AGE, GENDER, AND RELIGIOSITY AS RELATED TO DEATH ANXIETY

CHAN LI CHUIN

Sunway University College
No. 5, Jalan Universiti, Bandar Sunway
46150, Petaling Jaya, Selangor Darul Ehsan
Tel: +60(3)7491 8622
Fax: +60(3)5635 8633
chanlichuin@gmail.com

YAP CHIN CHOO

Sunway University College

ABSTRACT

Western society has always been somewhat intrigued by death anxiety and its causes. In comparison, the study of death anxiety has not been given much importance in other cultures. Due to this, some interesting questions have risen such as: does death anxiety exist in other cultures? Do the same variables that seem to attenuate death anxiety in Western countries function as well for individuals in other cultures? Thus, the purpose of this study was to examine the influence of religion, religious orientation, gender, and age on death anxiety in a culturally diverse country like Malaysia. There were 320 participants ranging in age from 17-70 years who took part in the study. It was hypothesized that a) participants with an affiliation to a religion would have lower death anxiety, b) a negative relationship between intrinsic religious orientation and death anxiety, and a positive relationship between extrinsic religious orientation and death anxiety would exist, c) female participants would have lower death anxiety, and d) death anxiety levels would not differ between young adults and older adults. A survey method was used in this study and participants were required to complete the Templer Death Anxiety Scale (TDAS) as well as the Age Universal Religious Orientation Scale. The results supported hypothesis c) and d). No significant negative relationship existed between intrinsic religious orientation and death anxiety, and no significant positive relationship existed between extrinsic religious orientation and death anxiety. Further research and implications are discussed.

Key words: death anxiety, religion, religious orientation, gender, age

LITERATURE REVIEW

Introduction

Life and death are inter-related and are often seen as two sides of the same coin. Unfortunately, many people see death as a taboo topic and may therefore be reluctant to discuss death. For instance, whenever the topic of death arises, people go to great lengths to avoid words like death and dying (Corr, Nabe, & Corr, 2003). Instead, euphemisms are used to provide a more pleasant feeling and to conform to social norms. Phrases such as 'kicked the bucket, passed away, moved on, laid to rest', and 'went to a better place' are used to

discuss death. Hence, the thought of death or dying is something that is uncomfortable and to a certain extent, frightening, for some, if not most people in modern society.

Death anxiety has always been a prominent research topic in Western society where it is believed that this anxiety can be attenuated by different variables. It is interesting to ask if this concept has not been researched as extensively in other cultures. This has led to the rise of some questions: Does death anxiety exist in varied cultures? Do the same variables that seem to attenuate death anxiety in Western countries function as well for individuals in other cultures? Seeing that Malaysia is a culturally diverse country, with people of different religious and cultural backgrounds living together, it seems appropriate to try to answer these questions about death anxiety. Thus, the aim of this study is to investigate death anxiety and its attenuating variables within a multi-cultural context.

Death Anxiety

Death is viewed as an event that one generally has no control over and thus generates anxiety amongst people (Schumaker, Barraclough, & Vagg, 1988). This anxiety is thus termed death anxiety. Death anxiety is an attitude that an individual holds towards death. It is defined as a negative and apprehensive feeling that one has when thinking about death and dying (Richardson, Berman, & Piwowarski, 1983) and is used interchangeably with fear of death (Feifel & Nagy, 1981; Wink & Scott, 2005).

As with all types of attitudes, many factors are involved in influencing and shaping an individual's death anxiety. Thus, it has come to no surprise to researchers that many variables could affect the degree to which an individual experiences death anxiety. These variables include age (Fortner & Neimeyer, 1999; Swanson & Byrd, 1998), gender (Harding, Flannelly, Weaver, & Costa, 2005), religious beliefs (Kraft, Litwin, & Barber, 1987; Spilka, Stout, Minton, & Sizemore, 1977), and health (Fortner & Neimeyer, 1999). All of these variables affect people's experiences and it is these experiences that prompt people to re-evaluate and re-examine certain attitudes and beliefs that they hold (DeSpelder & Strickland, 2005).

It has been noted that death anxiety may neither stay stagnant nor increase or decrease progressively over the years (Tomer & Eliason, 1996). A number of things can change an individual's death anxiety such as familiarity with death, a sudden loss, religion, physical ailments, and psychosocial maturity. How death anxiety is experienced and expressed, however, largely differs from individual to individual. Hence, even with so many studies conducted, the results are mixed as to which variable plays a part and to what extent that variable influences death anxiety. Obviously, a single study which examines all the variables is impossible and so this study chooses to focus on three specific variables. They are: religiosity, gender, and age.

Religion

Considered as an essential part of human culture, religion is seen as having the ability to shape an individual's attitudes and beliefs (Emmons, 1999). In this study, religion is defined as a system of faith and worship which consists of a collection of beliefs, practices, and values which are based on the teachings of a spiritual leader (The American Heritage Dictionary of the English Language, 2000).

Religion is seen as having three main functions within societies. Firstly, religion unifies people by providing shared beliefs, values, and norms (DeSpelder & Strickland, 2005). Secondly, religion helps people deal with issues of life and death by providing a framework as to what kind of life people are supposed to lead and also what happens to them after death (DeSpelder & Strickland, 2005). Thirdly, during times of crisis and upheaval, religion has been known to be a provider of emotional and psychological support to people (Richardson, Berman, & Piwowarski, 1983). For example, religion offers some sort of meaning in dying and offers mourning rituals which helps ease the grief felt (DeSpelder & Strickland, 2005). Religion is therefore seen as playing a role in mediating death anxiety.

Islam, Christianity, Buddhism, and Hinduism are among the major world religions. Yet studies on religion and death anxiety are few and far between and only the following study could be found. Richardson, Berman, and Piwowarski (1983) interviewed a total of 1428 participants in their study. The results revealed that religious participants experience less death anxiety when compared to participants who state that they have no affiliation to any religion.

A thorough search through various libraries and databases yielded unsatisfactory results as studies comparing individuals with and without religion and their levels of death anxiety are scarce. Thus it appears that whether the death anxiety level of an individual who professes to a religion differs from an individual who does not have a religion is worth exploring further. The following hypothesis is presented:

Hypothesis 1: Religious individuals will experience lower death anxiety as compared to individuals who have no religion.

Religiosity

One of the variables that are frequently associated with death anxiety is religiosity. Religiosity can be defined as beliefs, feelings, and practices that are tied to religion (Ho & Ho, 2007). For example, going to church or temple on a regular basis is a form of religiosity. Religiosity can be further divided into intrinsic and extrinsic religiosity (Allport & Ross, 1967). Intrinsic religious orientation is defined as the extent to which individuals actually partake in religious activities (Swanson & Byrd, 1998) while extrinsic religious orientation is defined as an individual's inclination to partake in religious activities as a way to obtain desired emotional or social outcomes (Swanson & Byrd, 1998). In other words, the intrinsically motivated individual lives his/her religion (self-transcendent) while the extrinsically motivated individual uses his/her religion (self-oriented) (Allport & Ross, 1967).

Most studies of this kind are conducted by Western researchers and the emphasis is placed on Christian beliefs and how they affect death anxiety. Studies regarding religious beliefs of other religions and the effect they have on death anxiety are scarce. The paragraphs below will review studies conducted on each religion (i.e. Islam, Buddhism, Hinduism, and Christianity) to see if findings are replicated across different religions.

Studies conducted on Egyptian Muslim women (Al-Sabwah &Abdel-Khalek, 2006) and Pakistani Muslims (Suhail & Akram, 2002) discovered that religious faith is associated with death anxiety. It seems that the more religious an individual is, the less death anxiety experienced by the individual.

One of the few studies available concerning Buddhism and death anxiety is Duff and Hong's study (1995). The study involved elderly participants and frequency of attending religious services was used as a variable that might affect death anxiety. The results demonstrated that the frequency of attending religious services is the most significant and strongest predictor of death anxiety while the subjective importance of religion and non-social religious behaviours (e.g. private prayers, meditation) are not. By engaging in religious acts regularly, solidarity and shared meanings can be fostered and strengthened. Consequently, the individual is protected from negative or unpredictable life events. This explanation offers support for Duff and Hong's (1995) study as to why religious services are viewed as shielding individuals from death anxiety as compared to private religious practices and religious beliefs.

Studies on Hinduism and death anxiety could not be found even after a methodological search of various databases and search engines. This lack of attention highlights the need for researchers to focus on whether the concept of death anxiety and religiosity can be applied to Hinduism.

Swanson and Byrd (1998) studied the association between death anxiety and religious orientation amongst introductory psychology students from a Midwestern university. The study found that extrinsically orientated individuals experienced more death anxiety. As seen by the extrinsically orientated individual, the emotional and social rewards that the individual has obtained from religion thus far will be lost when death occurs and this increases his/her death anxiety.

In Thorson and Powell's (1990) study, participants' religiosity and death anxiety were measured by asking the participants to complete a questionnaire. Results showed that participants who scored the highest in terms of death anxiety scored the lowest in terms of intrinsic religiosity.

One of the problems that are frequently encountered by researchers is the fact that even though there have been many studies conducted regarding the influence of religious beliefs and religious orientation on death anxiety; the findings from these studies have been equivocal. Some studies have found that high intrinsic religious beliefs lower death anxiety (Thorson & Powell, 1990; Roff, Butkeviciene, & Klemmack, 2002) while extrinsic religious beliefs increase death anxiety (Feifel & Branscomb, 1973; Swanson & Byrd, 1998). In addition, there are also some studies which have found no relationship between religious beliefs and death anxiety (Berman & Hays, 1973; Donahue, 1985). Others (Thorson & Powell, 1990; Rasmussen & Johnson, 1994) have conducted studies which showed that a negative relationship exists between intrinsic religious orientation and death anxiety. However, these studies also discovered that no relationship exists between extrinsic religious orientation and death anxiety. These inconsistencies are found even when the same scales to measure death anxiety are used.

Therefore, this study aims to further clarify the relationship between death anxiety and religiosity. Based on the findings discussed above, it appears that strong religious commitment alleviates death anxiety to a certain extent. The following hypothesis is proposed.

Hypothesis 2: There will be a negative relationship between intrinsic religious orientation and death anxiety and there will be a positive relationship between extrinsic religious orientation and death anxiety.

Gender

Another variable that is frequently linked to death anxiety is gender. In a comparison study carried out by Schumaker, Barraclough, and Vagg (1988), Malaysian and Australian students were asked to complete a survey to determine whether gender affects death anxiety scores. The results showed that both Australian and Malaysian women experienced greater death anxiety than men.

Suhail and Akram (2002)'s study on Pakistani Muslims discovered that women experienced greater death anxiety than men and Abdel-Khalek (2005) discovered that females experienced significantly higher death anxiety levels than males.

On the other hand, Wu, Tang, and Kwok's (2002) study on Chinese elderly people in Hong Kong found that gender does not affect death anxiety. Being male or female does not increase or decrease one's death anxiety.

Fortner and Neimeyer (1999) conducted a review on 49 studies about death anxiety and have also found that gender does not seem to predict death anxiety in elderly people. One should note, however, that this relates to the elderly and not to young adults. Regarding young adults, death anxiety is higher in younger females.

There are many arguments as to why death anxiety is higher in women. A reason why this is so has been proposed by Schumaker, Barraclough, and Vagg (1988) who said that in most societies, men are encouraged to pursue success and attain accomplishments which would cultivate the illusion of immortality while women are not. This illusion is useful as people rely on it to counter and conquer death anxiety. Other researchers declared that because women more readily admit troubling feelings as compared to men, their death anxiety scores are higher. Still others claim that death might have different connotations and implications for men and women and thus may be construed differently (Schumaker, Barraclough, & Vagg, 1988). This would affect their levels of death anxiety as they might fear different dimensions of death anxiety.

These studies show that gender and death anxiety produce mixed results and more studies are needed to clarify this relationship. The following hypothesis is thus presented.

Hypothesis 3: Males experience lower death anxiety as compared to females.

Age

Another variable that seems to affect death anxiety is age. This study focuses on participants who are in their adulthood. Adulthood is defined as ranging from the early twenties up till age 65 (Corr, Nabe, & Corr, 2003). Adulthood can be further broken down into two different categories: young adulthood (ranging in age from 21/22-45) and middle adulthood (45-65 years old). In this study, participants are broken down into two equal groups to enable a comparison to be made. The first group includes participants who are in young adulthood (from 17 years old to 39 years old) while the second group of participants consists of individuals who are in mid-adulthood and above (from 40 years old to 70 years old).

Studies by Feifel and Nagy (1981), Maiden and Walker (1985), as well as Walker and Maiden (1987) demonstrated that age was not linked to fear of death. The results from their studies showed that age does not play a significant role in affecting death anxiety as older participants are no more likely to fear death than younger participants.

On the other hand, Suhail and Akram (2002)'s study discovered different results. The researchers found that older participants (55 – 70 years old) had higher rates of death anxiety. There are several explanations for the results: a) as the participants are old and are nearer to death, they might think about their mortality more often and this behaviour results in increased fear and anxiety, and b) death of close friends and spouses might trigger off increased death anxiety. Additionally, DeSpelder and Strickland (2005) contended that adolescents tend to portray or feel a sense of invulnerability and invincibility. Death thus appears to be an event that occurs to other people but somehow does not happen to them.

Therefore, studies have generally found mixed results (Kastenbaum, 2007) regarding age and death anxiety. There have either been no age differences or relatively lower death anxiety among the elderly (Keller, Sherry, & Piotrowski, 1984; Kastenbaum, 2007).

Taking all the studies into consideration, the following hypothesis is proffered.

Hypothesis 4: There are no differences between young and mid-to-older adults in death anxiety.

METHODOLOGY

Study Design

The variables in this study are religion, religiosity, gender, age, and death anxiety. In order to analyse the hypotheses in the study, a survey was used to collect data.

Participants

This study consisted of 320 participants who were selected based on stratified random sampling. The participants consisted of college and university students as well as working and retired adults. The participants were obtained from the Klang Valley area and ranged in age from 17-70 years. The mean age of the participants was 38.88 years. There were equal numbers of male (160; 50.0%) and female (160; 50.0%) participants.

The sample consisted of 35 (10.9%) Malays, 173 (54.1%) Chinese, 68 (21.3%) Indians, and 44 (13.8%) participants from other races. In terms of religion, there were an equal number of Muslims, Buddhists, Christians, and Hindus (40; 12.5%) as well as 160 (50.0%) participants with no religion.

Of the total number of participants, 148 (46.3%) were single participants, 162 (50.6%) were married participants, and 10 (3.1%) participants from other statuses. Ninety-five (29.7%) participants completed secondary education, 36 (11.3%) completed pre-university education, 77 (24.1%) a diploma, and 112 (35.0%) a degree. The average years of schooling are 11 years.

All participants agreed to take part in the study voluntarily. This population was chosen as most studies on death anxiety have mostly focused on a certain population (i.e. the elderly population or the younger generation) and have paid little attention as to whether differences exist between the young and old.

Measurement Instruments

The measurements used in this study are the Templer Death Anxiety Scale and the Age Universal Religious Orientation Scale.

Templer Death Anxiety Scale (TDAS). The Templer Death Anxiety Scale (TDAS) (Lonetto & Templer, 1983) was designed to measure death anxiety. It is a self-administered 15-item scale where participants rate themselves on a true-false scale. The instrument is scored by allocating one point to every item which is answered correctly and then summing up all the items. High scores on this scale indicate high death anxiety while low scores indicate low death anxiety. The TDAS has good concurrent validity whereby it correlated 0.74 with the Fear of Death Scale. Besides that the TDAS is capable of significantly distinguishing between psychiatric patients who have high death anxiety and a control group. The TDAS also has an internal reliability of 0.76 and a three-week test-retest reliability of 0.83.

Age Universal Religious Orientation Scale. The Age Universal Religious Orientation Scale (Gorsuch & Venable, 1983) was designed to evaluate religious orientations of young individuals (fifth grade onwards) to the elderly. It is a 20-item scale where participants rate themselves on a five-point Likert scale ranging from 1) I strongly disagree to 5) I strongly agree. The scale can be scored in one of two ways. It can either be scored by summing up all the 20 items or it can be divided into an Intrinsic and Extrinsic scale and be scored separately by totalling up the items in each respective scale (Allport & Ross, 1967). The Age Universal Religious Orientation Scale has internal reliability coefficients of .66 (for the Extrinsic scale) and .73 (for the Intrinsic scale). Besides that, the Age Universal Religious Orientation Scale has good concurrent validity whereby it correlated .79 (for the Extrinsic scale) and .90 (for the Intrinsic scale) with the Allport-Ross Religious Orientation Scale.

Procedure

The questionnaires were distributed to participants from various colleges, universities, offices, and community halls within the Klang Valley area. All questions and instructions were written in English. The researcher briefed participants on the purpose of the study and obtained an understanding of participants' command in English before handing out the questionnaires. Participants were also required to fill up a consent form to indicate an understanding that their participation in the study is voluntary and that they can pull out at any time should they wish to do so.

Participants were given sufficient time to complete the questionnaires and any questions they had were answered by the researcher. The questionnaires were collected upon completion.

RESULTS

Religion

An independent sample t-test was performed in order to test the first hypothesis. Results showed that there were no significant difference in death anxiety between religious (M =

7.47; SD = 3.233) and non-religious (M = 7.56; SD = 3.373) participants [$t(318) = -.237$, $p>.05$]. Thus, the first hypothesis was not supported.

Religiosity

Pearson's product moment correlations were carried out to see if any relationships between intrinsic religious orientation, extrinsic religious orientation, and death anxiety existed. Out of 320 participants in the study, only data from half of them (N = 160) were used as the remaining participants were not affiliated with any religion. Results showed no significant relationships between intrinsic religious orientation and death anxiety ($r = -.082$, $p>.05$) and extrinsic religious orientation and death anxiety ($r = .092$, $p>.05$). Thus, the second hypothesis was not supported.

Gender

In order to test the third hypothesis, an independent sample t-test was conducted. Results showed significant gender difference in death anxiety [$t(318) = -2.147$, $p<.05$]. Death anxiety was higher amongst females (M = 7.91; SD = 3.311) as compared to their male counterparts (M = 7.12; SD = 3.249). Thus, the third hypothesis was supported (see Table 1).

Table 1. Independent Sample t-test of Gender and Death Anxiety

Variable	N	Mean	SD	t	df
Male	160	7.12	3.249	-2.147*	318
Female	160	7.91	3.311		

*$p<.05$

Age

An independent sample t-test was conducted to test the fourth hypothesis. There were no significant differences between the different age groups and death anxiety [$t(318) = 0.881$, $p>.05$]. The mean score for the young adulthood age group was 7.68 and the mean score for the middle adulthood and older age group was 7.35. Thus, the third hypothesis was supported (see Table 2).

Table 2. Independent Sample t-test of Age and Death Anxiety

Variable	N	Mean	SD	t	df
Young adulthood	160	7.68	3.099		
Middle adulthood and Older	160	7.35	3.490	0.881	318

Additional Analyses

Additional analyses were conducted in order to determine if any other relationship or differences existed between certain variables. A bivariate correlation was performed to determine if any relationship existed between years of schooling and death anxiety. Results showed that there was no significant relationship between years of schooling and death anxiety, r = -.106, *p*>.05.

Furthermore, a two-way ANOVA was carried out to examine the main effects and interaction effects of marital status and religion on death anxiety. Results found that only the main effect of religion was significant, $F(1,306) = 2.501$, *p*<.05, indicating that differences in death anxiety were affected by religion. A Tukey post-hoc test was conducted and it appeared that Muslims (M = 8.65; SD = 2.923) had higher death anxiety as compared to Christians (M = 6.20; SD = 2.911).

DISCUSSION

Religion

The study compared between participants who were affiliated with a religion and participants who claimed to have no affiliation to any religion in levels of death anxiety. Hypothesis 1 stated that participants who have no religious affiliation will have a higher level of death anxiety when compared to religious participants. The hypothesis was not supported as results showed that there were no significant differences in levels of death anxiety experienced between those who have a religion and those who do not.

Some researchers (Patrick, 1979) have found that because some individuals fear death so strongly, they may turn to religion to overcome these fears. However, as religion is used to help them with their fears and not embraced fully, in the end, religion still does not help them lessen their fears. This could explain why religion does not affect death anxiety levels of religious individuals.

Religiosity

The study distinguished between intrinsic religious orientation and extrinsic religious orientation and attempted to determine if there were any relationships between these two orientations and death anxiety. Hypothesis 2 stated that a negative relationship between intrinsic religious orientation and death anxiety and a positive relationship between extrinsic religious orientation and death anxiety exist. The hypothesis was not supported as results found no significant negative relationship between intrinsic religious orientation and death anxiety, and no significant positive relationship between extrinsic religious orientation and death anxiety. Some other studies have also found these results (Berman & Hays, 1973; Donahue, 1985).

The results found could be due to the instruments used to examine religious orientation that might not be applicable to individuals from different religions. Major religions differ in their conceptions of an afterlife and stress the importance of life, death, and judgment differently (Patrick, 1979). Therefore, if the beliefs within a religion emphasize retribution

in the afterlife, then fear of death of individuals who practice that religion would be higher (Florian & Kravetz, 1983). As studies are mostly conducted on Western population, the instruments are therefore designed to measure Western values and such values might not exist or be applicable to individuals of different religions.

Certain researchers have argued that religion plays a role in social integration and therefore leads to its members having better mental health or well-being (Idler & Kasl, 1992). Other researchers argue that religion acts as a comforter to individuals who are going through tough times (Malinowski, 1965 as cited in Richardson, Berman, & Piwowarski, 1983) and they also declare that religion is particularly useful when it comes to offering consolation and support to individuals who are dying or individuals who fear death (Malinowski, 1965 as cited in Richardson, Berman, & Piwowarski, 1983). Still others proposed that intrinsically orientated individuals are less likely to experience death anxiety than extrinsically orientated individuals because of their beliefs. Intrinsically orientated individuals might believe that their religious behaviour in this life will cause them to be rewarded in the afterlife (Hood & Morris, 1983). Different perspectives may also cause different results to emerge. The diverse results might not be wrong per se, they just provide varied support to different arguments.

Furthermore, researchers have found that multiple dimensions of death anxiety exist. Besides that, some researchers have broken down religiosity into many component parts and claimed that different types of religiosity have distinct effects on different aspects of death anxiety (Harding et al., 2005). This can be seen in a study by Clements (1998) where it was discovered that intrinsically orientated individuals are less afraid of certain aspects of death than extrinsically orientated individuals. As the instruments used in this study weren't as specific, the results obtained might not be as detailed.

Gender

The study explored if any differences exist in terms of level of death anxiety between males and females. Hypothesis 3 stated that females would experience higher levels of death anxiety than males. The hypothesis was supported as results revealed that significant differences exist between males and females in terms of death anxiety. The mean scores showed that females have slightly higher death anxiety scores as compared to males. Other studies have also found that death anxiety is higher in females as compared to males (Schumaker, Barraclough, & Vagg, 1988; Suhail & Akram, 2002). Even though the results showed that females have higher death anxiety scores, it does not mean that males are not afraid of death. They could just be suppressing it or denying it.

Why females experience higher levels of death anxiety when compared to males can be explained by the process of socialisation. Boys were taught not to complain or cry (Abdel-Khalek, 2005) and thus do not view expressing their feelings as desirable whereas girls were taught that it is okay to cry and express their concerns and feelings (Abdel-Khalek, 2005).

Despite the significant results, an in-depth look into the results is warranted as studies have found that females and males score higher on certain subscales of death anxiety. A case in point would be a study by DePaola, Griffin, Young, and Neimeyer (2003) which found that elderly women scored higher than elderly men on the Fear of the Dead subscale in the Multidimensional Fear of Death Scale (MFODS). Such differences were not found on any of the other seven subscales within the MFODS. Furthermore, researchers have noted

that death is evaluated emotionally by women while men evaluated death in cognitive terms. Studies which have found higher death anxiety levels amongst men as compared to women have used scales which measure death anxiety through cognitive constructs rather than through emotional constructs (Schumaker, Barraclough, & Vagg, 1988). If so, then the degree to which death anxiety questionnaires measure different dimensions as well as the way they measure these dimensions (whether emotionally or cognitively) would affect the results found.

Age

The study investigated whether participants who are in their young adulthood (age range from 17 to 39 years old) differed in levels of death anxiety when compared to participants who are in their middle adulthood and older (age range from 40 to 70 years old). Hypothesis 4 stated that there will be no differences between the different age groups when it comes to levels of death anxiety. The hypothesis was supported as results found that there were no significant differences between the different age groups in terms of death anxiety. Similar results were also obtained in other studies (Feifel & Nagy, 1981; Maiden & Walker, 1985).

Studies which have found significant differences between the young and old have usually based their sample on the very old, those who are living in homes or retirement communities, or those who are ill. This causes problems in interpreting the significance of the results obtained as these older individuals might have more experience with death (due to loss of spouse and friends to old age or illness) (Duff & Hong, 1995) as compared to healthier, older individuals in the general population.

Moreover, despite research showing that certain age groups experience lower or higher death anxiety levels, one must note that ambiguity regarding death attitudes exist (DePaola et al., 2003). For instance, individuals with poorer physical and mental health are more susceptible to distress regarding death compared to individuals who do not have these problems. Also, the meanings and prominence of death varies across the lifespan and might be linked to different causes at different stages in life (Richardson, Berman, & Piwowarski, 1983). In addition, individuals might have different fears of death during different times of their lives as evidenced by the results found in Keller, Sherry, and Piotrowski's (1984) study. Thus, a range of factors could influence death anxiety levels of the young and old and it is ill-advised to conclude that certain age groups have lower or higher death anxiety levels than other age groups.

Strengths and Limitations

To the researcher's knowledge, this is one of the few studies which have examined variables that affect death anxiety in a culturally diverse population. It is also one of the few studies which have investigated death anxiety and variables which could affect death anxiety (i.e. religiosity, gender, and age) in Malaysia.

Furthermore, the sample size is relatively large and heterogeneous, covering individuals from 17-70 years old and from students to the elderly. Additionally, equal sample size was obtained to enable accurate comparisons for all the variables.

One of the limitations of the study includes the interpretation of data. For instance, what exactly do the scores on death anxiety scales mean? Do low scores really indicate low

anxiety or high denial? Validated cut-off scores of death anxiety that allows researchers to establish clinical levels of death anxiety are lacking (Falkenhain & Handal, 2003). Additionally, a normal or standard level of anxiety has not been established (Cox, 1976). What is considered normal in one culture might be considered high in another culture.

Another limitation of the study is that it is cross-sectional in nature and it samples only one part of the participants' lives. Thus, causality cannot be determined. Also, death anxiety levels might change depending on what the individual experiences throughout his or her life.

Moreover, the survey method was used to obtain data from participants in this study and inherent in all survey methods is the possibility that participants might give untruthful answers to conform to social norms or show social desirability.

Future Research

A number of issues should be taken into consideration when discussing future research. First of all, researchers should look into longitudinal studies as they are better equipped to study death anxiety. This is because longitudinal studies allow the researcher to study participants across their lifespan and allow the researcher to notice any fluctuations in death anxiety levels and causes of these fluctuations.

A further suggestion by Beshai and Naboulsi (2004) include having a qualitative study to enhance the empirical results found as individuals with the same score on a death anxiety scale might have different fears regarding death and individuals who have the same fears might not have the same level of death anxiety.

In addition, future research should look into cultural issues as some concepts of death anxiety might not be relevant or might not even exist in other cultures and thus the usage of the same death anxiety scales which are used to measure Western beliefs might yield inaccurate results. Besides, different cultures might have different definitions for religiosity (Roff, Butkeviciene, & Klemmack, 2002) and a more in-depth look into this is warranted. Cross-cultural applicability of measures (Roff, Butkeviciene, & Klemmack, 2002) as well as concepts need to be determined if accurate interpretation of results found is sought.

Needless to say, an improvement of death anxiety questionnaires is necessary. Questionnaires which examine the multidimensional nature of death anxiety, with good validity, reliability, and cross-cultural applicability, would definitely be of help to the quality of death anxiety studies (Neimeyer, Wittkowski, & Moser, 2004). Furthermore, death anxiety measures which could detect the differences between participants who really have less death anxiety and participants who deny their death anxiety would contribute immensely to the future study of death anxiety (Keller, Sherry, & Piotrowski, 1984).

What researchers could do to somehow integrate all the different results found regarding the different variables would be to create a theory or model which shows the variables' effects on level of death anxiety and its many dimensions. An illustration of a model of death anxiety can be found in Tomer and Eliason's (1996) paper. Here, they discussed the different variables and how they, directly or indirectly, affect death anxiety. Such models can help explain inconsistent results (Tomer & Eliason, 1996) and can be used to test out, integrate, or expand different theories of death anxiety (Tomer & Eliason, 1996). By having models, more structure can be infused into death anxiety research and programs to help

individuals who are afflicted with high death anxiety levels can be produced (Tomer & Eliason, 1996).

Another direction researchers can take regarding future studies is to look at how death anxiety affects or alters an individual's ability to cope with one's future death and also the death of loved ones (Maiden & Walker, 1985). For instance, do individuals with different death anxiety levels cope with death differently? Do these individuals engage in negative coping responses or have longer periods of grief and bereavement? Answers to these questions would be tremendously useful in helping health personnel assist these individuals in the future.

Implications

This study has some theoretical and practical implications. Theoretically, the results obtained could be used to improve existing theories of death anxiety (Fortner & Neimeyer, 1999) or could be added to current death anxiety models.

Practically, death anxiety studies are extremely useful in improving the quality of life and health care services for those who have high levels of death anxiety. By pointing out the variables involved in increasing or decreasing anxiety, health professionals can work towards reducing or promoting them respectively (Fortner & Neimeyer, 1999). An example would be to have support groups for these individuals to express their fears and concerns as well as find healthy and effective ways to deal with their anxiety.

CONCLUSION

In conclusion, only two hypotheses of the study were supported. The study found that death anxiety levels are higher for females as compared to males and death anxiety levels do not differ between young adults and middle-aged or older adults. The remaining hypothesis was not supported: death anxiety levels do not differ between those with or without religion, and there were no significant relationship between intrinsic religious orientation and death anxiety and no significant relationship between extrinsic religious orientation and death anxiety.

Further refinement of death anxiety measurements, research methods as well as more cross-cultural studies could shed light on this amazingly complex yet interesting topic of death anxiety.

REFERENCES

Abdel-Khalek, A. M. (2005). Death anxiety in clinical and non-clinical groups. *Death Studies, 29,* 251-259.

Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5,* 432-443.

Al-Sabwah, M. N., & Abdel-Khalek, A. M. (2006). Religiosity and death distress in Arabic college students. *Death Studies, 30,* 365-375.

Berman, A. L., & Hays, J. E. (1973). Relation between death anxiety, belief in afterlife, and locus of control. *Journal of Consulting and Clinical Psychology, 41,* 318.

Beshai, J. A., & Naboulsi, M. A. (2004). Existential perspectives on death anxiety. *Psychological Reports, 95,* 507-513.

Clements, R. (1998). Intrinsic religious motivation and attitudes toward death among the elderly. *Current Psychology, 17,* 237-248.

Corr, C. A., Nabe, C. M., & Corr, D. M. (2003). *Death and dying, life and living.* 4th ed. Belmont, CA: Wadsworth/Thomson Learning.

Cox, G. R. (1976, April). *An analysis of factors influencing attitudes toward death.* Paper presented at the Annual Meeting of the Midwestern Sociological Society, St. Louis, Missouri.

DePaola, S. J., Griffin, M., Young, J. R., & Neimeyer, R. A. (2003). Death anxiety and attitudes toward the elderly among older adults: The role of gender and ethnicity. *Death Studies, 27,* 335-354.

DeSpelder, L. A., & Strickland, A. L. (2005). *The last dance: Encountering death and dying.* 7th ed. New York: McGraw Hill.

Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. *Journal of Personality and Social Psychology, 48,* 400-419.

Duff, R. W., & Hong, L. K. (1995). Age density, religiosity, and death anxiety in retirement communities. *Review of Religious Research, 37,* 19-32.

Emmons, R. A. (1999). Religion in the psychology of personality: An introduction. *Journal of Personality, 67,* 873-888.

Falkenhain, M., & Handal, P. J. (2003). Religion, death attitudes, and belief in afterlife in the elderly: Untangling the relationships. *Journal of Religion and Health, 42,* 67-76.

Feifel, H, & Branscomb, A. B. (1973). Who's afraid of death? *Journal of Abnormal Psychology, 81,* 282-288.

Feifel, H., & Nagy, V. T. (1981). Another look at fear of death. *Journal of Consulting and Clinical Psychology, 49,* 278-286.

Florian, V., & Kravetz, S. (1983). Fear of personal death: Attribution, structure, and relation to religious belief. *Journal of Personality and Social Psychology, 44,* 600-607.

Fortner, B. V., & Neimeyer, R. A. (1999). Death anxiety in older adults: A quantitative review. *Death Studies, 23,* 387-411.

Gorsuch, R. L., & Venable, G. D. (1983). Development of an "Age Universal" I-E scale. *Journal for the Scientific Study of Religion, 22,* 181-187.

Harding, S. R., Flannelly, K. J., Weaver, A. J., & Costa, K. G. (2005). The influence of religion on death anxiety and death acceptance. *Mental Health, Religion & Culture, 8,* 253-261.

Ho, D. Y. F., & Ho, R. T. H. (2007). Measuring spirituality and spiritual emptiness: Toward ecumenicity and transcultural applicability. *Review of General Psychology, 11,* 62-74.

Hood, R. W., & Morris, R. J. (1983). Toward a theory of death transcendence. *Journal for the Scientific Study of Religion, 22,* 353-365.

Idler, E. L., & Kasl, S. V. (1992). Religion, disability, depression, and the timing of death. *American Journal of Sociology, 97,* 1052-1079.

Kastenbaum, R. J. (2007). *Death, society, and human experience.* 9th ed. Boston, MA: Pearson Education.

Keller, J. W., Sherry, D., & Piotrowski, C. (1984). Perspectives on death: A developmental study. *The Journal of Psychology, 116,* 137-142.

Kraft, W. A., Litwin, W. J., & Barber, S. E. (1987). Religious orientation and assertiveness: Relationship to death anxiety. *The Journal of Social Psychology, 127,* 93-95.

Lonetto, R., & Templer, D. I. (1983). The nature of death anxiety. In C. D. Spielberger and J. N. Butcher (Eds.), *Advances in personality assessment, Volume 3* (pp. 14-174). Hillsdale, NJ: Lawrence Erlbaum.

Maiden, R., & Walker, G. (1985, November). *Attitudes toward death across the life span.* Paper presented at the Annual Scientific Meeting of the Gerontological Society, New Orleans, LA.

Neimeyer, R. A., Wittkowski, J., & Moser, R. P. (2004). Psychological research on death attitudes: An overview and evaluation. *Death Studies, 28,* 309-340.

Patrick, J. W. (1979). Personal faith and the fear of death among divergent religious populations. *Journal for the Scientific Study of Religion, 18,* 298-305.

Rasmussen, C. H., & Johnson, M. E. (1994). Spirituality and religiosity: Relative relationship to death anxiety. *Omega: Journal of Death & Dying, 29,* 313-318.

Richardson, V., Berman, S., & Piwowarski, M. (1983). Projective assessment of the relationships between the salience of death, religion, and age among adults in America. *The Journal of General Psychology, 109,* 149-156.

Roff, L. L., Butkeviciene, R., & Klemmack, D. (2002). Death anxiety and religiosity among Lithuanian health and social service professionals. *Death Studies, 26,* 731-742.

Schumaker, J. F., Barraclough, R. A., & Vagg, L. M. (1988). Death anxiety in Malaysian and Australian university students. *The Journal of Social Psychology, 128,* 41-47.

Spilka, B., Stout, L., Minton, B., & Sizemore, D. (1977). Death and personal faith: A psychometric investigation. *Journal for the Scientific Study of Religion, 16,* 169-178.

Suhail, K., & Akram, S. (2002). Correlates of death anxiety in Pakistan. *Death Studies, 26,* 39-50.

Swanson, J. L., & Byrd, K. R. (1998). Death anxiety in young adults as a function of religious orientation, guilt, and separation-individuation conflict. *Death Studies, 22,* 257-268.

The American heritage dictionary of the English language (4th ed.). (2000). USA: Houghton Mifflin Company.

Thorson, J. A., & Powell, F. C. (1990). Meanings of death and intrinsic religiosity. *Journal of Clinical Psychology, 46,* 379-391.

Tomer, A., & Eliason, G. (1996). Toward a comprehensive model of death anxiety. *Death Studies, 20,* 343-365.

Walker, G., & Maiden, R. (1987, April). *Lifespan attitudes toward death.* Paper presented at the Annual Meeting of the Eastern Psychological Association, Arlington, VA.

Wink, P., & Scott, J. (2005). Does religiousness buffer against the fear of death and dying in late adulthood? Findings from a longitudinal study. *Journal of Gerontology, 60B,* 207-214.

Wu, A. M. S., Tang, C. S. K., & Kwok, T. C. Y. (2002). Death anxiety among Chinese elderly people in Hong Kong. *Journal of Aging and Health, 14,* 42-56.