DEATH ANXIETY IN ADOLESCENTS:
THE FUNCTION OF RELIGIOSITY AND BEREAVEMENT

BY

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A Thesis
Submitted to the Faculty of Graduate Studies
In Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

Department of Family Studies
University of Manitoba
Winnipeg, Manitoba

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Possible relationships between religiosity and bereavement to death anxiety levels of adolescents were investigated. In determining the outcomes of life transitions, it was theorized that background, personal, event-related, physical, social and environmental factors contribute considerably to death anxiety levels. For this examination on death anxiety, personal factors of age, gender, religious behaviours, and previous experience with death, were examined. Scales measuring religiosity (‘Age-Universal’ I-E Scale-12 by Maltby, 1999), bereavement (Hogan’s Inventory of Bereavement by Hogan, 2001), and death anxiety (Revised Death Anxiety Scale by Thorson & Powell, 1992) were compiled into one questionnaire. Within independent schools in Manitoba, 226 adolescents between the ages of 11 and 18 completed these pen and paper questionnaires during school hours. Results indicated that females exhibited significantly higher death anxiety levels than did males; differences between the death anxiety levels of adolescents having no previous experience with death and those who had experienced a death in the family were not significant; while religiosity levels were significantly higher for students attending religious institutions, the relationships between measurements of religiosity and death anxiety were weak or non-existent. Grief due to bereavement was found to be the major factor in determining death anxiety for the adolescent. The findings are congruent with the crisis theory (Moos and Schaefer, 1986) and support the position that personal factors such as grief due to bereavement and gender are important factors in death anxiety research. These findings can provide direction for future investigation into the influence of other factors (event-related, physical, social and environmental) upon the death anxiety level of the adolescent.
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We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.
Through the unknown, remembered gate
When the last of earth left to discover
Is that which was the beginning...

-T.S. Eliot (Four Quartets, 1943)
CHAPTER 1: INTRODUCTION

Dying is an integral part of life, as natural and predictable as being born. But whereas birth is cause for celebration, death has become a dreaded and unspeakable issue to be avoided by every means possible in our modern society. Perhaps it is that death reminds us of our human vulnerability in spite of all our technological advances. We may be able to delay it, but we cannot escape it. We, no less than other, nonrational animals, are destined to die at the end of our lives. And death strikes indiscriminately—it cares not at all for the status or position of the ones it chooses; everyone must die, whether rich or poor, famous or unknown. Even good deeds will not excuse their doers from the sentence of death; the good die as often as the bad. It is perhaps this inevitable and unpredictable quality that makes death so frightening to many people. Especially those who put a high value on being in control of their own existence are offended by the thought that they, too, are the subject of the forces of death. (Kübler-Ross, 1986, p. 5)

Death. The only event in life that will occur with certainty and the one event that is rarely discussed. In Western culture when a death occurs, protocols are often followed; treatment or rituals may vary depending on factors such as age, gender, place, religion, and health of the deceased. An examination of funerary practices indicates that funerals for older individuals are often seen as celebrations of life whereas the death of a child or young adult may prompt obituary descriptions such as “untimely” or “premature” with the implication that the deceased was deprived of a more deserving and fulfilling life.

From an adolescent’s perspective, the death of a family member is a tragedy and a serious life crisis (Balk, 1983; Balk, 1999; Miller, 1999; Worden, Davies, & McCown, 1999). For adolescents, many hopes and dreams rest in the concept of family as a whole. The death of a family member can sever these hopes and shatter dreams leaving
adolescents void of understanding. This death of a family member can have significant ramifications as grieving adolescents face life without an integral member; a vital piece of the family puzzle is lost and will never be exactly replaced. A death of this nature can create unrest in the family system which causes an imbalance in the system as a whole.

The period of adolescence reflects a time of life when individuals are viewed as being vibrantly alive, growing through a time of transition into adulthood (Corr, 1995); this phase consists of changes and challenges, forming the character of adulthood. According to Bibby (2001), teenagers place the greatest value on friendship and freedom and adolescents experience tension over sacrificing individuality for the larger peer group. Bibby stated that although music was reported by adolescents to be one of the key sources of enjoyment, their primary resources in times of need were friends and family. Social concerns of teenagers mirrored universal concerns including “staying alive” and “living well”. In addition, young people tended to express the need for a high level of individualism and they believed that they play a central role in determining their life outcomes (Bibby). Although adolescents focus on living life, they have little understanding of death; bereaved adolescents are on a steep learning curve following the death of a family member (Fanos, 1996). The following excerpt highlights the experience of one adolescent:

Ralph was a fifteen-year-old student. During the interview he joked and was purposely silly. He did not want to discuss his brother’s death and resisted any gentle probing. He immediately began to distance himself by changing the topic. Ralph was described as very quiet, withdrawn and very well mannered. He appeared troubled, however, his facial expressions indicating that he was distancing himself from his present environment.

(Lee, 1995, p. 103)
In Ralph's case, his demeanor was altered, apparently masking inner grief; the grieving adolescent faces many difficult challenges and changes throughout the grief process (Cornell & Pack, 1993). The negative effects of bereavement for the adolescent can be numerous; common manifestations of adolescent grief include shock, numbness, guilt, confusion, depression, fear, loneliness, anger, difficulty sleeping, hallucinations, changes in study habits, feelings of emptiness, disbelief and a sense of hopelessness (Balk, 1983; Oltjenbruns, 1991) as well as feelings of vulnerability, fear of intimacy and an excessive concern for others (Fanos & Nickerson, 1991). In addition to the loss faced through death, the adolescent experiences losses of support, changes in living situations, and decreased familial financial means (Cornell & Pack, 1993).

The positive outcomes of extended grief are not as numerous but still evident in past research. Positive outcomes such as having a deeper appreciation for life, showing greater concern for loved ones, strengthening emotional bonds with others, developing emotional strength, increasing empathy for others and forming better communication skills can follow the death of a loved one (Hogan & DeSantis, 1996; Oltjenbruns, 1991). The time period, varying for each individual, following a familial death can therefore be a time of renewal and positive growth. The adolescent's views of life and death may or may not be altered following the death of a family member.

Death anxiety, simply defined as the extent that an individual experiences negative stress in reference to death (Fortner & Neimeyer, 1999), is a concept that may be closely linked to bereavement and experiences with death. Indeed, anxieties about our anticipated deaths may shape the way we live and experience our lives (Fortner & Neimeyer). Correlates that may help to explain sources of death anxiety include

Lester and Templer (1992-93) hypothesized that two factors, psychological health and life experiences, are the greatest predictors of death anxiety. As an adolescent’s exposure to death increases with time, changes in personal death anxiety level may occur. More specifically, the death anxiety of the adolescent bereft of a family member may be altered due to personal experiences. Although no research has sought to examine the specific relationship between bereaved adolescents and death anxiety, Lester and Templer’s two factors’ theory suggested a relationship may exist.

The current study, investigating the impact of religiosity and bereavement on death anxiety levels for the adolescent, serves to highlight the importance of personal factors in predicting levels of death anxiety. Three scales (Revised Death Anxiety Scale, ‘Age-Universal’ I-E Scale-12, Hogan Bereavement Inventory) were compiled into one questionnaire. After receiving consent, 226 adolescents aged 11-18 within independent schools in Manitoba participated in the research project. Adolescents who had not experienced the death of a family member completed the scales relating to death anxiety and religiosity while those who had experienced the death of a family member also completed the bereavement scale. Following data collection, analysis involved testing assumptions, determining correlations and conducting multiple regressions.

The remaining sections of this paper describe the study more fully. Chapter 2 examines theoretical and empirical perspectives of relevant aspects of death anxiety and
adolescent bereavement. Specifically, four theoretical frameworks including the
symbolic interaction framework, Cleiren’s model for bereavement, Moos and Schaefer’s
crisis model, and Figley’s theory of traumatology are presented. The context for the
research question is also explored through a review of current literature on adolescent
development, death anxiety, adolescent bereavement, stressors following death, religion
and spirituality as a means of coping, beliefs and rituals, and understandings on death.
The research methodology and procedures are detailed in chapter 3. In chapter 4, the
findings of the research project are presented based on the responses to the
questionnaires. Chapter 5 concludes with a discussion of the findings in light of the
theoretical frameworks and implications for further research are considered.
CHAPTER 2: THEORETICAL AND EMPIRICAL LITERATURE REVIEW

Theoretical Review

Several theories have been applied to adolescent death anxiety and bereavement. The contributions of these theories have paved the way for greater awareness and a better understanding of the adolescent and death anxiety. The symbolic interaction framework is presented as a “theoretical backdrop” as it contains ideas on language and the use of symbols in everyday communication. Three theories, Cleiren’s model for bereavement, Moos and Schaefer’s model of coping, and Figley’s traumatology theory, each provide a different dimension for the study of the adolescent and death anxiety.

Symbolic Interaction Framework

Symbolic interactionism is based on the concept that humans share common symbols that allow them to adapt and survive in their world; the theoretical framework focuses on meanings (Klein & White, 1996). It is both a theory about human behaviour and an approach to inquiring about that behaviour (Annells, 1996). Four central components of the symbolic interactionist perspective are: (1) Human behaviour is understood only if it is known what the meaning of that behaviour holds for the individual. (2) The context that people find themselves in is both symbolic and physical. (3) Humans have minds. (4) The symbolic world, society, precedes the individual (Klein & White).

The language people use gives meanings to symbols in this symbolic world. Language is a crucial link between the subjective and the objective. Miller (1999) discussed the use of language in the death of a child as she implied that without language, it is difficult to think, let alone empathize. “And when we are dealing with the
Death Anxiety and the Adolescent

unthinkable to begin with and then have no words with which to approach it, no wonder that psychological wisdom says that the death of a child is the most difficult death for survivors to endure.” (p. 20)

Language, a key component of symbolic interactionism, is central to our world of understanding in both its absence and presence. One can be a widow, widower or orphan, but our language ceases to name a parent, sibling, or extended family members who have lost a child (Miller, 1999). Miller suggested the nameless, as she termed them, live in a kind of limbo. These survivors of death remain out of reach, out of touch, and out of the realm of understanding from the rest of society. Terms like bereaved do not come close to describing the situation. “So many people sharing a similar agony, and we have only the most halting language- a few poor adjectives for what our culture considers the most tragic of personal experiences” (Miller, p. 20).

Symbolic interactionism, in its discussion on language and meaning, is crucial in understanding concepts related to death, bereavement and death anxiety for the adolescent. This theoretical framework serves as the backdrop for this research where meanings can be explored as they are defined through culture, community and family. For example, the experience of a death for an individual can have meaning even if the death occurred before the individual’s birth; the meaning of the death may be defined through activities such as discussions with family members close to the deceased. Through these activities, a person who was not yet born when the death occurred can perceive and define the meaning of a death and the importance of the deceased; in essence, “retroactive grief” allows the individual to grieve the death of someone who was not alive in his or her lifetime. In this way, feelings of bereavement can still be
experienced by the individual. The symbolic interactionist perspective lays the foundation for a greater understanding of bereavement and death anxiety at the adolescent level.

*Cleiren's Model for Bereavement*

Advances in bereavement theory have not produced one framework where both the dynamics of and influences on adaptation for the bereaved individual have been combined satisfactorily. Cleiren (1993) provides a more comprehensive approach by examining bereavement within the general context of stress; his model allows theoretical and empirical knowledge to be tested.

Adaptation to a stressful event such as a familial death is both dependent on the characteristics of the event as well as the individual (Cleiren, 1993). In addition, adaptation to loss results from a combination of stress and resources. Hobfoll (1989) in his discussion on stresses and resources, defined the terms in this way: Stress is the result of a perception of an actual loss event whereas a resource is the “single unit necessary for understanding stress” (p. 516). Types of resources include mastery, self-esteem, learned resourcefulness, socioeconomic status and employment (Hobfoll). The resources that an individual possesses will evolve throughout the life cycle resulting in a change of reactions to stressor events over the lifespan. Therefore, adolescents bring to their bereavement process their own set of resources from which they can manage stress.

The *demand-resource model* developed by Diekstra (cited in Cleiren, 1993) describes relationships between a person's resources and reactions of bereavement. In the demand-resource model, the stress from the tasks, either innate or learned, is a function of five components (Table 1).
Table 1

*Components of the demand-resource model (Cleiren, 1993, p. 31)*

<table>
<thead>
<tr>
<th>Task-demands</th>
<th>The type, pattern and number of the tasks a person is involved in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support</td>
<td>Affective or emotional support, practical or instrumental support and informational support</td>
</tr>
<tr>
<td>Available material resources</td>
<td>Financial, socioeconomic and technical resources</td>
</tr>
<tr>
<td>Attitudes with regard to Task-demands</td>
<td>Self confidence and image, belief in one's own competence, perception of the meaningfulness of a task, among other things influenced by personality traits</td>
</tr>
<tr>
<td>The environment or context in which the tasks are carried out</td>
<td>For example the neighborhood or area in which one lives</td>
</tr>
</tbody>
</table>

When a discrepancy exists between task demands and the available resources (including support, material resources, attitudes and environment), debilitating stress may result (Cleiren, 1993). Cleiren also made a critical distinction that the type of loss or stressor may not impose the same demands on the individual. Aspects such as the cause and circumstance of the loss event and the relationship of the deceased to the bereaved affect the task-demands. Characteristics of the loss event, such as the type of death (violent or peaceful) or the age of the deceased (young or old,) also define the characteristics of the loss (Cleiren). Similarly, aspects such as socio-demographic characteristics and the age of the bereaved clearly impact upon and determine reactions.

Cleiren (1993) created a model for bereavement that incorporates the demands, resources and functioning of the bereaved individual. This model (Figure 1) was
designed to guide empirical examination. In the model, functioning is related to both task-demands and resources.

*Figure 1. Cleiren’s model for the study of the consequences of bereavement*

Cleiren (1993) described the model as one that would “serve as a framework for classifying and describing the phenomena associated with bereavement, without making assumptions on the way in which adaptation is achieved...we can empirically verify which task-demands and characteristics of the resources are most strongly related to adaptation” (p. 36). The model is specific and applicable to different populations. The assets of this approach are numerous: there are no assumptions of adaptation, it is empirically testable, it measures both resources and task-demands, and it is applicable to bereaved individuals; utilizing the model may normalize bereavement for adolescents or provide a starting point for understanding their experience.

Death anxiety, in the context of adolescent bereavement, can be explored through the evaluation of “adaptation to loss” in the functioning category. The task
demands and resources of the adolescent are critical factors as the adolescent adapts to
the loss of his or her grandparent, parent, or sibling. As the adolescent deals with the
reality of the loss and begins to re-formulate a worldview, death anxiety is likely to
change due to the circumstances surrounding the traumatic event. The stress of
bereavement may lead to positive changes in the adolescent. Research has shown that
adolescents may place greater value on relationships and life following the death of a
family member (Oltjenbruns, 1991; Silverman, 2000). Adolescents may re-evaluate
their own conception of death and that exploration may cause them to reconsider what
death anxiety means to them on a personal level.

*Crisis Theory (Moos and Schaefer)*

Crisis theory deals with the impact of “disruptions on established patterns of
personal and social identity” (Moos & Schaefer, 1986, p. 9). According to these authors,
a crisis is defined by a situation so novel that habitual responses are insufficient. Crisis
can be a transition or turning point that profoundly affects the individual. A familial
death and subsequent bereavement represent such a crisis.

Similar to Cleiren (1993), Moos and Schaefer (1986) proposed that there are six
general aspects that determine the outcome of a transition or crisis: background and
personal factors, event-related factors, physical and social environmental factors,
cognitive appraisal, adaptive tasks and coping skills (Figure 2). These factors will be
explained in more detail in relation to adolescent death anxiety following the death of a
family member.

Demographic and personal factors include age, gender, ethnicity, religious belief,
previous experience with this kind of crisis, self-concept, intelligence, and
socioeconomic status; each helps to both define and resolve the crisis (Balk, 1996; Moos & Schaefer, 1986). These factors are significant components of adolescent bereavement research. In grief experiences and mourning processes, age is also a factor that affects the bereavement experience (Davies, 1995). The older individual is more likely to have more experience with death. Studies comparing parent-child pairs have also indicated gender differences; mother-daughter pairs reported more loss reactions such as prolonged depression than father-son pairs (Cleiren, 1993). Demographic and personal factors greatly affect adolescent bereavement.

**Figure 2.** A conceptual model for understanding life crises and transitions (Moos & Schaefer, 1986, p. 20)

Event-related factors are situation-specific. Examples include "the extent to which the crisis was anticipated and whether the individual is responsible for the crisis" (Balk, 1996, p. 372). Anticipated deaths usually have a different bereavement outcome than unanticipated death. For example, the adolescent who has time to prepare for the
death of an ill parent commonly has a less complicated bereavement experience in comparison to the adolescent whose parent committed suicide (Cieiren, 1993). Physical and social environmental factors include the equality and accessibility of family relationships and the availability of support by friends and health care providers (Balk, 1996). Social cohesion is linked to better adaptation to life crises, due to a network of support (Moos & Schaefer, 1986). Conversely, the closeness of the familial ties may affect the crisis negatively. Families with greater cohesion elicit stronger feelings of depression as a death of a family member was seen as a loss (Moos & Schaefer). The familial system often creates turmoil for the adolescent as roles change dramatically and upheaval is normal.

The adaptive tasks that human beings must deploy include:

1. Establish the meaning of the event and comprehend its personal significance.
2. Confront reality and respond to situational requirements of the event.
3. Sustain interpersonal relationships.
5. Preserve self-image and maintain a sense of competence.

The relative importance of each task varies depending on the individual, the type of stressor event and the unique set of circumstances (Moos & Schaefer, 1986). It is more difficult, for example, to establish the meaning of an unanticipated death of a sibling than of an expected death of an elderly grandparent.

The Moos and Schaefer (1986) model of coping is relevant to the topic of adolescent bereavement and death anxiety. The components of the model provide a holistic yet individual approach to the bereavement process. Additionally, self-concept,
coping methods (perhaps seen in religious behaviours) and environmental factors contribute to the model as they relate directly to adolescents. The Moos and Schaefer model provides an important framework to investigate coping methods following bereavement for the adolescent.

**Figley's Theory of Traumatology**

Figley's (1983) model of traumatology is based on the experiences of victims of catastrophic events, such as being a prisoner of war, a victim of rape or a hostage of terrorists. To illuminate how people may react in certain ways during emergency situations, a visual overview of the immediate and long-term emotional consequences for the survivors was developed (see Figure 3).

The central premise is that there is a sequence of perceptions and reactions during and following a catastrophe (Figley, 1983). Figley posited that catastrophic stress is not only a function of exposure to the emergency or catastrophe, but also a result of two factors: prior coping ability and the situational context of the victim. He determined that the combination of those factors may "account for the degree of intensity of the traumatic stress" (Figley, p. 7). At the time of a stressor event, the victim's reaction is one of fight or flight. "Both responses, the victim discovers, result in increased coping ability" (Figley, p. 8). As time progresses and the victim deals with the trauma, trigger events may cause the stressful event to become real again. This continuous pattern is part of the post-trauma experience.

Whether death is considered a traumatic event has been debated (Stamm, 1999). As death is not a rare event, it is unlikely that an "ordinary" death would lead to post-traumatic stress. However, Figley's traumatology model (1983) may be applied to
adolescent bereavement and death anxiety. As seen through Cleiren’s bereavement theory (1993) and Moos and Schaefer’s crisis theory (1986), aspects of coping, external factors and personal characteristics are important components of grief and coping.

Figure 3. Figley’s (1983) Model of Catastrophic Experiences

A theory proposed by Lester and Templer (1992-93) meshes well with Figley’s model of traumatolody (1983). Building on evidence that there is a relationship between death anxiety, psychological health and life experiences, Lester and Templer proposed a “two factor theory” of death anxiety. This theory contends that death anxiety is related both to one’s general psychological health, measured by general anxiety and depression (Tomer, 1992), and to specific experiences pertaining to death. Specifically, results that psychiatric patients consistently display greater death anxiety levels than other persons.
have lent credence to the theory. “Scales of death anxiety consistently correlate positively with measures of psychopathology....” (Lester & Templer, p. 245).

Additionally, one’s experiences pertaining to death can determine one’s level of death anxiety (Lester & Templer; Tomer). A breakdown in defense mechanisms may bring about death anxiety. Figley’s model also relies on coping ability and initial reactions following the stressful or traumatic event. As time progresses, the individual’s coping mechanisms may be better honed and more capable of dealing with stresses. Essentially, individuals in crisis rely on both lessons of past experiences and personal factors such as psychological health. Although the two factors involved in death anxiety found by Lester and Templer (1992-93) are integral in Figley’s model, Figley presented a more holistic picture of the individual dealing with crisis in general.

Therefore, utilizing Figley’s model (1983) and viewing the death of a family member from an adolescent’s perspective, the death is an emergency that causes stress on the individual and family system. As the adolescent goes through the periods of bereavement and coping with the death, attitudes towards life and death may be altered. Different coping mechanisms, reliance on religious behaviours for example, may change with increased exposure to death experiences. “When anything confronts us which is unexpected, we think about it enough until it becomes ‘expected’ in the future” (Figley, p. 9). Therefore, adolescents’ death anxiety may be decreased following the death of a family member as they are able to “normalize” the experience.

Empirical Investigation

The stage of adolescence, a time of newly emerging developmental capacities (Batten & Oltjenbruns, 1999), reflects a period when adolescents “contemplate their own
Deaths, encounter the deaths of others and react to death issues in developmentally unique ways..." (Noppe & Noppe, 1997, p. 233). This review of the literature examines the research on death anxiety to provide a framework for investigating adolescent death anxiety and understandings of death. Correlates of death anxiety: age, religiosity, previous experience with death, and gender, are examined. Additionally, commonalities and differences in adolescent bereavement following the death of a family member are determined. Finally, a general overview of adolescent bereavement concerning religion, religiosity and spirituality is presented.

*Adolescent Development and Understandings of Death*

The task of adolescence described by Erikson (1968) is the resolution of the psychosocial issues of identity versus role confusion. The young person is faced with the psychosocial dilemma of merging yet surpassing earlier identifications of self (Kroger, 1996). Identity formation involves creating security for one's self in the life cycle (Balk & Corr, 1996); adolescents must explore who they are within the context of their personal pasts, the present, and their anticipated futures (Erikson). Intimacy involves the ability to fuse personal identity with somebody else's without losing the concept of "self" (Kroger). Questions of Who am I? Where am I going? and How will I get there? are central to adolescents' perspective while trying to achieve personal identity (Erikson). The process involves the integration of one's prior experiences, self-evaluation, and feedback derived from social environment such as family and friends (Oltjenbruns, 1996).

Adolescence involves broadening the ideas of "self" to include a range of possible selves (Noppe & Noppe, 1996). In this stage, the 'dead self' also becomes a feasible
concept (Noppe & Noppe). Following the death of a significant person in adolescents’ lives, security becomes challenged (Oltjenbruns, 1996). Additionally, adolescents who experience the death of an age-mate must now integrate an understanding of personal mortality into their belief systems (Oltjenbruns). “Although this concept may be understood much earlier in an intellectual way, it is often during adolescence that young persons come to appreciate emotionally that they, too, will die and integrate this realization into their sense of personal identity” (Oltjenbruns, p. 203). Self-esteem and ego identity have been found to be important sources of strength in adolescent coping and management of stress resulting from loss (Noppe & Noppe). Also, excessive defensiveness surrounding issues of death and dying can hamper the process of individuation (Firestone, 1993). Death anxiety, for example, can produce negative consequences for adolescents resolving issues of intimacy and identity.

Adolescents have varied thoughts or understandings of death; they are suspended between adulthood and childhood and their concerns may mirror either group (Noppe & Noppe, 1997). As adolescents are beginning to see life as fully aware beings they look forward to becoming not ceasing to be. For most adolescents, death is a concept or an experience that is relatively foreign and mortality is not typically an issue for this time of development (Offer, Ostrov, Howard, & Atkinson, 1988). However, with the onset of puberty when rapid change occurs to the physical body, adolescents may feel anxiety over the certainty of their surroundings and these uncertainties may link to understandings of life and death (Gordon, 1986).

Cottle (1972) described his own awakening to the awareness of death in the following way:
First, the image that someday I just wouldn’t be anymore always stung me in bed at night. Then a fright would envelope me, a physiological jolt that like an H-bomb hit every outpost in my entire body at once. Second, with knees folded up into my chest, I invariably sought to ward off the fright, employing the solution that when you’re dead you cannot think about anything so it’s not so bad, at least not as bad as what you’re presently experiencing. Third, my warding off strategy never varied, and never worked. Fourth, I spoke about this death thing with my friends and laughed as again and again I realized that millions of kids went through the same four steps....One, two, three, four: explosion and death has receded for the while, just as before. (p. 313)

Adolescent death anxieties were seen to be universally experienced and furtively discussed with equally uninformed peers (Gordon, 1986).

Adolescents continually develop a way of handling life events based on and modified by experience. Successful experiences lead to positive self-esteem, healthy relationships, and autonomy. However, when encountering unsuccessful experiences, “the result is pessimism about the future and a belief that the present coping strategies are inadequate (and therefore the adolescent is inadequate) to handle present and future stress” (Gordon, 1986, p. 21). As adolescents’ understandings of death emerge, many variables shape and determine their death anxiety.

As children and adolescents begin to explore the meaning of death, it is invariably family and close friends who will impact most on their knowledge (Bibby, 2001). If individuals are unable to communicate questions or fears surrounding death with significant others, imaginations may play a greater role in understandings of death. In discussions with a 9-year old child with terminal leukemia, Bertoia (1993) highlighted the importance of the contributions of significant others. Children and adolescents want
to be able to talk about death with others and if their efforts are slighted, misconceptions may replace facts.

The understanding of death emerges when individuals are able to conceptualize the meaning of life. According to Piaget (1972), formal logical thought, developed at about age 10 to 12, creates the ability to contemplate the ideas of personal death. The pre-adolescent period is defined by concrete operations such as reasoning in terms of objects (numbers, for example) and not in terms of hypotheses that can be thought out before knowing if they are true or false (Piaget). A more complete logic will be reached once adolescents reach the age of about 14-15 years. At this stage, they can “attribute a decisive value to the logical form of the deductions that was not the case in the previous stages” (Piaget, p. 3). During early adolescence, most children realize that death is irreversible, permanent and universal (Seifert & Hoffnung, 2000), however there is a wide range of individual differences based on experiences. For example, a young child with a terminal illness may view death very differently than a healthy child (Bertoia, 1993).

Young people experience a shift from concrete operational thinking to formal operational thinking (Austin & Mack, 1986). Adolescents contemplate their own deaths, encounter the deaths of others and react to death issues in developmentally suitable ways. Additionally, the age range of adolescence is large enough to show great diversity within the population. As each stage of development progresses, individuals may increase in their knowledge of death. For example, in a study by Noppe and Noppe (1997), it was found that middle school students indicated more concerns about the inevitability of death than college age or high school students. Additionally, there were significant
differences between middle school and college samples; fewer high school students reported fears of death than did college or middle school students (Noppe & Noppe).

“Although early in the adolescent years egocentric thinking may buffer the adolescent (as it does the child) from viewing death’s universality and inevitability from the standpoint of the self, continued exposure to death, particularly from one’s peers, ultimately places a personal stamp on the concept” (Noppe & Noppe, 1997, p. 236). However, just because adolescents can think about death abstractly does not necessarily mean that they are actively engaged in thinking that way. Moreover, as adolescents grow older, they experience more situations in which death is encountered and pondered.

Death Anxiety

The term “anxiety” has connotations of primal stress (Kastenbaum & Aisenberg, 1972) and confusion (Kelly 1955). Death anxiety, however, is more specific. Death anxiety can be caused by the anticipation of the state in which one is dead, including the related aspects of fear of dying or the death of significant others (Tomer, 1992). Death anxiety has been viewed as that which is experienced in “daily-life”, in contrast to anxiety experienced in extreme situations such as immediate threats on one’s life and safety (Tomer). Death anxiety “includes measures of the extent to which one experiences angst in reference to death” (Fortner & Neimeyer, 1999, p. 391). Correlates of death anxiety are numerous and as researchers determine causes of death anxiety, different aspects of an individual are pursued. In the following review of the literature on death anxiety, gender, religiosity, previous experience with death and age are among the examined correlates. As the body of literature pertaining to adolescent experiences of death anxiety is limited and at times conflicting, studies focusing on adult experience
with death anxiety will also be included. This will add depth to the literature review and will also be useful to gain an understanding of the correlates of death anxiety.

The most commonly used method to measure death anxiety is the Death Anxiety Scale developed by Templier in the early 1970’s (Lonetto & Templer, 1986). The Death Anxiety Scale (DAS) contains 15 true or false items and it was developed to assess a range of life and death experiences (Hunt, 2000). The questions pertain to death and various illnesses and are usually presented in Likert form where subjects can chose from a range of answers (Davis, Bremer, Anderson & Tramill, 1983; Lonetto & Templer, 1986). Responses to the DAS are scored according to the number of agreements with responses established by Templer and the higher the score, the higher the death anxiety (Davis et al.). Scores of the general population range from 4.50 to 7.00 (Pepitone-Arreola-Rockwell, 1981). Several modifications of the DAS have also been created (McMordie & Kumar, 1984; Thorson & Powell, 1992).

Gender. The experiences surrounding death are different for males and females. “Death, the common denominator of all human existence...reflects the differential experiences of men and women” (Noppe, 1999, p. 339). This may be in part due to women’s biological propensity to live longer than men as well as their capacity to give birth. In her study of gender and death, Noppe determined that after death women, as in life, were treated differently than men as evidenced by smaller gravestones and fewer newspaper obituaries. Additionally, she found that, compared to men, women’s obituaries were generally shorter and rarely accompanied by a photograph (Noppe). Collectively, women have different experiences than do men yet questions remain as to the cause of these differences.
Gender differences have been supported through much of the death anxiety literature. In research on adolescent death anxiety, there is a positive association of being female and having a higher death anxiety (Brubeck & Beer, 1992; D’Attilio & Campbell, 1990; Glass & Knott, 1984). Also supporting this claim, Young and Daniels (1981) found that female adolescent participants reported a higher death anxiety score than male adolescents. Many studies have found that women of all ages (beginning at approximately age 10) reported greater death anxiety than did men (Davis et al., 1983; Davis, Martin, Wilee & Voorhees, 1978; Iammarino, 1975; Lonetto & Templor, 1986; Sanders, Poole & Rivero, 1980; Siscoe, Reimer, Yanovskky, Thomas-Dobson, & Templor, 1992; Thorson & Powell, 1988; Thorson & Powell, 1993; Young & Daniels, 1980).

The majority of the research, therefore, conducted using the Death Anxiety Scale supports the conclusion that women in general are more anxious about death than are men. However, the literature lacks full agreement as several studies are contradictory or inconclusive. In a study by Noppe and Noppe (1997) on the evolving meanings of death during different stages of adolescence, analyses failed to generate clear differences between males and females; adolescent death conception was not found to differ significantly by gender. Cole (1978-79) found that single adult males reported a much greater death anxiety level than did single adult females. Moreover, other studies (Fortner & Neimeyer, 1999; Hunt, 2000) have also failed to find significant gender differences.

Although the existence of some gender differences on death anxiety measures is moderately clear, its explanation and significance are not. One hypothesis is that the
discrepancy in death anxiety scores simply reflects the greater tendency of women to admit troubling feelings (Noppe, 1999; Stillion, 1984; Young & Daniels, 1981). Reported differences may be attributed to differences in culturally produced sex-role expectations that males are expected to not indicate fear or anxiety. Furthermore, men may feel more constrained to present a socially desirable self-image on death anxiety questionnaires (Dattel & Neimeyer, 1990; Stillion). Female adolescents have been reported to have more experiences with death (Noppe & Noppe, 1997) that may also affect their conceptions of death.

In an attempt to clarify gender differences in adolescent self-disclosure, Davidson, Balswick and Halverson (1980) examined four dimensions: revealing general information, revealing sexuality to parents, revealing personal information, and revealing sexuality to peers. They concluded that females disclose more than males in revealing general information and personal information whereas males disclose more in the categories revealing sexuality to parents and to peers. However, the authors cautioned that the magnitudes of the differences were not significant and so the issue of self-disclosure was not resolved. Pertaining to death anxiety, these findings may contribute to the gender differences found in adolescent reporting.

_Spirituality, religion and religiosity_. Of the many outcomes of religion, peace of mind may be desired on a more regular basis than any other (Thorson, 1998). Individuals may enjoy greater well-being because of the promise of an after-life, the comfort of ritual, the opportunity to socialize with friends, or the sense of being a part of something that is greater than oneself (Thorson). Conversely, religion may be seen to be a source of anxiety.
Religion has historically been a major part of many Canadian's lives. According to the survey conducted by Bibby (2001), approximately 20% of teenagers were involved in organized religion. Additionally, 75% of adolescents identified with a religious group such as Protestantism or Catholicism (Bibby). “This means that, in a psychological and emotional sense, they still think they are ‘religious somethings’, even if they are not actively participating” (Bibby, p. 117). More specifically, 9 of 10 teenagers anticipated future ties with religious groups for rites of passage such as funerals and weddings (Bibby). The role of spirituality was also at the forefront of the young adult’s mind as 40% of females and 35% of males reported that their friends were interested in spirituality; the spiritual needs of adolescents were self-proclaimed as being diverse.

Death, in the adolescent world, encompasses many characteristics and creates a unique bereavement journey unlike that of any other age group (Davies, 1987). Spirituality, religiosity, and religion were explored in relation to adolescent death anxiety in this research.

The terms spirituality, religion, and religiosity are necessarily operationalized for use in this research. It is critical that the terms are not interchanged as their meanings and influences are not the same; there is overlap in the terms yet distinction is apparent. Spirituality is “that which separates humans from other beings- it is that realm of being that is concerned with the profound and ultimate questions of existence” (deVeber, 1995, p. 297) whereas religion can be a way in which people express their spirituality. Spirituality encompasses an appreciation of the meaning of life and a connectedness and openness to the infinite as it integrates all aspects of personhood (Burke & Hackney, 1999; deVeber); spirituality represents intrinsic motivation. According to Balk and
Hogan (1995), spirituality is a “manifestation of the human species’ effort to make meaning...in some...spirituality finds expression in an organized religion; in others, organized religion holds no meaning, but a relationship with that which is more than themselves does hold meaning. Spirituality is the development of this relationship” (p.63).

Religion is often seen as a culturally concrete and appropriate expression of spirituality. Religion can be defined as a representation of an institutionalized set of beliefs and practices (Burke & Hackney, 1999); the literature suggests that religion is a “sufficient but not necessary condition for spirituality” (deVeber, 1995, p. 296). Religion provides rituals, stories, and acts (e.g. prayer) in which the individual expresses worship and perhaps experiences the presence of God (Balk & Hogan, 1995). Furthermore, religion can be a means to achieve spiritual needs but should not be equated with spirituality (deVeber). Additionally, the practices of organized religion may represent certain extrinsic characteristics, for example views of a punitive afterlife, and these extrinsic properties may be cause of greater death anxiety. Intrinsic properties of religion, such as belief in prayer, may lower death anxieties due to the inward and spiritual nature of the acts.

Religiosity consists of the measurement of religious beliefs and religious behaviours (Fortner & Neimeyer, 1999). Measuring religiosity includes assessing items such as belief in an afterlife and the extent of commitment to belief through religious behaviours. Measuring religious behaviours involves determining the frequencies of behaviours associated with religious beliefs such as church attendance, reading of holy books, and praying. Religiosity can also be measured by looking at the aspects of
religious beliefs, religious ritual and religious experience using Likert scale questions (Leming, 1979-80; Minear & Brush, 1980-81).

The terms religion, religiosity, and spirituality will be utilized throughout the literature review. Studies determining the effect of religion or religiosity on death anxiety have produced a myriad of results. A complicating factor is that definitions of religiosity or spirituality are not uniform among studies. Therefore, true comparisons are not possible. Nevertheless broad evaluations can add to existing knowledge.

Research on adults suggests that anxiety created through fascination with death is related to religiosity. "A preoccupation with death features in all religious traditions and religious individuals are thought to use interpretations of death to provide meaning to their lives" (Maltby & Day, 2000). Also, religious involvement can be seen as a coping or defense mechanism (Firestone, 1993). While the results from a number of studies were not uniform, findings generally reported that an intrinsic religious orientation was negatively correlated with death anxiety. As inner conviction and spirituality increase, death anxiety decreases and therefore highly spiritual persons tend to have lower death anxiety (Leming, 1979-80; Lester, 1967; Lester & Templer, 1992-93; Lonetto & Templer, 1986; Minear & Brush, 1980-81; Thorson & Powell, 1990). For example, Iammarino (1975) reported that individuals who were very spiritual (defined as highly religious) had lower death anxiety scale scores on Templer's Death Anxiety Scale. In other work, it was found that people with greater strength of conviction and unfailing belief in an afterlife had less death anxiety, death depression and death distress (Alvarado, Templer, Bresler & Thomas-Dobson, 1995).
Likewise, an extrinsic orientation toward religion may be positively related to
death anxiety, death depression and fear of death (Cole, 1978-79; Leming, 1979-80;
Maltby & Day, 2000). Swanson and Byrd (1998) found that death anxiety was
significantly associated with the belief that one has committed transgressions for which
retribution will be exacted. Those who believed the most important aspect of religion
was that it offered the possibility of life after death had higher death anxiety and the
prospect of the possibility of punishment following death provoked anxiety (Maltby &
Day). The association between extrinsic religiousness and death anxiety indicated that
religiosity might serve as a coping mechanism for death anxiety (Swanson & Byrd). “An
extrinsically religious person may experience more death anxiety because he or she
construes death as the end of the social and emotional gratifications served by religion…”
(Swanson & Byrd, p. 265).

After surveying a variety of studies, a general conclusion could be that “faith”
was more important or effective than “good works” as it appeared that attempting to
lower one’s death anxiety through greater religious participation was not an effective
remedy (Alvarado, Templer, Bresler & Thomas-Dobson, 1995).

A study by Young and Daniels (1981) served to identify the adolescent
perspective on death anxiety and religiosity. The researchers examined the relationship
of religiosity to death anxiety among high school students in the rural southern United
States. Religiosity was defined as the strength of one’s religious commitment. Utilizing
the Death Anxiety Scale to assess the measure of death anxiety among adolescents and
the Faulkner and DeJong Religiosity in 5-D scale to provide a multidimensional measure
of religiosity, four areas of religiosity (ideology, intellectualism, religious affiliation and
born-again status) were examined. Findings indicated that students who evidenced a greater degree of religiosity on an ideological level also tended to exhibit a greater fear of death. Conversely, adolescents exhibiting lower levels of religiosity on the intellectual scale tended to have greater fear of death. In regards to religious affiliation, the findings showed that subjects with more liberal denominational affiliations tended to exhibit greater death anxiety; they attributed this finding to the propensity for conservative denominations to provide greater assurance of life after death. Subjects who reported to be “born-again Christians” exhibited lower levels of death anxiety (Young & Daniels).

Previous experience with death. In Lester and Templer’s (1992-93) two-factor theory of death anxiety, previous experiences with death were found to be significant in determining death anxiety. They proposed that an increase in experiences with death would produce a decrease in death anxiety. Several studies have supported this theory (Brent, Speece, Gates, Mood, & Kaul, 1991; Lester & Templer, 1992-93), yet other results have not. In a study of children whose sibling had died of a terminal illness, it was found that there was an intense fear of death (Fanos, 1996). Additionally, the children in this study had unusual concepts related to illness and dying.

Conversely, in a study of nursing students in palliative care environments, it was found that death anxiety decreased when students were in close contact with the patients (Brent, Speece, Gates, Mood, & Kaul, 1991). This particular study may indicate that experiences with death can have a positive impact on the individual. Glass and Knott (1984) found that respondents with no previous personal experience with death had the highest levels of death anxiety.
Age. There have been studies that explore the relationship between death anxiety and age, especially among the adult population. Some results show a positive relationship between age and death anxiety (Hunt, 2000; Minear & Brush, 1980-81), others suggest a negative relationship (Eggerman & Dustin, 1985-86; Johnson, 1980; Lester & Templer, 1992-93; Stevens, Cooper, & Thomas, 1980), whereas others purport no relationship (Lester & Templer; Lonetto & Templer, 1986). Among adolescents, there have been no studies completed on the relationship between death anxiety and age.

In an attempt to clarify the relationship, Rasmussen and Brems (1996) included a third variable: psychosocial development. In that particular study, age and psychosocial maturity were found to be significantly and inversely related to death anxiety (Rasmussen & Brems). They hypothesized that age alone could not account for the decrease in death anxiety among the elderly. Rather, a combination of aging and the achievement of greater psychosocial maturity may result in a decrease in death anxiety (Rasmussen & Brems).

A new dimension is evident in the philosophical perspective. It has been hypothesized that as individuals grow older, they have more time to ponder death and therefore may have higher death anxiety than younger individuals. Many philosophers such as Sartre have studied death and death anxiety. In Sartre’s view (1957), a person who looks to the future through different tasks or goals cannot avoid fearing death, as death would negate these projects; death prevents individuals from realizing their possibilities. Ultimately, “death reduces one’s existence to what this existence really is: a ‘useless passion’, nothing” (Tomer, 1992, p. 478). From this point of view, reflection on death is actually a reflection on the meaninglessness of existence. Therefore, from the
philosophical perspective, it seems likely that there would be higher death anxiety for those who spend more time thinking about death.

*Adolescent Bereavement*

Estimates from the United States indicated that approximately 90% of adolescents in junior or senior high school have known a family member or friend who has died (Ewalt & Perkins, 1979; Oltjenbruns, 1991). In a study of college students at Kansas State University, it was found that over 25% of students were in their first year of grief following the death of a family member (Balk & Vesta, 1998). Statistical data from Britain estimated that approximately 3% of the school population had lost a parent through death (Quarmby, 1993). Similarly, American statistics showed that the percentage of children who have experienced the death of one or both parents was estimated to be 3.4% (Clark, Pynoos & Goebel, 1994). Substantial numbers of adolescents are in the process of mourning.

Metaphorically and statistically, adolescence is considered a healthy phase of the lifespan; thus the death of an adolescent is often due to unnatural causes such as accidents, homicides or suicides (Noppe & Noppe, 1991). In Canada, the mortality rate for adolescent males aged 15-19 is 0.7 deaths per 1,000 males and for female adolescents aged 15-19 is 0.3 deaths per 1,000 females (Statistics Canada, 2002a). The two leading causes of death in adolescents and young adults in Canada are accidents or adverse effects (e.g. motor vehicle, suicide, and accidental falls), or cancer (Statistics Canada, 2002b). Therefore, as death of peers is not a common part of the adolescent world, death is usually unexpected and a tragic occurrence which may “cast the meaning of death for adolescents in a somewhat peculiar, possibly even romantic, light.” (Noppe & Noppe, p.
Adolescents' need for additional supports to deal with personal perceptions of death are in place long before a death is experienced. Support for adolescents is seen to be most readily available in the family, as friends may feel uncomfortable discussing death (Noppe & Noppe). It is the case, however, that "the need to seek emotional support within the family often creates turmoil for adolescents who are seeking to establish their independence from parents." (Martinson & Campos, 1991, p. 54).

Following the death of a family member, the journey of bereavement may affect many areas of the adolescent's being such as self-concept, identity formation, interpersonal relationships, schoolwork and family life. Adolescent bereavement presents a serious life crisis at a time when development is marked by significant transitions (Balk, 1991). According to Balk, "a parent's death creates excruciating anguish for an adolescent" (p. 9). The death of a sibling is also marked by intense emotional reactions such as confusion, depression, anger and guilt (Balk). In addition, dramatic changes were found to be common in the lives of the grieving adolescent. Adult responsibilities were assumed, attitudes about life were altered, and personal routines were disrupted (Martinson & Campos, 1991). Common manifestations of adolescent grief included shock, numbness, confusion, depression, fear, loneliness, anger, difficulty sleeping, hallucinations, changes in study habits, feelings of emptiness, disbelief and a sense of hopelessness (Balk, 1983; Davies, 1987; Oltjenbruns, 1991) as well as feelings of vulnerability, fear of intimacy and an excessive concern for others (Fanos & Nickerson, 1991).

Davies (1995) reported that approximately fifty percent of the adolescents in her study felt guilty about the death. "...other children feel guilty just for being alive, for
having wished their sibling dead, or for feeling jealous over their parents’ grief for the deceased sibling” (p. 68). Fanos and Nickerson (1991) discussed several types of guilt following the anticipated death of a sibling: a global sense of guilt including a readiness to blame themselves for anything that might go wrong, guilt over the way the adolescent handled the illness and death, and guilt because they were alive. These guilt feelings were not limited to unanticipated death but led to continued low self-esteem (Davies).

Bereaved adolescents may show virtually no change in social behaviour or they may exhibit great changes. They may become absorbed in schoolwork to keep distracted from emotional stressors (Davies, 1995). Conversely, they might stay close to home, feeling anxious about encountering new experiences or upsetting parents. Additionally, parents may have contributed to their child’s wariness by being hesitant in letting them resume additional activities (Davies). “Freedom is a major developmental issue for adolescents, an it seems impossible for parents who have lost a child to allow even a portion of the freedom their teenagers would like, especially if their child has died traumatically” (Davies, p. 71). The bereaved adolescent can be negatively affected by diminished financial resources creating worries about money and a restriction of activities. This translated into less time with friends and more time alone (Martinson & Campos, 1991).

The adolescent grieving the unanticipated or anticipated death of a sibling reported common health difficulties including frequent headaches, stomachaches, other aches and pains, sleep difficulties, being afraid of the dark or an increase in nightmares (Davies, 1995). In addition, some bereaved adolescents had difficulty eating (too much
or too little), anxiety about being alone or trying out new activities, having difficulty concentrating, being lonely, and sad or withdrawn (Davies).

Religion and Spirituality as a Means of Coping with Adolescent Bereavement

There is evidence that religion and spirituality play a part in the coping of some bereaved adolescents. However beliefs and rituals may complicate the bereavement journey for the adolescent. Several studies of grieving adolescents have explored the role of religion and spirituality. In a study by Gray (1987) on the adolescent response to the death of a parent, respondents were asked if they had any beliefs that were religious or spiritual in nature. Results indicated that those who had specified religious or spiritual beliefs had significantly lower mean scores on the Beck Depression Inventory; high depression scores were found to be significantly related to the absence of reported religious beliefs. “One way to understand this finding is to consider religious beliefs as modifying the effects of loss, thereby leading to lower measures of depression” (Gray, p.522). Similarly, Balk (1983) also found that religion took on increased importance following the death of a sibling. He asserted that positive values related to religion and spirituality resulted from the grief experience.

Faith during a period of grief can provide comfort and strength through inner resources and support. The sorrow following death can have a refining influence helping an individual clarify perspectives and values and permitting the bereavement period to be one of growth (Cullinan, 1993). Individuals may emerge emotionally stronger placing greater value on religion or spirituality (Balk, 1983). Batten and Oltjenbruns (1999) posited that the crisis for adolescents experiencing the death of a sibling has the potential to serve as a catalyst for enhanced spirituality (defined as a quest for greater meaning).
For some, increased faith development occurred during bereavement as the individual transformed and matured in an understanding of life and death (Cullinan). In response to this question, “What helped you cope with your sibling’s death?”, 8% of the adolescent respondents in Hogan’s survey determined that a personal belief system helped in the coping following death (Hogan, n.d.). For these adolescents, religion and spirituality played a positive role in their bereavement journey.

However, religious sentiments may not give adolescents the edge in coping with bereavement. For many, the solace that they hoped to find in religious traditions or rituals was not available leaving the individual feeling abandoned. “Faith can be a constantly shifting source of strength or a cold comfort for the harsh reality of death” (Cullinan, 1993, p. 203). Trust in God prior to the death might elicit a sense of betrayal leaving the adolescent cynical. “Faced with not only the apparent but the brutal sense of having been abandoned by God, the believer has a considerable task not only to work through grief but to reconstruct a religious world-view that is honest to the fact that a loved one has died” (Balk, 1991, p. 14). The death of a family member can shake one’s beliefs about God, religion, and the meaning of life.

There is evidence for both arguments: religion and spirituality can be positive or negative components of the bereavement process for the adolescent. However, as Balk and Hogan (1995) conclude, “clinical experience and research has convinced us that a deepening understanding of human existence does occur in the lives of some bereaved adolescents. We believe this deepening understanding is a possibility open to all human beings” (p. 82). Although the evaluation of some adolescents has shown enhanced understanding of the large life questions, the situation is not homogenous.
Beliefs and Rituals: Facilitating or Complicating Bereavement

Doka (1993) in his work on the spiritual crisis of bereavement explored the ways that beliefs and rituals following death can both facilitate and complicate bereavement. Rituals were defined as “prescribed symbolic acts that must be performed in a certain way and in a certain order, and may or may not be accompanied by verbal formulas” (Doka, p. 186). Rituals are often rooted in a belief system – for example, marriage, baptismal, and burial ceremonies. In this way, rituals can be a powerful tool during the bereavement process as the adolescent may find comfort in the rituals of his or her religious community.

The ritual of a funeral can serve the opportunity to “reintegrate and reaffirm the group, allow the expression and expiation of emotion, affirm the value of the deceased’s life, stimulate remembrance, provide support and structure, offer hope and comfort, and perhaps even teleologically justify loss” (Doka, 1993, p. 186). Yet the ritual of the funeral may also have negative repercussions. The funerary service may be used as a platform of condemnation for the acts of the deceased or as a means to convert attendees. “Dysfunctional funerals” such as these may serve to cause extended grief in the bereavement process (Doka). If the funeral of an adolescent killed in an alcohol related accident is used as a means to condemn drunk driving this may extend grief and guilt unnecessarily.

Worden (1991) discussed four tasks of mourning that need to take place in order to achieve balance in one’s life.

1. To accept the reality of loss. The first task of grieving is accepting that the dead person is actually dead and that they will not come back.
2. To work through the pain of grief. "It is necessary to acknowledge and work through this pain or it will manifest itself through some symptoms or other form of aberrant behaviour." (Worden, p. 13)

3. To adjust to an environment in which the deceased is missing. This task incorporates taking on the roles that were formerly completed by the deceased. In many cases, this stage is marked by resentment.

4. To emotionally relocate the deceased and move on with life. This stage is a time of reinvesting back into life (Worden, 1991).

Rituals can facilitate the completion of these tasks of mourning. However, the spirituality or religiosity of the individual may also impede the resolution of these tasks. For example, a common emotion of adult and adolescent bereavement is guilt (Davies, 1995). As stated earlier, Davies reported that approximately half of the adolescents in her study felt guilty about the death. With moral guilt, survivors may feel responsible for the death and some bereaved individuals may feel that the death of the family member is a result of their own inadequacies or sins (Doka, 1993).

In the fourth task of relocating the deceased and moving on with life, rituals may also play an important role: Post-death rituals can be an excellent vehicle for saying goodbye and sustaining memories. Bereavement camps for adolescents regularly integrate symbolic ceremonies to facilitate grief. Additionally, beliefs about afterlife can serve as an assurance for the living (Doka, 1993). However, few research studies provide insight into rituals that help or hinder the grief process for adolescent individuals and this is an area that warrants further investigation.
There is evidence that religion and spirituality can have positive effects on the adolescent bereavement process. For some, faith helps strengthen beliefs, understand personal values and develop a better understanding of life following death. For others, however, the test of death is too much for the personal belief system of the adolescent and the bereavement journey shows significant struggles and negative affects.

Omissions in the Literature

The preceding literature review connected past research to death anxiety, bereavement and religiosity for the adolescent. To focus the research questions, omissions in the literature pertaining to adolescent experiences of bereavement, death anxiety, previous experiences with death, and religiosity should be noted. These omissions provide the framework for the current study.

Bereavement

As previously cited, death is not a common part of the adolescent world which may create an unusual understanding of death for the adolescent (Noppe & Noppe, 1996). During the time of adolescent development, bereavement presents a serious catastrophe (Balk, 1991). Dramatic adjustments in lives of the grieving adolescent, such as assuming adult responsibilities, were obvious (Martinson & Campos, 1991).

Common signs of adolescent grief included shock, numbness, confusion, depression, fear, loneliness, anger, difficulty sleeping, hallucinations, changes in study habits, feelings of emptiness, disbelief and a sense of hopelessness (Balk, 1983; Davies, 1987; Oltjenbruns, 1991) as well as feelings of vulnerability, fear of intimacy and an excessive concern for others (Fanos & Nickerson, 1991).
Perhaps most importantly, relating this work to death anxiety was the pervasive feeling of guilt in bereaved adolescents (Davies, 1995; Fanos, 1996). While studies commonly determined the symptoms of bereavement, there is a lack of studies examining the effects of these symptoms on the adolescent’s perception of death. For example, does this pervasive sense of guilt lead to greater death anxiety? Do feelings of confusion create increased anxiety for the adolescent or are these feelings temporary? How do adolescent grief reactions manifest themselves in longer-term anxieties?

*Death Anxiety and Previous Experience with Death*

Lester and Templer (1992-93) proposed a two-factor theory of death anxiety where one factor found to be significant in determining death anxiety was previous experiences with death; increased experiences with death would produce a decrease in death anxiety. Several studies have supported this theory (Brent, Speece, Gates, Mood, & Kaul, 1991; Figley, 1983; Glass & Knott, 1984), yet results have not been conclusive. With children whose sibling had died from cystic fibrosis, fear of death increased (Fanos, 1996). To clarify the relationship between previous experience with death and death anxiety, continued research is imperative. More specifically, as only one study was found that looked at the adolescent perspective (Fanos), additional research is critical in the area of death anxiety and previous experiences with death for the adolescent.

*Religiosity*

While the relationship between religiosity and death anxiety has been widely explored, little has been completed on the adolescent experience. Among adults, religious involvement was explored as coping or defense mechanisms (Firestone, 1993) where intrinsic motivations affect the individual differently than do extrinsic motivations.
In this way, highly spiritual persons tended to have lower death anxiety (Alvarado, Templer, Bresler & Thomas-Dobson, 1995; Iammarino, 1975; Leming, 1979-80; Lester, 1972; Lester & Templer, 1992-93; Lonetto & Templer, 1986; Minear & Brush, 1980-81). Conversely, an extrinsic orientation toward religion may be positively related to death anxiety (Cole, 1978-79; Leming, 1979-80; Maltby & Day, 2000; Swanson & Byrd, 1998). “Faith” could be seen as being more important or effective than “good works” (Alvardo et al.).

Only one study examined religiosity and death anxiety among adolescents. Young and Daniels (1981) indicated that adolescents who evidenced a greater degree of religiosity on an ideological level also tended to exhibit a greater fear of death. Conversely, adolescents exhibiting lower levels of religiosity on the intellectual scale tended to have greater fear of death. Subjects with more liberal denominational affiliations tended to exhibit greater death anxiety and those who reported to be “born-again Christians” exhibited lower levels of death anxiety (Young & Daniels, 1981).

There is a noticeable information deficiency regarding adolescent death anxiety in relation to religiosity. Research needs to address this void and incorporate religiosity as a variable. As religiosity has been found to be a critical factor in death anxiety for adults, it should be included in adolescent research. In developing concepts of death and spirituality, adolescent views of death and mortality may be personally fashioned, perhaps altering death anxiety. The present research maintained a focus on religiosity and death anxiety for the general adolescent population.
Bereavement and religiosity

Past research has reported a variety of viewpoints concerning bereavement and religiosity for the adolescent. In determining positive aspects of religion and spirituality in adolescents' lives following death, Gray (1987) found that religion and spirituality were determinants of lower depression. Balk (1983) asserted that religion was of greater importance following a death and that positive values related to religion and spirituality were evident in the aftermath of grief. Additionally, bereavement can lead to a time of spiritual growth and renewal (Balk, 1983; Cullinan, 1993) and death could be a catalyst for spiritual development (Batten & Oltjenbruns, 1999). Negative aspects in the relationship between religiosity and bereavement were also cited as religion may represent a sense of betrayal (Cullinan) or abandonment (Balk, 1991).

Beliefs and rituals, components of religion, also contain positive and negative components. Rituals can be a comfort to the individual or they can create pain (Doka, 1993). Rituals can facilitate mourning (Worden, 1991) or they can impede resolution of the tasks of grief (Davies, 1995; Doka).

Many areas related to adolescent bereavement and religiosity need further development. Regarding death anxiety, the role of religious behaviours and bereavement is an area that has not been examined. The following questions highlight some possible areas for research. Is the death anxiety level of bereaved adolescents significantly different from non-bereaved adolescents after controlling for the effects of religious behaviours? Following the death of a family member is the adolescents' faith system a component of death anxiety; if the individual believes strongly in a punitive afterlife, will this relate to death anxiety?
Research Questions

Bereavement, religiosity and death anxiety was investigated within the adolescent population. A broad focus on death anxiety and the adolescent was addressed while a more specific investigation into bereavement and religiosity will be incorporated. To address limited adolescent research on bereavement, religiosity and death anxiety, the following research questions were explored in this study:

1. a) Is there a statistically significant difference in death anxiety between adolescents who have experienced the death of a family member and those who have not?
   b) Among adolescents who have experienced the death of a family member, is there a relationship between their level of grief and general death anxiety?
2. What is the relationship between religiosity and death anxiety for the adolescent?
3. What is the relationship of death anxiety to bereavement and religiosity for the adolescent?
CHAPTER 3: RESEARCH METHODOLOGY AND PROCEDURES

Participants

Adolescents in this study were students attending independent schools in Manitoba; of the 226 participants 130 (57.5%) were female and 95 (42.0%) male. Students’ ages ranged from 11 to 18, with a mean of 14.82 ($SD= 2.002$). Independent schools were chosen to decrease the time needed to conduct the study and simplify access to potential participants. Within many of Manitoba’s public school divisions, there exist ethics boards that review and determine which research studies can proceed within the particular school division. As these ethics committees commonly meet semi-annually, the procedure was generally regarded as time-consuming. As the independent schools in Manitoba do not have an ethical committee governing research within the schools and decisions on research projects are typically made by individual administrators, independent schools were approached.

Four of the five schools contributing to the project were religious institutions; 162 (71.7%) of the participants attended schools supported by Mennonite churches and 64 respondents (28.3%) were from an independent school with no religious affiliation (Table 2). Regarding religious affiliation, 107 (47.3%) of the students indicated that they were Mennonite, 31 (13.7%) documented no religion and 88 (38.9%) were of other religious backgrounds such as Roman Catholic, Anglican, United Church, Lutheran and Jewish.

In response to the question “In your family, have your grandparent(s), parent(s), brother(s) or sister(s) died?” over 60% (138) of the respondents reported a familial death. The number of deaths varied between 1 and 4 with an average of 1.69 ($SD= 0.778$). As is shown in Table 2, the most frequently disclosed death was that of a grandparent; the
Death Anxiety and the Adolescent

death of 1 mother, 6 fathers, 3 sisters and 4 brothers was reported compared to 66 grandmothers and 117 grandfathers.

Table 2

*Descriptive Statistics of Reference Person (N=226)*

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<th>Number</th>
<th>Percent</th>
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### Characteristic

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<th>Percent</th>
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### Family Death

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### Instruments

**Definitions**

**Death Anxiety:** the level of negative stress concerning death that an individual experiences (Fortner & Neimeyer, 1999) which can be caused by anticipation of the state of death, including related aspects such as fear of dying or death of significant others (Tomer, 1992). Death anxiety was measured using the Revised Death Anxiety Scale (Appendix C-1) developed by Thorson and Powell (1992).

**Religiosity:** measures of religiosity consist of both religious beliefs and religious behaviours (Fortner & Neimeyer, 1999). Measures of religious belief evaluate the extent of commitment to belief through religious behaviours both intrinsically and extrinsically motivated. The measurement of religious behaviours involves determining the frequencies of behaviours associated with religious beliefs such as attendance at a place
of worship, reading of holy books, and praying. In this study, religiosity was measured using the “Age Universal” I-E Scale-12 (Appendix D) developed by Gorsuch and Venable (1983) and amended by Maltby (1999).

**Bereavement:** in this study, adolescents having experienced the death of a family member were termed “bereaved.” A family member consisted of a sibling, parent, or grandparent. A single question asked the adolescents “How many people in your family (grandparent, mother, father, sisters, brothers) have died?” If subjects experienced the death of a family member, they were asked to complete Hogan Bereavement Inventory (Appendix E-1) (Hogan & DeSantis, 1996), which measures grief and personal growth due to bereavement. Permission to use this scale was granted by Hogan (Appendix E-2).

**Scales**

To complete the research on death anxiety, religiosity and bereavement, participants were asked to complete one questionnaire containing three scales. These pen-and-paper questionnaires were self-administered within the school, either in the classroom or library setting. On the questionnaire (Appendix L) there were additional questions regarding age, gender, and religious affiliation. The following is an overview of the three scales used in the study.

**Death Anxiety:** Several measures are available to measure death anxiety, yet the most commonly used method is the Death Anxiety Scale (DAS) developed by Templer in the early 1970’s (Kelly & Corriaveau, 1985; Lonetto & Templer, 1986; Thorson & Powell, 1992). The DAS contains 15 true or false items and it was developed to assess a range of life and death experiences (Hunt, 2000). However, the DAS is not sensitive to age differences (Thorson & Powell). Therefore, the Revised Death Anxiety Scale, a 25-item
device was utilized for the present study (Appendix C). This scale has an acceptable level of reliability in large diverse samples where the Cronbach alpha of reliability is .804 (Thorson & Powell). Additionally, “the scale has shown to be age-sensitive, and it has been utilized in several studies demonstrating differences in the elements that make up the construct of death anxiety” (Thorson & Powell, p. 519).

Religiosity: The distinction between an intrinsic and extrinsic orientation towards religion (I-E) is useful in the research of religious attitude and behaviour (Maltby, 1999; Gorsuch & Venable, 1983). An intrinsic orientation is generally viewed as a deeply personal where respondents are living their religion (Allport & Ross, 1967; Maltby). In contrast, an individual having an extrinsic orientation towards religion has a more self-serving approach (Genia, 1993) where he or she places an emphasis on religion as membership in a powerful in-group, providing protection, consolation and social status (Allport & Ross).

The Religious Orientation Scale by Allport and Ross (1967) is the most commonly utilized measure of intrinsic and extrinsic orientation toward religion (Maltby, 1999). The Religious Orientation Scale contains 20 items where 11 measure the extrinsic nature and 9 the intrinsic motivations of the individual (Allport & Ross). Since the inception of the Religious Orientation Scale (Allport & Ross), there have been many developments to advance its use. Specifically, the development of an ‘Age-Universal’ I-E Scale (Gorsuch & Venable, 1983), a modification of the Religious Orientation Scale, was produced to be used with children and young adults. This age universal scale also has 20 questions and the scale was determined to be reliable and valid with alpha coefficients of .75 for E and .68 for I (Gorsuch & Venable).
A subsequent modification of the ‘Age-Universal’ Scale was completed by Maltby (1999) to improve the measurements of intrinsic and extrinsic religiosity. This scale, the ‘Age-Universal’ I-E Scale-12, consists of 12 questions; analysis indicated three clear components emerging from the scale: intrinsic, extrinsic-personal, and extrinsic-social (Maltby). The new scale builds on that of Gorsuch and Venable (1983). “With this, the present findings suggest a scale which can be used among a number of samples, among adults and school children and among religious and non-religious individuals” (Maltby, p. 411). The scale, however, does not employ holistic language that would be inclusive of all religious communities. The presence of words such as “God” or “church” implies a Christian perspective. For this study, a modification of the scale altered four of the questions to more accurately reflect the general population. These modifications (identified with italics) were:

1. a) I have often had a strong sense of God’s presence.
   
   b) *I have often had a strong sense of a supreme being’s presence.*

2. a) I go to church because it helps me make friends.
   
   b) *I go to a place of worship because it helps me make friends.*

3. a) I go to church mainly because I enjoy seeing people I know there.
   
   b) *I go to a place of worship mainly because I enjoy seeing people I know there.*

4. a) I go to church mostly to spend time with my friends.
   
   b) *I go to a place of worship mostly to spend time with my friends.*

The modified version of this scale was utilized in the research project (Appendix D).
Bereavement: The Hogan Inventory of Bereavement (Appendix E-1) was utilized in this research project in an attempt to clarify the bereavement process. The Hogan Inventory of Bereavement was formerly named the Hogan Sibling Inventory of Bereavement. The instrument is used as much for parentally and peer bereaved children and adolescents as it is for those whose sibling died and therefore the word sibling was dropped from the title (Hogan, personal communication, July 8, 2002). The Hogan Inventory of Bereavement (HIB), consisting of 46 questions, was developed empirically from data collected through bereaved adolescent following the death of a sibling (Hogan & DeSantis, 1996).

Within the HIB, two factors emerged during factor analysis: grief (alpha = .90-.95, 24 items) and personal growth (alpha=.88-.90, 22 items) (Neimeyer & Hogan, 2001). Two statements from the grief subscale are “I am uncomfortable when I am feeling happy” and “Family holidays such as Christmas are sad times for my family.” Examples of statements measuring personal growth include “I am a more caring person” and “I have changed my priorities.” The Hogan Inventory of Bereavement subscale scores should not be totaled and reported as a single score; therefore, summing the items in each subscale completes scoring for the HIB.

Procedure

Following approval by the Joint Faculty Research Education Board (JFREB), see Appendix Q-1, at the University of Manitoba, a letter containing a brief overview of the research project (Appendix F) was sent to the administrators of the 10 independent schools listed in Appendix A. Seven days after the letter of invitation was sent, a follow-up phone call (Appendix G) was placed. The purpose of this phone call was two-fold:
to determine the interest level of the administrator and to establish a meeting time to discuss the research in more detail. Of the ten administrators contacted, seven expressed interest in the project and three did not. Of the three who did not feel that they could assist with the project, reasons were cited such as lack of time, lack of teacher interest, and the fact that the researcher was not an alumna. Of the seven expressing interest, two administrators put the researcher directly in contact with an assisting teacher to finalize plans, but even after repeated attempts, the teachers did not return calls and the schools were cancelled from the project. The schools of the remaining five administrators formed the core of the research project.

All of the administrators discussed the fact that a research study on eating disorders had been conducted in their school the previous year; the success of the schools’ involvement varied with each school and seemed to shape the willingness of the administrator to take on another research project.

If the administrator agreed to a meeting, greater detail of the research project was provided either in person or over the phone. Specifically, the questionnaires were reviewed, ethical guidelines were explained, consent procedures were detailed and protocol appropriate for the school was established (Appendix H). With the rural independent school, the administrator requested the researcher e-mail all the documents and in this way was able to review them with the staff. Of the five administrators who agreed to hearing further details, all approved involvement of his or her school. One was able to coordinate the entire school’s participation but a more common route was to involve several classes from the school. Once approval was given to proceed, data
collection in the particular school began. Data collection took place from February 5 to March 6, 2003.

During this initial time of determining interest in the project, the greatest difficulty was making direct contact with the administrators; their lack of time to return calls was at times wearisome. Additionally, the school calendar (revolving around holidays and exams) and available times created scheduling difficulties. Overall, the process to involve schools was more time-consuming than anticipated.

As required by the JFREB, informed consent in writing was obtained. Adolescents are a vulnerable population due to their ages, and so informed consent was obtained from both parents and students. The consent form (Appendix J) containing a brief overview of the research project was given to each student. The researcher introduced the project to the majority of the students who were involved. Due to time constraints, one of the teachers introduced the project to three of five classes participating in the project. Before the administration of the questionnaires, the researcher or teacher provided another verbal explanation of the project, including details that the adolescent needed to personally consent to the procedure (Appendix K). Questionnaires were completed within the school classroom or library. Where individual classes were involved with the project, the researcher administered the questionnaires. In the situation where an entire school participated, classroom teachers were provided with specific instructions for administration and the researcher monitored the process. In all cases, the administration of the questionnaires involved very few difficulties. By bringing additional questionnaire or crossword packages, problems were quickly averted. It generally took the students between 20-30 minutes to complete the questionnaire.
The research did not involve deception and careful measures were taken to preserve anonymity and confidentiality. Confidential records did not need to be consulted at any time and at no time in the research project were students asked to identify themselves. Records of the questionnaires were kept in a locked filing cabinet at the researcher's home where the only people with access to the files were the researcher and faculty advisor (Dr. John Bond Jr.). Records will be destroyed with a shredding machine seven years after the research project has ended.

To ensure confidentiality, the subsequent process was implemented. Following the introduction to the research project by the researcher or teacher, consent forms for the study (Appendix J) were given to the adolescents. The students had instructions to either send in the consent form (postage paid by researcher) or return the form to the classroom teacher by a specified date. Four of the five schools followed the initial protocol of mailing in the consent forms directly to the researcher (Appendix Q-1). After application was successfully passed by the JFREB to have the classroom teacher collect the consent forms (Appendix Q-2), the process of consent form collection was more effective; the revised process was advantageous to the research project as it was both less expensive and resulted in a higher response rate. There were 646 consent forms distributed and 253 consent forms returned. For all of the forms returned, consent was given. Apparently, if a parent did not want his or her child to participate, the form was not returned. The teacher provided the researcher with a class list and once the researcher had received the forms from students with consent, packets were created. Each student in the class received a package; students with consent had an envelope with the questionnaire (Appendix L) whereas those without consent received one containing crossword puzzles.
and word searches (Appendix M). The name of each student was written on the tab of each envelope. After students received the envelopes and before opening them, instructions were given to rip off the tab where the name was identified thus removing any form of identification. Following completion of the questionnaire or crossword puzzle, students returned their forms to the “tab-less envelope” and submitted it. In this way, the researcher ensured confidentiality and anonymity. Of the 253 students with consent, 226 completed the survey; students absent from school during data collection were unable to participate.

The risk due to participation was minimal. While adolescents are not commonly asked to report their feelings on death or anxieties, the questions did not seem to produce any significant negative stress. From time to time, students would write comments on the back of the questionnaires and from these comments, it was clear that the questions were not stressful. One student wrote “I thought that your questionnaire was very good. I found all the questions made sense and it really made me think. Although it was kinda dark.” After checking with teachers and administrators, the researcher was confident that the students did not suffer any ill effects. According to the teachers and administrators, there was generally little said about the project. Students were reminded at several stages of the project that they were not required to complete the questionnaire if they did not feel comfortable and to follow-up with the school counselor. At one point, a student did ask the researcher if he needed to finish the questionnaire. After some discussion, he admitted he had not thought about death “enough” and so he was not sure if it made sense for him to try and answer the questions; he was worried that he would answer questions incorrectly. Following a brief explanation of data analysis, the student was satisfied that
his answers could not be singled out and thus he continued to work on the questionnaire. Again, through discussions with the school counselors, there was no indication of further counseling relating to the research project being necessary.

Subjects were not compensated by the researcher for their voluntary participation. Feedback in the form of a summary of the results will be made available to the schools upon completion of the research project (Appendix P).

Data Analysis

Dependent variable

The dependent variable was the death anxiety score. Although death anxiety responses are measured using a Likert-type response that implies ordinal level of measurement, the final death anxiety score was treated as an interval level variable. The Revised Death Anxiety Scale (RDAS) is a robust scale that has been proven to be reliable ($\alpha = .804$) in past studies (Thorson & Powell, 1992). The statistical test employed, whether it is multiple regression, correlation or $t$-tests, is unaware of the empirical meaning of the numbers produced from the ordinal scale (Lord, 1953). Therefore, the dependent variable death anxiety was treated as an interval level variable.

Other death anxiety scales including Templer's DAS regularly utilize parametric tests such as ANOVA and regression to complete the analysis (Brubuck & Beer, 1992; Dattel & Neimeyer, 1990; Davis et al., 1978; Young & Daniels, 1980, 1981). This supports the claim that ordinal scales to measure death anxiety can be analyzed with parametric procedures. Death anxiety, measured in this study using the RDAS, was considered an interval level variable for the analysis. Using the Revised Death Anxiety
Scale, the range of scores could be between 0 (lowest) and 100 (highest possible score) with higher scores indicating higher death anxiety.

*Independent variables*

There were four independent variables: past experiences with death of a family member, religiosity, age, and gender. As with the dependent variable of death anxiety, both religious orientation and bereavement were measured using Likert-type scales that use ordinal measurement. Religiosity scales, including the ‘Age-Universal’ I-E Scale-12, have been regularly treated as interval level by researchers employing parametric analysis (Gorsuch & Venable, 1983; Maltby, 1999; Masten, 1994; Zaleski & Schiaffino, 2000). Similarly, bereavement studies recently completed using the Hogan Inventory of Bereavement also employed parametric analysis (Gamino, Sewell & Easterling, 2000; Hogan & DeSantis, 1996). Therefore, the robust nature of the scales has been demonstrated and the data from the scales were treated as interval level variables.

One characteristic of the reference person, gender, was measured with a dummy variable. Gender was coded as 1 if the reference person was male, 0 if female. In dummy variable regression, the analysis is made in comparison to the variable that is not listed and so this analysis compared males to the females. Age, measured on ratio level, was the final independent variable.

*Analysis*

The analysis of the data was completed using SPSS (version 11.0). To determine whether the data meet the assumptions for correlation and multiple regression, several tests were completed.
Assumption: There are 25-50 cases per variable. For the analysis, the sample size was 226 participants which exceeded the necessary minimum of 109 participants (Appendix B). As there were four independent variables, this minimum size was within the requirements for sample size.

Assumption: Sample is selected randomly. For the purposes of this study, the participants had to be between the ages of 11 and 19. Additionally, resources of time and cost were applied to the research methodology with the result that a purposive or convenience sample technique was employed. Therefore, the sample was selected from independent schools within Manitoba and only adolescent students were asked to participate. As class selection was not random (administrators determined which classes would be available for the study), a convenience sample was chosen (Jackson, 1999). As the sample was purposive, results were explorative and accepted with caution. This type of non-probability sampling technique is commonly used by researchers as it provides meaningful data (Jackson).

Assumption: Independent variables need to be measured on at least an interval level. To meet this assumption, a dummy variable was created for the independent variable gender. The independent variables of religious behaviours and bereavement, though measured ordinally, were treated as if interval level. Age was appropriately measured on an interval level.

Assumption: Data contain no outliers. To eliminate outliers, frequencies were run on the data. Cases were outliers were presented necessitated reviewing the original questionnaire. In all cases, outliers were due to data entry error and were then corrected.
Assumption: Data do not contain missing values. For both the religiosity and death anxiety scale, missing cases were given the value of 0 as determined by the scales' authors. Therefore, a blank answer was still tallied in the final score. In the bereavement scale, the instructions insisted that case-wise deletion be employed for missing cases.

Assumption: Data satisfy the assumptions of multivariate normality, multivariate linearity, and homoscedasticity (equal variances). To determine if the data met these assumptions, a regression was completed and a plot of the residuals and predicted values was evaluated. After reviewing the initial scatterplot, (Appendix N) it was determined that the dependent variable met the assumptions of normality and linearity but not equal variances. To transform the data to meet the assumption of equal variance, the log of the independent variable grief was completed. The data were once again plotted (Appendix N) and a minute improvement was present but it was not sufficient to meet the assumption of equal variance. Therefore the results of the regression were interpreted with caution.

Assumption: The independent variables are not multicollinear. To test this assumption, the tolerance statistics were examined to reveal the proportion of variability of that variable that is not explained by its relationship with other independent variables. The tolerance levels of the independent variables indicated that there was very little variability was explained by other variables (Appendix O).

Regarding the first research question whether the differences in the means of the death anxiety scores and previous experience with death were statistically significant, an independent t-test was employed. To decide whether there was a relationship between previous experiences with death anxiety, Spearman’s rank order correlation was utilized.
Spearmans’ rank order correlation, a nonparametric test, was applicable in this situation as it is appropriate to use with ordinal data and it does not make any assumptions regarding either the parametric mean or standard deviations (Sprinthal, 1990). The second research question regarding the relationship between religiosity and death anxiety for the adolescent was also analyzed using a correlation (Pearson Product Moment Correlation). Although the data were ordinal, the assumption was made that it can be interpreted and analyzed on an interval level, as the scales are robust. Therefore, Pearson’s correlation analysis was appropriate. The third research question, examining the relationship of death anxiety to bereavement and religiosity, was approached using multiple regression; to predict variations in the dependent variable (death anxiety score) from independent variables (religiosity, bereavement, age, and gender) regression was utilized.
CHAPTER 4: RESULTS

To measure the death anxiety level of the adolescents, the completion of the Revised Death Anxiety Scale (RDAS) was required. On the RDAS, the mean score for the sample \( (N=226) \) was 40.79 \( (SD=15.346) \) with scores ranging between 3 and 82 (scores can range from 0 to 100 where a higher score indicates a higher death anxiety level). For participants in this study, the Cronbach alpha of reliability for the RDAS was .8557. For the female respondents \( (n=130) \), the mean death anxiety score was 43.985 \( (SD=14.877) \), with scores ranging between 8 and 82; the mean death anxiety score for males \( (n=95) \) was 36.379 \( (SD=15.037) \), and scores ranged from 3 to 78. After completing a two-sample independent \( t \)-test to assess the differences between male and female death anxiety scores, it was found that there was a highly significant difference between males and females on death anxiety scores \( t(223)=-3.770, p<.001 \) (one-tailed), \( d=.50851 \).

Religiosity was measured using the ‘Age-Universal I-E Scale-12’ Religiosity Scale which calculates three components of religious behaviour: intrinsic (maximum score=12), extrinsic-personal (maximum score=6), and extrinsic-social (maximum score=6). A sample statement measuring extrinsic personal religiosity was: *I pray mainly to gain relief and protection*; extrinsic social religiosity: *I go to a place of worship mainly because I enjoy seeing people I know there*; intrinsic religiosity included: *It is important to me to spend time in private thought and prayer*. All participants \( (N=226) \) completed the religiosity scale. Within the intrinsic religiosity category, there was a range of responses from 0 to 12 with the mean of 6.323 \( (SD=4.51) \); extrinsic personal religiosity responses ranged from 0 to 6 with a mean score of 3.491 \( (SD=2.24) \); extrinsic
social religiosity responses also spanned from 0 to 6 with a mean score of 1.854 ($SD=2.49$). As minor variations in the wording were made by the researcher (Appendix D), the Cronbach alpha of reliability ($\alpha=.8997$) was calculated following administration of the scale.

The Hogan Inventory of Bereavement (HIB), completed by 138 participants who had experienced a death, consists of two separately scored factors: personal growth and grief. Scores for each factor ranged from 23 to 97. The mean score for personal growth was 57.669 ($SD=16.35$) and for grief, 40.525 ($SD=15.05$). The calculated Cronbach alpha of reliability for the grief subscale of the HIB was .9090 and the personal growth subscale was .9178.

To determine whether there was a significant difference in death anxiety between adolescents who have experienced a death of a family member and those who have not, $t$-tests were employed. Although adolescents may have attached meaning to a death that occurred before they were born, only those reporting a death over the duration of their lifespan were included for the analysis. Individuals who indicated no death in their family ($n=87, M=40.82, SD=15.33$) did not report a significantly different death anxiety level compared to those who indicated a familial death ($n=138, M=40.86, SD=15.43$), $t(223)=.022, p=.983$ (two-tailed), $d=.00260$.

A subsequent analysis of only those individuals who had experienced a death in their family ($n=138$) compared two subgroups: those with death(s) in the extended family (grandparent; $n=124$) and those with a death in their immediate family (parent or sibling; $n=14$). Results indicated that there was no significant difference between the death anxiety of an adolescent who had experienced the death of an immediate family
member (M=44.57, SD=15.75) compared to an adolescent who had experienced the death of an extended family member (M=40.85, SD=15.35), [t(99)= -.839, p= .404 (two-tailed), d=.239201].

To explore the relationship between bereavement (grief and personal growth) and death anxiety levels of adolescents who had experienced the death of a family member (n= 138), two-tailed Spearman’s rank order correlation coefficients were calculated (Table 3). There existed a strong positive relationship (r=.437, p<0.01) between grief due to bereavement and general death anxiety. The correlation between personal growth from bereavement and death anxiety, though positive (r= 0.105) was not significant at the 0.05 level of significance (p=.197). An unanticipated finding was revealed in a significant positive correlation between personal growth and grief (r=.386, p<.01).

Table 3

Correlations Between Death Anxiety and Bereavement for the Adolescent

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Death Anxiety</td>
<td>_</td>
<td>.105</td>
<td>.437*</td>
</tr>
<tr>
<td>2. Personal Growth</td>
<td>_</td>
<td></td>
<td>.386*</td>
</tr>
<tr>
<td>3. Grief</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the .01 level (2-tailed).

The second research question pertains to the relationship between religiosity and death anxiety for the adolescent. Of interest was the link between religiosity and death anxiety for the adolescent (N=226) and to analyze this, the Pearson Correlation was used (Table 4). The correlation between death anxiety and extrinsic personal religiosity though weak (r=.142) was significant (p=0.033). There was no significant relationship
between both death anxiety and intrinsic social religiosity ($r=-.004$) or extrinsic social religiosity ($r=.078$).

Two findings were seen in the links among the religiosity categories (Table 4). There was a significant correlation between extrinsic social and extrinsic personal religiosity ($r=.238, p<0.001$) and extrinsic personal and intrinsic religiosity ($r=.557, p<0.001$). Possible reasons for these significant relationships will be discussed in the following chapter.

Table 4

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Death Anxiety</td>
<td>___</td>
<td>-.004</td>
<td>.142*</td>
<td>.078</td>
</tr>
<tr>
<td>2. Intrinsic Religiosity</td>
<td>___</td>
<td></td>
<td>.557**</td>
<td>.112</td>
</tr>
<tr>
<td>3. Extrinsic Personal Religiosity</td>
<td>___</td>
<td></td>
<td></td>
<td>.238*</td>
</tr>
<tr>
<td>4. Extrinsic Social Religiosity</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * Correlation is significant at the .05 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed)

As the majority of the students attended Mennonite schools, an examination comparing students at religious based and non-religious based schools was appropriate. A two-tailed $t$-test was performed to examine potential differences between students of religious and non-religious institutions on the meaning of religiosity and death anxiety. In this sample, there were 162 students who attended religious institutions and 64 who attended a non-religious school, and statistics comparing the two groups signaled critical differences. Intrinsic religiosity levels for students in religious institutions ($M=7.32$, $SD=4.32$) compared to those in a non-religious school ($M=3.79$, $SD=4.01$) were
significantly greater \[t(224)=5.632, p<.001, d=.84695\]. Similarly, the examination of extrinsic personal religiosity levels were significantly higher \[t(224)=4.868, p<.001, d=.69000\] between the students attending a secular institution (\(M=2.39, SD=2.45\)) and those in a religious school (\(M=3.93, SD=1.99\)). Likewise, extrinsic social religiosity levels for those in religious institutions (\(M=2.223, SD=2.58\)) and the non-religious institution (\(M=.91, SD=1.97\)) showed significant differences \[t(224)=3.695, p<.001, d=.57202\].

Continuing the comparison of students in religious based and non-religious based schools, the link between religiosity and death anxiety was assessed using Pearson Correlation (Table 5); each school will be discussed in turn. For those in religious based schools \((n=162)\), the correlation between death anxiety level and extrinsic personal religiosity though weak \((r=.176)\) was significant \((p=0.025)\). No relationships were found between death anxiety scores and intrinsic religiosity levels \((r=-.041)\) or extrinsic social religiosity \((r=.105)\). For students in non-religious based schools, there were no significant relationships between any of the religiosity variables and death anxiety scores.

The relationships between religiosity scores indicated greater variation between the schools (Table 5). For the faith-based institutions, there was a significant correlation between extrinsic personal and intrinsic religiosity \((r=.410, p<0.001)\); the non-religious institution had several significant correlations: extrinsic personal and intrinsic religiosity \((r=.729, p<0.001)\), intrinsic religiosity and extrinsic social religiosity \((r=.350, p=0.005)\), and extrinsic personal and extrinsic social religiosity scores \((r=.299, p=.016)\).
Table 5

*Correlations between Death Anxiety and Religiosity- Mennonite Schools (Non-Mennonite School)*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Death Anxiety</td>
<td>_</td>
<td>-0.041 (.199)</td>
<td>0.176* (.176)</td>
<td>0.105 (.089)</td>
</tr>
<tr>
<td>2. Intrinsic Religiosity</td>
<td>_</td>
<td>_</td>
<td>0.410** (.729**)</td>
<td>_</td>
</tr>
<tr>
<td>3. Extrinsic Personal</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>0.138 (.299*)</td>
</tr>
<tr>
<td>Religiosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Extrinsic Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religiosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* * Correlation is significant at the .05 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed)

The third and final research question, "What is the relationship of death anxiety to bereavement and religiosity for the adolescent?" was analyzed using multiple regression. The multiple regression analysis model (Table 6) was significant with an $R^2$ of .225, $p<.001, \ F=13.85$; 22.5% of the observed variability in death anxiety levels of adolescents was explained by the independent variables. The standard method of multiple regression was used as there no available theory to determine which variables had greater importance; all variables had equal weight when entered into the regression analysis.
Table 6

*Summary of Dummy Variable Hierarchical Regression Analysis for Variables Predicting Death Anxiety Levels in Adolescents Ages 11-18 years (N=226)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.925</td>
<td>.693</td>
<td>.115</td>
</tr>
<tr>
<td>Male (female) „</td>
<td>-4.870</td>
<td>2.747</td>
<td>-.157</td>
</tr>
<tr>
<td>Intrinsic Religiosity</td>
<td>-.315</td>
<td>.376</td>
<td>-.096</td>
</tr>
<tr>
<td>Extrinsic Personal Religiosity</td>
<td>.504</td>
<td>.742</td>
<td>.076</td>
</tr>
<tr>
<td>Extrinsic Social Religiosity</td>
<td>-.115</td>
<td>.528</td>
<td>-.019</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>-.0036</td>
<td>.089</td>
<td>-.036</td>
</tr>
<tr>
<td>Grief</td>
<td>43.694</td>
<td>9.749</td>
<td>.414*</td>
</tr>
</tbody>
</table>

Note: R² = .225; Adjusted R² = .177 (p<.05).
*p<.05
a. reference category in parentheses

The only significant factor contributing to death anxiety of this regression model is grief, one component of the bereavement scale as seen in the regression equation:

Predicted Death Anxiety = -38.024 constant + .925(age) - 4.87(sex) -.315(intrinsic religiosity) + .504(extrinsic personal religiosity) - .115 (extrinsic social religiosity) - .0036 (personal growth) + 43.694 (grief)

For variables with a positive value (age, extrinsic personal religiosity, grief), the predicted value of the death anxiety level increased when the value of the independent...
variable increased and the opposite was true for variables with a negative value (sex, intrinsic religiosity, extrinsic social religiosity, and personal growth).

It appears that religiosity, age, sex and personal growth from bereavement had no significant independent contribution to the death anxiety experienced among adolescents in this investigation. Although sex differences in the RDAS were significant when examined using a t-test, gender was not found to be a significant independent contributor to the model. From the dummy variable regression model where 0 = female and 1 = male, males would have a decrease in death anxiety score of 4.87 provided that all other variables were held constant whereas females would experience a uniform (constant) death anxiety when grief due to bereavement was held constant. These findings, bolstered by earlier t-test analysis, indicated that death anxiety experienced among males was lower in scale than that of females.

The only factor independently contributing to death anxiety was grief due to bereavement. This observation was validated by the strong correlation found between death and grief due to bereavement reported earlier. Although personal growth, an accompanying factor within bereavement, was not found to be a significant independent component of the regression model, this was also supported by an earlier computation of a weak correlation. The observations that all three factors within religiosity had no contribution to the death anxiety experienced among adolescents were also endorsed by the weak and non-significant correlations between death anxiety and religiosity.
CHAPTER 6: DISCUSSION

It was the purpose of this study to draw attention to the potential influences of religiosity and bereavement to the death anxiety level of the adolescent. The findings of this research reinforced that the factors of death anxiety are multi-faceted; different relationships in varying degrees of significance were evident among variables. At the forefront, however, was the finding that grief due to bereavement was a significant predictor of death anxiety. The following discussion will explore these findings. Infused within this discussion will be relationships to the theoretical groundings of symbolic interactionism, Cleiren’s model of bereavement (1993), Moos and Schaefer’s crisis theory (1986), and Figley’s theory of traumatology (1983).

The first research question explored the possibility of a significant difference in death anxiety between adolescents who had experienced the death of a family member and those who had not. Subsequent analysis of the type of familial death (extended or immediate family member) on the adolescent was conducted. It was also investigated whether, among those adolescents who had experienced a familial death, there was a relationship between bereavement and death anxiety. As the results indicated, the death anxiety level of an adolescent who had experienced a familial death (extended or immediate) was not significantly different than those who had not experienced a death at all.

The lack of significant differences is noteworthy given the debate raised by Lester and Templer’s two factor theory of death anxiety (1992-93). In this theory, it is asserted that previous experiences with death should be significant determinants of death anxiety; with an increase in death related experiences, there would be a decrease in death anxiety.
Accordingly, individuals with little or no death experience would tend to have a greater death anxiety level. Cleiren’s model for bereavement (1993) also supports this theory where “learned resourcefulness” due to past bereavement experience was believed to create an advancement of ideas and additional mastery skills. For example, as adolescents experience familial death(s), they will learn accompanying emotions and different coping mechanisms; greater psychosocial resources would be available to them with each experience, and they might be able to comprehend death differently which in turn may decrease death anxiety levels. Previous research had supported this theory (Brent, Speece, Gates, Mood & Kaul, 1991, Lester & Templer) yet a study by Fanos (1996) on the death anxiety levels of children was contradictory. In her study, death anxiety levels actually increased subsequent to a child’s death experience (Fanos, 1996). Like Fanos’ study, this current research of adolescents indicates that the average death anxiety levels were higher for those who had experienced a death (although not significantly higher) than those who had not. The tenets of the above mentioned theories imply that those differences should have been reversed: the death anxiety levels of those who had not experienced a death should have been higher than those who had.

To determine whether death anxiety levels varied according to the number of deaths experienced, independent samples t-tests were performed. Results indicated that of the 47.8% respondents reporting one familial death, death anxiety levels ($M=40.5313$, $SD=14.35$) were not significantly different than those individuals reporting two or more familial deaths ($M=40.5294$, $SD=15.50$). This would further argue against the two-factor theory as the death experience(s) of the adolescent would seem to leave the death
anxiety level relatively unaltered. The fact that death occurs in the lives of adolescents seems to do little to alter death anxiety levels.

An unexpected finding was the nonsignificant differences in death anxiety levels when comparing the experiences of the death of an immediate to extended family member. As immediate family was shown by Bibby (2001) to be an adolescent’s primary resource, it was assumed that the death of a parent or sibling would have a greater effect, apt to be negative, resulting in higher death anxiety; the lack of difference may underscore a need to probe further into similarities and dissimilarities between immediate and extended families. The “resource” of family, which provides many aspects of social support and often defines the context of the environment (Cleiren, 1993), may not have as much strength as once perceived.

For the current study, a possible explanation and limitation of the previous finding was the small sample size ($n=14$) for those who reported a death in the immediate family. Additionally, within this sample there was great variation in both time since death and the family member who had died. Two examples from adolescents experiencing the deaths of a father, grandmother and grandfather clarify the diversity. The first adolescent (18 years old) experienced the death of a father at age 6, the death of a grandmother at age 16, and the death of a grandfather at age 9; deaths of both immediate and extended family members were experiences over a 10 year span. Conversely, the other adolescent (15 years old) experienced the deaths of both the father and grandmother at age 10 and the grandfather at age 5 which is a 5 year span. While the grieving process is unique to the individual (Christ, Siegel, & Christ, 2002), the length of time since death and the relationship to the deceased may be significant components to
predict death anxiety. Relationships between family members are not homogeneous: as one student remarked off-handedly “you must think that I actually care about my brother... well, I care a lot more for my dog.” Due to the small sample size, the research could not explore variables such as time since death, types of death, or strength of relationship to the deceased; there is room for further investigation.

Female adolescents reported significantly higher death anxiety levels than males. This finding lends support to the growing body of literature concluding that women report more anxiety about death than do men (Davis et al., 1983; Davis, Martin, Wilee & Voorhees, 1978; Iammarino, 1975; Lometto & Templer, 1986; Sanders, Poole & Rivero, 1980; Siscoe, Reimer, Yanovskky, Thomas-Dobson, & Templer, 1992; Thorson & Powell, 1988; Thorson & Powell, 1993; Young & Daniels, 1980). The explanations for these differences have included the argument that women are more willing to admit troubling feelings than are men (Noppe, 1999; Stillion, 1984, Young & Daniels, 1981). Similarly, those differences may be attributed to culturally produced sex-role expectations that males are expected to repress fears (Dattel & Neimeyer, 1990).

The second part of the primary research question investigated the adolescents who had experienced the death of a family member. In the specific examination of the adolescents who had reported a familial death, the experience of bereavement was scrutinized and relationships between bereavement and death anxiety were determined. Within bereavement, two factors exist: grief and personal growth. Each will be discussed in turn as they relate to death anxiety for the adolescent. Although several students seemed to attach meaning to a death occurring before their own birth as they completed the bereavement section, only responses of adolescents experiencing a death during their
lifetime were included within the analysis. It was beyond the scope of this study to analyze the symbolic meaning of death experienced by individuals over the lifespan. The data explored whether there was a relationship between their bereavement experiences of grief and personal growth to general death anxiety. As the factor "bereavement" had not been previously investigated in relation to death anxiety, the results are foundational.

The trajectory of grief, explained by Hogan and DeSantis (1996) contains a period of time when adolescents are "consumed by their irrevocably changed reality" (p. 249). As individuals sink further into this time of despair and hopelessness, general anxieties commonly increase and fears, panic and guilt are frequent emotions of the grief period (Hogan & DeSantis). Following this line of reasoning, it was not surprising to note a significant relationship between grief due to bereavement and death anxiety. An increase in grief due to bereavement coincided significantly with an increase in death anxiety level. This finding is in accordance with previous research (Gamino, Sewell & Easterling, 2000) that posits an existing positive correlation between anxiety and grief due to bereavement. Extending this general concept of anxiety to specifically include death anxiety, then, should not be inappropriate. After experiencing the death of a family member, concepts relating to death would most likely be foremost in the adolescents' minds; during the period of grief when anxieties and despair are high, it would make sense that the fear of death, and consequently the death anxiety level, would increase in turn. From a theoretical angle, Figley's theory of catastrophic experiences (1983), implies there is a period of time following the stressful event where immediate reactions lead to (a) a flight reaction or (b) denial and/or numbing. It is during this time period that grief reactions may be at their peak and also a time when death anxiety may be higher.
Several studies have shown that personal growth due to bereavement is negatively correlated with general anxiety (Hogan & DeSantis, 1996; Gamino, Sewell, & Easterling, 2000). On the basis of this research, the expectation would be that personal growth and death anxiety would be negatively correlated for the adolescent. Prior to the death of a family member, the adolescent’s identity is entwined with all of their family members. The death of a family member may cause the adolescent to alter priorities in questions of meaning in his or her life (Hogan & DeSantis, 1996). During this alteration of priorities, there commonly is a shifting of focus from egocentrism which then may lead to an increase in love, resiliency, and faith (Hogan & DeSantis). While this personal growth may have taken place in the adolescents surveyed, the positive relationship between personal growth due to bereavement and death anxiety was both weak and insignificant.

Looking again at the trajectory of grief may provide further insight. Gamino, Sewell and Easterling (2000) found that four factors of personal growth emerge as correlates of better adjustment, including the ability to see some good resulting from the death, having a chance to say goodbye, intrinsic spirituality, and spontaneous positive memories of the decedent. The implication is made that without presence of some or all of the factors, personal growth may not be a result of the bereavement trajectory.

Therefore, if the respondents in the survey did not experience positive growth it would become more understandable that the correlation between personal growth and death anxiety was not as predicted. If their grief experience did not include some aspect of personal growth, then it is quite possible that changes in death anxiety are not related to growth at all. Furthermore, the two studies cited (Hogan & DeSantis, 1996; Gamino, Sewell, & Easterling, 2000) dealt primarily with an examination of the effect of deaths
occurring within the immediate family. Within the current study, there were only 14 deaths reported that occurred within the immediate family; this small sample size would not have made strong relationships evident within the bereaved sample (n=138).

Although the significant relationship between personal growth and grief due to bereavement was an unexpected finding in the study, it speaks to the depth of the grief experienced by the adolescent. Returning again to the trajectory of bereavement (Hogan & DeSantis, 1996), where personal growth is experienced only after the adolescent is able to deal with grief, it is reasonable to see how the depth of grief would be related to the degree of growth. If, for example, an individual experiences the death of a person whom he or she does not know well, it would be likely that the grief experience would not be intense and the personal growth resulting from that specific bereavement experience would not be extensive. Conversely, if the death is meaningful to the adolescent, the grief experience may be more intense followed also by a period of personal growth similar in intensity.

This brings the discussion to the second research question of the study, “What is the relationship between religiosity and death anxiety for the adolescent?” Accepting that religion may be important in the lives of adolescents (Bibby, 2001) and anticipating that religious behaviours would be a determinant to quantify death anxiety levels, measures of religiosity were selected as variables for the study. As Thorson stressed, “depth of belief moderates anxiety, at least for some people” (1998, p. 58), which would accentuate the conviction that greater importance placed on religion may imply a lower death anxiety. Associations were investigated between extrinsic personal, extrinsic social, intrinsic religiosity and death anxiety for the adolescent.
While the results from the study confirmed this suspected association between extrinsic personal religiosity and death anxiety (Powell, Abdel-Khalek, & Beshai, 1997), it was a weak association. Furthermore, relationships between both intrinsic religiosity and extrinsic social religiosity to death anxiety were not apparent leading to the conclusion that the three factors of religiosity are not closely related to death anxiety for the adolescent population. For some, religion may serve as a comfort where one can believe in the promise of a life beyond death; religion may also provide an opportunity to socialize with friends or it may bestow a sense of being a part of something greater than oneself (Thorson, 1998). For the adolescent unconcerned with thoughts of life, death, and afterlife, religion may not be serving a function of solace assuaging death anxieties (Firestone, 1983). The vast complexities of religion may allow the adolescent to meet other individual needs of ritual, socialization, and pacification. Conversely, religion may be serving a consolatory function appeasing a different set of fears and anxieties altogether (Thorson).

Therefore, it was not surprising to note that students of religious institutions and those of the secular independent school had significant differences in religiosity scores; the students within religious institutions scored significantly higher on measures of religious behaviors. It is reasonable that those individuals attending schools that nurture faith ideals would place a greater importance on religion than do those of a secular institution.

In a subsequent analysis examining the associations between extrinsic personal, extrinsic social, intrinsic religiosity and death anxiety for the students within religious schools to those who attended a non-religious institution, substantial differences were
A noteworthy difference was evident in the correlation between death anxiety and extrinsic personal religiosity. For the students at the Mennonite independent schools, there was a small yet significant correlation between the two variables yet for the students attending a secular independent school, no relationship was apparent. As mentioned earlier, the results indicating that death anxiety scores may increase with higher levels of extrinsic religiosity are not novel; past research has also exposed this relationship (Powell, Abdel-Khalek, & Beshai, 1997). The fact that the correlation is weak may be related more to the age of the respondents than anything else.

The examination of the three religiosity variables (extrinsic personal, extrinsic social and intrinsic) indicated remarkable differences. For Mennonite school students, there was only one significant relationship and it was between intrinsic and extrinsic personal religiosity. However, for the students within the secular independent school, there were significant relationships among all measures of religiosity. The data from the Mennonite schools showed a strong significant relationship (r = .410) between the variables intrinsic religiosity and extrinsic personal religiosity but the strength of the relationship for those in the non-religious institution was dramatically larger (r = .729). Past research has done little to explain the connection among religiosity measures; the inter-connectedness of the variables within religiosity scales has not been evident within the literature. Rather, the variables are commonly discussed in relation to an outside variable (such as death anxiety). Possible reasons for the differences found in this study, therefore, are purely speculative. Perhaps the individuals within the secular institution had little knowledge of religious beliefs; their individual faith system had not been
“tested” until the research project. Therefore, discussions relating to religious behaviours all held the same significance to them and the differences were muddled. The significant correlates may indicate that the students within a non-religious institution mentally lumped the religiosity categories into one. Therefore, for the adolescent within the secular institution, there was little distinction between extrinsic and intrinsic religious questions which explains the strong correlations. As the students attending Mennonite institutions are involved with faith-related activities on a regular basis and may be able to distinguish differences between extrinsic and intrinsic religious motivation, the differences were not as apparent.

The third and final research question was intended to evaluate the relative weight of each of the variables for predicting death anxiety within the adolescent population. Through previous research, each variable has shown importance in the field of measuring death anxiety. Characteristics of the individual, age and gender, have also been noteworthy in prior studies involving death anxiety. As religious behaviors and beliefs may determine views of life and death, religiosity measures were critical to the analysis. All variables, those measuring religiosity, age, gender and bereavement, were thus entered into a regression equation as a means of predicting the death anxiety level of an adolescent.

Despite the proposed importance of each of the variables, only grief due to bereavement surfaced as a significant predictor of death anxiety for the adolescent. While it is logical to assume that a personal grief experience would shape the adolescent’s views on death and thus his or her death anxiety, the lack of significance for the other variables was not expected. The significant variable of the model, grief due to
bereavement, was supported with the earlier significant computation of correlational data between grief due to bereavement and death anxiety for adolescents. Moreover, the findings supported theoretical arguments by Hogan and DeSantis (1996) on the trajectory of adolescent grief following a familial death.

The non-significant factors of the model provided additional insight into death anxiety for the adolescent. As age has been found to be a significant factor when examining death anxiety in adults, it was unexpected that age was not significant for adolescents. The assumed developmental differences among adolescents where concepts of death may alter over the period of adolescence would imply that death anxiety levels would also indicate variation within the adolescent population. Reasons for the lack of difference found in the death anxiety levels for the adolescents in this study may illuminate similarities rather than differences in developmental issues for the adolescent.

As stated previously, adolescents have varied thoughts or understandings of death and in this transitional period their concerns may mirror either children or adults (Noppe & Noppe, 1997). Within the small age range of adolescence, great variation may exist due to experience with and knowledge of death. Students within the study commented with some regularity that they rarely thought about death which support the notion that for most adolescents, death is a concept or experience that is relatively foreign (Offer, Ostrov, Howard & Atkinson, 1988). For others who reported numerous death experiences, knowledge of death issues may have been heightened through experience.

Developmental theory as seen through Piaget's work (1972) indicates that the adolescent moves from concrete logical thought, where the individual has the ability to contemplate personal death through formal operational thinking. The age range of
adolescence was seen to be large enough to evidence great diversity in thoughts related to death. The findings of the study, however, indicate that age did not contribute to the death anxiety regression model. These findings contradict the work of Noppe and Noppe (1997) who found that middle school students were more concerned about the inevitability of death than were older adolescents. In their research, significant differences in death anxiety levels due to age were present. As was seen in an earlier study (Rasmussen & Brems, 1996), other variables such as psychosocial maturity may be a superior predictor of death anxiety than is age.

Although it was presented that the female respondents had significantly higher death anxiety scores than did males, gender was not found to be a significant independent determinant of death anxiety level. As prior research has only utilized the variable gender to compare means and test significant differences, a common finding is that females have significantly higher death anxiety scores than do males (Davis et al., 1983; Davis, Martin, Wilee & Voorhees, 1978; Iammarino, 1975; Lonetto & Templer, 1986; Sanders, Poole & Rivero, 1980; Siscoe, Reimer, Yanovskky, Thomas-Dobson, & Templer, 1992; Thorson & Powell, 1988; Young & Daniels, 1980). Within the regression model, these differences were not significant enough to be predictors of death anxiety levels.

The variables within religiosity (extrinsic personal, extrinsic social, and intrinsic) were also among those found to be nonsignificant predictors of death anxiety. While Bibby (2001) reported that adolescents consider religion to be a part of their lives, its connection to issues of death is not clear. Theoretical standpoints would assert that religion or spirituality may be a coping mechanism used to alleviate fears of death.
A variety of studies researching the adult population have concurred with this supposition; religiosity, and more specifically intrinsic measures of religiosity, have often been found to be related to lower levels of death anxiety in the individual (Leming, 1979-80; Lester, 1967; Lester & Templer, 1992-93; Lonetto & Templer, 1986; Minear & Brush, 1980-81; Thorson & Powell, 1990). Highly spiritual people tend to have lower levels of death anxiety. Extrinsic religious behaviours, conversely, have been found to be related to higher anxieties as it has been suggested that extrinsic motivations are not effectual coping mechanisms. The authors of a study on spiritual experience, church attendance and bereavement concluded that “those persons who simply perform religious rituals or attend church regularly do not necessarily cope better with bereavement or other personal crises” (Easterling, Gamino, Sewell & Stirman, 2000, p. 273). For the adult population, a generalization that religiosity can affect death anxiety levels may be accurate. For the adolescent, however, this generalization would not be possible in light of the results from this study. In particular, the variable of age may provide insight as spirituality and meanings of religious behaviours may dramatically change with time. Additionally, the coping mechanisms employed by adolescents may not be related to religious behaviours at all. The adolescent may be relying on self-esteem and ego identity as his or her source of strength (Noppe & Noppe, 1996).

Within the regression model of this study, the variable of “personal growth due to bereavement” did not contribute to death anxiety. While the predicted value of the death anxiety level was shown to decrease when the value of the personal growth variable increases, the variable in question had a value of - .00336 and was insignificant within
the model. This regression finding was supported by earlier correlational computations that the correlation between bereavement from personal growth and death anxiety was not significant. For these reasons, personal growth due to bereavement cannot be seen as a factor relating to adolescent death anxiety.

Limitations

A limitation of this study is the lack of generalizability due to the nature of sample collection; the purposive sample resulted in a fairly homogeneous sample of adolescents attending independent schools. As detailed earlier, independent schools were selected primarily due to constraints on the researcher's time. Completing this study in a public school setting would likely produce a sample more representative of the general Canadian population socially, economically, and culturally. While characteristics such as age and gender were acceptable in composition, the variable religion was skewed as over 47% of respondents reported a Mennonite religious affiliation. Although this large grouping allowed broad comparisons, it did not permit generalizations to other religious communities.

Furthermore, the sample sizes of students attending religious and secular institutions were not equivalent; in this study, there were approximately twice as many students attending religious institutions. As results indicated significant differences in religiosity scores when comparing the two types of institutions, perhaps the combination of the two groupings masked other differences in the general results. Distortions in the results may have resulted from this imbalance between students attending religious and non-religious institutions. Consequently, caution should be exercised when considering
these findings in relation to adolescents in the general population and future research should aim for greater balance for comparison of religious and non-religious institutions.

A second limitation was evident in data collection and more noticeably in response rates. The response rates from the four Mennonite schools ranged from 17.68% to 44.23% while the non-religious institution had a response rate hovering near 75%. The large difference in response rates was due primarily to an alteration in consent form collection. While the Mennonite independent schools followed the extremely time-consuming and costly protocol where students mailed consent forms directly to the researcher, the final school was given ethical approval was received for the classroom teacher to collect forms. In this way, the teacher could regularly encourage students to return forms (signed or unsigned) which increased return rates dramatically.

Along similar lines are limitations surrounding the understood purpose of the study. After hearing the introduction to the research project, students may have decided prematurely that they did not have anything to offer to the research. One principal commented to the researcher that a student had said “I would’ve liked to do the questionnaire but I didn’t have anyone die in my family so what was the use?” Believing that the research was solely about bereavement, students might have opted out of the study. This may also account for the high percentage of students reporting death(s) in the family. On the other hand, students may have simply felt uncomfortable discussing topics relating to death or anxieties, and, not wanting to expose a high anxiety level or enter an area of apprehension, again chose to not be a part of the study. Whether the introduction focused too heavily on bereavement or students misinterpreted the study’s focus of death anxiety with or without bereavement, the low response rates indicate that a
large adolescent population remained untapped. Given the approved ethical procedures, it was unethical for the researcher to contact students without consent and determine motives for non-participation.

A further limitation of this study was the small ($N=14$) sample that reported death in the immediate family. While the study was not designed to explore solely this type of death, a larger sample size would have made comparisons between immediate and extended family members more trustworthy. Moreover, within that small sample there existed many differences in factors such as time since death and family member who died which makes generalizations dubious. The comparisons between adolescents experiencing the deaths of immediate and extended family members need to be interpreted with caution.

The situation where multiple deaths were experienced is also a concern. Over half of the adolescents (52.2%) reporting a familial death experienced multiple deaths. These deaths frequently ranged over the entire life span of the adolescent where, for example, one grandparent may have died when the adolescent was an infant and another died when the adolescent was in childhood. As understandings of death vary greatly over the lifespan but especially in childhood (Piaget, 1972; Seifert & Hoffnung, 2000), bereavement measurements may not have been entirely accurate as details of the death experience may be nebulous. Thus, the factor of time since death may have been a complication in the situation of multiple deaths. Furthermore, several situations occurred where individuals had experienced the death of both an immediate and extended family member. As the bereavement scale did not limit to a specific bereavement situation, the adolescent generalized their bereavement experiences. Differences in bereavement
experiences relating to immediate family opposed to extended family may have been clouded due to this approach.

Implications and Suggestions for Further Research

This study provides useful research on death anxiety pertaining to the adolescent. Although many researchers have examined factors relating to death anxiety levels of the adult, few have used the adolescent perspective. The investigation into the effect of personal factors on death anxiety levels of adolescents laid the groundwork for further exploration.

Building on theoretical arguments presented by Moos and Schaefer (1986), three components (background and personal, event-related, and physical and social environmental) combined to determine the impact of a crisis. In essence, this study compared death anxiety levels of adolescents who were void of crisis to those who had experienced the crisis of a familial death. In the current study however, only demographic and personal factors were examined and those were limited to age, gender, religious beliefs, and previous experience with death. As ethnicity, self-concept, intelligence and socio-economic status are additional personal factors which may help to define death anxiety levels (Moos & Schaefer), further exploration is warranted. While research has tended to focus on personal factors of adults, it now needs to be specific to adolescents.

Whether an adolescent had experienced a familial death was unrelated to death anxiety levels. However, grief due to bereavement was a critical component in determining death anxiety. In light of this, examination into the characteristics of the death would be a critical component of further research. As anticipated deaths usually
have a different bereavement outcome than do unanticipated deaths (Cleiren, 1993), the effect on death anxiety may be very different when comparing type of death. Event-related factors such as type of death would need to be scrutinized with care as great variation exists in the bereavement experiences (Cleiren); death anxiety levels following, for example, a suicide or death after extended illness may show interesting difference. Moreover, the general categories of “anticipated” and “unanticipated” may not be enough to dissect the true meaning behind event-related factors. Within each broad category, it would be important to categorize the event to see the specific result. The concept of grief altering with type of experience could have interesting implications in the study of death anxiety.

Physical and social environmental factors were identified by Moos and Schaefer (1986) to measure social cohesion, which includes the accessibility of family relationships and the availability of support through friends (Balk, 1996). The closeness of the family ties may affect the crisis and resulting death anxiety level. Kinship relationships could provide critical information when discussing death anxiety. The concept of family as a resource, a tenet of Cleiren’s theory (1993) may be an interesting area to examine. Although relationship to deceased (immediate or extended family member) did not seem to be significant in this study, limitations discussed earlier identified small sample sizes of those experiencing deaths of immediate family members could have hampered the results. In a study designed to examine differences between kinship and type of death (event-related factors and physical and social environment factors), there is a strong indication that significant differences would be obvious (Balk, 1983, Balk & Corr, 1996; Cleiren, 1993; Davies, 1995); for example, the death anxiety
levels of an adolescent mourning the unanticipated death of a sibling compared to the individual bereaving the death of an ill grandparent should provide evidence of differences in death anxiety levels.

Another critical component of Moos and Schaefer’s model (1986) that requires further research is the role of coping skills on the outcome and death anxiety level. Many prominent researchers in the field of thanatology have suggested the religion offers to the individual a coping mechanism (Balk & Hogan, 1995; deVeber, 1995; Firestone, 1993; Fortner & Neimeyer, 1999). Religiosity, although its factors were not significant determinants of death anxiety, was seen to have significant variation among adolescents. Religion, therefore, is evidenced to be playing an important role in the lives of some adolescents. Other coping mechanisms, however, may play a more prominent role in the lives of adolescents. From an existential and psychoanalytic perspective, the arousal of death anxiety generally leads to an increased reliance on defensive behaviours (Firestone, 1993). Individual defenses such as self-nourishing habits, preoccupations with pseudo-problems, and progressive self-denial may be the dominant coping mechanisms that work towards alleviating the fear of death. Different coping mechanisms, other than religiosity, may be evident in individuals as they make efforts to avoid fears of death. Exploratory research in this area would require an initial search for the types of coping skills commonly utilized by adolescents followed by an examination into the significance of those coping skills on death anxiety.

Using the results of this study for adolescents in a practical way would be of greatest assistance to educators and others who work directly with adolescents. Relating to the educational needs of adolescents, it became clear through students’ comments
(written or verbal) that they did not think about death with any particular regularity. One grade seven student openly admitted that this was the first time he could recollect thinking about death; for those who had not experienced any kind of death, the questions may have seemed somewhat foreign and unusual. While that in itself is not a negative or worrisome item, it may become a problem when a death occurs in the adolescent’s life. Not having any prior experience or thoughts on death may create an instant crisis following a death. In discussing death concepts at a developmentally appropriate level, the shock of death may be lessened and coping mechanisms may be more obvious.

Additionally, the research proved that bereavement is related to change for the adolescent; the experience of grief can alter ideas and more specifically can increase death anxiety. If educators or counselors have knowledge of this significant relationship, they can look for evidence of bereavement that is maladjusted. More importantly, they can open the doors of communication to allay fears surrounding the death experience. Being able to field questions on death and bereavement can normalize the grief experience and perhaps lessen the death anxiety.

This research project was successful in demonstrating significant relationships between grief due to bereavement and death anxiety for the adolescent. Effects of religious behaviours on death anxiety, although insignificant, added depth to the ongoing exploration into the effect of religiosity on death anxiety. As the body of literature in this area expands, more specific aspects of death anxiety may be isolated.

In summary, possible relationships between religiosity and bereavement to death anxiety levels of adolescents were investigated. In determining the outcomes of life transitions, it was theorized that background, personal, event-related, physical, social and
environmental factors contribute considerably to death anxiety levels. For this examination on death anxiety, personal factors of age, gender, religious behaviours, and previous experience with death, were examined. Scales measuring religiosity (‘Age-Universal’ I-E Scale-12 by Maltby, 1999), bereavement (Hogan’s Inventory of Bereavement by Hogan, 2001), and death anxiety (Revised Death Anxiety Scale by Thorson & Powell, 1992) were compiled into one questionnaire. Within independent schools in Manitoba, 226 adolescents between the ages of 11 and 18 completed these pen and paper questionnaires during school hours. Results indicated that females exhibited significantly higher death anxiety levels than did males; differences between the death anxiety levels of adolescents having no previous experience with death and those who had experienced a death in the family were not significant; while religiosity levels were significantly higher for students attending religious institutions, the relationships between measurements of religiosity and death anxiety were weak or non-existent. Grief due to bereavement was found to be the major factor in determining death anxiety for the adolescent. The findings are congruent with the crisis theory (Moos and Schaefer, 1986) and support the position that personal factors such as grief due to bereavement and gender are important factors in death anxiety research. It is hoped these findings will provide direction for future investigation into the influence of other factors (event-related, physical, social and environmental) upon the death anxiety level of the adolescent.
References


### Appendix A

**List of schools contacted**

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<tr>
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<td>Ron Loeppky/ John Sawatzky</td>
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<td>Patricia Johnson</td>
<td>554</td>
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Appendix B

Sample Size Calculations*

Step 1: Decide on confidence level to be used.
95% confidence level will be used. $Z = 1.96$

Step 2: Select a major variable to determine sample size
The dependent variable “death anxiety” is measured on an interval level as it is a score. The general population’s death anxiety scores average is 51.85 with a standard deviation of 15.93 (Thorson & Powell, 1992).

Step 3: determine the minimum precision that would be acceptable
I chose to be within 3.0 points on the scale as my accuracy measure

Step 4: Compute Sample Size

\[
\text{Required Sample Size} = \frac{(\text{confidence limit})(\text{sd pop})}{(\text{equation squared})} \\
\text{(accuracy)}
\]

\[
1.96 (15.93) \\
\text{--------- (squared)} = 108.32 \\
3.0
\]

With a sample size of 109 we can be 95 percent confident that the population mean score is within 3.0 points of the sample mean.

Appendix C-1

*Revised Death Anxiety Scale*

1. I fear dying a painful death.
2. Not knowing what the next world is like troubles me.
3. The idea of never thinking again after I die frightens me.
4. I am not at all anxious about what happens to the body after burial.
5. Coffins make me anxious.
6. I hate to think about losing control over my affairs after I am gone.
7. Being totally immobile after death bothers me.
8. I dread to think about having an operation.
9. The subject of life after death troubles me greatly.
10. I am not afraid of a long, slow dying.
11. I do not mind the idea of being shut into a coffin when I die.
12. I hate the idea that I will be helpless after I die.
13. I am not at all concerned over whether or not there is an afterlife.
14. Never feeling anything again after I die upsets me.
15. The pain involved in dying frightens me.
16. I am looking forward to new life after I die.
17. I am not worried about ever being helpless.
18. I am troubled by the thought that my body will decompose in the grave.
19. The feeling that I will be missing out on so much after I die disturbs me.
20. I am worried about what happens to us after we die.
21. I am not at all concerned with being in control of things.
22. The total isolation of death is frightening to me.
23. I am not particularly afraid of getting cancer.
24. I will leave careful instructions about how things should be done after I am gone.
25. What happens to my body after I die does not bother me.

Appendix C-2

Permission Letter for the Use of the Revised Death Anxiety Scale

University of Nebraska at Omaha

Ms. Carla Ens

Winnipeg, Manitoba R3T 3X1
Canada

January 22, 2003

Dear Ms. Ens:

This is to give you permission to use our Revised Death Anxiety Scale in your thesis, to publish the RDAS and its items in your thesis, and to also publish the scale and its items in any subsequent articles or publications based upon your research. There is no charge for this, but we of course would be interested in seeing your results.

Enclosed are a few reprints on the development and uses of the RDAS as well as scoring instructions.

Best wishes for the success of your research project.

Sincerely,

James A. Thorson
Professor & Chairman

cc: Dr. Powell
Appendix D

The ‘Age-Universal’ I-E Scale-12*

1. I enjoy reading about my religion.

2. I go to a place of worship** mainly because I enjoy seeing people I know there.

3. It is important to me to spend time in private thought and prayer.

4. I have often had a strong sense of a supreme being’s** presence.

5. I pray mainly to gain relief and protection

6. I try hard to live all my life according to my religious beliefs.

7. What religion offers me most is comfort in times of trouble and sorrow.

8. My religion is important because it answers many questions about the meaning of life.

9. Prayer is for peace and happiness.

10. I go to a place of worship** mostly to spend time with my friends.

11. My whole approach to life is based on my religion.

12. I go to a place of worship** mainly because I enjoy seeing people I know there.


** revisions include substituting “a place of worship” for church and “supreme being” for God. See alternate wording in questions 2, 4, 10, and 12.
Appendix E-1

Hogan Inventory of Bereavement*

This questionnaire consists of a list of thoughts and feelings that you may have had since your grandparent, parent, brother or sister died**. Please read each statement carefully, and choose the number that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement that best describes you. Please do not skip any items.

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<td>3</td>
<td>Describes me fairly well</td>
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1. I believe I will lose control when I think about him or her....................1 2 3 4 5
2. I believe I am a better person..................................................1 2 3 4 5
3. I have grown up faster than my friends.......................................1 2 3 4 5
4. I am uncomfortable when I am having fun........................................1 2 3 4 5
5. I believe I am stronger because of the grief I have had to cope with...1 2 3 4 5
6. I have no control over my sadness................................................1 2 3 4 5
7. I have learned to cope better with my problems................................1 2 3 4 5
8. I believe I am going crazy.............................................................1 2 3 4 5
9. My religion has become more important to me......................................1 2 3 4 5
10. I want to die to be with him or her..............................................1 2 3 4 5
11. I am more tolerant of others...........................................................1 2 3 4 5
12. I am uncomfortable when I am feeling happy.....................................1 2 3 4 5
13. I have learned that all people die..................................................1 2 3 4 5
14. I should have died and he or she should have lived.............................1 2 3 4 5
15. I have changed my priorities.............................................................1 2 3 4 5
16. I feel depressed when I think about him or her...................................1 2 3 4 5
17. I have a better outlook on life........................................................1 2 3 4 5
18. Family holidays such as Christmas are sad times for my family............1 2 3 4 5
19. I am a more caring person.....................................................................1 2 3 4 5
20. I believe I have little control over my life.........................................1 2 3 4 5
21. I have learned to cope better with my life.........................................1 2 3 4 5
22. I have panic attacks over nothing.......................................................1 2 3 4 5
23. I can give help to others who are grieving.........................................1 2 3 4 5
24. I take risks to help me forget that he or she is dead...........................1 2 3 4 5
25. I care more deeply for my family........................................................1 2 3 4 5
26. I am afraid that more people I love will die.......................................1 2 3 4 5
27. I try to be kinder to other people......................................................1 2 3 4 5
28. I have nightmares about his or her death............................................1 2 3 4 5
29. I don’t take people for granted..........................................................1 2 3 4 5
30. I worry about everything......................................................................1 2 3 4 5
31. I am more creative.................................................................................1 2 3 4 5
32. I do not believe I will ever get over his or her death..........................1 2 3 4 5
33. I am more aware of other’s feelings....................................................1 2 3 4 5
34. I don’t care what happens to me .......................................................... 1 2 3 4 5
35. I have more compassion for others ....................................................... 1 2 3 4 5
36. My family will always be incomplete .................................................... 1 2 3 4 5
37. I am more understanding of others ...................................................... 1 2 3 4 5
38. I am often sick ....................................................................................... 1 2 3 4 5
39. I am more tolerant of myself .................................................................... 1 2 3 4 5
40. People don’t know what I am going through .......................................... 1 2 3 4 5
41. I don’t think I will ever be happy again ................................................ 1 2 3 4 5
42. I know how fragile life is ......................................................................... 1 2 3 4 5
43. I can get help for my grief when I need it .............................................. 1 2 3 4 5
44. I have trouble concentrating ................................................................. 1 2 3 4 5
45. I am afraid to get close to people .......................................................... 1 2 3 4 5
46. I do not sleep well at night ..................................................................... 1 2 3 4 5


** original scale’s wording: “This questionnaire consists of a list of thoughts and feelings that you may have had since your brother or sister died”. Amendment necessary for adolescent research dealing with deaths of grandparent(s), parent(s) or sibling(s).
Appendix E-2

Permission Letter for Use of Hogan Inventory of Bereavement

Carla Ens

Winnipeg, MB R3T 3X1
Canada

February 6, 2003

Dear Ms. Ens:

Thank you for your interest in the Hogan Inventory of Bereavement. You are granted permission to use the HIB for research purposes only, this instrument is not to be used for clinical diagnostic purposes. The HIB marked “Children Form” is appropriate for ages 8-12 years old. Some younger children may need assistance in understanding how to score the instrument. The HIB labeled “Adolescent Form” is designed for adolescents 13-18.

You may edit the instructions for the instrument as appropriate for your sample(s). However, if you are interested in studying change in grief as a function of time since death the current wording will allow you to effectively study that variable. The wording of the items and the scaling options may not be changed without express permission. Any edited versions of the instrument will remain my property and I request you forward a copy of the edited version for my records.

The instrument may not be duplicated or reproduced in any publications. I would request a copy of any published manuscripts or abstracts of presentations that reference the HIB. For the time being, all published work must contain the following credit:


Finally, I’d appreciate any unpublished feedback relating to the psychometrics of the HIB and your experiences with the measure. Thank you again for your interest in the HIB and I wish you the best in your research endeavors.

Sincerely,

Nancy S. Hogan
Professor
Appendix F

*Letter to Prospective Schools*

Date
Address of School

Dear Mr. / Ms. [Name of Administrator],

As a former junior and senior high teacher, I have developed interested in research on adolescent death anxiety in relation to religiosity and bereavement. As part of my master's thesis research in Family Studies at the University of Manitoba, I would like to enlist your help in recruiting participants.

I would like to sign up students in grades 7-senior 4 for this research project. After students have given personal consent and received parental consent, they would complete one questionnaire with questions related to death anxiety, bereavement and religiosity. All results would be confidential and there would be no opportunity for students to identify themselves.

*Death anxiety* defined as the extent that an individual experiences negative stress in reference to death, is a concept that may be closely linked to religious orientation, bereavement and experiences with death. *Religiosity* measures religious orientation—whether an individual is outwardly (extrinsically) or inwardly (intrinsically) motivated. *Bereavement* following the death of a family member may also affect the adolescent's death anxiety.

Participating in this study would move ahead the science of anxiety while providing students an opportunity to be involved in research at an exciting level. As a teacher, I know the value in hands-on learning and I see this as an excellent opportunity to see a new dimension of research. I would appreciate the opportunity to discuss further with you this research project and I will call the school to determine your interest. If you have any questions before that time, please contact me at home ( ) or through email at .

Sincerely,

Carla Ens
Graduate student

Dr. John Bond
Thesis Advisor
Appendix G

*Telephone Script with Administrator*

Thank you for taking interest in this research project at the University of Manitoba. I am a graduate student in the Masters program in the Department of Family Studies. As part of my degree requirements, I am conducting a research study entitled “Death Anxiety in Adolescents: The Function of Religiosity and Bereavement.”

I am specifically interested in adolescent death anxiety and I would like your help to recruit participants. I am contacting independent schools that teach junior and senior high classes. Students would complete a questionnaire with questions on death anxiety, religiosity and bereavement. It would take approximately 20-30 minutes to complete during regular class time. This research project has met University of Manitoba’s ethical research committee’s standards.

Would you give permission for your school to participate in this research? (If the administrator does not indicate any interest, I thank him/her for his/her time and end the conversation.)

(If the administrator indicates interest, I say, “I would like to set up a time when I could discuss further the details of the study”.)

(After scheduling the time, I say, “If you need to cancel or reschedule our visit, please contact me through phone ( ) or email ( ).”)

Thank you.

Good bye.
Appendix H

General Meeting Outline
[meeting with school administrator]

Outline

1. Introduction to the study
   a. Discuss consent and confidentiality

This research project investigates adolescent death anxiety and the relationship of religiosity and bereavement to death anxiety. Once adolescents have given personal consent and received parental consent, they would fill out one questionnaire containing questions regarding death anxiety, bereavement and religiosity. Death anxiety, the extent that a person experiences negative stress in reference to death is a concept that is not well understood within adolescent populations. It may be closely linked to religious orientation and past experiences with death. Religiosity measures religious orientation—whether an individual is outwardly (extrinsically) or inwardly (intrinsically) motivated. Bereavement following the death of a family member (parent, sibling or grandparent) may also affect the adolescent’s death anxiety.

The participants of the study will be completing a pen-and-paper, self-report questionnaire during regular class time that consists of three different surveys. An important aspect of this project is the introduction to the research project. It is critical that a school counselor either provides the introduction or sits in on the introduction provided by the researcher. In this way, adolescents can understand that there is emotional support available if they are feeling stress due to the surveys. The surveys include a measurement of death anxiety, religious orientation and bereavement. If the subject has not experienced the death of a parent, grandparent or sibling, he or she will not complete the bereavement survey. To complete the questionnaire, it will take approximately 20-30 minutes. Results will be anonymous, confidential and destroyed following the completion of the study.

The risk of participation is minimal. While adolescents are not commonly asked to report their feelings on death or anxieties, the questions should not produce any significant negative stress. If students do find the questionnaire troubling in any way, they are not required to complete it and follow-up with the school counselor will be suggested. This is a voluntary commitment and participation is not mandatory.

As mentioned earlier, individual results of the survey are confidential and anonymous. The only individuals with access to the information during the course of the research will be the main researcher (Carla Ens) and her faculty advisor (Dr. John Bond). Completed questionnaires will be kept in a locked filing cabinet within the home of the researcher. Confidentiality and anonymity are fully guaranteed.

A summary of the study will be made available to the school upon completion of the research.
Participation in this study is not a requirement for the student’s mark or progress in the class. This research is being conducted independently by the University of Manitoba and will not be reflected in any way through the school. For example, students will not receive extra credit if they chose to be participants in the study.

Participation by adolescent students is greatly appreciated as it will further knowledge and understanding in the area of death anxiety. Participating in this study would move ahead the science of anxiety while providing students an opportunity to understand research at an exciting level. This would provide excellent hands-on learning and would be an excellent opportunity to see a new dimension of research.

2. Discussion of the scales
   a. provide a copy of the questionnaire to the administrator
   b. answer questions

3. School Counselor’s duties with the research project
   a. read the introduction before handing out the consent form or be in the room while the researcher introduces the project
   b. be in the room during the invigilation of the questionnaire. Introduce the questionnaire
   c. be available to students post-questionnaire should they be feeling stress that needs to be discussed

4. Teacher’s duties within the research project
   a. allow 20-30 minutes of class time for questionnaire completion

5. Interest by the administrator
   a. Determine if the study is appropriate for the school
   b. If no, thank the administrator for the time
   c. If yes, determine the number of students that could potentially complete the questionnaire or determine teachers that teach adolescent students
   d. Provide consent forms (to teacher or administrator)
   e. Determine appropriate dates to complete questionnaire (with teacher or administrator)
Appendix I

Introduction to Research Project (principal researcher)

Note: if principal researcher is introducing the project, the counselor will be asked to be in the room.

Principal Researcher

My name is Carla Ens and I am a graduate student at University of Manitoba. I am currently involved in a research project looking at adolescents (aged 11-19) and their fears surrounding death. The title of the project is Death Anxiety: The Effects of Religiosity and Bereavement (write on board). Death anxiety is essentially the fear of death, either one’s own death or other’s death. Death anxiety is not an abnormal phenomenon (almost everyone experiences some types of fears of death in their lifetime) but understanding factors that contribute to death anxiety is not well understood. I would like to look at two specific factors. Firstly, I want to understand the effect of religious behaviour on death anxiety. For example, does church attendance or regular prayer decrease or increase death anxiety? Additionally, I am looking at how past experiences with death will affect an adolescent’s personal death anxiety (or fears of death). If you have experienced the death of a grandparent, for example, I would like to understand if that would change your feelings about death.

Participating in this research is voluntary. I do need your permission as well as the permission of one parent or guardian to continue. The consent forms that I am handing out review the study briefly. Please have a parent read it over before they sign it.

(Review a consent form with the adolescents).

To be involved in the research study, please have one parent or guardian sign the form and then you can a) mail it to the researcher in the envelope provided, or b) return it to your classroom teacher. During the actual completion of the questionnaire, if you feel uncomfortable answering the questions, you do not have to continue the questionnaire.

I have talked to your school principal and guidance counselor about this project detail. They feel comfortable with the questionnaire. If, however, you feel like you would like to talk to someone following the research project, they are available for you. This is not meant to increase your fear of death but if it does do that, there will be help available.

Questions or comments...
Guidance Counselor

Our school has been asked to participate in a research project being conducted by a researcher named Carla Ens. She is a graduate student at University of Manitoba and her research project is looking at adolescents (aged 11-19) and their fears surrounding death. The title of the project is Death Anxiety: The Effects of Religiosity and Bereavement. Death anxiety is essentially the fear of death, either one’s own death or other’s death. Death anxiety is not an abnormal phenomenon as almost everyone experiences some types of fears of death in their lifetime, but understanding factors that contribute to death anxiety is not well understood. The research would like to look at two specific factors. First, the researcher wants to understand the effect of religious behaviour on death anxiety. For example, does church attendance or regular prayer decrease or increase death anxiety? Additionally, the researcher is looking at how past experiences with death will affect an adolescent’s personal death anxiety or fears of death. If you have experienced the death of a grandparent, for example, she would like to understand if that would change your feelings about death.

Participating in this research is voluntary. Your permission as well as the permission of one parent or guardian is necessary to continue. The consent forms that I am handing out review the study briefly. Please have a parent read it over before he or she signs it.

(Review a consent form with the adolescents).

To be involved in the research study, please have one parent or guardian sign the form and then you can return it to me as soon as possible. During the actual completion of the questionnaire, if you feel uncomfortable answering the questions, you do not have to continue the questionnaire.

As a school counselor, I have been made aware about this project in detail. I feel comfortable with the questionnaire. If, however, you feel like you would like to talk to someone following the research project, I am available for you. This study is not meant to increase your fear of death but if it does do that, please make an appointment to see me.

Questions or comments...
Appendix J

Consent Form

Research Project Title: Death Anxiety in Adolescents: The Function of Religiosity and Bereavement

Researcher: Carla Ens

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

This research project investigates adolescent death anxiety and the relationship of religiosity and bereavement to death anxiety. Once students have given personal consent and received parental consent, they would fill out one questionnaire containing questions regarding death anxiety, bereavement and religiosity. Death anxiety, the extent that a person experiences negative stress in reference to death is a concept that is not well understood within adolescent populations. It may be closely linked to religious orientation and past experiences with death. Religiosity measures religious orientation- whether an individual is outwardly (extrinsically) or inwardly (intrinsically) motivated. Bereavement following the death of a family member (parent, sibling or grandparent) may also affect the adolescent’s death anxiety.

The participants of the study will be completing a pen-and-paper, self-report questionnaire during regular class time. The following statements are a sample from the questionnaire:

- Not knowing what the next world is like troubles me.
- It is important to me to spend time in private thought and prayer.
- I believe I am stronger because of the grief I have had to cope with.

The adolescent would rate his or her response from 1-5 according to how well they agree with the statement. It will take approximately 20-30 minutes to complete. Results of the questionnaires will be anonymous, confidential and destroyed following the completion of the study.

There is very little risk for those who participate in the study. While adolescents are not commonly asked to report their feelings on death, the questions are sensitively worded and should not produce any or very little stress. If students do find the questionnaire troubling in any way, they are not required to complete it and follow-up with the school counselor will be suggested. This is a voluntary commitment and participation is not mandatory.

As mentioned earlier, individual results of the survey are confidential and anonymous. The only individuals with access to the information during the course of the research will be the
Appendix K

Preamble to Research Questionnaire Administration (researcher)

Hello. My name is Carla Ens and I am a graduate student at the University of Manitoba. Currently, I am involved in a research study investigating adolescents’ thoughts and feelings about death. In addition to other students in the province, you will be the research participants that help me and others learn more about the adolescent population.

I’m here today to ask you to participate in this study by filling out a questionnaire. When the consent form was sent home, both you and your parents had the opportunity to see the purpose of the study and students who have parental consent have been determined. If your parent or guardian has given consent but you do not want to complete the study, you do not have to do so.

The questionnaire should take about 20-30 minutes to complete. When you are done, please flip them over and doodle on the reverse. I will pick them up when everyone has completed. It is important for you to know that your answers will be kept completely confidential and your parents or teachers will not see your answers. There is no opportunity for you to identify yourself on the questionnaire.

Once the analysis has been completed, I will provide your school with a summary of the results.

I now ask you to fill out the questionnaire by following the directions. Note that there is a point on the questionnaire when you may have to stop. You should only fill in the final segment if it applies to you.
Preamble to Research Questionnaire Administration (teacher or guidance counselor)

A graduate student from University of Manitoba, Carla Ens, is conducting a research study investigating adolescents' thoughts and feelings about death. In addition to other students in the province, you will be the research participants that help the researcher and others learn more about the adolescent population. Today, you will be asked to participate in this study by filling out a questionnaire. When the consent form was sent home, both you and your parents had the opportunity to see the purpose of the study and students who have parental consent have been determined. If your parent or guardian has given consent but you do not want to complete the study, you do not have to do so. The questionnaire should take about 20-30 minutes to complete. When you are done, please flip them over and doodle on the reverse. I will pick them up when everyone has completed. It is important for you to know that your answers will be kept completely confidential and your parents or teachers will not see your answers. There is no opportunity for you to identify yourself on the questionnaire.

Once the analysis has been completed, the researcher will provide your school with a summary of the results.

I now ask you to fill out the questionnaire by following the directions. Note that there is a point on the questionnaire when you may have to stop. You should only fill in the final segment if it applies to you.
Appendix L

Adolescent Questionnaire

Thank you for taking the time to complete this questionnaire. All results are confidential (your parents or teachers do not see them) and participation is voluntary. If at any time you want to stop the questionnaire, turn over your paper and draw on the back. Once again, thank you.

Sex:  □ female
      □ male

Age: ____________________

Religious Affiliation:  □ Anglican
                      □ Jewish
                      □ Mennonite
                      □ Roman Catholic
                      □ United
                      □ Other: ____________________
                      □ none
Using the guide below, read the statements carefully and circle the number that describes you the best.

<table>
<thead>
<tr>
<th>1</th>
<th>Does not describe me at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Does not quite describe me</td>
</tr>
<tr>
<td>3</td>
<td>Describes me fairly well</td>
</tr>
<tr>
<td>4</td>
<td>Describes me well</td>
</tr>
<tr>
<td>5</td>
<td>Describes me very well</td>
</tr>
</tbody>
</table>

1. The subject of life after death troubles me greatly. 1 2 3 4 5
2. I am looking forward to new life after I die. 1 2 3 4 5
3. I fear dying a painful death. 1 2 3 4 5
4. Not knowing what the next world is like troubles me. 1 2 3 4 5
5. The idea of never thinking again after I die frightens me. 1 2 3 4 5
6. I am not at all anxious about what happens to the body after burial. 1 2 3 4 5
7. Coffins make me anxious. 1 2 3 4 5
8. I hate to think about losing control over my affairs after I am gone. 1 2 3 4 5
9. Being totally immobile after death bothers me. 1 2 3 4 5
10. I dread to think about having an operation. 1 2 3 4 5
11. I am not afraid of a long, slow dying. 1 2 3 4 5
12. I do not mind the idea of being shut into a coffin when I die. 1 2 3 4 5
13. I hate the idea that I will be helpless after I die. 1 2 3 4 5
14. I am not at all concerned over whether or not there is an afterlife. 1 2 3 4 5
15. Never feeling anything again after I die upsets me. 1 2 3 4 5
16. The pain involved in dying frightens me. 1 2 3 4 5
17. I am not worried about ever being helpless. 1 2 3 4 5
18. I am troubled by the thought that my body will decompose in the grave. 1 2 3 4 5
1. Does not describe me at all
2. Does not quite describe me
3. Describes me fairly well
4. Describes me well
5. Describes me very well

19. The feeling that I will be missing out on so much after I die disturbs me.
20. I am worried about what happens to us after we die.
21. I am not at all concerned with being in control of things.
22. The total isolation of death is frightening to me.
23. I am not particularly afraid of getting cancer.
24. I will leave careful instructions about how things should be done after I am gone.
25. What happens to my body after I die does not bother me.
26. I enjoy reading about my religion.
27. I go to a place of worship mainly because I enjoy seeing people I know there.
28. It is important to me to spend time in private thought and prayer.
29. I have often had a strong sense of a supreme being’s presence.
30. Prayer is for peace and happiness.
31. I go to a place of worship mostly to spend time with my friends.
32. My whole approach to life is based on my religion.
33. I go to a place of worship mainly because it helps me make friends.
34. I pray mainly to gain relief and protection.
35. I try hard to live all my life according to my religious beliefs.
36. What religion offers me most is comfort in times of trouble and sorrow.

37. My religion is important because it answers many questions about the meaning of life.

In your family, have your grandparent(s), parent(s), brother(s) or sister(s) died?

- [ ] yes
- [ ] no

If you responded “no” to the above questions, please stop the questionnaire now.

Thank you for your participation.

If you responded “yes” to the above question, please continue with the questionnaire.

Family member(s) that died

- [ ] mother
- [ ] father
- [ ] brother
- [ ] sister
- [ ] grandmother
- [ ] grandfather

How many people in your family (grandparent, mother, father, sisters, brothers) have died?

1 2 3

Year of death(s): grandmother(s) __________________ grandfather(s) __________________

mother __________________ sister(s) __________________

father __________________ brother(s) __________________
This questionnaire consists of a list of thoughts and feelings that you may have had since your parent(s), brother or sister died. Please read each statement carefully, and choose the number that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement that best describes you. Please do not skip any items.

1. Does not describe me at all
2. Does not quite describe me
3. Describes me fairly well
4. Describes me well
5. Describes me very well

1. I believe I will lose control when I think about him or her. .......... 1 2 3 4 5
2. I believe I am a better person. .......................................... 1 2 3 4 5
3. I have grown up faster than my friends. ............................... 1 2 3 4 5
4. I am uncomfortable when I am having fun. ........................... 1 2 3 4 5
5. I believe I am stronger because of the grief I have had to cope with... 1 2 3 4 5
6. I have no control over my sadness. ................................. 1 2 3 4 5
7. I have learned to cope better with my problems. ................... 1 2 3 4 5
8. I believe I am going crazy. ............................................ 1 2 3 4 5
9. My religion has become more important to me. ..................... 1 2 3 4 5
10. I want to die to be with him or her. ................................ 1 2 3 4 5
11. I am more tolerant of others. ........................................ 1 2 3 4 5
12. I am uncomfortable when I am feeling happy. ..................... 1 2 3 4 5
13. I have learned that all people die. ................................ 1 2 3 4 5
14. I should have died and he or she should have lived................ 1 2 3 4 5
15. I have changed my priorities. ....................................... 1 2 3 4 5
16. I feel depressed when I think about him or her................... 1 2 3 4 5
17. I have a better outlook on life. .................................... 1 2 3 4 5
18. Family holidays such as Christmas are sad times for my family... 1 2 3 4 5
19. I am a more caring person. ........................................ 1 2 3 4 5
20. I believe I have little control over my life. ....................... 1 2 3 4 5
21. I have learned to cope better with my life. ....................... 1 2 3 4 5
Death Anxiety and the Adolescent

1 Does not describe me at all
2 Does not quite describe me
3 Describes me fairly well
4 Describes me well
5 Describes me very well

22. I have panic attacks over nothing. ................................. 1 2 3 4 5
23. I can give help to others who are grieving. ...................... 1 2 3 4 5
24. I take risks to help me forget that he or she is dead. ........ 1 2 3 4 5
25. I care more deeply for my family. .................................. 1 2 3 4 5
26. I am afraid that more people I love will die. ...................... 1 2 3 4 5
27. I try to be kinder to other people................................. 1 2 3 4 5
28. I have nightmares about his or her death. ....................... 1 2 3 4 5
29. I don’t take people for granted.................................. 1 2 3 4 5
30. I worry about everything........................................... 1 2 3 4 5
31. I am more creative.................................................... 1 2 3 4 5
32. I do not believe I will ever get over his or her death.......... 1 2 3 4 5
33. I am more aware of other’s feelings............................... 1 2 3 4 5
34. I don’t care what happens to me.................................. 1 2 3 4 5
35. I have more compassion for others............................... 1 2 3 4 5
36. My family will always be incomplete............................ 1 2 3 4 5
37. I am more understanding of others ............................... 1 2 3 4 5
38. I am often sick.......................................................... 1 2 3 4 5
39. I am more tolerant of myself...................................... 1 2 3 4 5
40. People don’t know what I am going through.................... 1 2 3 4 5
41. I don’t think I will ever be happy again......................... 1 2 3 4 5
42. I know how fragile life is........................................... 1 2 3 4 5
43. I can get help for my grief when I need it...................... 1 2 3 4 5
44. I have trouble concentrating........................................ 1 2 3 4 5
45. I am afraid to get close to people............................... 1 2 3 4 5
46. I do not sleep well at night........................................ 1 2 3 4 5

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Appendix M

Package for Adolescents without Consent

University of Manitoba

Directions:

While others are completing the questionnaire, please take some time to work at these word searches and puzzles. When the questionnaires are completed, you will be asked to return these activities to the envelope and hand them in. Thank you for your cooperation in this research project.

Carla Ens
Researcher
University of Manitoba
Batman

POISON IVY
RATCATCHER
RENE MONTOYA
RIDDLER
ROBIN
SCARECROW
SUPER HERO
TIM DRAKE
TWOFACE
VILLIAN
ZSASZ

ABBATOIR
ACID
ALFRED
BANE
BATGIRL
BRUCE WAYNE
CAPE
CATWOMAN
CAVE
CORNELIUS STIRK
CRIME
DETECTIVE
Harry Potter Word Search

Muggles  Harry Potter  Hermione
Diagon Alley  Quidditch  Ron
Dumbledore  Hagrid  Voldemort
Dobby  Gryffindor  Moaning Myrtle
Slytherin  Hogwarts  Lockhart
Azkaban  Tom Riddle
Fast Fives Puzzle No.1

The five words given opposite will fit into the grid in both directions. For example, 1 across is the same as 1 down. You have to work out the correct order to make all the words fit.

1

UNCLE
LINER
FELLS
BLUFF
FRESH
Letter Logic Puzzle No.1

There are no clues to this puzzle other than the letters in the grid and the length of the word or phrase.

### Across
APED, MEET, STUN,
VARY, APRON, FABLE,
LLAMA, NERVE, REINS,
SCOUR, TABLE, TASKS,
APPOINT, CURRANT,
DEADPAN, DOODLER,
EARACHE, IMPALED,
INSIDER, OPERATE,
SCIENCE, TUMBLER,
EASTBOUND, ELECTIONS,
SNAPSHOTS, SUSPENDED,
DETREMENTAL,
ENCHANTMENT,
STANDPOINTS

### Down
DARE, NOEL, PIES, ROSE,
BASIC, COSET, DELIA,
DROVE, EASES, LANCE,
RESTS, SOBER, ACCUSE,
ADHERE, FUTURE,
ITALIC, OSPREY, TOUSLE,
UPDATE, WEIRDO,
ARABIAN, DIPLOMA,
EASTERN, MOISTEN,
TERRACE, TRAMPLE,
ENDANGERS,
ABOMINATION,
ELASTICATED,
ENDEAVOURED,
MATERNALISM
### O Brother, Where Art Thou?

<table>
<thead>
<tr>
<th>Prison Ad Rep Pads</th>
<th>Aefhound SnaLkys</th>
<th>Prcnramledbrsr</th>
<th>Yahmyenomwmeic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brother, Where Art Thou?</td>
<td>Pnwisertdtbng</td>
<td>Rsnadpbtroxiot</td>
<td>Onnrioloumogner</td>
</tr>
<tr>
<td>BARN</td>
<td>George (Nelson)</td>
<td>Eeieebnmhlhdyo</td>
<td>Grandynyjafoaedw</td>
</tr>
<tr>
<td>Bible</td>
<td>Gopher</td>
<td>Aihepherdmnlll</td>
<td>Leftterevaeano</td>
</tr>
<tr>
<td>Big Dan (Teague)</td>
<td>Hair</td>
<td>Sotybottomboys</td>
<td>国足treasurercogo</td>
</tr>
<tr>
<td>Can</td>
<td>Homer (Stokes)</td>
<td>Sing</td>
<td>Sirenswagwollap</td>
</tr>
<tr>
<td>Chain</td>
<td>Hornytoad</td>
<td>Sirens</td>
<td>Tommy (Johnson)</td>
</tr>
<tr>
<td>Cooley (Sheriff)</td>
<td>Hounds</td>
<td>Soggybottomboys</td>
<td>Treasure</td>
</tr>
<tr>
<td>Cow</td>
<td>Klan</td>
<td>Tire swin (Happy Little)</td>
<td>Train</td>
</tr>
<tr>
<td>Cross</td>
<td>Money</td>
<td>Tommy (Johnson)</td>
<td>Wharvey girls</td>
</tr>
<tr>
<td>Dapper Dan</td>
<td>Noose</td>
<td>Train</td>
<td>Wdboywharveys</td>
</tr>
<tr>
<td>Delmar (O’Donnell)</td>
<td>Pappy (O’Daniel)</td>
<td>Treasure</td>
<td>Wdworthwharveys</td>
</tr>
<tr>
<td>Everett (McGill)</td>
<td>Penny (McGill)</td>
<td>Vernon (T. Waldrip)</td>
<td>Wdworths</td>
</tr>
<tr>
<td>Fire</td>
<td>Pete (Hogwallop)</td>
<td>Wdworth</td>
<td>Wharvey girls</td>
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<tr>
<td>Flag</td>
<td>Pomade</td>
<td>Wdworth</td>
<td>Wdworths</td>
</tr>
<tr>
<td>Flood</td>
<td>Prison</td>
<td>Wdworth</td>
<td>Wdworths</td>
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Appendix N

Scatterplots

(Plots of the residuals and predicted values of the dependent variable before and after transformations)

Before Transformation:

![Graph showing regression studentized deleted (Press) residual before transformation.]

After Transformation (log of Grief):

![Graph showing regression studentized residual after transformation.]

Regression Studentized Deleted (Press) Residual

Regression Studentized Residual
## Appendix O

**Collinearity Statistics of Independent Variables**

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<td>Sex</td>
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*Note.* Dependent variable: RDAS
Appendix P

Summary of Results for Independent Schools

DEATH ANXIETY IN ADOLESCENTS:
The Function of Religiosity and Bereavement

SUMMARY OF RESULTS

BY: CARLA ENS

DATE: JUNE 6, 2003

Thank you once again for your school’s participation in this research project. The following report briefly outlines the preliminary results of the study. For additional statistical information and discussion regarding the study, please contact me at carla_ens@hotmail.com after August 1, 2003.

- There was very little difference between the death anxiety scores of students who had a death in their family compared to those who did not. Although the death anxiety scores of those who had experienced a death were higher, they were not high enough to indicate meaningful differences. This is essential information as it has always been assumed (and revealed in studies relating to adults) that an increase in the number of death experiences will decrease death anxiety. Knowing that the adolescent experience is different is important for field workers such as social workers and teachers.

- There was a strong link between grief and general fear of death. As grief increased, death anxiety scores also increased. This was a really important finding because grief and death anxiety levels were shown to be very closely related. In fact, one could be used to predict the other. Knowing that grief can be related to increased death anxiety is also important for the practitioner; bereaved adolescents may need interventions such as grief counseling in the time following the death of a family member depending on his or her level of grief.
• Religious behaviours (such as prayer and church attendance) were generally not related to fears of death. Again, this was a really interesting finding. As a common coping method for adults is reliance on religious behaviours, the researcher was studying to see whether the same was true for adolescents. Regarding death anxiety, however, it was found that adolescents do not use religious behaviours as a coping mechanism. Even the comparison between students of religious institutions and those of non-religious institutions showed little difference. From a counselor’s perspective, this finding may mean that individuals experiencing maladjusted grief need not turn to religion for consolation. The question remains as to what are the coping mechanisms that adolescents use to deal with their fears of death. Some other findings have shown that self-esteem is related to the ability to cope and so it would be interesting to explore this further.

• Students attending Mennonite private schools had higher scores on the questions pertaining to religious behaviours than did the students who attended the secular independent school. On questions relating to spirituality or personal faith, the students of religious schools had higher scores. Additionally, questions regarding church attendance and the meaning of prayer were answered differently when comparing the two types of institutions.

• In general, females had death anxiety scores that were higher than males. This finding was not surprising as other research studies almost always find that females have higher death anxiety levels. The application of this finding may imply that females need to be treated differently following a death than males. However, it is more appropriate for people relating to both male and female adolescents to look for abnormal and extended evidence of grief. Interventions, such as grief counseling, may be appropriate in situations such as these regardless of gender.
Appendix Q-1

Ethical Approval from Joint Faculty Research Ethics Board

22 October 2002

TO: Carla Ens
Principal Investigator

FROM: Wayne Taylor, Chair
Joint-Faculty Research Ethics Board (JFREB)

Re: Protocol #J2002:099
"Death Anxiety in Adolescents: The Function of Religiosity and Bereavement"

Please be advised that your above-referenced protocol has received human ethics approval by the Joint-Faculty Research Ethics Board, which is organized and operates according to the Tri-Council Policy Statement. This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.
Appendix Q-2

Amendment to Ethical Approval

TO: Carla Ens
Principal Investigator

FROM: Wayne Taylor, Chair
Joint-Faculty Research Ethics Board (JFREB)

Re: Protocol #J2002:099
“Death Anxiety in Adolescents: The Function of Religiosity and Bereavement”

This will acknowledge receipt of your e-memo dated December 11, 2002 requesting amendment to the above-noted protocol.

Approval is given for this amendment. Any other changes to the protocol must be reported to the Human Ethics Secretariat in advance of implementation.

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