1973) predicted that children functioning at the preoperational level would be limited to providing reasons consistent with *egocentricity and animism.* This level would include fantasy reasoning and magical thinking. Children at the concrete operational level would be expected to draw on the experiences of others evaluating their environment, giving a more realistic and naturalistic explanation.

Thirdly, when asked, "*Can you make dead things come to life?"* it was expected that children functioning at the preoperational level would detail one or more way in which this could be a true statement. This question was also aimed at tapping the *irreversibility and the finality* of death in their explanations of death. However, it is

anticipated that children at the concrete operational level should have the capacity to learn from the experiences of others as well as become less egocentric than before.

Fourthly, the question: "*Do all things die?"* was not used in Koocher's (1973) study but was added to this study in order to tap into the concept of the *universality* of death and at what age children are able grasp this. The question used in Koocher's (1973) study asked children when they thought they would die, it was felt that was a sensitive questions to be asking children considering the sample drawn for the present study.

The participants were interviewed individually due to the sensitive nature of the information that was elicited. Face-to-face interviews were beneficial as they allowed for the opportunity to establish rapport with the participants (trust was seen to be essential in this study), this method also provided the participants the opportunity to be aided in their comprehension of the questions and allowed for flexibility in the order of the questions, if it was needed. It also enabled the researcher more control over the interview (Rosnow & Rosenthal, 1996). These factors were deemed necessary when dealing with children, as they might not have correctly understood the wording of questions.

Following a structured interview format, participants were asked each of the questions in the same order. The questions were repeated or rephrased to ensure that all of the participants fully understood all the questions before answering. The interviews took place over the period of a month. The first set of interviews was conducted at the Place of Safety and was no longer than ten minutes in duration. The participants were audiotape recorded and the interviewer made short notes of certain interactional aspects and observations which were deemed specific to the nature of the research.

Where participants had experienced or were in the process of bereavement (that is, who had lost a parent less than a year ago), it was felt that the nature of the questions might have had a negative impact on the bereavement process. Therefore, such children were asked if they still wanted to participate in the research. If they agreed to partake then a note was made to the relevant authorities. They were informed of the nature of the interview and given the option of counselling services on completion of the interview. Only three of the children participating in the study were identified as possibly requiring counselling upon request. In response to these children, the relevant authority ensured that the children would be in the position to consult with the resident psychologist.

The interviews were transcribed by the researcher (Refer to Appendix C). The interviews were transcribed verbatim reports including dimensions such as pauses and tone of voice. This method is in accordance with the recommendations made by Ezzy (2002) for the typical psychological interview transcription. In keeping with qualitative research practices both the interviewer and the participant's speech was recorded in the written transcripts. Therefore the data of the study thus most significantly comprised the written texts of the recorded interview.

3.4 Ethical Considerations

The researcher was cognisant of the ethical concerns posed in working with human subjects in general, and minor participants, in particular, as well as the sensitive nature of the topic under investigation. The usual guarantees of anonymity and the right to stop participating in the process at any point, without prejudice, were extended to the participants. Due to the fact that the study centres on minors, it was critical to first obtain permission from the children's legal guardians or from the management the

children's home. Ethical clearance for the study was obtained from the University of Witwatersrand's Research Committee (Refer to Appendix D).

Having outlined the method employed in the study, the following chapter presents a summary of the results of the analysis prior to a discussion of the findings.

CHAPTER 4

DATA ANALYSIS AND RESULTS

Given that the data of the present thesis have been subjected to a qualitative analysis as outlined in the previous chapter, the following results represent a summary of the material to be discussed in greater depth in chapter five. The material in this chapter is divided into three sections representing the more quantitative nature of the study and providing the background information against which the discussion of the results should be read. The first section presents the demographic features of the participants and describes the various ages and cognitive developmental stages according to Piagetian theory found among the participants of the study. The second section covers a complete list of the categories and subcategories derived from the content analysis. A description of the categories is provided and discussed in order to clarify the way in which the categories and subcategories were formed. The third section provides a complete list of the results of the content analysis along with the complete number of responses identified firstly within the specified age groups and secondly across the entire sample of the population of the study. The results presented in this chapter are interpreted and discussed in chapter 5.

In order to discuss the results adequately it is best to reiterate the aim of the present study so that the results can be read in light of this. The aim of the current study was an attempt to gain an understanding of children's perceptions of death, specifically from a Piagetian perspective. Stated differently, the current study hoped to determine the relevance of using a Piagetian, cognitive-developmental approach in order to understand the way in which children understand the concept of death. It was also hypothesised that children in South Africa may understand the concept of death at an

earlier age due to early exposure to death through violent means and fatal illnesses like AIDS.

4.1 Demographic Characteristics of the Participants

The age groups of the participants allows for them to be categorised within Piaget's cognitive developmental stages with the majority in the preoperational and concrete operational stages (See Table 1). It should be noted that in the current study it was assumed that the proposed ages of Piaget's cognitive developmental stages were relevant and that this might not be a true and accurate indication of actual cognitive development. For the purposes of the current study it was assumed that the children between the ages of eight and twelve belong in Piaget's concrete operational stage. This can be further broken down into early (6-9yrs) and late (9-12yrs) concrete operations. Therefore six participants between the ages of twelve and ten were classified under the late concrete operational stage, whilst ten children between six and nine were classified within the stage of early concrete operations. The participants that were five years old were considered to be grappling with common developmental milestones related to the late preoperational stage and this group comprised seven of the total number of twenty-three participants.

Although the sample was based on volunteers from a Place of Safety and a preschool, there were twelve female and eleven male participants. Due to the small sample size, however, gender does not form the main focus of this study.

TABLE 1
DEMOGRAPHIC DESCRIPTION OF PARTICIPANTS

PARTICIPANT	AGE	GENDER	COGNITIVE STAGE
P2	12	Male	
P4	12	Female	
P5	12	Female	Late Concrete
P1	11	Female	Operations
P3	10	Male	10-12yrs
P13	10	Female	Total = 6
P7	9	Male	
P11	8	Female	
P14	8	Male	
P10	7	Male	
P8	7	Male	Early Concrete
P12	7	Female	Operations
P9	6	Male	6-9yrs
P6	6	Female	Total = 10
P16	6	Female	
P19	6	Male	
P15	5	Female	
P17	5	Female	
P18	5	Female	
P20	5	Male	Preoperations
P21	5	Male	5yrs
P22	5	Male	Total = 7
P23	5	Female	
	AVE AGE:	**TOTAL:**	
	7.47 yrs	Female = 12	
		Male = 11	

4.2 Data Analysis

The data analysis took place within the frame of traditional content. For the purposes of this study, the data/texts were analysed from both a qualitative and quantitative perspective. The latter method was deemed useful in gaining an understanding of the frequency of the identified concepts across the age groups as well as across the entire population of participants. From a qualitative viewpoint, the texts first had to be analysed and categorised according to themes informed by previous research and identified by the researcher. Within this framework, certain sections of the transcriptions were omitted from the analysis where the subject matter was not relevant to the study. For example, one participant spent some time talking about consequences of misbehaving and since this was not relevant to the question relating to what happens when people die it was omitted from the analysis. Apart from the minimal exclusion of sections of the data (a selection practice endorsed generally in qualitative research), the data analysis was based upon full interview texts (Breakwell, Hammond & Fife-Schaw, 1997).

Given that the length and certain contents of the interviews were variable due to the way they were structured, and that many of the coded statement units could be coded under more than one category, as discussed previously, it was decided not to quantify material exactly across interviews. Therefore one response was recorded under more than one category where participants provided more information than was required of them. The content categories derived from the analysis are thus presented in terms of the following dimensions:

i) The name and a description of the category was provided together with some example of the kind of category or subcategory that was coded under more than one heading. The

range and nature of the content categories that emerged as important from the data could thus become apparent through the descriptive exploration.

ii) The number of statements coded under a particular category was identified. The number of words and statements coded under a specific theme heading were viewed as representing the degree to which this issue appeared significant within the data field and the degree to which this aspect represented a central understanding for the participants in the study. Thus, the overall numbers of statements or responses were viewed as a guide as to the understanding or perception the participants may have had of death. A cautionary note is warranted in this regard. It is possible that a particular response may have been as a result of a lack of understanding of a question and may thus have little relevance to what was being asked in actuality and thus skewed the volume of the data set. In order to gauge the frequency of coding of content categories across participants the range of statements coded per participant per age group was provided.

4.2.1 The Conceptual Content Analysis

Traditional content analysis is the term used to describe a more interpretive application of the method of content analysis, in which categories are identified and elaborated on the basis of systematic scrutiny (Kelly, 2002). The aim of content analysis is the reduction of data into coherent, manageable categories to allow for the classification and explication of central issues. Within the current study the process of reduction and extraction was, while strongly influenced by past research and by the research agenda, directed by a number of commonly accepted procedural steps (Kelly, 2002; Neuman, 1997). This started off as a process of open coding as the investigator identified potential themes by pulling real examples from the text. Identifying the categories used by the participants has been called “in vivo coding” (Ryan & Bernard, 2002; Stemler, 2001). The process of coding in this study was informed by the theoretical framework

of Piagetian theory as well as by past research in the arena of children's perceptions of the death concept. These procedures are discussed in detail along with the coding procedure.

The application of these procedures to the present research is outlined as follows:

1) The recording units were specified, that is, whether the focus was on words, sentences or themes. The analysis in this case was based upon the identification of both words and of thematic units. Thematic units were defined in terms of their logical coherence around a specific topic. In this study the themes were identified according to the developmental level of the participants from the perspective of Piaget's theory of cognitive development and from the death concepts identified by Speece and Brent (1984).

2) The categories of analysis were defined. As previously mentioned, the analytic categories of this study were based upon a vast array of research findings from studies of a similar nature, but Koocher's (1973) study, in particular. These include Speece and Brent's (1991) subconcepts of the understanding of the death concept, that is, the universality, irreversibility, causality and non-functionality of death. Further categories that appeared significant were also generated from the data guided by the theory covered in the literature review. This involved close reading of the transcripts in order to identify any aspects of the text which appeared relevant to the study which were not encompassed in previous research study findings and assigning these aspects appropriate thematic category labels. It is accepted that analytic categories can be derived from both theory and/or data within the qualitative tradition (Kelly, 2002; Neuman, 1997). All of the interviews were coded manually; identifying any thematic recording units occurring that had relevance for the subject matter of the study. If a recording unit could not be categorised within

any of the pre-existing thematic analytic categories, a new generic category would be created. In this analysis of the data, a new theme or category was created whenever a piece of interview material could not be included under the categories that already existed. Therefore an attempt was made to ensure that analysis was as comprehensive as possible.

3) Each interview was then arranged according to the specific questions asked of the participant. This aided the process of systematically searching for common themes across the various age groups within the specified questions. Thus, for example, each participant's transcript was scrutinised for any units pertaining to the thematic category of, for example, "irreversibility vs. reversibility of death". Concepts relating to this category, derived from all twenty three interview texts, were then collated and analysed in terms of their frequency, commonalities and differences. Therefore all twenty-three interviews were subject to within-text analysis and these findings were then compared across the various age groups in accordance with Piaget's cognitive developmental stages.

4) The categorised data was then analysed at a higher level of abstraction. For example, trends and highlights were identified and comparisons made with pre-existing findings.

5) Conclusions were extrapolated, particularly those relating to the manner in which findings could be related to children's developmental levels and their perceptions of death associated to the role of experience in the development of the death concept.

For the sake of clarity of the presentation of the results, a synopsis of the categories and subcategories drawn from the data set will be discussed, first in summary form. The

categories and subcategories will then be addressed in detail before discussing the major findings presented in Table 2.

4.3 Synopsis of Categories and Subcategories

The categories were generated out of a synthesis of theory and prior research on children's perceptions of death. The researcher scrutinised the range of codes that emerged from the analysis of the data and endeavoured to understand where associations could be made between the groups of codes. This conceptual linking was largely generated by Piaget's theory and reflects the ability of theory to assist data to become coherent. There are obviously other possible options for creating categories, however, the groupings discussed below seemed to provide a comprehensive framework for interpreting the data. The way in which the categories were formed has been discussed earlier in the chapter and is presented in inclusive summary form in Table 2. The ensuing discussion will refer to the categories and subcategories identified from the data set, including all the categories noted in Table 2

TABLE 2
RESULTS OF THE CONTENT ANALYSIS

Category/ Subcategory	Operational definition	Responses according to age groups			Results of content analysis	
		10-12yrs (n=6) Late concrete ops	6-9yrs (n=10) Early concrete ops	5yrs (n=7) Preop	Total (n = 23)	%
CATEGORY 1: NON-FUNCTIONALITY – inability to move once dead						
Mobility vs Immobility	Ability or inability to be mobile	3	2	1	6	26
Emotional	Referring to the emotional loss of a loved one as a distinction between death and living	2	0	1	3	13
CATEGORY 2: CAUSALITY- physical-biological factors that lead to death						
NATURALISTIC EXPLANATIONS- death of the physical body in the context of natural (scientific) laws.						
Physical explanations (Diseases/Illness)	Explain death in a physical-biological way. (Disease or illness as a cause for death).	6	5	1	12	52
Old Age	Death might occur as a result of old age.	1	0	0	1	4
Miscellaneous	Explanations that did not fit into any of the other categories, for example, fire	0	0	1	1	4
NON-NATURALALISTIC EXPLANATIONS – causes of death as a result of external causes, other than physical reasons						
Crime/violence	Death a result of violent acts.	4	4	4	12	52
Accidents	Death a result of car accidents	2	1	1	4	17
Narcotics	Death result of smoking or drugs or consuming poison	1	2	1	4	17
Miscellaneous	Death explanations that did not fit into any of the other categories, suicide, throwing bones	1	0	5	6	26

Category/ Subcategory	Operational definition	Responses according to age groups			Results of content analysis	
		10-12yrs (n=6) Late concrete ops	6-9yrs (n=10) Early concrete ops	5yrs (n=7) Preop	(n = 23)	%
Spiritual explanations	Referring to heaven or hell in understanding what happens to humans when they die.	3	1	7	11	47
Burial Rites	Burial reference as an understanding of human death.	3	4	3	10	43
CATEGORY 3: IRREVERSIBILITY – understanding that death is an irreversible phenomenon, a state from which there is no return or recovery.						
Reversible Explanations	Reversible by medical technology thought of a child.	0	1	6	7	30
Irreversible Explanations	Death not reversed under any circumstance	6	7	5	18	78
CATEGORY 4: UNIVERSALITY - understanding of the fact that death is a state which is experienced by all living beings.						
All-inclusive	Death is universal, every living thing will experience at some time or other	4	4	3	11	47
Exclusive	Death is not universal and the state of the deceased can be altered	2	4	5	11	47

4.3.1 Category 1: Explanations of the Non-Functionality Concept of Death

This category refers to the concept of the non-functionality aspect of children's perceptions of death, which has been identified in most of the more recent studies conducted on children's conceptions of death, for example Speece and Brent (1991). The subconcept of non-functionality involves an understanding that once a living thing is dead, all of the life-defining capabilities or functional capacities attributed to that living thing cease. According to Corr (1995a), life-defining functions that children attribute to a living human being are of two types, namely external or observable

functions, such as breathing, eating, walking or playing, and internal functions which are not directly observed but are inferred from what is observed or expected of a living thing, such as feeling, thinking, or dreaming. Therefore, the category of non-functionality is defined as referring to any data targeting the understanding or lack thereof that mobility is not available to the deceased.

Non-functionality was identified as the main category and the subcategories that follow were found to be related. These categories emerged as a response to Question 1 (See Appendix B). They were found to refer to the inability of movement in the dead and the attribution of movement to the living. Added to this, responses also indicated the spiritual and emotional explanations children used in explaining the difference between the states of being dead or alive. The next section will discuss the subcategories identified within the main concept of the non-functionality of death.

A) *Mobility vs. Immobility* refers to explanations regarding the ability or inability of the deceased to move. According to Kane (1979), immobility refers to the child's notions concerning the movement of the dead. The dead may be seen as totally inactive or partially or completely active, depending on the cognitive development of the child. Therefore the child in the preoperational stage might still see dead people as having life-like qualities and apply animistic rules to them.

B) *Emotional explanations* referred to the impact death might have/had on the participants at a personal and emotional level. For example, the preoperational child may view the death of a person in an egocentric light where the focus is only on how the child's life will change because of the death.

4.3.2 Category 2: Explanations of Causality

The second set of categories to be presented centres around children's perceptions of the causes of death.

The concept of the causality of death was related to the physical-biological factors that lead to the death. As previously mentioned, the interview questions were drawn up with previous research findings and theory in mind (Anthony, 1971; Kane, 1979; Koocher, 1973; and Lonetto, 1980). An understanding of the concept of causality is a crucial phase in intellectual development (Lonetto, 1980; Nagy, 1948; Speece & Brent, 1991). Piaget (1955) reported that all seems well to the child until ongoing cognitive development and an awareness of life and death differences initiates a search for causal explanations. The search for causality may be a way of coping with the separation of the subjective from the objective (Lonetto, 1980; Smilansky, 1987). Therefore, when the child has grasped the concept of causality he or she has most likely entered into the concrete operational phase.

Certain themes identified within the category of causality were found to be unique to this study in particular. The subcategories related to causality that were identified will now be discussed in more detail.

A) Naturalistic explanations

Naturalistic explanations referred to explanations of the cause of death as relating to the physical body in the context of natural or scientific laws. Similar findings were reported in a study conducted by Speece and Brent (1991). Three different explanations were given in this subcategory, namely physical explanations, old age, and miscellaneous naturalistic.

Physical explanations stated that the cause of death is as a result of illness (for example, heart attack, Tuberculosis; AIDS) and included themes relating to the actual workings of the human body. Typical responses coded under this subcategory included references made to the fact that illness and diseases are the main or only causes of death.

Old age explanations stated or implied that death is a result of old age. As identified by Smilansky (1987), old age has also been known to factor into younger (mostly preoperational) children's descriptions of the causes of death. Understanding old age involves understanding the biological sequence of life (birth, growth, aging and death). It is important to note that the concept of old age is related to the concept of inevitability.

B) Non-naturalistic explanations

Non-natural explanations are those that referred to the possible causes of death as external causes, other than physical reasons, such as car accidents or stabbing. Therefore the understanding is that events outside which humans have control over (car accidents and so on) cause death. Many of the studies discussed in the review of the literature refer to explanations relating to external causes for death, these could include car accidents, being murdered and death by an overdose of drugs, to name a few (Anthony, 1971; Kane, 1979; Koocher, 1973; Lonetto, 1980; and Smilansky, 1987). In this sample it was found that the non-naturalistic explanations referred to the causes of death as suicide, smoking, taking drugs and to post death processes such as burial rites and spiritual explanations. The main explanations given by the current sample are indicated below:

Crime/violence refers to death being caused by acts of crime or violence. This subcategory does not appear often in the literature and warrants a more detailed discussion in chapter 5.

Accidents refer to the explanation given by the participants that death is caused by accidents, in particular car and pedestrian accidents.

Narcotics refer to the thinking that death might occur as a result of either smoking, taking drugs, or consuming poison.

Burial Rites refer to any reference made to the after-life or to customs associated with them. The reason for inclusion under the category of causality is due to the fact that responses, referring to burial rites were provided under the questions targeting an understanding of factors that cause death. These responses (See Appendix C) reflected that participants might have misunderstood the question. However, Lonetto (1980) argues that children might be concerned about the rites of burial in order to keep the dead separate from the living and to present a sense of life after death, which at one extreme, attempt to ensure a static immortality housed in associated monuments and awards. Another explanation may be that most children in this study had not reached an abstract level of cognitive thinking and therefore understood the question posed in a concrete manner. Thus providing an explanation regarding the burial rites might prove to highlight the difference between those that are living and those that are dead.

Spiritual explanations refer to heaven or hell as an understanding of what happens to humans after they have died. A few studies have considered the impact religion may have upon the child's understanding of death issues. In particular references to what happens after death are of particular importance (Wass & Corr, 1984; Smilansky, 1987). This will be explored further in chapter 5.

Miscellaneous non-naturalistic explanations did not fit into any of the other categories and included suicide, throwing the bones and participant responses that reflected an uncertainty of the response required of them.

4.3.3 Category 3: Explanations of the Concept of Irreversibility

This concept of death has been found in many of the studies reviewed (Koocher, 1973; Speece & Brent, 1984). The understanding is that once a child can grasp that death is a state from which there is no return or recovery, the child has mastered the concept of the irreversibility of death. In this study the Question 3 (See Appendix B) was included as part of the interview questions in order to tap into the participants understanding of the irreversibility concept of death.

Reversible was included as a subcategory to refer to those responses in which death was seen to be reversible and a state from which there is a chance for recovery. Before children understand irreversibility, they often view death as temporary and reversible. These children tend to see death as sleep or as a long trip. In addition, Speece and Brent (1984) refer to the fact that a large number of children mention medical intervention (for example, going to a hospital, getting a shot, taking a pill) as a method of reversing death. This was clearly seen in the study and it can be hypothesised that perhaps concrete operational and younger children see death as similar to being sick. The child who believes death is reversible could be said to see death and life as mutually exclusive states of being (It was for this reason that this study attempted to first determine whether the participants understood the different state of being and non-being). This subconcept can be related to the fourth category of universality.

Irreversible refers to the explanation that death is irreversible and final. According to Speece and Brent (1991) children in the concrete operational stage of development should have grasped the irreversibility of death and have consolidated the understanding that being dead is overtly different to being alive. This subcategory can be related to the category of non-functionality.

4.3.4 Category 4: Universality (do all things die?)

This category was tapped through Question 3 (See Appendix B) and refers to explanations indicating that all living things die. An understanding of the inevitability of death is linked to an affirmation of the universality of death. The category of the universality of death included responses related to all-inclusiveness or the sense that death happens to all people.

A) *All-inclusive explanations* refer to death, as pertaining to all living beings and that nothing is able to escape death. Lonetto (1980) mentions that older children are more likely to understand the fact that all living things die and that nothing is able to escape it. Cognitively the child needs to have started to grapple with the tasks characteristic of the concrete operational phase mentioned earlier in a review of the literature (Wass & Corr, 1984). This was found in the current study where more concrete operational children than preoperational children indicated that death is all-inclusive (See Table 2).

B) *Death as exclusive explanations* refer to death as being escapable and only applicable to certain categories of living beings. Younger children who have not entered into the concrete operational phase have not been found to have an understanding of the inclusive nature of death (Corr, 1995). Rather, the preoperational

child has not yet developed the cognitive structures to understand the universality of death. The preoperational child therefore believes that death is something that only happens to certain people, such as old people or people who take drugs.

This chapter has discussed the categories and subcategories that emerged from the conceptual content analysis. How these categories relate to the particular Piagetian cognitive developmental stages of the participants will be discussed in the next chapter.

CHAPTER 5

INTERPRETATION AND DISCUSSION OF RESULTS

Three points warrant mention in qualifying the ensuing discussion:

1. Firstly, throughout the literature review on children's perceptions of death, it was emphasised that they are likely to understand death within the framework of Piaget's cognitive developmental stages and that the death concepts identified in previous studies, for example Koocher (1973) and Speece and Brent (1991), are likely to emerge from the responses of the present sample. Therefore, from the outset, these stages and death concepts were used as a basis for the development of the questionnaire, and for the analysis and interpretation of the responses.

2. The discussion follows a descriptive format, which is informed by, but not limited to the cluster categories of the results chapter. This is because, while such clustering provided a useful conceptual framework within which to present the comprehensive data, following such a format rigidly would constrain the structuring of the discussion. A narrative format allowed for the interrelationships between categories to be demonstrated.

3. Due to the small sample of the study it is important to reiterate that the intention was not to produce generalisable data, as with quantitative research, but rather to

examine a sample of responses within the framework of Piagetian theory. The validity of such extrapolation lies in its theoretical and conceptual coherence, the illustrative clarity of the supporting data and the degree to which such arguments are convincing to a critical reader. The ensuing discussion is based within such an understanding of qualitative research.

5.1 Themes Relating to Death Concepts

This section explores the clusters identified from the data. The categories will now be discussed individually with the aim of not only gaining an understanding of children's perceptions of death according to Piagetian theory, but also to examine the impact of early exposure to death, as is prevalent in the South African context. The discussion of the categories and subcategories will now be addressed.

5.1.1 Category 1: Non-functionality

When children attempt to grasp the concept of non-functionality in their understandings of death, they are challenged to comprehend that a once living thing is dead, all of the life-defining capabilities or functional capacities that are attributable to a living physical body cease. Therefore the child is forced to think of the living and the dead in a different form. For the child in the preoperational stage, the ability to take account of and coordinate two or more changes that occur simultaneously is limited, thus the child is only able to make one centration, a single act of observation and comparison (Wood, 1993). However, as the child starts to discover more facts about death, he or she starts to de-centre him or herself and moves away from an intuitive understanding of the state of being alive, involving centration on aliveness only, towards judgements based on the coordination of several acts of centration, that is, the ability to consider both time and

space when trying to grasp the issue of death. From the discussion to follow it will become clear that this category is linked to the category of the finality of death.

5.1.1.1 *Mobility versus Immobility*

This subcategory refers to explanations referring to the mobility or immobility of the deceased. Originally the question related to this subcategory was included to ascertain whether or not the participants understood the difference between the meaning of being dead and alive, and was the first question, as outlined in Appendix B. After analysing the data it became clear, however, that the type of explanations provided in response to this question were of great value for this study as they clearly corresponded to the non-functionality aspect of death. Therefore, this question managed to tap into a much wider aspect of children's understanding of death than was previously anticipated when designing the questionnaire.

The most striking finding within this sample was the focus on the mobility or the immobility of the deceased or the living as a key difference between the state of being alive and of being dead. Thus, mobility was assigned to the living whereas immobility was assigned to the deceased. It was found that 26% of all the participants made use of these characteristics to explain how they came to the conclusion that there is clearly a difference between being dead and being alive. As presented in Table 2, most children assumed to be in the late phase of concrete operations were able to denote living as synonymous with movement and death with an inability to move. This indicates that children in the current study aged between 10 and 12 years have consolidated the concept of non-functionality and are able to distinguish between the meanings of the words "dead" and "alive", whereas only one participant in the preoperational group explained the difference between the

words “dead” and “alive” in terms of dead being immobile and alive being mobile. This finding corresponds with Piaget’s theory where children younger than the age of seven are generally unable to decentre their thinking, thus only able to focus on one aspect of a situation at a time. Only later, when they have constructed logical operations, do they develop the capacity for sustained and systematic perceptual analysis and rational thought about the difference between the states of being alive or dead. The child over the age of seven is aware that dead human beings are in a different category to the living, in that the dead were once alive but, once dead, are unable to continue living (Wood, 1993).

According to Speece and Brent’s (1991) review of the literature on children’s perceptions of death, there is a flaw in studies conducted prior to their review. They reported that most researchers merely assumed that children knew the difference between the words “dead” and “alive”. However, Wass and Corr (1984) had already noticed that children at the stage of preoperational thought might use the words “dead” and “death” but understand little, or nothing, of their true meaning. According to Piaget (1955) this may be due to the fact that, although children of this age talk as they play together, they do not really converse in the true sense of the word. Rather the preoperational child is often unable to assimilate what is said by another person to his or her own point of view and as a result often distorts the meaning of what is said to them. Thus the impact of language on the child then, is limited to what he or she can assimilate, and this is determined by the child’s developmental level. True reciprocity and attempts at mutual understanding only emerge with the development of concrete operations.

The preoperational child sees many things as being alive, including immobile and inanimate objects and death is totally foreign to the child’s world. When the child does observe death, it is a puzzle that he or she often solves with magical thinking

or other pre-logical and intuitive explanations. The preoperational children in the current study were also found to display this type of thinking under the non-functionality aspect of death as they answered the first question in a pre-logical fashion. Most of the youngest (that is, 5 year-olds) participants were unable to distinguish between the words “dead” and “alive”. This might be indicative, not only of the fact that the child in the preoperational phase has not yet developed the ability to understand the concept of time or the concept of different states of being or non-being, but also the ability to understand language and the meaning of words correctly. For example, one participant’s response to the question, “Is there any difference between being dead and being alive” was (P15, 5yrs): “*Yes. Only if you play-play then you dead for real. Then you die. Then the police comes to take you to the doctor*.” This response indicates that the child has come to some illogical conclusion of what death means and has been exposed to the word “dead” but has not quite understood the meaning clearly. Another participant explained death as (P17, 5yrs): “*You go down into a cage nê and then you will go down, they will throw sand and then you will go down into the cage after you are dead and then you will be awake nê and then they will take you up*.” Once again the perception of what death actually means has not been logically inferred rather the child has displayed the thought characteristic of preoperations. Therefore the participant quoted above shows the intuitive nature of thought of the preoperational child as the thinking appears to have not been based on logic but rather on immediate perceptions. As indicated by Piaget and Inhelder (1969), the preoperational stage is termed as such due to the lack of operational thinking, thus no specific kind of cognitive scheme has been developed yet. The above-mentioned quote is also evident of very concrete thinking characteristic of the early concrete operational and preoperational stages where the child is unable to grasp the abstractness of death.

As the child develops cognitively, the understanding of the distinction between the words “dead” and “alive” seems to improve. This was observed where five out six children who referred to the mobility of the living and immobility of the deceased, fell within the concrete operational phase (Refer to Table 2). This indicates that participants in this study were found to possess a sense of the non-functionality of death by the age of six.

The concrete operational child’s thinking is considered to be “concrete” in nature because the operations carried out are based on actual objects and not on hypotheses that have been abstractly expressed in words (Piaget & Inhelder, 1969). As previously mentioned, the thinking of the child entering into the concrete operational phase changes in the sense that most of the characteristics of preoperations, such as egocentricism, centration, transductive reasoning, finalism, animism have been overcome (Berk, 1997). At this stage, the thinking has shifted to the logical and naturalistic. The child now understands that only people, animals, and plants are alive, and that what lives also dies (Corr, 1995a). The results from the current study revealed that the participants in the concrete operational stage were all able to explain the difference between the words “dead” and “alive”, but more importantly is how these children explained themselves. Due to the fact that five out of the six responses under this subcategory were provided by children between the ages of 6 and 12, supposedly in the concrete operational stage it is assumed that they were able to use logic to draw conclusions about particular issues. It should be noted that the concrete operational children in the sample of the current study no longer made use of artificialistic and animistic thinking and were able to understand that certain objects and events in the world are not made solely to serve people and that inanimate objects do not have the same qualities as living beings do. This thinking is assumed to be largely due to a decrease in egocentricism where the child becomes more able to construct situations as they appear from another person’s point of view.

According to Corr (1995a), many children refer to the life-defining functions attributable to a living human being in terms of external or observable functions, such as breathing, eating, and/or playing, as well as internal functions which are not directly observable but are inferred from what is observed or expected of a living thing, such as thinking, feeling, and/or dreaming. The participants in this study did not seem to conceptualise the non-functionality aspect of death in terms of internal or unobservable functions but rather all referred to the observable types of life-defining functions, referred to in this study as the category of immobility vs. immobility. The types of responses that reflected mostly external functions included the inability to move around. It is interesting that most of the responses across developmental stages reflected this function of death and it is possible that this may be exclusive to the participant group in particular and may relate to their inability to think in abstract ways. Therefore, most of the responses referred to the observable fact that dead people or things are unable to move. The following quotes are typical and reveal that all of the children in the concrete operational stages and only one in the preoperational stage were able to explain the difference between the terms 'living" and "dead" accurately.

P2 (12yrs): *"If you can't move, your pulse can't move you are dead. If you are alive then your heart is pumping, your blood is moving and you are moving"*.

P14 (8yrs): *"Because if you dead you can't wake up and make your bed or drive your car, but if you alive then you can do all that"*.

P20 (5yrs) *"When it is alive. When the person is alive then they can do things. When you dead you don't do things"*.

5.1.1.2 *Emotional Explanations*

Only 8% of the responses referred to this subcategory, but emotional explanation, when describing the difference between life and death were added, as they appeared to constitute a separate subcategory of responses to the question tapping non-functionality. In the case of the one participant cited below, the participant revealed that she had lost both her mother and her aunty and it was felt that this exposure to death might have influenced the emotional content of the answer.

P 13 (10yrs): *"Yes, aunty. If a person is dead then you can't see that person anymore but that person is always still in your heart. If you are living then you can still do whatever you want to do."*

The following response by a six-year-old boy, (P9) *"Dead. Heartache"*, did not reveal a lot but was interpreted as him being aware of what death means emotionally to the people left behind. It can be argued that the above quotations are egocentric in nature, perhaps more so than as emotional in nature, but the observations by the researcher during the interviews were the determining factor in categorising responses as emotional explanations. From the responses it was clear that their own experience of death appeared to have influenced their perception of death markedly.

The literature available did not seem to refer to the emotional aspect in children's responses distinguishing between death and being alive (Anthony, 1971; Kane, 1979; Nagy, 1948; Speece & Brent, 1991). This could be as a result of most of the studies focusing primarily on the cognitive aspects of children's perceptions of death. An interesting finding of the current study was the emotional content that was revealed in a few responses. Interestingly, as previously mentioned, the literature reviewed has not focused on emotionality related to children's perceptions of death.

One would assume that in providing an emotional response to such a vague question, (Question 2 in Appendix B) children may have been exposed to death and therefore have personal experience of death. Many of the studies have asked even more personal questions, for example, Koocher (1973, pp.369) asked children the question “When will you die?”. In this regard, one would expect to obtain an emotional response to such a question if the child has been exposed to the death of a loved one. It could be speculated that few emotional responses occurred since children do in fact see death and death issues in a matter-of-fact manner, as was found by a review of the literature conducted by Stambrook and Parker (1987). However, it cannot be assumed that exposure to death is the only reason for the appearance of such emotional responses. It could also be as a result of egocentric thinking where the child presumes that death will have more of an impact on him or her, than thinking about what the deceased may have experienced in the process of dying. Further, more in-depth research would need to be conducted to conclude the validity of such a statement.

5.1.2 Category 2: Causality

When children attempt to grasp the concept of causality in their understanding of death, they are challenged to comprehend what it is that really does or can bring about the death of a living thing. As proposed by Speece and Brent (1991), a mature understanding of causality involves an abstract and realistic understanding of both internal and external events that might bring about death. The understanding of death in terms of internal and external life-defining functions has previously been discussed under the category of non-functionality. The inter-related nature of the two concepts is crucial in understanding the way in which children perceive death and should be noted as such.

Nagy's (1948) findings that children are most concerned about the separation aspect of death was only observed in one participant's response who stated, (P16, 6 yrs): "*If your mommy and daddy dies then you will stay alone. If you are in your house and your mommy is not alive then they can kill you.*" This quote was a response to the question, "Do you think all things die?" and was intended to measure universality, which was included in this category, as the statement was found to support Nagy's (1948) findings. Importantly, it should also be noted that the quoted participant was possibly still in the preoperational stage and therefore employing illogical thinking and egocentricism, fearing the loss of his or her parents and what this would mean for him or her. The discussion to follow will reflect on the subcategories which were identified as related to the causality concept of death.

5.1.2.1 Naturalistic Explanations

This subcategory emerged when the children in the study expressed natural causes for death. This can be likened to Corr's (1995a) conceptualisation of children's explanations of death in terms of two types of life-functioning factors, namely, internal causes and external causes. In the current study responses were considered to be naturalistic in nature if they referred to the cause of death in terms of the physical body in the context of natural laws.

5.1.2.1.1 *Physical explanations*

In direct contrast to the findings by Wass and Corr (1984) and Koocher (1973) that older children in the concrete operational phase refer to the causes of death as external, (for example assault, accident, or disaster) this study found that children of a similar age tended to provide internal explanations for causes of death, such as Aids, and other diseases. These findings are in accordance with those of Anthony

(1971) and Nagy (1948) where children aged nine and older (and so in the later part of the concrete operational phase) usually see death as an internal biological process that operates according to natural laws. Stambrook and Parker (1987) have also noted that children between the ages of 7 and 11 move from believing that illness is externally caused to believing that illness is the result of internal physiological dysfunction. According to Piagetian theory these children become more aware of the internal causes for death as they get older (that is from concrete operations and onward) due to the fact that they are able to think in more logical ways and are no longer governed by what can physically be seen but become more interested in they "why's" and "how's" of the causes of death.

In the current study 52% of the total number of participants made reference to the cause of death as occurring in a physical-biological way. Some examples of such responses include: (P2, 12yrs): "*Your whole body shuts down.*" and (P10, 7yrs): "*If a person is sick*". Moreover, all of the children in the late phase of concrete operations understood death as being caused by physical factors. Added to this, five out of the ten children (50%) in the phase of early concrete operations also reported internal or physical explanations for the causes of death, while only one child in the preoperational stage provided a physical cause for death. This might indicate that the participants have had greater exposure to death as a result of illness (possibly Aids) than the children in previous studies (Anthony, 1971; Nagy, 1948) have been. The latter studies focused more on children and their understanding of death, and did not pay much attention to any previous experience with death. The current study did not implicitly measure the participants' experience with death but was able to take this factor into account through the intimate nature of the interviewing process and the small size of the sample. Another reason for the differing findings may be that children at the concrete operational level are unable to think in abstract ways and

therefore see illness as a major cause of death due to the fact that one can often observe the effects of illness on the body of people who are terminally ill.

The children from the current sample, who were in the preoperational stage, drew illogical conclusions and made reference to people going to the hospital when sick but then being able to take a pill and go back to school again. This type of thinking shows the characteristics of the preoperational child's level of cognitive development as the child has little concept of time and therefore makes illogical assumptions based on what has been observed. It is also evident that the preoperational child is not yet able to grasp the true meaning of the word "dead" and that they cannot grasp the fact that death is final and irreversible.

5.1.2.1.2 *Old Age*

Even though only one participant responded by stating that old age is a major cause of death, many statements relating to old age were evident when the question relating to the universality of death (See Appendix B) was posed. When asked if all things die, most of the younger, preoperational children referred to the elderly as the ones who die. The response by P1 (11yrs) was as follows, " *If you like get too old or if you eat something that is not right for you…*" For the purpose of clarity within the categories identified, the subconcept of old age will also be discussed under the heading of the universality of death at a later stage. However, under the category of the causes of death, it is remarkable that only one participant referred to the issue of old age. This contrasts with the findings of Smilansky (1987) where one third of the children in early concrete operations spontaneously named old age as a cause of death, compared to only 7% of the preoperational children in the current study. This study found that the majority of the participants did not make any mention of old age in describing the causes of death. Possible reasons for this may have been due to a

lack of comprehension of the meaning of the concepts of causality and inevitability (to be discussed at length later) as they apply to old age. Alternately, the participants of the study may have little experience with death due to old age, as younger people are dying of AIDS, resulting in the grandparents often outliving their children. It is understandable for the child in the preoperational stage to struggle with the concept of old age as a result of the inability to gauge time correctly and also due to their egocentric focus on themselves. However, it is assumed that the concrete operational child should have a better grasp of old age, partly due to a better perception of time. The fact that this was not found in this study may reflect cultural and/or social differences in children's perceptions of death.

5.1.2.2.3 Non-naturalistic Explanations

The subcategory of non-naturalistic explanations refers to the causes of death due to external factors, other than physical reasons. This is related to the finding by Corr (1995a) that children tend to explain death and its causes in light of internal and external life-defining functions, such as accidents, shootings and suicide. Several types of non-naturalistic explanations were given by the sample and these are discussed below.

5.1.2.2.4 Crime/violence

A result that was anticipated by the researcher was the high percentage of participants (52%) who referred to death as a result of violence and crime. The fact that the crime rate in South Africa is high may have influenced this anticipated result. An equal number of participants across the three different age groups identified in Table 2 responded to the prevalence of violence in the country, showing

that children at all three levels of cognitive development were aware of crime and violence as a cause of death.

Children aged five and six years gave more explicit explanations regarding the causes of death, for example (P19, 6yrs): "*It's people that are killing other children. When you walking in the street and there comes a car and a car bumps you. If people are still watching TV and the bell goes or they knock, if they are tsotsies, they will open, then they will get in and then they shot you.*" and (P17, 5yrs): " *When somebody shoots you, you die, you go down to a hospital. Because when you die your heart will be broken and then you go somewhere else and then they will take you to a hospital and then the ambulance will come*." Both of the children quoted above were in the preoperational phase and their responses clearly indicate a lack of logical operations.

While the responses of the preoperational children often reflect their animistic and egocentric thinking, the responses made by the older concrete operational children refer to the issue of violence and crime in their environment in a more logical manner, for example, (P14, 8yrs): "*Sickness, or like when they beat you*." and (P4, 12yrs): " *If you are sick, and if you walk around late at night and people shoot you, or if you fight here in the taverns where people start to use bottles to tab each other with.*"

The heightened awareness of crime and violence as a cause of death seems to be in agreement with findings by Smilansky (1987), who found that Israeli children had a more mature understanding of human death due to the prevalence of war and violence in their country. Therefore, the degree of exposure children have to different causes of death will inevitably impact on their understanding of the possible causes of death.

Stambrook and Parker (1987) have suggested that the influx of knowledge made available to children in recent years through television and other forms of mass media is largely responsible for the finding that children believe in realistic and concrete causes of death, be they internal or external. Although children in past decades were not exposed to the influence of television, they may have been exposed to more actual death experiences. In fact, Stambrook and Parker (1987) note that, in past decades, death in childhood was a more frequent and openly discussed occurrence and, for the most part, death occurred at home. Therefore, the results in the current study do appear to have reflected the 'occurrence' of death as fairly common, but it is mostly associated with violent causes and accidents.

5.1.2.2.5 Accidents

In contrast to the findings by Wass and Corr (1984) that children refer less to external events as the cause of death as they progress in the concrete operational stage, the current study revealed that 17% of the total number of participants made reference to car accidents as a cause of death. The largest percentage of these responses originated from children in the late concrete operational stage. Once again, this seems to be in contrast to what Stambrook and Parker (1987) view as common responses for children in the concrete operational stage of development. The current study found that some children in the concrete operational stage conceived of the cause of death in terms of external, non-physical means, as opposed to seeing death as an internal process that operates according to natural laws as was evident from the findings of Anthony (1971) and Nagy (1948), but this discrepant view could be due to the very small sample of the current study. As mentioned earlier, it is imperative that Piaget's stages of cognitive development be used merely as a guide and not seen as inflexible stages adhering to set chronological ages. Given

this, it is possible that the participants may be functioning at a lower cognitive developmental level than is expected of their age or it could be assumed that they have not yet consolidated a specific aspect of the concrete operational phase, in particular the mechanisms of the human body and/or logical conclusions drawn from inferences and hypotheses. Use of narcotics was also mentioned as a potential cause of death and will be discussed next.

5.1.2.2.6 Narcotics

As seen in Table 2, responses coded under this subcategory included those which referred to smoking, the act of taking drugs or consuming poison. 10% of all the participants referred to this subcategory when explaining the causes of death. These responses came from participants in the early phase of concrete operational thought and the preoperational stage. From the responses coded, it was evident that one participant, had been exposed to drug abuse, her responses indicated drug ingestion as the only cause of people dying, for example, (P11, 8 yrs): "*If a person takes drugs then they die*." Similarly, in response to the question whether all things die, this respondent replied, "*no, people that don't take drugs don't die*." Therefore, when analysing the data it is imperative to remain cognisant of the contextual environment of the participants, regardless of their chronological age and their cognitive development. Participant 11 is assumed by her age to have entered into the early phase of concrete operations and therefore should be starting to grasp the universality and the possible causes of death. However, this response indicates a sense that death is not universal among preoperational children and demonstrating the variable nature of the time taken to develop all the operations used at the concrete operational level. Participant 11's response supports Wass and Corr's (1984) finding that children younger than nine years old primarily perceive death as being externally caused.

There is no mention of the subcategory of narcotics as a cause of death in the literature reviewed and this could be a result of the manner in which previous data was coded. Stambrook and Parker (1987) found that between the ages of 7 and 11, children move from believing death is externally caused to believing that death is predominantly a result of internal, physiological dysfunction. The finding in the current study corresponds with Piaget's theory of cognitive development in that the explanations provided by the concrete operational children adhere to concrete ways of understanding the causality of death. So one would anticipate external causes for death to be given by children between the ages of five (preoperational phase) to approximately eight or nine, entering into the concrete operational phase. Children in the current study, who gave narcotics as the sole cause of death, appear to be still developing the operations needed for logical thought patterns.

Some participants, when questioned about the possible causes of death, gave other explanations which were not strictly related to causes of death, but rather to the processes of the afterlife and warrant mention here. These include the subcategories of burial rites and spiritual explanations. Burial rites and spiritual issues appeared to be important in the child's developing concept of death although they are not clearly related to the causes of death. It is possible that the children did not clearly understand the question, but nonetheless, their responses were included under the causality of death in order to highlight the differing cognitive developmental stages and how the question about the causes of death was understood. The subcategory of burial rites will now be discussed.

5.1.2.2.7 Burial Rites

In contrast to studies included in the literature review, as mentioned above, the current study found that an almost equal amount of children referred to burial procedures as an explanation for why people die and for what happens after they die. Therefore, children spanning from the preoperational to the late concrete operational phase were aware of the rites and rituals related to death. A possible reason for this dissonance with the literature is given by Silverman (2000), who reported that the culture of death and how and where it occurs has changed over time, for example, death is no longer taboo and many terminally ill people are now taken care of at home. Also, the onset of AIDS and the pandemic proportion it has reached means that children may have greater exposure to death than in previous years. Caregivers are becoming increasingly aware of the importance of including children in the funeral and burial procedures in an attempt to assist in their bereavement process (Holland, 2001; Silverman & Worden 1993).

Two of the participants in the concrete operational stage referred to dead bodies being taken to a mortuary (P4, 12yrs): "*They take them to a mortuary and those places, which have freezers and stuff. Yes that is all I know*…" and (P5, 12yrs): "*They get buried. And then everybody does a grave for them. Sometimes people take the body to a missuary (sic) and then they burn the body up and then they find something in which they can out some of the ashes inside and then they put in their room or something*." Both of these participants had recently lost an immediate family member, which may account for their responses. Such responses also highlight how perceptions of death and bereavement have changed over the years at a societal and cultural level.

Nagy (1948) found that children in the late concrete operational stage were very curious and asked many specific questions about the funeral procedure, the coffin, the cemetery and so on. Many researchers appear to have overlooked this fascination

with the practical or concrete aspects of death. On a developmental level, children at this stage of cognitive development may not yet understand that death is complete and final.

In the current study it was found that the children in the preoperational phase also commented on the burial rites and procedures. Among this group, the act of putting flowers on top of the coffin or grave was the most common statements. This may be due to the preoperational child not yet having grasped the finality and universality of death and the act of placing flowers appears to be the most obvious concrete object connected to the deceased. Stambrook and Parker (1987) also found that children who experienced the death of a family member presented with a more mature concept of death. Similarly, Nagy (1948) categorised children in her study as either "death experienced" or "death inexperienced" and from her findings it was evident that experienced three to six year olds held a significantly more mature concept of death and were better able to understand the irreversible nature of death and the fact that the dead no longer have life-like features or abilities. Stambrook and Parker (1987), however, mention that many researchers have been unable to obtain the same findings as Nagy (1948). Consequently, the results of the current study need to be interpreted with caution, since many of the sample appear to have had prior experience of death. Moreover, with the exception of Kane (1979), the remainder of the researchers mentioned in this study, who have investigated the impact of exposure to death on the child's understanding thereof, did not examine the possibility that the understanding may differ according to the child's age. Spiritual or religious explanations were also considered to refer to the post death process, and will now be discussed.

5.1.2.2.8 Spiritual/religious explanations

A total of 17% of the participants made reference to religious or spiritual aspects in relation to why people die and what happens after they die. However, one of the children in the preoperational stage referred to this aspect when describing what happens after a person dies. The younger children clearly had no understanding of such abstract ideas or could not articulate them as can be seen in the following response, (P17, 5 yrs): "*They die, when they are still getting dead, and then they are still going. They go to the hospital and then they are going home, they go and sleep in bed*." The children in the concrete operational stage, on the other hand showed that they had started to think about the afterlife and what happens when a person dies, for example, (P1, 11yrs): "*If you good and stuff here then you go to heaven but if you are bad then you go to hell",* and, (P8, 8yrs): *"… the person, if he done good then he goes to heaven but if he done bad then he goes to hell*". From these quotations it appears that the concrete operational participants in this study were able to speculate on more abstract, spiritual issues. According to Wass and Corr (1984), children's religious beliefs concerning death do not appear to influence their perceptions of death, but that it does reflect the cognitive process of the development of more abstract ways of reasoning about issues faced in the concrete operational stage. The last subcategory to be discussed under the category of non-naturalistic explanations as a cause of death was coded as miscellaneous because it included explanations that were found not to fit into any of the other previously mentioned categories of the causes of death.

5.1.2.2.9 Miscellaneous

Included under this subcategory are responses referring to suicide, throwing of the bones (or traditional medicine), and fire. In this study, 10% of all the participants made reference to the above-mentioned causes of death. Of the 10%, two of the participants referred to suicide as a cause of death. This finding is similar to many

studies reviewed in the literature, for example, Anthony (1971), Kane (1979) and Stambrook and Parker, (1987). In the current study, the two participants who made reference to suicide as a cause for death arose from two contrasting developmental stages, that is, one from the late concrete operational phase and one from the preoperational phase. From the responses given, it could be speculated that the preoperational participant may have had prior experience to suicide and may also understand death as being reversible. When referring to the participant in the concrete operational phase of development, it appears that he or she may have started to question the issue of death and gave suicide as one of several causes of death. This may be explained as the ability to decentre and possess the ability take cognisance of more than one cause of death at a time, and thus might be seen as moving toward abstract thinking characteristic of the formal operations period. Lonetto (1980) refers to the way in which the adolescent starts to grapple with the abstract issues surrounding death, namely the spiritual and ethical moral issues related to death and speculates on what happens after one dies. The two participants discussed are exceptions to the general pool of participants and may have had specific exposure to the issue of suicide.

The category of irreversibility was identified in the current research study and will now be discussed.

5.1.3 Category 3: Irreversibility

The category of irreversibility was also identified in many of the studies reviewed, for example, Anthony (1971), Corr (1995a), Lonetto (1980), Speece and Brent, (1991), Smilansky (1987) and Wass and Corr (1984). Irreversibility refers to the understanding that once a living thing dies, its physical body cannot be made alive again. An understanding of this category also allows the child to grasp the finality of death.

Research indicates that children in the preoperational stage understand death as reversible, temporary, and caused by an external force (Nagy, 1948). The young child of five years cannot understand the irreversible nature of death, as the child in this stage uses very literal thinking. Consequently he or she may sometimes distort reality to confirm his or her idiosyncratic understanding. This may also be due to the child's limited understanding of the world and as a result may often result in illogical explanations for events. However, as the child matures cognitively, the ability to understand the irreversible nature of death emerges (Koocher, 1973).

A seminal study by Speece and Brent (1991) examined the validity of studies on the development of children's understanding of death, where their understandings were compared to a presumed mature adult concept of death. Thus, most studies post-1991, assumed that a mature adult concept of death is the end-state toward which the process of conceptual development is directed. However, the results indicated that many adults did not have a definite understanding of the irreversibility of death and that the children actually performed better on the tasks than the adults did (Speece & Brent, 1991). This suggests that it may be incorrect to identify irreversibility as a desired or mature conceptualisation of death. The subcategories of reversibility and irreversibility will now be discussed with regards to the findings of the current study.

5.1.3.1 Death as Reversible

In the current study, only one participant in the preoperational age group responded affirmatively that people could come back from the dead. This participant replied, (P17, 5yrs): "*Yes, you first put your heart back in how you feel and then you feel better*." Clearly this participant did not understand the irreversibility of death and

made use of magical thinking to bring a dead person to life again. It should be noted that a number of preoperational children responded that one couldn't bring people back to life once they are dead, but in examining their reasoning it becomes obvious that they were not too sure about exactly why death is irreversible. Such responses appear to show the beginnings of an awareness of the irreversible nature of death, but those children were still in the process of consolidating the concept. Although 17% of all the participant's answers were coded under this subcategory, that is, death as reversible, three out of the four responses (See Table 2) reflected upon modern technology and the role of faith in bringing people back from the dead. An example of this (P5, 12yrs): "*No, because, umm, when you've already like passed away your spirit has already gone to heaven. And then it's only possible if God wants you to come back. But then if God needs you, they told me that when my brother passed away that maybe God needs him in heaven now*". This participant still shows aspects of concrete operational thinking mentioning that death can be reversed if an external, higher force grants it. It could also be hypothesised that the participant, having experienced the death of a brother, has reflected on issues of the afterlife sooner than children of the same age who have not had direct experience with death.

Another response to the issue of death being reversible referred to the role of modern technology, for example, (P1, 11yrs): "*No. Unless you are cured by a doctor. Ja, like if you are in hospital and you go in for a stroke and then like they take those things and then they bring you back to life*". The quotation illustrates how the child at the concrete operational stage is able to use logical conclusions in order to argue a point. The results of this study corroborate those of Speece and Brent (1991) who observed that from the age of 9 or 10 onwards, the development of the concept of death involves a more complex and sophisticated understanding of the relationship between life and death than that assumed in the traditional studies of

this process (Anthony, 1971; Kane, 1979; Nagy, 1948). In fact, it appears that, after the age of approximately ten years, children seem to have a growing understanding of the fact that, under certain conditions, certain physiological states traditionally associated with unconditional irreversible death, may, in fact, be reversed by various medical procedures, for example, the participant 11 (as quoted above) was aware that death is irreversible, but was able to think rationally about circumstances under which a person would be able to be brought back from the dead or near death. This corresponds with Piaget's theory where the child is able think in a more abstract and organised way based on the concrete and tangible information upon entering into the stage of concrete operations. However, this also possibly indicates that certain tasks, like abstract reasoning are reached before others, for instance, the concepts of finalism and transductive thinking.

This issue of the irreversibility of death was explored by Rowling (2003) who argued that advancements in medical technology have interposed between the states of being unambiguously alive and unambiguously dead and a new state of being ambiguously alive or being alive on life support measures. Smilanksy (1987) also mentioned the impact that modern medical technology has on children's perceptions of death, as well as that the concept of irreversibility may not be as 'mature' a concept of death as was previously thought (Speece & Brent, 1991). The current research study indicated that children who have passed the preoperational stage and are moving towards, or are in the concrete operational phase tend to understand death as irreversible, but this is not necessarily an end-point or mature adult conceptualisation of death. The subcategory of death as being irreversible will now be discussed at length.

5.1.3.2 Death as Irreversible

The responses that were coded under this subcategory generally referred to an inability to reverse death under any circumstance. Eighty-two of the total number of participants responded that death is irreversible. Although all six members of the late concrete operational age group responded in this way, two of them were able to hypothesise about cases in which death may be reversed, as mentioned previously. However, it was decided to include the two participants under this subcategory as they initially commented that one could not bring dead people back to life. This indicated that on a cognitive level, they had reached the concrete operational stage in that they had gained an awareness of the finality and the inevitability of death. Consequently, all of the children at the late concrete operational level were able to understand the irreversibility of death. Similarly, eight out of the ten children positioned in the early concrete operations stage were able to understand that death was irreversible. Their responses were, however, very concrete, for example, (P3, 10yrs): "*No. Because if you kill a person you can't make him live again*", thus there is no possibility in any way that one can bring the dead back to life. The current study revealed that many of the children in the preoperational group showed an awareness of the irreversible nature of death but that their explanations seemed to contradict their original answers, for example, (P18, 5yrs): "…*no, because they won't be alive and they will stay dead the whole night.*" In this instance, the child's lack of awareness of the concept of time has influenced his or her ability to fully grasp the irreversibility as well as the finality of death. Another example of illogical reasoning from a preoperational child is as follows, (P15, 5yrs): "… *because some people are alive and some people does get shot, but then they go to the doctor and then they have to go back to school*."

Therefore all of the children at the late concrete operational level were able to display an understanding of the irreversible nature of death, while children at the preoperational level were unable to substantiate why death was irreversible and

most of them contradicted themselves by saying initially that dead people can be brought back to life. Thus, the findings of the current study are in agreement with Piaget's theory in terms of the illogical conclusions that were made by the children in the preoperational stage of cognitive development with a progression to more concrete and logical ways of making conclusions at the concrete operational stage. The last category to be discussed below is the universal nature of death.

5.1.4 Category 4: Universality

According to Speece and Brent (1984) the category of universality refers to the understanding that all living things die. Other terms used for this general notion include, death as an immediate possibility and the inevitability of death. The question used to elicit this information was "Does everybody die?". Other studies that also made use of this question included those of Koocher (1973) and Sternlicht (1980).

Before children understand that death is universal and inevitable, they often believe that there are certain actions that can be taken to avoid death, or that certain groups of people do not die (Nagy, 1948). The participants of the current study also displayed this type of thinking and this will be discussed under the subcategory of the exclusive or all-inclusive nature of death.

5.4.1.1 All-inclusiveness

Once children have reached the stage of concrete operations, it seems that they have a clearer understanding of the universality of death. In this study 47 % of all the participants responded that death is universal. Unsurprisingly, most of these participants belonged to the stage of concrete operations. Thus, the findings support

those of Nagy (1948), who reported that children between the ages of 9 to12 years have realised that death marks the cessation of corporeal life (finality) and that it is a process operating within each of us (internality and universality). Results derived from other researchers, for example, Anthony (1971), Nagy (1948), and Koocher (1973) agree that the child's conception of death moves from a state of nonawareness (denial), through an intermediate stage where death is externalised in many forms, to one of an appreciation of death as universal. Similarly the child exiting the concrete operational stage may be inclined to be afraid of death due to the understanding of the universality of death. The realisation that death is universal, inevitable and final has been found to create high levels of anxiety for the child facing early adolescence (Lonetto, 1980; Silverman, 2000).

5.4.1.2 Exclusivity

The participant responses, which were coded under this subcategory, were found to consist of references made to the belief that death is not universal and that the state of the deceased can be altered in some way. Ten of the 23 participants (43%) gave responses within this subcategory. However five of those responses came from the preoperational age group. Only two of the children in the late concrete operational phase responded that death is exclusive to some people or things and these referred to the difference between animate and inanimate objects and the fact that, air and buildings, for example, don't die but that all humans can die. Therefore, the child at this level of cognitive development is able to draw conclusions based on concrete and rational thinking and is also able to think in less animistic ways than before. This corresponds with Kastenbaum's (1984) findings that the child does not seem to be able to express adequate conceptions of death until he or she is able to make a clear distinction between animate and inanimate forms. The fact that four out of the ten responses recorded under this subcategory came from children in the early phase

of concrete operations might be indicative of the children still learning to grasp the notion of conservation, that is, that people may be different in many outward ways but are all exposed to the same internal life processes (birth, aging, death).

Nagy (1948) reported that young children often think that death can be avoided by being clever or lucky. Similarly the preoperational participants in this study were also found to believe that death is something that only happens to an exclusive class of people or things, for example, (P6, 6yrs), in response to the question of whether all things die, responded by saying: "*Some, umm things die and other things don't die. Some people die. Those that die are the old people and the people that aren't old don't die*". This can be seen as the child denying the inevitability of his or her own death, but it can also be seen to indicate that the child at this young age has yet to develop an understanding the universality of death. In terms of Piagetian theory this can be linked to the fact that preoperational children have not yet developed cognitively in order to understand classification systems, for example that a daisy and a rose are both different types of flowers and therefore belong to the same classification system. Therefore, the child in the preoperational stage may think that only old people die, seeing them as being different to themselves and others. Similarly, a participant in the preoperational phase reported that only people who take drugs die and that people who don't take drugs don't die.

In the literature, it was indicated that that children understand that others will die before they understand that they themselves will die (Lonetto, 1980). This might be because many researchers did not probe this issue directly by asking, "Will you/when will you die?" amongst them, Nagy (1948) and Lonetto (1980). Many children who apparently understand the inevitability of their own deaths have a tendency to say that their death will occur only in the remote future when they get old (Speece & Brent, 1991). As previously noted, this could be a denial of their own

death at a young age and a defense against consequent anxiety. One participant, when asked what happens when people die, responded by saying that she did not know about all that “stuff”, hence denying the inevitability of death. Thus, children only seem to fully understand the all-inclusiveness of death once they reach the concrete operational stage. The central findings of the study will be mentioned as a conclusion to this chapter.

An important finding from the current study was the identification of crime and violence as a cause of death. It was also found that most children understood the finality of death at an earlier age than reported in the literature. The current study found that children as young as five were able to understand the final nature of death. Exposure to death also appeared to play a role in an early understanding of death in children due to being forced to face the issues of death at an earlier age. In concluding this chapter it is hoped that the lengthy discussion on the data has provided a rich and comprehensive appreciation of the child’s cognitive development and the rate at which the major concepts of death are acquired, together with role of early experience of death in their lives. The final chapter of the thesis reflects on the limitations of the current study, as well as those of previous studies on children’s perceptions of death and makes recommendations for further research.

CHAPTER 6

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The findings of the study together with those from the reviewed literature have suggested several ways in which younger children's understandings of death, from a Piagetian perspective, may differ from those of adults. Preoperational children appear to think death is reversible, attribute various life-defining functions to dead beings, and think that certain individuals will not die or that death can be avoided. By approximately seven years of age (concrete operations), the children in this sample could understand the causality, irreversibility, non-functionality, and universality of death. These general findings can serve as rough guidelines concerning what children of various ages can be expected to understand about death. Another important finding from this study was that exposure to death may have an impact on the rate at which children understand or at least start to grapple with conceptual issues related to death.

In general, the sample's findings were highly congruent with, and could be readily explained by Piagetian theory. It was found that children in the sample showed thinking characteristic of that proposed by Piaget. Most children above the age of seven displayed less centration, as they were able to understand that all human beings die, and that even though humans are alive, they change physically once they die and no longer possess the characteristics they had when they were alive, thus, taking account of more than one aspect of a situation at a time. There was also evidence that children over the age of seven showed less egocentricism in that they were able empathise with others, and were able to understand that they do not have the power to cause death by merely wishing it upon a person. A reason for the concrete operational child's understanding of the impact of death on others is due to their ability to now ignore their own physical and mental position and to be able to construct new situations as they appear from other perspectives. Children can only perform such constructions once they have developed the requisite mental operations. Before this stage is reached, they assimilate what is said by another person, to their own point of view, often distorting meaning. Along with less egocentric thinking, it was also found that children in the concrete operational stage were less animistic in their perceptions of death and were able to grasp that not all things posses human qualities, that certain things do have life, but that things such as plants and trees do not have human qualities, that is, they do not eat and breath as humans do. The older the children were, the better they were able to understand the finality of death and were also able to grasp the concepts of time and space more effectively. Thus, they were capable of comprehending that the dead are incapable of coming back to life. However, children in the late stage of concrete operations and those entering formal operations were able to think in more abstract terms and said that it was possible in certain instances to bring the dead back to life with the aid of modern medical technology.

There are, however, a number of limitations of this study, as well as of previous research in the field of children's perceptions of death, which should be considered. A limitation of using Piagetian theory as a perspective for analysis of the development of children's perceptions of death is its almost exclusive focus on the cognitive, with little attention given to life experiences, individual personality, social and cultural factors which may also impact on what children know and understand about death and why they think about it in given ways.

Corr (1995b) stated that using a stage-based theory to understand children's developmental understanding of death concepts is too limiting and fails to take into account the fact that the development of children occurs in a more complex, variable, and individualised manner. The development of a child is equated to a grove of trees in that it has many simultaneous dimensions, processes, and rates, and is affected by a variety of individual and environmental factors. Making use of a stage-based theory of child development is in conflict with the awareness that all children do not develop at the same pace or in the same ways. To understand children and their interactions with death in a comprehensive and responsible way, it is necessary to pay attention to their developmental level, but development is not merely a cognitive affair, rather it involves emotions, behaviours and values as well. In addition, life experiences, the personality of the child, and his or her communication patterns should also be taken into account (Pritchard & Epting, 1992; Stambrook & Parker, 1987).

As Corr (1995b) mentions, future investigations should also involve task-based descriptions (based on children's abilities and experiences rather than presupposing phases according to age alone) of children's understandings of death in order to expand on the descriptions and sequencing of the stages in what children are thought to know about death, and to avoid the potentially misleading linkages between

chronological age and cognitive development. Rather, a task-based description of children's understandings of death accommodates life-long learning of the meanings of death instead of moving from one stage of understanding to the next.

With regard to the measurement used in the study of children and death, the focus has been limited by a narrow focus on either bereavement or death concept formation. The study of death concept formation has been solely dependent on structured interviews and well-standardised instrumentation, where the questionnaires have undergone some sort of standardisation for the purpose of broader use, has been underreported in the literature. It is proposed that the phenomenographic method (that is, analysing children's drawings about death from a phenomenological perspective) be used as an alternative method for both qualitative and quantitative investigation.

All of the available studies reviewed in chapter 2 as well as the current study share a common limitation that should be noted, namely that they are cross-sectional. Therefore, there is no indication how the same children develop their concepts of death over a period of several years. Consequently, it is not possible to distinguish the effects of age or developmental status from possible cohort effects. Children who are 10 years old now, in 2004, for example, are also those who were born in 1994. This decade of social history could well have had a different impact on cognitive development and death-related thoughts in general than previous and subsequent decades. Longitudinal studies are needed in order to understand how the developmental process operates in the same child. Only the study conducted by Bluebond-Langner (1977) was longitudinal in method, but covered a relatively short developmental period (a few months). It is felt that research into the development of children's perceptions of death would be greatly enhanced if attention were given to the limitations inherent in the use of cross-sectional research designs. It is

recommended that longitudinal-sequential research designs be implemented, as this could lead to an examination of important age changes and the effect of life experience on these changes and on the perception of death.

Some suggestions for further research include, firstly, the importance of an updated definition of a mature adult concept of death which takes into account advances in medical technology that continue to change the boundary between alive and dead. Secondly, understanding the composition of the four subconcepts, namely causality, universality, irreversibility and finality, requires more detailed study as children may not grasp all aspects of a subconcept at the same time, that is, some aspects may be understood earlier than others. Thirdly, the attainment of a "mature" understanding of the subconcepts may occur much earlier than previously anticipated for most children. The impact of culture, political turmoil, and hostile conflicts on the understanding of death merit more attention than has been received in the past. For example, Nagy's (1948) research is likely to have been influenced by war-time conditions in Hungary, just as the current study's findings were most likely influenced by the high crime and murder rates, together with the occurrence of AIDS in South Africa. Fourthly, the often-cited study by Nagy (1948) needs to be replicated under contemporary conditions. Nagy's (1948) study has produced a confusing array of results, with little that lends itself to easy understanding and integration (Stambrook & Parker, 1987). Lastly, the research in this area has become somewhat directionless in that the investigations have not been based on the replication and clarification of the results from previous studies. Instead, researchers have repeatedly examined developmental trends in the conceptual understanding or perception of death, using very different methods and very different samples of children and measuring instruments.

In conclusion, it is hoped that this exploratory study will give some insight into the developmental differences inherent in children's perceptions of death. While the interpretations of the findings have been largely theoretical in nature, they also have practical implications for professionals who work with bereaved children.

.

REFERENCES

Anthony, S. (1971). The Discovery of Death in Childhood and After. London: The Penguin Press.

Aspinall, S.Y. (1996). Educating Children to Cope with Death: A Preventive Model. Psychology in the Schools, 33 (4), 341-349.

Ayyash-Abdo, H. (2001). Childhood Bereavement: What School Psychologists Need to Know. School Psychology International, 22(4): 417-433.

Babbie, E. & Mouton, J. (2002). The Practice of Social Research. Cape Town: Oxford University Press.

Berg, B.L. (1995). Qualitative Research Methods for the Social Sciences (2nd Ed). Boston: Allyn & Bacon.

Berk, L.E. (1997). Child Development. (4th Ed). Boston: Allyn and Bacon.

Bluebond-Langner, M. (1977). Meanings of Death to Children. In H. Feifel (Ed). New Meanings of Death. New York: McGraw-Hill Book, Co.

Bluebond-Langner, M. (1978). The Private Worlds of Dying Children. Princeton, New Jersey: Princeton University Press.

Boyle, D.G. (1969). A Student's Guide to Piaget. Oxford: Pergamon Press.

Breakwell, G.M. (1997). Interviewing. In G.M. Breakwell, S. Hammond & C. Fife-Schaw. Research Methods in Psychology. London: Sage Publications.

Cook, S.S. (1974). Children and Dying. New York: Health Sciences Publishing Corporation.

Corr, C.A. (1995a). Children's understandings of Death: Striving to Understand Death. In K.J. Doka. Children Mourning, Mourning Children. Bristol: Hospice Foundation of America.

Corr, C.A. (1995b). Children and Death: Where have we been? Where are we now? In D.W. Adams & Deveau, E.J. Beyond the Innocence of Childhood: Factors Influencing Children and Adolescents' Perceptions and Attitudes Toward Death. New York: Baywood Publishing Company, Inc.

Cowan, P.A. (1976). Piaget: With feeling. New York: Holt, Rinehart and Winston.

Currer, C. (2001). Responding to Grief: Dying Bereavement and Social Care. New York: Palgrove.

Deaton, R.L. & Berkon, W.A. (1995). Planning and Managing Death Issues in the Schools: A Handbook. Connecticut: Greenwood Press.

Deveau, E.J. (1995). Perceptions of Death Through the Eyes of Children and Adolescents. In D.W. Adams & Deveau, E.J. Beyond the Innocence of Childhood: Factors Influencing Children and Adolescents' Perceptions and Attitudes Toward Death. New York: Baywood Publishing Company, Inc.

Ezzy, D. (2002). Qualitative Analysis: Practice and Innovation. London: Routledge.

Fife-Schaw, C. (1997). Questionnaire Design. In G.M. Breakwell, S. Hammond & C. Fife-Schaw. Research Methods in Psychology. London: Sage Publications.

Flavell, J.H. (1963). Developmental Psychology of Jean Piaget. New Jersey: D. Van Nostrand Company, Inc.

Flick, U. (1998). An Introduction to Qualitative Research. London: Sage Publications.

Florian, V. & Kravetz, S. (1985). Children's Concepts of Death: A Cross-Cultural Comparison among Muslims, Druze, Christians and Jews in Israel. Journal of Cross-Cultural Psychology, 16, 174-189.

Florian, V. (1985). Children's Concept of Death: An Empirical Study of a Cognitive and Environmental Approach. Death Studies, 9, 133-141.

Fontana, A. & Frey, J.H. (2000). The Interview: From Structured Questions to Negotiated Text. In N.K. Denzin & Y.S. Lincoln. Handbook of Qualitative Research (Eds) (2nd ed). Thousand Oaks: Sage Publications, Inc.

Gaffney, D.A. (1988). The Seasons of Grief: Helping Children Grow Through Loss. Canada: New American Library.

Ginsburg, H. & Opper, S. (1969). Piaget's Theory of Intellectual Development: An Introduction. New Jersey: Prentice-Hall Inc.

Glass, Jr., & Conrad, J. (1991). Children's Perceptions of Death, Loss, and Grief and Rationale for Study. Elementary School Guidance and Counseling, 26(2), 139-149.

Grollman, E.A. (1995). Grieving Children: Can We Answer Their Questions. In K.J. Doka. Children Mourning, Mourning Children. Bristol: Hospice Foundation of America.

Holland, J. (2001). Understanding Children's Experiences of Parental Bereavement. London: Jessica Kingsley Publishers Ltd.

Hopkins, A.R. (2002). Children and Grief: The Role of the Early Childhood Educator. Young Children, 2002, 40-47.

Inhelder, B. (1979). Piaget and His School. New York: Springer- Verlag.

Jenkins, R.A. & Cavanaugh, J.C. (1985). Examining the Relationship between the Development of the Concept of Death and Overall Cognitive Development, Omega, 16, 193-199.

Jones. S (1985). The Analysis of Depth Interview. In R. Walker. Applied Qualitative Research. Great Britain: Grover Publishing Company.

Kane, B. (1979). Children's Concepts of Death. The Journal of Genetic Psychology, 134, 141-153.

Kastenbaum, R. (1974). Childhood: The Kingdom Where Creatures Never Die. Journal of Clinical Child Psychology, Summer, 1974, 11-14.

Kastenbaum, R. (1984). Death, Society, and Human Experience (3rd ed). Columbus: Charles E Merrill Publishing Company.

Kastenbaum, R. & Aisenberg, R. (1972). The Psychology of Death. New York: Springer Publishing Company, Inc.

Kelly, K. (2002). From Encounter to Text: Data-gathering in Interpretive Research. In M. Terre Blanche & K. Durrheim. Research in Practice: Applied Methods for the Social Sciences. Cape Town: University of Cape Town Press.

Koocher, G.P. (1973). Childhood, Death, and Cognitive Development. Developmental Psychology, 9(3), 369-375.

Koocher, G.P. & O'Malley, J.E. (1981). The Damocles Syndrome. New York: McGraw-Hill Book Company.

Krementz, J. (1992). How it Feels When a Parent Dies. New York: Alfred Knopf.

Kubler-Ross, E. (1969). On Death and Dying. London: Tavistock Publications

Kubler-Ross, E. (1985). On Children and Death. New York: Collier Books Macmillan Publishing Company.

Lonetto, R. (1980). Children's Conceptions of Death. New York: Springer Publishing Company.

Louw, D.A. (1991). Human Development. Pretoria: Kagiso Tertiary.

Miller, G. (1997). Contextualising Texts: Studying Organisational Texts. In G. Miller & R. Dingwall. Context and Methods in Qualitative Research. London: Sage Publications.

Moos, N.L. (1995). An Integrative Model of Grief. Death Studies, 19, 337-364.

Morin, S. & Welsh, L.A. (1996). Adolescent's Perceptions and Experiences of Death and Grieving. Adolescence, 31(123), 585-596.

Mouton, J. (2001). How to Succeed in Your Master's and Doctoral Studies. Pretoria: Van Schaik Publishers.

Nagy, M. (1948). The Child's Theories Concerning Death. Journal of Genetic Psychology, 73, 1948, 3-27.

Neuman, W.L. (1997). Social Research Methods: Qualitative and Quantitative Approaches. Boston: Allyn and Bacon.

Orbach, I, Talmon, O., Kedem, P. & Har-Even, D. (1987). Sequential Patterns of Five Subconcepts of Human and Animal Death in Children. Journal of the American Academy of Child and Adolescent Psychiatry, 26, 4: 578-582.

Pennells, M. & Smith, S.C. (1995). The Forgotten Mourners: Guidelines for working With Bereaved Children. London: Jessica Kingsley Publishers.

Piaget, J. (1926). The Language and Thought of the Child. New York: Harcourt, Brace & World.

Piaget, J. (1955). Child's Construction of Reality. London: Routledge and Kegan Paul.

Piaget. J. (1966). The Child's Conception of Physical Causality. London: Routledge and Kegan Paul.

Piaget, J. & Inhelder, B. (1969). The Psychology of the Child. London: Routledge and Kegan Paul Ltd.

Pritchard, S. & Epting, F. (1992). Children and Death: New Horizons in Theory and Measurement. Omega, 24(4), 271-288.

Richardson, K. (1998). Models of Cognitive Development. East Sussex: Psychology Press.

Rosnow, R.L. & Rosenthal, R. (1996). Beginning Behavioural Research: A Conceptual Primer. (2nd Ed). New Jersey: Prentice- Hall International, Inc.

Rowling, L. (2003). Grief in School Communities: Effective Support Strategies. Buckingham: Open University Press.

Ryan, G.W. & Bernard, H.R. (2000). Data Management and Analysis Methods. In N.K. Denzin & Y.S. Lincoln. Handbook of Qualitative Research (Eds) (2nd ed). Thousand Oaks: Sage Publications, Inc.

Safier, G. (1964). A Study in Relationships Between the Life and Death Concepts in Children. Journal of Genetic Psychology, 105, 283-294.

Silverman, P.R. (2000). Never Too Young to Know: Death In Children's Lives. New York: Oxford University Press.

Silverman, P.R. & Worden, J.W. (1993). Children's Reactions to the Death of a Parent. In M.S. Stroebe, W. Stroebe & R.O. Hansson (Eds.), Handbook Of Bereavement: Theory, Research and Intervention. New York: Cambridge University Press.

Smilansky, S. (1987). On Death: Helping Children Understand and Cope. New York: Peter Lang Publishing.

Speece, M.W. & Brent, S.B. (1984). Children's Understanding of death: A Review of Three Components of a Death Concept. Child Development, 55, 1671-1686.

Speece, M.W. & Brent, S.B. (1991). The "Adult" Concept of Death: Irreversibility. In J. Morgan (Ed). Young People and Death. Philadelphia: The Charles Press Publishers.

Stambrook, M & Parker, K.C.H. (1987). The Development of the Concept of Death in Childhood: A Review of the Literature. Merrill- Palmer Quarterly, 33 (2), 133-157.

Stemler, S. (2001). An Overview of Content Analysis. Practical Assessment, Research & Evaluation, 7 (17).

Sternlicht, M. (1980). The Concept of Death in Preoperational Retarded Children. The Journal of Genetic Psychology, 137, 157-164.

Terre Blanche, M. & Kelly, K. (2002). Interpretive Methods. In M. Terre Blanche & K. Durrheim. Research in Practice: Applied Methods for the Social Sciences. Cape Town: University of Cape Town Press

Towmnley, K. & Thornburg, K.R. (1980). Maturation of the Concept of Death In Elementary School Children. Educational Research Quarterly, 5 (2), 17-24.

Ward, B. (1993). Healing Grief: A Guide To Loss and Recovery. London: Vermilion.

Wass, H. & Corr, C.A. (1984). Childhood and Death. Washington: Hemisphere Publishing Corporation.

Willis, C.A. (2002). The Grieving Process in Children: Strategies for Understanding, Educating, and Reconciling Children's Perceptions of Death. Early Childhood Education Journal, 29 (4), 221-226.

Wood, D. (1993). How Children Think and Learn. Oxford: Blackwell Publishers.

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

APPENDIX A

Letter Of Consent

Dear Parent/Guardian

Hi! My name is Janice Symons, and I am doing my Community Counselling Masters in Psychology at the University of the Witwatersrand, Johannesburg, South Africa. I am doing research on children's perceptions of death. The reason for this letter is to ask you and your child to take part in a research project.

Many people have carried out studies to try and understand how children make sense of and understand death. These studies have shown that children understand death

according to the development of their reasoning, this means that children do not really understand death until they can understand that something cannot come back to life once it has dies. Therefore they can understand that death is final only at approximately the age of nine or ten.

What I would like to do is ask the child some questions in order to understand how he or she makes sense of death. It will take approximately 10 minutes to complete. Please note their responses will be confidential. No identifying data is requested on the questionnaire, hence assuring anonymity. There is no right or wrong answer; rather I am trying only to determine their response to each question. The child will be informed about the nature of the research so that he or she is aware of what will be required of him or her. In return, at the end of the research project I will give you a short report on whether the results differed greatly or were similar to the findings of previous research done on children's perceptions of death.

By completing and returning this questionnaire I will assume that you allow me to use your child's responses in my research. Should the child decide not to take part in this study, there will be no negative consequences in any way. Also, you may withdraw your permission at any time without any consequences. The child's name will not be made available in the research report or anywhere else –no child is ever identified in any written or spoken report.

If you are happy to participate please sign then detach and return the signed form to the staff as soon as possible. Should you want more details please contact me at

I would like to thank you in advance for giving of your time to complete this questionnaire.

Janice Symons

E-mail address: janmike@absamail.co.za

Psychology – School of Human and Community Development, Private Bag 3, Wits, 2050, Johannesburg, South Africa.

Telephone No: 27-11-0839410800 (Mobile Cell- phone)

APPENDIX B

Interview Schedule (Based On Koocher's (1973) Questions)

1.Is there a difference between being dead and alive?

2.What makes things die?

3.Can you make dead things come to life?

4.What do you think happens when a person dies?

5.Do you think all things die?

APPENDIX C

Transcribed Interview Schedule

Participant 1
Gender: Female
Age: 11 yrs

Interviewer: Ok, now I am going to ask you a few questions and I would like you to tell me what you think the answer is. I am going to ask you do you know the difference between being dead and alive?
Participant1: Quiet.
I: **Is there any difference between being dead and being alive?**
P1: All I think of is that if you dead, then you underground and your body stays there forever and when you are alive then you get to walk around and do things.
I: Ok so for you there is a difference between being dead and being alive. When you are dead you don't have anything to do but when you alive you can do things?
P1: Ja. Nods head.
I: What makes things die?
P1: If you like get too old or if you eat something that is not right for you. If you don't go to the doctor when you are sick you die, you don't get any help or medication, you die.
I: Ok, so you have mentioned quite a few things there, hey?
P1: Nods.
I: Can you make dead things come to life?
P1: No.
I: So you say no.
P1: Unless you are cured by a doctor.
I: So then you say only if the doctor can bring you back to life.
P1: Ja, like if you are in hospital and you go in for a stroke and then like they take those things and then they bring you back to life.
I: Ok, so there are certain times when you can come back to life.
P1: Ja.
I: Is there anything else you would like to say about that?
P1: No.
I: Ok, **What do you think happens when a person dies?**
P1: If you good and stuff here then you go to heaven, but if you are bad then you go to hell.
I: All right and what do you think happens to the person's body?
P1: Umm, it gets buried. I don't know if it evaporates or anything or what happens then.
I: You still not too sure of that one then? Ok. Then one last question, **do you think all things die?**

P1: Umm, no.
I: And what do you think does not die?
P1: No. Like air can't die, umm, I'm not sure. Laughs.
I: Ok, that was a pretty good answer.

Participant 2
Gender: Male
Age: 12 yrs

I: Ok, today I am going to ask you a few questions about what death means to you, ok. The first question I am going to ask you is **do you know the difference between being dead and alive?**
P2: Yes.
I: Ok, what is the difference
P2: If you can't move, your pulse can't move you are dead.
I: ok, and if you are alive?
P2: If you are alive then your heart is pumping, your blood is moving and you are moving.
I: Ok, then I would like to ask you, **what do you think makes things die?**
P2: Diseases, people who kill
I: Ok, so diseases and people that kill, is there anything else you can think of?
P2: Umm, accidents, umm, dogs, kill humans.
I: Can you make dead things come to life?
P2: Umm, not that I know of.
I: Ok, so when you dead you dead. **What do you think happens when a person dies?**
P2: Your whole body shuts down.
I: Ok, your body just stops working? All right. And **do you think all things die?**
P2: In a way yes and in a way no.
I: Ok why do you think that.
P2: Umm, a building can't die, a table can't die, a human can die, a tree can die.
I: Ok, is there anything else you can think of?
P2: Nods.
I: Ok what else?
P2: Chairs, carpets.
I: Those things, they can't die?
P2: Yes, they can break but they can't die.
I: Ok, thanks. Those are all the questions I wanted to ask you.

Participant 4
Gender: Female
Age: 12 yrs

I: Ok, Sandy hoe oud is jy? (Ok, Sandy, how old are you?)
P4: Twaalf. (Twelve)
I: Weet jy wat is die verskil tussen om dood te wees en om lewendig te wees. (Do you know the **difference between being dead and alive?).**
P4: Nee. (No)
I: Ok, dink jy n persoon wat dood is, is die selfde as n persoon wat lewe.(Ok, do you think that a person that is dead is the same as a person who is living?)
P4: Ja, want die ander eene wat dood is kan nie lewe, en die ander een wat lewe is kan lewe en goeders doen.(Yes, because the other one that is dead cant be alive, but the one that is living can live and do things.)
I: Ok, so as n mens dood is dan kan hy nie meer goeders doen nie. So dit is die verskil all right. Is dit hoe jy dit verstaan? (Ok, so when a person is dead then he can't do things anymre. So that is the difference all right? Is that how you understand it?)
P4: Ja. (Yes)
I: Wat maak laat dinge dood gaan? (**What makes things die?)**
P4: As jy siek is, en as soos as jy laat in die aand loop en mense skiet jou, en messe, of as jy baklei hierso in die taverns begin die mense om die bottels te gebruik om met mekaar te steek. (If you are sick, and if you walk around late at night and people shhot you, or if you fight here in the taverns where people start touse bottles to stab each other with)
I: OK, so dit is hoe mense kan dood gaan. Ok. (Ok, so that is how people can die?)
I: Kan jy dinge wat dood is weer lewe gee? (**Can you make dead things come to life?)**
P4: Nee.(No)
I: Hoekom se jy so? (Why do you say so?)
P4: Want jy kan nie, want hy of sy is oorlede en jy kan hulle nie terug bring nie. (Because you can't, because if he has passed away then you can't bringthem back)
I: Ok, wat dink jy gebeur as n persoon dood gaan? (**What do you think happens when a person dies?)**
P4: Hulle vat hulle mortuary en daai plekke toe, wat yskasse het en goed. Ja dis al wat ek ken. (They take them to a mortuary and those places, which have freezers and stuff. Yes that is all that I know)
I: En wat dink jy gebeur met die persoon se liggaam?(And what do you think happens with the person's body?)
P4: Dit is gevries so dat die persoon nie, ek weet nie, so dat die persoon nie, umm, ek weet nie. (It gets frozen so that the person, I don't know so that the person, umm, I don't know)
I: Ok, dink jy alles gaan dood? (**Do you think all things die?)**

P4: Ja, ons almal gaan dood gaan. (Yes we all die)
I: Ok, baie dankie. (Ok, thank you very much)

Participant 5:
Gender: Female
Age: 12 yrs

I: Ok Prudence, how old are you?
P5: Umm, I'm twelve.
I: Ok, twelve. And tell me has someone that you know died?
P5: Yes, my brother.
I: And how long ago was that?
P5: I don't know when he passed away because they, I heard he had the sickness one day and then my uncle came and he told me that my brother passed away because he was sick.
I: So do you think it was this year sometime?
P5: Umm, it was last month too.
I: Ok. So it was quite recent hey?
P5: Ja.
I: Ok if you feel that this is too difficult for you then you must just let me know, and if you feel you want someone to talk to after this then we will sort something out for you, ok?
P5: Ok.
I: All right, I am going to ask you some questions quickly. Do you think **there a difference between being dead and alive?**
P5: Umm, maybe.
I: What do you think the difference would be?
P5: Umm, maybe because when you have passed away then you go to heaven, but then when you are alive then you are still on earth.
I: Ok, so there is a difference for you. Ok, w**hat makes things die?**
P5: Umm, maybe sickness, crime, umm, suicide, when you commit suicide ja, that's all I can think of now.
I: Ok, **Can you make dead things come to life?**
P5: No.
I: And why would you say that?
P5: Because umm when you've already like passed away your spirit has already gone to heaven and then you will not be able to come back on earth again. And then it's only possible if God wants you to come back. But then if God needs you, they told me that when my brother passed away that maybe God needs him up in heaven now.
I: Ok, so if God wants you to then you can come back, but you said that most of the time he wants you…

P5: Up in heaven.
I: Ok, and then he will look after them there?
P5: Ja.
I: Ok, **what do you think happens when a person dies?**
P5: They get buried.
I: Ok and then what?
P5: And then everybody does a grave for them, and then maybe, I don't know if they do it for them. Sometimes people take the body to a missuary and then they burn the body up and then they find something in which they can put some of the ashes inside and then to put in their room or something.
I: Ok, is there anything else you would like to add?
P5: No.
I: Do you think all things die?
P5: Yes most probably.
I: Yes, so everything dies?
P5: Yes.
I: Ok, thank you very much.

Participant 3
Gender: Male
Age: 10 yrs

I: Ok, Wayne, hoe oud is jy? (Okm Wayne how old are you?)
P3: Tien. (Ten)
I: En jy se jou ma was laas jaar, laas jaar het jou ma dood gegaan? (And you say your mother died last year?)
P3: Nods.
I: Ok, ek gaan net vir jou a paar vrae vra. Ek sal jou nie lank hou nie. (Ok, I'm going to ask you a few questions. I won't keep you long)
Weet jy wat die verskil is tussen om lewendig te wees en om dood te wees? **(Is there a difference between being dead and alive?)**
P3: Nee. (No)
I: Jy dink nie daar is a verskil nie?(You don't think there is a difference?) Ok, waat maak laat dinge dood gaan? **(What makes things die?)**.
P3: Ek weet nie. (I don't know)
I: Jy weet nie? Wil jy beitjie daaroor dink eers, wat jy daaroor jan se? (You don't know? Would you like to think about it first?)
P3: Quiet, shakes head. Ek weet nie. (No, I don't know)

I: Ok, se nou jy het a hondjie en hy gaan dood, wat dink jy bebeur om hom dood te maak? (Ok, lets say you had a little dog and he died, what do you think would have to happen for him to die?)
P3: Ek weet nie. (I don't know)
I: Jy weet nie, ok, kan jy dinge wat dood is weer lewe gee? (You don't know, ok, **Can you make dead things come to life?)**
P3: Nee. (No)
I: Hoekom nie? (Why not)
P3: Want as n mens dood is dan kan jy hom nie weer lewendig maak nie. (Because if you kill a person you cant make him live again)
I: Ok, so niks wat ons doen kan n mens terug bring nie? (Ok, so nothing that we do can bring a person back?)
P3: Nods.
I: Ok, umm, wat dink jy gebeur as n persoon dood gaan? (**What do you think happens when a person dies?)**.
P3: Ek weet nie. Silence. As n persoon dood gaan wara na gaan hy toe? (I don't know. If a person dies where does he go to?)
I: Ja. (Yes)
P3: As n persoon dood gaan dan gaan hy op hemel toe. (If a person dies he goes up to heaven)
I: Ok, en dink jy dat alles dood gaan? (**Do you think all things die?)**.
P3: Nee. (No)
I: Nee, hoekom nie? Watter goed gaan nie dood nie? (No, why not? What things don't die?)
P3: Alle goeders gaan dood. (All things die)
I: Ok, baie dankie. (Ok thank you very much)

Participant 13:
Gender: Female
Age: 10 yrs

I: Jy moet asseblief mooi hard vir my praat ok. (You must please speak nice and loud for me ok?)
P13: Ok tannie. (Ok, aunty)
I: Ok, Marie, is jy tien jaar oud? (Ok, Marie, are you ten years old?)
P13: Ja tannie. (Yes, aunty)
I: Ok, ek wil net vir jou se dat daar is nie n regte of verkeerde antwoord nie, ok. So wat ever jy dink is die regte antwoord is goed genoeg. Right. Weet jy wat die verskil is tussen om lewendig te wees en om dood te wees? (Ok, I would like to say that there is

no right or wrong answer, ok. So whatever you thinkis the right answer is good enough. Right. Do you know what the **difference is between being dead and being alive?)**
P13: Ja tannie. As n mens dood is dan kan n mens nie meer sien of dit nie maar die mens is nog altyd in jou hart. As jy lewe dan kan jy nog enige iets doen wat jy wil. (Yes, aunty. If a person is dead then you can't see that person anymore but that person is always still in your heart. If you are living then you can still do whatever you want to do)
I: Ok, baie dankie. Wat maak laat dinge dood gaan? (Ok, thank you. **What makes things die?)**
P13: Soos slaan, hart anval, siekte en al daai goed. (Like hitting, heart attack, sickness and all that stuff)
I: Wat beteken jy as jy se al daai goed? (What do you mean when you say all that stuff?)
P13: Soos n kar ongeluk, en umm, dus al waar aan ek kan dink. (Like a car accident, and umm, that is all I can think of)
I: Ok, baie dankie. Kan jy dinge wat dood is weer lewe gee. (Ok, thank you. **Can you make dead things come to life?)**
P13: Nee. (No)
I: Nee, hoekom se jy so? (No, why do you say that?)
P13: Want n mens kan nie die siel weer terug trek nie. Die lyk is in die graf en die mens se siel is in die hemel. Jy kan die mens nie weer lewendig maak nie. (Because a person can't bring the soul back. The corpse and the person's soul is in heaven. You can't ever make the person live again)
I: Ok, en wat dink jy gebeur wanneer n persoon dood gaan? (Ok, and **what do you think happens when a person dies?)**
P13: 'n Mens is baaie hartseer en as n mens dood gaan dan kan n mens daai persoon in n mens se hart bly, maar n mens sal altyd huil. Soos ek, ek het my ma verloor, maar sy bly in my hart vir altyd. (A person is very heart sore and if a person dies then that person can stay in a person's heart, but a person will always cry. Like me, I lost my mother, but she stays in my heart forever)
I: Ok, so even as 'n persoon dood is weet ons hulle is nog steeds in ons hart. So hulle ligaam is nie meer hier nie maar hulle siel is. (Ok, so even if a person is dead we know that they are still in our heart)
P13: Ja. Partykeer is die siel hierso want se nou soos my tannie, sy het voor haar kind verskyn en sy was baaie bang, so partykeer sal jy daai persoon sien as jy glo, en as jy die Here vra dan kan jy miskien weer eenkeer daai persoon sien. (Yes, sometimes the soul is here because say now my aunty, she appeared in front of her child and she was very scared, so sometimes, if that person believes, and if you ask the Lord, then maybe you will be able to see that person one more time)
I: Ok, en wat dink jy gebuer met daai persoon wat dood gaan? (Ok, and what do you think happens to that person when they die?)

P13: As die persoon dood gaan dan gaan hy bo on die hemel toe. (If the person dies then he goes up to heaven)
I: Dink jy alles gaan dood? (**Do you think all things die?)**
P13: Ja, soos elke mens gaan dood gaan. So elke persoon gaan dood. (Yes, like every person will die. So every person dies)
I: Ok, enige anders wat jy wil se? (Ok anything else you would like to say?)
P13: Nee (No)
I: Ok, baie dankie vir al jou hulp. (Ok, thank you for all your help)

Participant 7:
Gender: Male
Age: 9 yrs

I: Ok, wat dink jy is die verskil tussen om lewendig te wees en om dood te wees? (**Is there a difference between being dead and alive?).**
P7: Ek weet nie. (I don't know)
I: wat maak laat dinge dood gaan? (**What makes things die?)**
P7: As jy hulle skiet. (If you shoot them)
I: Ok. Kan jy dinge wat dood is weer lewendig maak? (**Can you make dead things come to life?).**
P7: Ek weet nie. (I don't know)
I: Ok, wat dink jy gebeur wanneer n persoon dood gaan? (**What do you think happens when a person dies?).**
P7: Ons gaan na die grafplaas toe.(We go to the graveyard)
I: Ok, dink jy dat alles dood gaan? (**Do you think all things die?).**
P7: Nee, nie alles gaan dood nie, varke and kooie gaan nie dood nie maar al mense kan dood gaan. (No, not everything dies, pigs and cows don't die but all people die)
I: Ok, baie dankie. (Ok, thank you very much)

Participant 11:
Gender: Female
Age: 8 yrs

I: Weet jy wat is die verskil tussen om lewendig te wees en om dood te wees? **(Do you know what the difference is between being dead and alive?)**
P11: … unclear.

I: … nie lewe nie, ok. Ok wat maak laat dinge dood gaan? (… not living, ok. **What makes things die?)**
P11: As n persoon drugs wat dan gaan hulle dood. (If a person takes drugs then they die)
I: Ok, kan jy maak dat dinge weer lewe? (**Can you make dead things come to life?)**
P11: Nee.(No)
I: En hoekom se jy so? (And why do you say that?)
P11: …unclear.
I: Ok, wat dink jy gebeur wanneer n persoon dood gaan? (**What do you think happens when a person dies?)**
P11: Hy gaan dood want hy het drugs gebruik. (He dies because he used drugs)
I: Hy gaan dood want hy het drugs gebruik? Ok, dink jy dat alles dood gaan? (He dies because he used drugs? Ok, **Do you think all things die?)**
P11: Nee. (No)
I: Ok, wat se jy gaan nie dood nie? (Ok, what would you say does not die?)
P11: Mense wat nie drugs gebruik nie gaan nie dood nie. (People that don't take drugs don't die)
I: Ok wil jy enige iets anders se? (Ok, would you like to add anything else?)
P11: Nee. (No)
I: Ok, baie dankie. (Ok, thank you very much)

Participant 14:
Gender: Male
Age: 8 yrs

I: Ok, I want you to speak as loud as you can ok?
P14: Nods.
I: Do you know what the difference is between being dead and being alive?
P14: Yes.
I: Ok, what is the difference?
P14: Because if you are dead you can't wake up and make your bed or drive your car, but if you are alive you can do all that.
I: Ok. **What makes things die?**
P14: Sickness, or like when they beat you.
I: Ok, so you think sickness...
P14: ..unclear.
I: Ok **can you make dead things come to life?**
P14: Yes, with God you can.
I: With God you can? What do you mean?
P14: God can umm, work something to bring you back. If you believe then he will bring you back if he wants you to...unclear of the rest of sentence.

I: Ok, **what do you think happens when a person dies?**
P14: When a person dies you plan the funeral, you buy all the food for the people to eat... unclear.
I: Oh, and what happens to that person, the person who died?
P14: The person if he done good then he goes to heaven but if he done bad then he goes to hell.
I: Ok, last question, **do you think all things die?**
P14: Yes.
I: Yes? So there is nothing that can't die?
P14: No.
I: Ok, thank you very much.

Participant 10:
Gender: Male
Age: 7 yrs

I: Wat dink jy is die verskil tussen om lewendig to wees en om dood te wees? **(What do you think is the difference between being dead and being alive?)**
P10: Weet nie. (Don't know)
I: Jy weet nie? (You don't know?)
P10: Nee. (No)
Tape stopped.
I: Ok, kan dinge wat dood is weer lewendig (**Can you make dead things come to life?)**
P10: Nee. (No)
I: Wat dink jy gebeur as n persoon dood gaan? (**What do you think happens when a person dies?)**
P10: As n persoon siek is. (If a person is sick)
I: Kan jy aan ander goed dink? (Can you think of anything else?)
P10: Nee (No)
The rest of interview did not tape well and is unclear.

Participant 8:
Gender: Male
Age: 7 yrs

I: Ok, the question I want to ask you is, what i**s there a difference between being dead and alive?**
P8: You can be alive but you can also be dead.
I: And if you dead then what happens?
P8: If you dead then you go to Satan or you go to hell.
I: Ok, **what do you think makes things die?**
P8: If there are problems like… unclear.
I: Unclear…Like flowers?
P8: Ja.
I: Ok, c**an you make dead things come to life?**
P8: No.
I: What do you think happens when a person dies?
P8: I don't know.
I: You don't know?
P8: No.
I: Do you think all things die?
P8:I think so.

Participant 12:
Gender: Female
Age: 7 yrs

I: Dink jy daar is n verskil tussen om lewendig te wees en om dood te wees? (Do you think **there is a difference between being dead and alive?)**
P12: Ek weet nie. (I don't know)
I: Jy weet nie, wat is die verskil tussen iets wat dood is en iets wat lewe?(You don't know what the difference is between something that is dead and something that is alive?)
P12: Ek weet nie. (I don't know)
I: Ok, wat maak laat dinge dood gaan? (**What makes things die?)**
P12: As jy siek is of so iets. (If you are sick or something)
I: Mmm, enige iets anders? (Mmm, anything else?)
P12: As jy AIDS het. (If you have AIDS)
I: Ok, wat gebeur as ons AIDS het? (Ok what happens when you have AIDS?)
P12: Ons gaan dood. (We die)
I: Kan jy dinge wat dood is weer lewe gee? (**Can you make dead things come to life?)**
P12: Nee. (No)
I: En hoekom se jy so? (And why do you say that?)
P12: Ek weet nie! (I don't know!)

I: Wat dink jy gebeur wannneer n persoon dood gaan? (**What do you think happens when a person dies?)**
P12: Ek weet nie van daai klomp goede nie. (I don't know about all that stuff!)
I: Jy weet nie van daai klomp goed nie? (You don't know about all that stuff?)
P12: Nee! (No!)
I: Ok, dink jy alles gaan dood? (**Do you think all things die?)**
P12: Nee. (No)
I: Nee, wat gaan nie dood nie? (No, what does not die?)

P12: Sommige mense en sommige diere gaan nie dood nie (Some people and some animals don't die)
I: Sommige mense en sommige diere. Enige iets anders? (Some people and some animals. Anything else?)
P12: Honde gaan nie dood nie, net as n kar hulle stamp. (Dogs don't die, only if a car bumps them)
I: Honde gaan dood as n kar hulle stamp? (Dogs die when a car bumps them?)
P12: Ja. (Yes)
I: Baie dankie. (Thank you very much

Participant 9:
Gender: Male
Age: 6 yrs

I: … unclear.
P9: … unclear.
I: Ok, weet jy wat is die verskil tussen om lewendig to wees en om dood te wees? **(Is there a difference between being dead and alive?)**
P9: Dood (Dead)
I: Ok as iets dood is wat bedoel dit vir jou? (Ok, so if something is dead, what do you
P9: Hartseer. (Heartache)
I: Ok, wat maak laat dinge dood gaan?**What makes things die?**
P9: Soos as ons kos eet met gif daan gaan ons dood. (Like if we eat food with poison, then we die)
I: Ok, as ons gif eet dan gaan ons dood. (Ok, if we eat poison then we die)
P9: Ja. (Yes)
I: Ok, kan jy umm dinge wat dood is weer lewe gee? (**Can you make dead things come to life?)**
P9: Nee. (No)
I: Nee, hoekom hie? (No, why not?)

P9: Want as iemand al lank al dood is dan kan ons hulle nie terug bring nie. (Because if somebody is already dead, then we can't bring them back)
I: …nie terug bring nie. Ok, wat dink jy gebeur wanneer n persoon dood gaan? (…can't bring them back. Ok **what do you think happens when a person dies?)**.
P9: Umm, ons gaan by die graf en ons wat blomme. (Umm, we go to the grave and we take flowers)
I: …unclear. Ok, dink jy alles gaan dood? (**Do you think all things die?)**.
P9: Ja. (Yes)
I: Ok, dankie dit is alles wat ek jou wou gevra het. (Ok, thank you, that is all I wanted to ask you!)

Participant 6:
Gender: Female
Age: 6 yrs

I: Ok, Melissa hoe oud is jy? (Ok, Melissa, how old are you?)
P6: Ses. (Six)
I: Ok, Melissa is ses. Ek gaan vir jou n paar vrae vra en dan moet jy vir my se wat jy dink die antwoord is. (Ok, Melissa is six. I am going to ask you a few questions and you must tell me what you think the answers are) Ok, wat dink jy daar is n verskil tussen dinge wat dood is en dinge wat lewe? (Ok, what do you think is **the difference between being dead and alive?)**
P6: Nee. (No)
I: Nee, daar is nie n verskil nie? (No, there is no difference?)
P6: Nee. (No)
I: Ok, wat maak laat dinge dood gaan? (**What makes things die?)**
P6: Niks. (Nothing)
I: Niks. So as iets dood gaan wat dink jy maak laat dit dood gaan? (Nothing. So if something dies, what do you think happens to make it die?)
P6: Dit moet nie dood gaan nie. (It mustn't die!)
I: Hulle moet nie dood gaan nie. Ok, umm, kan jy dinge wat dood is weer lewe gee? (They mustn't die.Ok, umm, **Can you make dead things come to life?)**
P6: Quiet.
I: As iets dood gaan dink jy dit kan weer lewe? (If something dies can you make it live again?)
P6: Nee. (No)

I: Nee? Ok, wat dink jy gebeur as n persoon dood gaan? (**What do you think happens when a person dies?).**
P6: Ek weet nie. (I don't know)
I: Jy weet nie? Wat dink jy het bebeur as iets dood gaan? (You don't know? What do you thinkhappens when something dies?)
P6: As hulle dood gaan dan sal hulle nooit weer wakker raak nie. (If they die then they will never wake up again)
I: Ok so as hulle dood is dan gaan hulle nie weer wakker raak nie? Wat gaan hulle doen dan? (Ok, so if they are dead, then they will never wake up again? What are they going to do then?)
P6: Dan bly hulle dood. (Then they will stay dead)
I: Hulle gaan dood bly? (Then they stay dead?)
P6: Ja. (Yes)
I: Ok, dink jy alles gaan dood? (**Do you think all things die?)**
P6: Party, umm goed gaan dood en party goed gaan dood. (Some, umm, things die and other things don't die)
I: Ok, so watter goed bly lewendig? (Ok, so what things stay alive?)
P6: Party mense gaan dood. Die wat dood gaan is die ou mense wat dood gaan, en mense wat nie oud is nie gaan nie dood nie. (Some people die. those that die are the old people and people that are not old don't die)
I: Ok, so die mense wat nie oud is nie dood nie? Net die ou mense. (Ok, so the people that are not old don't die? Just the old people?)
P6: Ja! (Yes!)
I: Ok baie dankie Melissa! (Ok, thank you very much Melissa!)

Participant 16:
Gender: Female
Age: 6

I: Ok, tell me something, how old are you?
P16: Six
I: Six!
P16: Yes!
I: Ok, you must speak loud for me ok.
P16: Nods.
I: Ok I am going to ask you some questions ok? I am going to ask you, **is there a difference between being dead and alive?**
P16: I don't know.
I: Do you think there is a difference between someone that is alive and somebody that is dead?

P16: Dead.
I: You can just try your best ok.
P16: Ok.
I: Ok, **what makes things die?**
P16: If they kill
I: If they kill you, so things die if they kill you. How do they kill you?
P16: With guns.
I: With guns. Ok. **Can you make dead things come to life?**
P16: No.
I: No, and why do you say that?
P16: If they dead then they go back to the hospital
I: If they go to the hospital, then?
P16: And then they will be alive when they are at the hospital.
I: So if they go to the hospital then the doctor will help them and then they will be alive again?
P16: Yes.
I: All right. **What do you think happens when a person dies?**
P16: They can die for a long time.
I: They die for a long time. What happens when they die? What do they do?
P16: When they die they bring them to the hospital.
I: Ok, so where do you think a person goes to when they die?
P16: To the hospital and then the doctor fixes them.
I: And if the doctor can't fix them then what happens?
P16: They just stay at the hospital.
I: Ok, **do you think everything dies?**
P16: No.
I: No, what do you think doesn't die?
P16: If your mommy and daddy dies then you will stay alone. If you are in your house and your mommy is not alive then they can kill you.
I: Ok, so if your mommy and daddy die you will still live and you won't die and then you will be alone.
P16: Yes.
I: Ok, thank you very much!

Participant 19
Gender: Male
Age: 6 yrs

I: You must speak nice and clearly so we can hear you on the tape ok.
P19: Ok.

I: What is your name?
P19: Soso.
I: And how old are you?
P19: Six
I: Six years old! Ok, Soso, **do you think there is a difference between something that is dead and something that is alive?**
P19: The dead.
I: Ok, what is the difference between the dead thing and the thing that is living?
P19: If they are dead then they can't wake up.
I: Ok, so when you are dead then you don't wake up and when you are alive then you can walk and do all those things.
P19: Nods.
I: Ok, so **what makes things die?**
P19: It's people that are killing other children and people.
I: Ok and what else makes things die?
P19: When you walking in the street and there comes a car and a car bumps you.
I: Ok, so accidents also. Any other things you can think of?
P19: Yes.
I: What?
P19: If people are still watching TV and the bell goes or they knock, if they are totsies, they will open, then they will get in and then they shot you.
I: Ok, so tootsies can also make things die. **Do you think can you make dead things come to life?**
P19: No.
I: No. Why not?
P19: Because you can't wake up if you are dead.
I: Ok. **And what do you think happens to a person when he or she dies?**
P19: When she dies she doesn't wake up she just going into that thing that goes into the ground then they put her in the box.
I: Ok so they go into the ground in a box?
P19: Yes.
I: Ok and then what happens to them?
P19: Then they stay there for a long, long time and they cannot wake up again.
I: Oh. **Do you think everything dies?**
P19: Yes.
I: Yes? There is nothing that can't die?
P19: No.
I: Ok, Soso thank you very much!

Participant 15:
Gender: Female
Age: 5

I: Ok, I am going to ask you the questions now and you must speak nice and loudly for me, ok?
P15.: Nods.
I: Ok, do you think **there is a difference between being dead and alive?**
P15: Yes. Only if you, only if you play-play then you dead for real.
I: Oh, only if you play-play then..?
P15: Then you die.
I: Ok
P15: Then the police comes and they take you to the doctor.
I: Ok. **What makes things die?**
P15: If you die then you still wake up and then you drink something and then you eat.
I: Ok, so what makes us die?
P15: Umm, only if you dead for play-play then we die when somebody shot us (coughs) and then the police comes, "Who did that?" "Somebody else did that" then they take some people to the doctor and they take some people to jail.
I: Ok, **Can you make dead things come to life?**
P15: Shakes head.
I: No, why do you say that?
P15: Because some people are alive and some people does get shot, but then they go the doctor and then they have to go back to school.
I: Ok, so can you make dead things come back to life?
P15: Shakes head.
I: No, so if you dead then you can't come back to life?
P15: Sometimes when somebody shot us then we die and then umm they, we never wake up again.
I: All right. **What do you think happens when a person dies?**
P15: You must, umm (coughs) umm you must, you must do something, somebody, if you don't listen to the teachers that means you naughty and you must go to the time-out chair.
I: Ok, but what do you think happens when a person dies, where do they go?
P15: A person goes to jail, and then they go to jail (coughs), because then they die and they can't get over again and again.
I: Ok and do you think all things die?
P15: Shakes head.
I: No, what do you think doesn't die?
P15: No. Sharks does die sometimes, fish does die sometimes, when people look for sharks then, and then they, then sharks eat the people.
I: Ok, so what do you think dies?
P15: Dies means two sharks eat you all up. Then sharks dies.

I: Do all people die then?
P15: When they stick a nadle in them then they dies. And if you bleed then they still live but then they…
I: So do you think all people die?
P15: Some people doesn't die and some people does die.
I: So which people do die?
P15: Like an old granny and my father dies…. Unclear.
I: Ok, thank you very much.

Participant 17:
Gender: Female
Age: 5 yrs

I: Is there a difference between being dead and alive?
P17: You go down into a cage ne' and then you will go down, they will throw sand and then you will go down into the cage after you are dead and then you will be awake ne' and then they will take you up.
I: Ok, **what makes things die?**
P17: When somebody shoots you, you die, you go down to a hospital.
I: Ok, you go to a hospital?
P17: Yes.
I: And how else can you die?
P17: Because when you die your heart will be broken and then you go somewhere else and then they will take you, they will take you a hospital and then the ambulance will come.
I: Ok. **Can you make dead things come to life?**
P17: Yes.
I: How do you do that?
P17: You first put your heart back in how you feel and then you feel better.
I: Ok. **What do you think happens when a person dies?**
P17: They die, when they are still getting dead, and then they are still going.
I: Where do they go?
P17: They go to hospital and then they are going home, they go and sleep in bed.
I: And then what happens after they sleep?
P17: They take their tablets and then they drink water.
I: Ok. So where do you think a person goes when they die?
P17: They go to hospital, the hospital give them tablets and they give them, and they give them, and they give them, they give them lots of tablets and they eat them and then they are alive when they are dead.

I: Ok. Do you think all things die?
P17: No, everything doesn't die.
I: Not, what doesn't die?
P17: Nothing. Lots of things they don't die, they only die one day when somebody is stabbing them and then their heart breaks.
I: Ok, what else doesn't die?
P17: Their heart get broken.
I: Ok. Thank you very much.

Participant 18
Gender: Female
Age: 5 yrs

I: Ok, do you think there is **a difference between being dead and alive?**
P18: No.
I: No, ok, so you don't think there is a difference?
P18: No.
I: Ok. **What makes things die?**
P18: Guns.
I: Guns, ok, anything else?
P18: Knives, if the plates break then they will hurt you here (pointing to leg). When I was at the party, then I break the plate and I hurt myself here.
I: Oh, so you can cut yourself. Ok. Now tell me something, **can you make dead things come back to life?**
P18: No.
I: No, why not?
P18: Because, I don't make other people dead.
I: Ok and if something is dead can somebody or something bring them back to life?
P18: No.
I: Ok, and when something dies, where does it go to?
P18: To the doctor.
I: Ok, and then what?
P18: If you broke something then they take you to the police station.
I: Ok **what do you think happens when a person dies?**
P18: To the doctor. When you break stuff then you must go to the police station.
I: Ok, tell me something, **do you think all things die or only some things?**
P18: Some things die. Somebody who drives the car doesn't come out.
I: Ok, who doesn't die?

P18: Somebody that go to jail doesn't die, they only drink tea and they eat lunch. And they go to the police station.
I: Oh, and what does die?
P18: Umm, Somebody who steals will go to jail.
I: And do they die?
P18: No.
I: Ok, thank you very much.

Participant 20
Gender: Male
Age: 5 yrs

I: Ok, you must speak nice and loud so we can hear you on here all right?
P20: Yes.
I: Ok, do you think there's **a difference between something that is dead and something that is alive?**
P20: When it is alive.
I: Ok so something that's alive what does that do?
P20: When the person is alive then they can do things.
I: So when you alive then you can do things, and when you dead?
P20: When you dead you don't do things.
I: Oh, ok, so that is the difference hey? Ok, **what do you think makes things die?**
P20: People that bumps cars, and then they knock them and then the glass breaks and pokes people's eyes.
I: When the people bump cars and the glass breaks and pokes their eyes out? Shoe! And how else do you think things die?
P20: I can make rats and spiders also die and then I kill them.
I: You can make them die. Ja so other things can also die when someone kills them. Ok. **Can you make dead things come to life?**
P20: No.
I: No, why not?
P20: Because they wont be alive and they will stay dead the whole night.
I: They stay dead the whole night.
P20: Yes.
I: So if you dead you can't come back to life. Ok. **What do you think happens when a person dies?**
P20: You bury them and put flowers and also water and then you take the dry plants out and you go back and take away the dirt and put clean flowers again.
I: Ok, **do you think everything dies?**

P20: No.
I: No? What do you think doesn't die?
P20: Crocodiles.
I: Crocodiles don't die? And all people?
P20: Die.
I: All people die?
P20: Yes.
I: Ok, thank you very much!

Participant 21
Gender: Male
Age: 5 yrs

I: Ok Tumi, do you think **there is a difference between something that is living and something that is dead?**
P21: Living.
I: Ok. What does something that is living, what do they do?
P21: Live
I: And what happens when something is dead?
P21: They shoot you.
I: And what do you do when you are dead?
P21: We go to the doctor.
I: And then?
P21: And then you come home.
I: And then you come home. Ok. **What makes things die?**
P21: Cause when you sick you must go to the doctor.
I: When you are sick? What else makes us die?
P21: Also die, it's a gun also makes us dead.
I: What does a gun do?
P21: It shoots and then you die.
I: Oh, and what else makes us die?
P21: A big gun.
I: Ok, a big gun. Ok. **Can you make dead things come to life?**
P21: No!
I: Why not!
P21: Because when they shoot you, you can't laugh.
I: When they shoot you, you can't laugh. So once they shot you you can't laugh anymore. What else can't you do?
P21: I can do anything.
I: And when a person is dead what can't they do anymore?

P21: I don't know.
I: Ok. **What do you think happens when a person dies?**
P21: You go to the doctor and then you go home.
I: Ok and **do you think all things die?**
P21: Yes they shoot you.
I: Ok, and who else dies? People die, who else dies?
P21: I don't know.
I: You don't know. Ok that's fine. Ok was that difficult?
P21: Yes.
I: Ah but you did well, do you want to hear yourself.

Participant 22:
Gender: Male
Age: 5 yrs

I: What is your name?
P22: Maurice
I: And how old are you Maurice?
P22: Five
I: All right Maurice…
P22: Ja.
I: What do you think the difference is between something that is living and something that is dead?
P22: Dead.
I: What happens when you are dead?
P22: They bury you.
I: So when you alive then you are not buried?
P22: Yes.
I: Ok. **What makes things die?**
P22: Shooting.
I: Shooting, ja.
P22: Pointing with a knife, throwing bones and stabbing.
I: Stabbing, anything else you can think of?
P22: And umm, what's it fire.
I: And fire, so fire can also make things die. Ok. **Tell me something do you think that you can make dead things come back to life?**
P22: No.
I: Why not!

P22: Umm, because if the doctors cannot help and if you don't phone the doctor then you just be buried.
I: Ok. So if you don't get help from the doctor in time then you can just be buried?
P22: Nods.
I: You can't come back to life?
P22: No.
I: Ok, you said when a person dies you bury them, what else do you think happens?
P22: Mmm, pray for them?
I: Ok, so when a person is dead then you pray for them. **And what happens to that person after they die?**
P22: Mmm, agh, they put them under ground.
I: And then?
P22: And then you go.
I: You go? Where to?
P22: Then you go home!
I: Oh so you are there and you put the person underground.
P22: And then you cover him.
I: Then you cover him? **Do you think all things die?**
P22: Yes, a person, a bee, a butterfly, a flower.
I: Ok
P22: And a fly.
I: And tell me something do you think children die?
P22: Yes!
I: Also.
P22: Yes.
I: Anything else you want to say?
P22: No.
I: Thank you!

Participant 23:
Gender: Female
Age: 5 yrs

I: Hello! What is your name?
P23: Umm, Alyssa!
I: And how old are you Alyssa?
P23: Five.
I: Alyssa, **do you think there is a difference between something that is dead and something that is living?**

P23: No.
I: No? What does something that is dead do?
P23: Umm, I don't know.
I: You don't know. Ok tell me something **what do you think makes things die?**
P23: When you smoke.
I: Oh, when you smoke. Ok what else?
P23: When you kill yourself.
I: When you kill yourself? How do you kill yourself?
P23: You shoot yourself.
I: Ok. Anything else you can think of?
P23: Shakes head.
I: No. Ok. **Do you think you can make dead things come back to life?**
P23: No.
I: Not, why not?
P23: Because.
I: Not sure? Ok. **What do you think happens when a person dies?**
P23: Umm, you bury them.
I: You bury them. And what happens to the person?
P23: Um, you put flowers on top.
I: Ok, what else do you think?
P23: Shrugs.
I: Is that all?
P23: Yes.
I: Ok, tell me something **do you think all things die? Does everything die?**
P23: Some stuff dies.
I: Tell me tell me!
P23: People and flowers, animals.
I: Anything else?
P23: Old mense and old grannies also dies.
I: Ok, thank you!

APPENDIX D

Ethical Clearance Certificate