University of Southampton Research Repository
ePrints Soton

http://eprints.soton.ac.uk

UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL AND HUMAN SCIENCES

School of Psychology

**Religious Pathways to Coping with Personal Death Anxiety among
Older Adult British Christians and Chinese Buddhists:
Afterlife Beliefs, Psychosocial Maturity and Regret Management**

by

Victoria Ka-Ying Hui

Thesis for the degree of Doctor of Philosophy

April 2012

This page is intentionally left blank.

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SOCIAL AND HUMAN SCIENCES

SCHOOL OF PSYCHOLOGY

Doctor of Philosophy

RELIGIOUS PATHWAYS TO COPING WITH PERSONAL DEATH ANXIETY AMONG

OLDER ADULT BRITISH CHRISTIANS AND CHINESE BUDDHISTS:

AFTERLIFE BELIEFS, PSYCHOSOCIAL MATURITY AND REGRET MANAGEMENT

by Victoria Ka-Ying Hui

Religion was proposed to account for the relatively low personal death anxiety found among older adults. This dissertation sought to examine the influence of religious afterlife beliefs, religiously enhanced psychosocial maturity and religious management of a past major regret on personal death anxiety in later life. Terror Management Theory and Erikson's Psychosocial Theory were used to describe these three religious pathways to coping with personal death anxiety in later life. The cross-sectional postal survey samples consisted of 143 older adult British Christians and 141 older adult Chinese Buddhists. Structural Equation Modelling results from the British Christian survey study showed that intrinsic religiosity predicted lower personal death anxiety through: (a) fostering more benign afterlife beliefs; (b) enhancing psychosocial maturity; and (c) promoting emotional stability. No significant relationship between belief in reincarnation and personal death anxiety was found in the Chinese Buddhist survey study. Both survey studies failed to support the personal death anxiety buffering power of religious management of a past major life regret, although some religious coping strategies were associated with lower negative emotional appraisal towards the major life regret among older adults. The British survey study has been the first to demonstrate both the personal death anxiety buffering and psychosocial maturity enhancing power of religion in an increasingly secular society. The lack of relationship between Buddhist reincarnation beliefs and personal death anxiety suggests that not all religious afterlife beliefs have death anxiety buffering power as proposed by Terror Management Theory. The development of Buddhist reincarnation belief and Buddhist coping scales is a pioneering step towards developing research on under-explored Eastern non-theistic afterlife beliefs and coping measures. Implications for ways that help religious older adults cope with their personal death anxiety were discussed. Prospective cross-cultural and cross-religion studies were recommended to replicate the present survey findings. Finally, self detachment (self negation) was proposed as the basis of an alternative death transcendence theory to be researched in future studies on personal death anxiety.

This page is intentionally left blank.

Table of Contents

CHAPTER 4: MAJOR BRITISH CHRISTIAN PILOT INTERVIEW STUDY .. 47

List of Figures

This page is intentionally left blank.

List of Tables

This page is intentionally left blank.

Declaration of Authorship

I, Victoria Ka-Ying Hui

declare that the thesis entitled

Religious Pathways to Coping with Personal Death Anxiety among Older Adult British Christians and Chinese Buddhists: Afterlife Beliefs, Psychosocial Maturity and Regret Management

and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published work of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
- parts of this work have been published as:
  Hui, V. K-Y., & Coleman, P. G. (in press). Do reincarnation beliefs protect older adult Chinese Buddhists against personal death anxiety? *Death Studies*.
  Hui, V. K-Y., & Coleman, P. G. (in press). Afterlife beliefs and ego integrity as two mediators of the relationship between intrinsic religiosity and personal death anxiety among older adult British Christians. *Research on Aging*.
  http://dx.doi.org/10.1177/0164027512436429

Signed: ....

Date: 27 April 2012

This page is intentionally left blank.

Acknowledgements

the hospital as an emergency. Knowing that I was in his thoughts was comforting to me at a time when my study nearly went to a halt due to my 12-week suspended registration. He is very thoughtful and I am glad that our lives have touched.

I would like to thank Professor Constantine Sedikides, my PhD advisor, for his generous invitation to join his research team – Centre of Research on Self and Identity. He did this out of his kindness perhaps because he was concerned about my vulnerability to cultural maladjustment when he knew that I had no family or relatives in the UK. Having a group membership did make me feel less like an orphan in the School in the first few months and I am thankful for his integrating me to the School. Professor Sedikides is very humble and does not mind serving refreshments to students, which I think is quite an unusual act for a successful professor like him. Therefore, I was very surprised that he and the other internal upgrade examiner criticized me severely on my upgrade exam. I got a sympathetic pass in the end. Because of his constructive comments, my previous meandering thesis and the scope of my inquiry have been tightened substantially (possibly saving me from failing my viva). I am also charmed by his earnest advice on drafting a thesis correction proposal to ensure I have satisfactorily addressed all examiners' necessary recommendations before resubmission.

I would like to express my thanks to Professor Bob Woods and Dr. Aiden Gregg for their contributions to improving my thesis, in particular, cross-sectional analysis and presentation of my British survey study as well as construction of religious pathway mediation models. I would like to acknowledge Dr. Aiden Gregg's direct involvement in my post-viva thesis revision and recommendation of the BIDR-7 scale when I had no idea of finding an appropriate scale to measure social desirability for my British participants. His suggested item exclusion criterion was also very helpful.

Many other people have helped me, directly and indirectly, in shaping the following pages. First, I would like to thank my very kind colleague, Dr. John Spreadbury, for his help. He coached me in the first few British Christian pilot interviews. He agreed to check for any misspelling of my Time 2 British Christian survey. He assisted me in obtaining the contact details of my British Christian participants to identify participants who returned their anonymous Time 2 survey as soon as possible. He was happy to manage my mails and correspondence during my 12-week suspended registration and spared me some of his inter-library loan quota. He was kind enough to devote his time to review my thesis and letter to examiners before resubmission.

delicious and nutritious meals to welcome me home. They constantly send me Chinese snacks and herbs that I can eat and cook while I am living in the UK to restore my health so that I can carry on with my study. Conversations with my parents also help me understand better about the ageing experience and death-related concerns in later life underlying my participants. My mother was enthusiastic about my Buddhist study that she recommended some useful Buddhist materials to help design my Buddhist surveys. She even helped me follow-up all Buddhist volunteers who kindly distributed the Buddhist surveys to interested parties and updated me about the recruitment progress when I was back to the UK. My elder brother gave me a laptop to use and resolved most technical errors I came across when using it. He also promptly ordered a new notebook and Office software when my old laptop broke down. My elder sister, Emily Hui, saved at least two months of her salary for me in case I ran out of money. She did this also because she was worried about my health that she did not want me to take up any part-time jobs that might put me under strain. I am still touched by her compassion.

Delighted at having resubmitted my thesis, I would like to thank Buddha, Bodhisattvas, Monkey King, Three Jewels god and judge for their spiritual support and for sending me all these angels to help me compile this dissertation.

Definitions

- *Acceptance coping* refers to people's acknowledgement of their unchangeable past to cope with a stressful life event.
- *Afterlife beliefs* refer to people's beliefs in a life after death. It is sometimes known as literal immortality.
- *Belief in a pleasant afterlife* describes people's belief in a happy life and personal justification after death.
- *Belief in an unpleasant afterlife* describes people's belief in punishment for sins and suffering after death.
- *Buddhism reincarnation belief* is an afterlife belief that one's existence spans through many lifetimes depending on one's karma.
- *Buddhist* is defined as a person who believes in Buddhism and has taken the Three Refuges ceremony.
- *Christian* is defined as a person who believes that Jesus was the Son of God and who is receptive to belief in a personal God.
- *Death* is the cessation of all vital bodily functions.
- *Deferring Buddhist coping* refers to passivity in problem solving and reliance on enlightened masters (i.e. Buddha or Bodhisattvas), their doctrines or spiritual teachers (i.e. Sanghas) to deal with a stressful life event.
- *Ego integrity* is the acceptance of the life one has led and the person one has become, as something that had to be.
- *Existential vacuum* refers to perception that life is deprived of any significance that there is nothing to live for and that one's life is worthless.
- *Extrinsic religiosity* represents an instrumental approach to use religion as a means of seeking comfort and social convention.
- *Generative concerns* are defined as people's conscious concerns for the next generation's well-being and their perceived contribution to the society.
- *Intrinsic religiosity* describes people's commitment to strive for meaning through their religion and to live out their religious faith.
- *Karma* refers to the effects of our past volitional actions on the reward or retribution in our present and future well-being.
- *Life despair* refers to an ominous view of one's life as a whole characterized by pessimism, disconnectedness with family and struggle with the demands of life.
- *Life purpose* refers to a sense of having life mission and direction that there is something of lasting significance in one's personal existence. It also reflects a sense of fulfilment from previous goal accomplishment.
- *Life regrets* usually involve counterfactual thinking and negative emotions over actions or inactions.

- *Life satisfaction* is a positive life outlook characterized by the feeling that one's life is hopeful and worth living.
- *Mortality acceptance* is the acknowledgement of the inevitability of death as a final process of life, when one neither looks forward to it nor fears its occurrence.
- *Negative emotional regret appraisal* refers to the range of negative emotions people feel towards their regret.
- *Negative religious coping* is characterized by uncertain faith and religious struggle. It also describes a person's belief in divine punishment and demonic acts for his/her personal failings.
- *Neuroticism* is a personality trait characterized by a range of negative emotions such as anxiety, tension, and depression.
- *Nirvana* is a place or state characterized by freedom from and extinction of the endless cycle of reincarnation.
- *Non-religious coping* means dealing with stressful life events cognitively and behaviourally in ways unrelated to religion.
- *Personal death anxiety* is defined as a negative emotion arising from the awareness of one's prospective total non-existence.
- *Personal dying anxiety* is defined as a negative emotional reaction concerning one's dying process.
- *Positive attitudes towards ageing* refer to a person's optimistic orientation and feelings concerning his/her personal ageing.
- *Positive religious coping* reflects a secure connection with God. It also reflects reliance on religion for support, personal growth and comfort.
- *Psychosocial maturity in later life* refers to the ability to reflect on and embrace one's life and social responsibility.
- *Religious coping* is the use of religion-based cognitions and behaviours to deal with stressful life events.
- *Self acceptance* refers to acceptance towards and being at peace with one's inalterable past and personal insufficiencies.
- *Self-directing Buddhist coping* refers to the coping strategies characterized by self-reliance and upholding the Five Precepts to deal with a stressful life event.
- *Transpersonal faith-based Buddhist coping* refers to the use of strategies that enable one to sustain faith in Buddhism and to foster right mindfulness of life purpose.

Preface

It is nearly eleven years since the death of my grandmother. She died of cancer in her late 80s. I knew she was in pain both physically and emotionally. Because elders of her generation still treated it as a taboo to speak about death at that time, she kept these feelings all to herself and avoided talking about her impending death with me and my family. I was puzzled by her reluctance to talk about her distress and her suffering unnecessary fear along with her physical pain during the end of her life. But after suffering a major illness that required immediate operation myself, I understand why it is so hard to talk about and face death, especially when one is dying: one is not yet prepared or ready to die.

Living entails many mini-deaths, such as major illness or injury to self, each of which reminds people of the ephemeral nature of life. Five years ago I was a research postgraduate concentrating on the study of death and dying. Owing to my research interests and training in this area, I considered myself quite well acquainted with research about personal death anxiety. On many levels, I was perplexed by my lack of identification with the terror of death expressed in the literature. Only when I experienced a major illness did I become aware of my intense fear of death.

In September 2008, I suffered from an unexpected gynaecological condition, despite having no such prior history. I was told by two private practising gynaecologists that I had a dysfunctional inflamed ovarian cyst that required immediate surgery. I was very shocked at the news but managed to be admitted to hospital as an emergency within the same day. I still vividly remember the scene before I was pushed to the operation theatre for general anaesthesia. I could not forget my mother releasing her grip of the rail of bed and her tearful expression. When I lost sight of her, I regretted not reassuring her that my surgery would go well and I would be back in no time. I was then surrounded by a group of (life saving) surgeons who appeared to me as complete strangers. In the moments before I was anaesthetized, I became petrified by my awareness of proximity to death that I lost my sense of time. I was very fearful of dying as a result of a surgical failure to the point of being catatonic. But my mind went like a merry-go-round. Thoughts of death came one after another. I was thinking if this would be my lot to end my life, in a hospital far away from my family. If I had died, it would have been the worst kind of solitude being unable to say that I was going to die and thinking of everything I wanted to say to my beloved family – words, gestures of love and gratitude. I was wondering about what it was like to be dead and where I would go after I died. Inside of me, I felt helpless and I cried. I knew for sure that I did not want to die at all. My thoughts were then interrupted by the placing of the

anaesthesia apparatus on my nose and my veins on the back of hand. In my heart, I yelled 'No, please let me live'. And my breathing got heavier and heavier.

Certainly, this critical medical condition has made death and dying more real to me that I, as a research student on death and dying, may well be experiencing it. Not only my life as a whole is bound by birth and death, the boundary between life and death at any moment can be particularly fragile. By experiencing a life-threatening illness, I feel more able to empathize and identify with the distress of my grandmother and people facing impending death. It also added weight to my decision to dedicate myself to accompanying others on the last steps of life's journey as a palliative counselling psychologist. More importantly, I realize the difference between anxiety towards a distal and a proximal actual death. The former is like watching lions outside a cage while the latter can be compared to being trapped in a cage with the lions (cf. Xin-Yuan, 2005). As Chaplin (2000, p. 201) put it, 'there is a world of difference between saying good-bye and then continuing on with one's life and saying good-bye prior to ending life'. I realize that it is so easy to lose one's composure in the face of approaching death. Therefore, the motivation for writing this dissertation on personal death anxiety is anchored in compassion. It is hoped that, by confronting my and others' discomfort with personal death, the fear arising from the anticipated destruction of personal legacy and intimate bonds as well as the unknown transition to the hereafter brought about by death can be lessened.

Chapter 1:   Introduction

> And nothing can we call our own but death;
> And that small model of the barren earth,
> Which serves as paste and cover to our bones.
> Shakespeare, *King Richard II*

In this chapter, I will first explain the purpose of this dissertation. Next, I will describe how technological advancements have changed our relation to death in the modern society and explain why confronting personal death is a source of terror. Then, I will show how ageing is related to death. After that, I will review the empirical findings regarding personal death anxiety in later life. Subsequently, I will explain why religion is a compelling source of coping with personal death anxiety in old age. The outline of the thesis will be presented at the end of this chapter.

1.1. Purpose of the Study

This dissertation sought to examine the effect of religious afterlife beliefs, religiously enhanced psychosocial maturity and religious management of a past major regret on personal death anxiety in later life. Because the power of religion in mitigating older adults' personal death anxiety may have been circumscribed by an increasingly secular culture, this dissertation aimed to examine the efficacy of these three proposed religious pathways to coping with personal death anxiety in a sample of older adult Christians in the UK, where Christianity is on the decline. In addition, empirical investigations into Eastern religious afterlife beliefs and religious coping with past-related regret in old age have been meagre. Hence, this dissertation also attempted to explore the personal death anxiety buffering power of Buddhist reincarnation beliefs and Buddhist coping with a past major regret among older adult Chinese Buddhists.

1.2. Background

1.2.1.   Death in Modern Society

Death is the cessation of all vital bodily functions. The greatest triumph over the millennia is the dramatic postponement of death. For example, emerging new effective medication and key-hole surgical replacement of vital organs have assisted many people to remain reasonably healthy from middle adulthood onwards. These medical breakthroughs have fuelled efforts to conquer ageing completely in contemporary

medical science. For instance, genetic engineering and cloning are some aggressive attempts to overcome death (Zisook & Downs, 2004).

Such progress, however, has come with a price. Technological progression has distorted our time perspective, as if our life is a line that grows longer and longer. Each time we are informed that a previously incurable disease can now be treated, we begin to anticipate the coming of a cure for everything that death can be postponed indefinitely.

In addition, technological advances have contributed to an increasing preference for a quick and easy death. A person who would have died in a much shorter time is now maintained on life support or resuscitated, resulting in a long and lingering decline. Such concerns over the quality of end-of-life have led more individuals to make advanced directives, such as living wills and durable powers of attorney, to state what kinds of medical care they wish to receive should they become incapable of making treatment decisions. 'Rather than uniformly being on the side of preserving life and preventing suicide, physicians now are being urged in certain circumstances and in the name of compassion and dignity to help some patients carry out their suicidal wishes' (Zisook & Downs, 2004, p. 1963).

1.2.2. Confronting Personal Death

While medical/technological advances have successfully deferred the onset of old age, confronting our own mortality is still emotionally difficult to deal with for some of us. In particular, our awareness of our inevitable and irreversible demise often brings about a sense of anxiety in respect to our prospective death (Cicirelli, 2006b) for two reasons.

First, humans have an instinctual drive for continued survival (Greenberg, Pysczynski, & Solomon, 1986; Solomon, Greenberg, & Pysczynski, 1991), but death precludes life continuation. We take pride in our ability to achieve important objectives and to help others meet their ends. We enjoy what we possess and gain. But death brings an irrecoverable closure to our life. Annihilation of life also leads to a total loss of a sense of self identity that we value. Therefore, awareness of the inevitability of death can evoke a number of fears (Moore & Williamson, 2003; Zisook & Downs, 2004).

The multidimensional fears of personal death were captured in Florian and his colleague's (2004) proposed Tri-dimensional Model of Fear of Personal Death. 'The intrapersonal dimension includes concerns and worries related to the consequences of

death for one's own mind and body...The interpersonal dimension includes concerns and worries related to the painful effects of death on one's interpersonal interactions and close relationships...The transpersonal dimension includes personal concerns related to the hereafter' (Mikulincer & Florian, 2008, p. 42). These far reaching consequences of death on earthly engagement and the mystery surrounding the hereafter make human encounter with death a source of terror.

Second, human is also a meaning seeker who is primarily motivated to find reasons for his/her survival (Wong, 2008). But the fact that death is inevitable provokes a sense of existential futility and fragility. We feel powerless in the face of death. What is the point of struggling to achieve significance when all our activities will end in destruction? Do the suffering and tragedies that life brings with it have meaning in the face of our inevitable death? Doubts about whether our striving and endeavour for survival will lead to anything of significance or failure to envision existential meaning underlies our fear towards impending death.

> Death is patiently making my mask as I sleep.
> Each morning I awake to discover
> In the corners of my eyes the small tears of his wax.
> *Philip Dow*

1.2.3.   Ageing as an Antecedent to Death

'Ag[e]ing is related to the passage of time' (Schenck & Roscoe, 2009, p.63) and death becomes more of an inescapable reality with advanced age. The quintessence of old age is that there is no other period following late adulthood (Munnichs, 1966) besides death. In addition, the prospect of approaching death, of experiencing a gradual functional loss and of waning social network near the end of life makes old age a process going hand in hand with death (Langle & Probst, 2000).

1.2.4.   Personal Death Anxiety in Later Life

The most disturbing feature of ageing has to do with its increasing nearness to personal death, concomitant bodily, interpersonal and psychological losses (Lazarus & Lazarus, 2006, p. 3). These existential challenges of advanced age are believed to be associated with greater personal death anxiety, which is defined as a negative emotion arising from the awareness of one's prospective total non-existence (Cicirelli, 2006a).

Because older adults stand at the end of the life continuum that the young do not, heightened awareness of proximity to death in old age is proposed to increase personal death anxiety among seniors. For example, Quinn and Reznikoff (1985) found that perceived amount of feeling stressed by the passage of time was positively related to death anxiety among older respondents aged over 60. Likewise, Moreno, de la Fuente Solana, Rico, and Fernandez (2008-2009) found that, among their participants aged over 65, those who thought that time passed quickly had significantly higher death anxiety than those who did not notice the passing of time.

Ageing promotes life-threatening and disabling diseases, which remind older adults of their own mortal limit. 'Weakness, frailty, ailing and illness and finally the neediness of elderly all indicate that the force of life is broken' (Langle & Probst, 2000, p. 194). The grim prospect of living under various ailments in later life is likely to reduce the attractiveness of future life (Pinquart, Frohlich, Silbereisen, & Wedding, 2005-2006). This is because older adults' decreasing vitality and growing dependency interfere with their own and other people's life. Hence, physical frailty is expected to increase personal death anxiety among elderly people. In a sample of older adults aged over 60, Rhudick and Dibner (1961) found that those who reported more physical symptoms and those who admitted to have more physical and psychiatric symptoms exhibited significantly more death concerns than those who listed fewer such health complaints. Later, Tate (1982) found that poorer health was associated with greater death anxiety in his sample of elderly women aged over 65. In a comprehensive review of correlates of death anxiety in older adults, Fortner, Neimeyer and Rybarczyk (2000) discovered that higher levels of death anxiety, in general, were predicted by more physical problems.

Bereavement is seen as one of the many losses encountered in old age (Garrett, 1991). It is also likely to occur in rapid succession among elderly people leaving them insufficient time for resolution of grieving over each loss (Stillion, McDowell, & May, 1989). Because the couple derived support and a sense of identity from one another, the death of a spouse in old age can induce an existential crisis for the surviving elderly widow/widower who is already very vulnerable and less resistant to stress. For example, Moreno and colleagues (2008-2009) found that, among people aged over 65, those who experienced the death of any family member or friend recently had higher death anxiety than those who had no loss of loving ones.

Yet, there is little empirical support for the view that higher level of death anxiety is associated with advanced age (Fortner & Neimyer, 1999; Fortner, Neimyer, & Rybarczyk, 2000). On the contrary, the level of death anxiety in late adulthood has

been commonly found to be low (e.g., Field, 2000; Jeffers, Nichols, & Eisdorfer, 1961; Munnichs, 1966). For example, Gesser, Wong and Reker (1987-1988) found that general fear of death and dying was minimal in later life. The majority of studies with elderly people suggested that older adults tended to show less death anxiety than persons of younger age groups (e.g., Keller, Sherry, & Piotrowski, 1984; Thorson & Powell, 1988). For instance, across diverse ethnic community samples in the Los Angeles area, Kalish and Reynolds (1977) found that elderly people were less anxious about death than their younger counterparts. Likewise, Rhudick and Dibner (1961) found that people aged 80 or above had the lowest death concerns than their young and middle-aged counterparts.

Although some investigators (Rasmussen & Brems, 1996) have suggested that the level of death anxiety decreases over the course of life span, Fortner, Neimeyer, and Rubarczyk (2000) did not find death anxiety continues falling with advanced age within later life. Rather, they cautioned about the scarce research on personal death anxiety of the relatively few oldest-old people and concluded that "death anxiety tends to decline from middle age to older age and stabilizes during the final decades of life" (Fortner et al., 2000, p. 99; Russac, Gatliff, Reece, & Spottswood, 2007). 'Nevertheless, the phenomenon of fear of death exists among older adults, although it may be low compared to younger adults' (Cicirelli, 2000b, p. 177).

1.2.4.1. Mortality Acceptance as an Alternative Death Attitude in Later Life

Most previous studies have been confined to personal death anxiety, which is one but many attitudes towards death. A review over studies done with older adults aged over 60 generally showed high mortality acceptance. Mortality acceptance is the acknowledgement of the inevitability of death as a final process of life, when one neither looks forward to it nor fears its occurrence. For example, most old people agreed that death was a salient topic, but negative views of death were found to be less prevalent than acceptance of death in old age (Field, 2000; Riley & Foner, 1968; Wass, Christian, Myers, Murphey, 1978-79). Indeed, Pinquart, Frohlich, Silbereisen, and Wedding (2005-2006) found age was the strongest predictor of death acceptance. Among their cancer participants (aged between 18 and 83) as well as their healthy participants free of any life-threatening illness (aged between 18 and 88), increasing age was associated with higher accepting attitudes towards death. Field (2000) also discovered a common pattern of an increasing acceptance towards death and dying among elderly people aged between 65 and 80 as they got older.

1.2.5.   Religion and Coping with Personal Death Anxiety

The overwhelming majority of research suggests that advancing age does not increase older people's personal death anxiety. Instead, older adults usually see death as a natural part of life and have few worries regarding their impending death. How do older people experience low personal death anxiety when death is no longer a distal but an inexorable fact of life? I propose that religion is often called upon to cope with personal death anxiety among older adults for two reasons: (a) religion is interconnected with old age; and (b) religion serves as a basis for a person's global meaning system that aims to provide a meaningful and integrally-linked journey from the beginning to the negation of existence.

1.2.5.1. Interconnections between Religion and Old Age

Historically speaking, religion has been a dominating factor in structuring the passage of life from one stage to the next – birth, adolescence, marriage, and most of all death – and the ritualistic celebrations of the key moments in the life course (Davie & Vincent, 1998). Such religious rites of passage enable its members to acknowledge difficult life transitions rather than deny their reality (Pargament, Ano, & Wachholtz, 2005).

The interconnection between religion and old age is further supported by studies on developmental changes in religiosity, which generally found that as people grew older and approached death, they became more religious. For example, belief in God increases with age (Davie & Vincent, 1998). Intrinsic religious commitment is stronger in older adults aged over 55 than youths (Watson, Howard, Hood, & Morris, 1988). Self-rated religiosity increased somewhat over four years among people aged over 60 (Markides, 1983).

However, the age difference in various indices of religiosity could be due to different cohorts' upbringing experience (cf. Davie & Vincent, 1998). Pre-war generations tended to grow up under the influence of membership of a wide range of church congregations while post-modernity undermines the role of a traditional religious life course by increasing variety in life styles.

Because of their established formal link with churches, religion remains an important source of support in the midst of suffering, loss and death for many older people (Blazer & Palmore, 1976; McFadden, 1996). For example, religious faith was among one of the typical strategies people in their late 70s and early 80s used as a defence

against death anxiety (Cicirelli, 2003). In addition, faith in God was cited by a number of older adults as a facilitating factor for their recovery from crises (Caplan, Haslett, Burleson, 2005). Moreover, religion became more prevalent in meaning-making among elderly people after the death of a partner (Golsworthy & Coyle, 1999) or the diagnosis of a terminal illness (Ardelt, Ai, & Eichenberger, 2008). Manfredi and Pickett (1987) also found that prayer was the most frequently used strategy to cope with stress and conflict among elderly people.

1.2.5.2. Religion as Part of a Global Meaning System

'Human beings are hungry for significance' (Cottingham, 2003, p. 32), in particular, the meaning of existence. Because 'no finite being can conquer its finitude' (Tillich, 1964, p. 194), awareness of death gives rises to a sense of loss of control, predictability, or comprehensibility of the world. Hence, search for meaning often occurs in response to impending death (Marrone, 1999) and/or normal ageing process (Moremen, 2004-2005). Meaning searching involves questioning the justness and goodness of the world. It also involves examination of life meaning and the place of oneself in the universe (Marrone, 1999). Religion is often mentioned when discussing meaning of suffering, life and death. This is because, as a part of a person's global meaning system, religion functions to inform his/her global beliefs, global goals and subjective sense of meaningfulness (Park, 2005a) to cope with existential issues.

Global beliefs are general beliefs about the nature of the world that help people interpret their everyday life experiences (Park, 2005a; 2005b). 'Every [religious] tradition depicts a meaningful world and encourages its members to find and live by this meaning' (Pargament, 1997, p. 48). Specifically, religion provides fair, predictable, controllable and safe worldviews (Park, 2005b) to understand the impermanence of life so as to restore existential meaning that has been threatened by death. For example, religion offers more benign or acceptable causal attributions to account for why a given life event occurred and illuminates the positive aspects that may follow from stressful situations (Park, 2005a). Such an approach could conserve the meaning of personal striving by providing insights into instances where a seeming wrong decision leads to the right decision after all.

Global goals are desirable outcomes that people strive to achieve or maintain (Park, 2005a; 2005b). Religion outlines a 'framework for determining what is right and good and to be sought after, and for determining what is wrong and bad and to be avoided' (Park, 2005a, p. 301). If one follows such religious code of practice, one is believed to reach a sacred destination. For example, believers may see their righteous action as

oriented toward a desirable afterlife. If heaven is not a reward for their devotion to their faith, then efforts to persevere in their religious commitment despite obstacles and suffering on Earth become meaningless in themselves (Kubler-Ross, 1969).

Subjective sense of meaningfulness refers to feelings of having a purpose in life (Park, 2005a; 2005b). Most religions are able to provide meaning by explaining the human nature, the origin of existence, and the inevitable cessation of life (Ardelt & Koenig, 2006). "Religious and spiritual beliefs represent one way in which human beings create a structure of meaning that gives a sense of order and purpose to their existence and to death" (Golsworthy & Coyle, 1999, p. 22). Specifically, religion helps people restore a sense of meaning and continuity of existence in three ways: (a) re-construction of past conflicts, (b) integration and appreciation of one's social responsibility and life experiences, and (c) affirmation of a future life after death. It is this religious focus on making sense of our past, present and future that makes religion more effective than mundane meaning systems in approaching death.

Given that religion is an important meaning system that helps people comprehend the problems of existence, there is a need to investigate the efficacy of religion's pervasive personal death anxiety buffering power. Hence, the purpose of this dissertation is to examine the efficacy of the aforementioned three pathways by which religion exerts its influence on personal death anxiety in later life among religious older adults.

1.3. Outline of This Thesis

Chapter 2 considers three religious pathways to buffer personal death anxiety in later life: afterlife beliefs, psychosocial maturity, and regret management. I will review the existing empirical evidence with regard to these three religious pathways from older adult and mixed-age samples. Although death is a familiar theme in all religions, a huge body of studies centre on theistic afterlife beliefs and coping with adversity; while similar research done on non-theistic religion such as Buddhism is still in its infancy. Therefore, a proportion of this chapter will be devoted to introduce Buddhist reincarnation beliefs and Buddhist coping with sufferings. Then, I will propose one confound (neuroticism) and several potential additional correlates of personal death anxiety that may be or have been related to personal death anxiety but are not captured by the three proposed religious pathways.

Chapter 3 is an overview of the present inquiry. It provides a justification of selecting older adult British Christian and Chinese Buddhist as the two religious target groups.

Next, the research design for each religious group will be described. Finally, a list of causal hypotheses will be reiterated.

Chapter 4 outlines a pilot interview study conducted on 19 older adult British Christians. The goals of this pilot interview study are: (a) to check the applicability of some scales considered for use among older adult British Christians in terms of clarity and length; and (b) to serve as a preparatory study for the subsequent major cross-sectional British Christian survey study. The corresponding findings will be presented and discussed.

In Chapter 5, the efficacy of the three proposed religious pathways to buffer seniors' personal death anxiety in an increasingly secular society will be examined among older adult British Christians using a cross-sectional postal survey design. I hypothesize that people with greater intrinsic religiosity will have a lower level of personal death anxiety because of: (a) their stronger belief in a more benign afterlife; (b) attainment of psychosocial maturity; and (c) effective religious management of a past major regret. The corresponding findings will be presented and discussed.

Chapter 6 outlines a pilot interview study conducted on three older adult Hong Kong Chinese Buddhists. Similar to the British Christian pilot interview study (see Chapter 4), the goals of this pilot interview study are: (a) to check the applicability of some scales considered for use among older adult Chinese Buddhists in terms of clarity and length; (b) to serve as a preparatory study for the subsequent exploratory cross-sectional survey study; and (c) to self-construct a Buddhist coping strategies measurement with reference to some Buddhist information booklets and an important theistic coping scale. The corresponding findings will be presented and discussed.

In Chapter 7, the efficacy of Buddhist reincarnation beliefs and Buddhist coping with a past major regret on lowering personal death anxiety in later life are examined among older adult Chinese Buddhists using a cross-sectional postal survey design. Because reincarnation is not desirable for Buddhists, I hypothesize that Buddhist reincarnation belief will be a weak personal death anxiety buffer. Given the beneficial outcomes of employing theistic positive religious coping, I hypothesize that more use of Buddhist coping will lower personal death anxiety by reducing participants' negative emotional regret appraisal. In addition, with no existing measurements for Buddhist reincarnation belief and Buddhist coping strategies, this exploratory survey study also aims to validate the self-constructed Buddhist reincarnation beliefs and Buddhist coping with regret scales. The corresponding findings will be presented and discussed.

Chapter 8 compares and contrasts five findings from the major British Christian and the exploratory Chinese Buddhist survey studies. Furthermore, the unique contributions of these two studies are highlighted. Several implications on coping with personal death anxiety and regrets are also drawn from these two survey studies. Limitations incurred in this dissertation are noted. In addition, advice is suggested to address the shortcomings of the studies in future research.

1.4. Conclusions

Technological advancements have shaped our personal experience with and attitudes towards death in the modern society. Still human encounter with death is a source of terror. Older adults are expected to have high personal death anxiety owing to many age-related challenges that come to the fore in late adulthood. Yet, older adults are predominantly found not only to have low personal death anxiety but to express high mortality acceptance. Religion is relevant to understanding why older adults tolerate personal death anxiety better than younger adults because: (a) religion is interconnected with old age; and (b) the religion is an important part of a person's global meaning system which is able to restore a sense of meaning and continuity of existence that are threatened by personal death.

Chapter 2:   Literature Review and Hypotheses

2.1. INTRODUCTION

In Chapter 1, the possessing of a religious meaning system has been theorized to help older adults cope with existential crises. It is the efficacy of religion in lowering personal death anxiety in later life that warrants investigation in this dissertation.

This chapter begins with a review of the existing theories and empirical evidence with regard to three religious pathways to coping with personal death anxiety from both older adult and mixed-age samples. Next, the confounding effect of neuroticism on the negative relationship between intrinsic religiosity and personal death anxiety will be discussed. Since religion is only one factor to understand personal death anxiety in later life, I will describe in the last section of this chapter some additional correlates of personal death anxiety and their relations to personal death anxiety.

2.2. Three Religious Pathways to Coping with Personal Death Anxiety

Two issues that relate to confronting finitude are restoring a sense of continuity and meaning of existence. The meaning an individual attaches to suffering, life, and death will determine his/her ability to endure these fundamental paradoxes of human existence. Because religion underlies older people's resilience in the searching for meaning in the midst of loss and death (cf. McFadden, 1996), it is believed to be a compelling buffer against personal death anxiety in later life. In particular, religion serves to buffer personal death anxiety by: (a) providing reassurance of life continuation through the concept of an afterlife; (b) fostering psychosocial maturity to restore the significance of existence; and (c) managing past regrets to bring closure to life and meaning to its vicissitudes. In short, religion gives meaning to the life before and after death to help older adults cope with their personal death anxiety.

> We need a life not correlated with death,
> A health not liable to illness,
> A kind of good that will not perish,
> A good in fact that flies beyond the Goods of nature.
> *William James*

2.2.1. Afterlife Beliefs as a Religious Pathway to Buffer Personal Death Anxiety

2.2.1.1. Afterlife Beliefs and Personal Death Anxiety

According to Becker (1973), aspiration for immortality is the core of human motivation. Because humans are equipped with sophisticated intellectual abilities that enable them to self-aware, they not only know that they are alive but also that they will eventually die. Becker (1973) argued that such a conflict between humans' awareness of their own inevitable mortality and their instinctual desire for continued life is the root of death anxiety, which underlies all their other fears. Living in a largely uncontrollable universe, where death is the only certainty, is constantly terrifying for humans. Becker thought that 'much of what we call civilization consists of a desperate attempt to keep our death anxiety under control' (Kastenbaum, 2000b, p. 137). Similarly, Moore and Myerhoff (1977) later pointed out that '…beneath all rituals is an ultimate danger…the possibility that we will encounter ourselves making up our conceptions of the world, society, our very selves. We may slip in that fatal perspective of recognizing culture as our construct, arbitrary, conventional, invented by mortals' (p.18).

Terror Management Theory (Greenberg et al., 1986; Solomon et al., 1991) draws on Becker's (1973) idea of human social behaviour and proposes that, in order to shelter from the overwhelming terror of death, humans create cultural worldviews to (a) imbue the chaotic world with order and meaning, (b) define their place in that orderly world; and (c) provide themselves with an illusory perception of control over the forces of nature. The way in which humans construct cultural worldviews as defence mechanisms against death awareness and anxiety appears to posit that man becomes 'the creator and generator of the meaning of his own life' (cf. Cottingham, 2003, p.12).

Some of these cultural worldviews provide a death illusion that immortality is possible. For example, death can be seen as a gateway to an eternal afterlife in Christianity. By denying death, people forget the anxiety that death causes. For instance, most dying patients react to the awareness of their dying with initial denial to mitigate their personal death anxiety (Armstrong-Coster, 2004; Buckman, 1988; Kubler-Ross, 1969). Consequently, validation and maintenance of these cultural worldviews will help people manage their personal death anxiety (Greenberg et al., 1986; Solomon et al., 1991).

Answers as to whether death is or more than the end of one's life have been nearly the exclusive domain of religions (Burris & Bailey, 2009). Specifically, religion focuses on a spiritual non-material realm that surpasses corporeal existence (Hart & Goldenberg,

2008). The concept of religious afterlife beliefs reassures its believers that continued existence after death is possible. Death becomes less threatening when people believe that life continuation is possible after the decomposition of their physical body. Moreover, in situations of impending death, afterlife beliefs may become salient as they are often framed in positive terms, and thus they could be a source of comfort and of hope for dying people (Exline & Yali, 2007).

A review of past studies showed that belief in an afterlife was prevalent among elderly people. For example, the General Social Survey in the United States indicated that over 78% of people aged over 60 believed in an afterlife (as cited in Spilka, Hood, Hunsberger & Gorsuch, 2003). This survey also revealed that more than 66% of these older adults believed in heaven and that, to a lesser extent, around 55% reported holding a belief in hell. Moreover, older adults often believed in a positive afterlife. For instance, Gesser, Wong, and Reker (1987-1988) found that elderly people reported stronger belief in death as a passage to a happy afterlife than younger people. Likewise, Cicirelli (2006b) found that older adults tended to strongly agree that death means the beginning of something beyond life on earth and that death is the beginning of a new adventure in the afterlife. Among 12 terminally ill women aged between 41 and 91, Grumann and Spiegel (2003) found that most of them associated death with images of paradise and a better world.

Because religious afterlife beliefs provide a sense of life continuation beyond death, or literal immortality, for its mortal believers, they are expected to lower personal death anxiety. However, an overview of past studies found inconclusive evidence to support such a claim. For example, while Harding, Flannelly, Weaver and Costa (2005) found that belief in an afterlife was negatively correlated with death anxiety in a sample with ages ranging from 22 to 84, Falkenhain and Handal (2003) as well as Kurlychek (1976) found that belief in an afterlife was unrelated to personal fear of death among American older adults.

I propose two reasons to account for the inconsistencies. First, the protective power of religious afterlife beliefs on buffering personal death anxiety might have been compromised in an increasingly secular society. Buckman (1988) remarked that the accumulation of more scientific knowledge about the workings of the physical universe, previously considered beyond human understanding, has disrupted spiritual or religious individuals' choices of calling upon a lifelong faith to support them near their end of life. As Heinz (1999, p. 10) noted,

> This intimates a crisis of secularity, that triumphant worldview epitomized by empirical observation, technical mastery, and scientific knowledge, in which the ascent of rationalism parallels the "disenchantment" of the world – the voguish term for a world set free of any religious or symbolic underpinnings.

Hence, as a result of increasing secularization, 'religion has lost its ability to provide protective cover for a great many people' (Chaplin, 2000, p. 197). It follows that religious afterlife beliefs may become a weak buffer against personal death anxiety for people living in a more secular society.

Second, there is more than one kind of religious afterlife beliefs and different religious afterlife beliefs vary in their efficacy in buffering people's personal death anxiety. To examine the influence of different religious afterlife beliefs on personal death anxiety in later life, the present study will focus on two of the major religions of the world: Christianity and Buddhism (Carus, 2003).

Christian afterlife beliefs[1]: Heaven vs. Hell. Christians believe that, when a person dies, there is life after death, heaven, and hell (Exline, 2003; Exline & Yali, 2007; Lester, Aldridge, Aspenberg, Boyle, Radsniak, & Waldron, 2001-2002). Moreover, in Christianity, it is believed that only the corruptible human body is subject to decay and dies, whereas the disembodied soul is set free, lives in the afterlife, and awaits bodily resurrection granted by God.

Heaven and hell are two opposite extremes of Christian beliefs about life after death, hence, belief in an unpleasant afterlife needs to be distinguished from belief in a pleasant afterlife. In addition, whenever the possibility of an afterlife is mentioned in a research study, it is usually framed in a positive way (cf. Exline, 2003; Exline & Yali, 2007) and the dark side of an afterlife has been under-explored. Moreover, people could have inconsistent afterlife beliefs and death perspectives. For example, Rose et al. (2002) found that a strong belief in an afterlife was associated with expectation of judgement/punishment as well as reward. Similarly, Spilka et al. (1977) found that Christians' death perspectives tended to fall into two groups, namely, "a positive orientation" and "a negative outlook" towards death (p. 174).

Yet, Christians often hold benign expectations about the afterlife. For example, in a sample consisted of predominantly Christian undergraduates, Lester and colleagues (2001-2002) found that many (95% - 65%) believed that the afterlife would be an

eternal bliss, peaceful, and a place where they could reunite with their family and friends. To put it differently, Christians are likely to believe that death is the beginning of a glorious eternity beyond human imagination, with anticipations of reunion with the deceased and a stronger fellowship with God. Heaven is greatly to be welcomed by Christians and they believe that whether one is destined for heaven is subject to God's judgment and mercy.

When death is seen as a transition to a better life in heaven, death becomes less threatening resulting in a reduced level of personal death anxiety. For example, in a sample with ages ranging from 18 to 90, Wong, Reker and Gesser (1994) found that approach acceptance (belief in a happy afterlife) was negatively related to fear of death. In contrast, the prospective of punishment for sins after death might heighten believers' personal death anxiety (Kastenbaum, 2000a). Thus, Christian belief in a more benign afterlife is expected to lower personal death anxiety.

Buddhist afterlife beliefs: Reincarnation vs. Nirvana. Buddhist reincarnation belief is an afterlife belief that one's existence spans through many lifetimes depending on one's karma. Buddhists believe that both life and death are part of an on-going wheel of reincarnation propelled by the power of karma. Karma is a concept concerned with the effects of our past volitional actions on the subsequent reward or retribution in our present and future well-being. In its simplest form, a person's wholesome action will improve his or her future while a person's unwholesome action will diminish that person's subsequent well-being. Buddhists also believe that, when one dies, one either is reborn into one of the six realms of existence[2] (the realm of heaven, of asura,[2] of human, of animals, of hungry ghosts, of hell) or enters Nirvana. Only the enlightened one, Buddha, will reach Nirvana which signifies the end of reincarnation.

However, none of the six realms of existence are permanent. That is to say, one does not remain in any realm of existence indefinitely. Reincarnation is analogous to oceanic water in motion (cf. Thebigview.com, 2010). Waves occur because of wind and other kinetic forces. A wave is a temporary phenomenon of water in motion. It is gone in the next moment. Similarly, reincarnation is caused by karmic forces. The up and down of the ocean's waves corresponds with the rotation of the six realms of existence. The sea that surges, falls, and resurges, is the life that is born, dies, and is reincarnated again. Due to the relative weight of wholesome and unwholesome karma, a being will float and sink in the sea of reincarnation. If the force of wholesome karma dominates, a being will be reincarnated into one of the three upper realms of existence (heaven, asura, or human). If the force of the unwholesome karma predominates, a being will be

reincarnated into one of the three lower realms of existence (animals, hungry ghosts, or hell). Hence, reincarnation is usually referred to as 'transmigration' in Buddhism (ReligionFacts, 2004).

It is true that, with rebirth, any being within the six realms of existence has the chance to move to or remain in a higher realm of existence. But no being can stay permanently in any of the three upper realms of existence. In addition, owing to one's karma, one may be reborn into one of the three lower realms of existence after death. Hence, Buddhists do not view reincarnation as a source of solace because it renews suffering incurred from past incarnations and brings forth any unwholesome karma for subsequent incarnations until one attains Nirvana (Kumar, 2002; Sorabji, 2006).

Moreover, the ultimate goal of a Buddhist is to escape the agony of reincarnation through entering Nirvana which signifies the end of reincarnation, and hence, the end of all sufferings (the suffering of existence, of happiness and sadness, of youth and ageing, of health and sickness, of pain and death). Nirvana is a place or state characterized by freedom from and extinction of the endless cycle of reincarnation. Failure to attain Nirvana does not necessarily mean rebirth in a lower realm of existence, rather one is believed to be trapped in an infinite cycle of reincarnation.

Unless a person enters Nirvana, he or she cannot escape the pain or misery of existence through numerous rebirths. Therefore, despite there being many afterlives beyond death, it is doubtful that such reincarnation belief in itself is desired by Buddhists. It follows that its effectiveness in alleviating Buddhists' personal death anxiety is questionable. Hence, Buddhist reincarnation belief is expected to be a weak personal death anxiety buffer.

2.2.1.2. Intrinsic Religiosity and Afterlife Beliefs

According to the Terror Management Theory, cultural worldviews prescribe standards of value to determine one's worthiness for immortality (Vail, Rothschild, Weise, Solomon, Pyszczynski, & Greenberg, 2010). It follows that compliance with and upholding one's cultural worldviews provide a means to immortality. Therefore, people who meet the standard of their cultural worldviews will become more confident in their continued existence after death.

Likewise, faith is usually what lies under the belief in an afterlife (Chaplin, 2000). It follows that the extent to which a person considers his/her religion as a salient aspect of his/her life will influence the strength of his/her religious afterlife beliefs. Intrinsic

religiosity describes people's commitment to strive for meaning through their religion and to live out their religious faith. With the exception of one study (Falkenhain and Handal, 2003), greater intrinsic religiosity was generally related to a stronger belief in a pleasant afterlife. For example, Ardelt (2008) found that greater intrinsic religiosity, but not extrinsic religiosity, predicted stronger belief in a good afterlife among older adults. Likewise, Spilka, Stout, Minton and Sizemore (1977) found that stronger belief in an afterlife of reward was found among those who scored high in intrinsic religiosity, but not those high in extrinsic religiosity in a sample with ages ranging from 17 to 83 years. It was only when religiosity was measured in terms of both intrinsic and extrinsic religiosity, that higher religiosity predicted stronger belief in a good afterlife among American and Chinese older adults (Lin, 2003).

These findings suggest that religiosity measurements that do not incorporate intrinsic religiosity as one of their facets will not be predictive of older people's strength of good afterlife belief. Spilka and colleagues (1977) reasoned that the importance of intrinsic faith had helped participants internalize death as a transition to a better world; while those who had not fully internalized their religious beliefs were likely to cast doubts on the possibility of a positive afterlife. Hence, it is hypothesized that Christians who have a stronger devotion to their religion will be more assured of living in a state of grace that their religion offers them after their death; while Christians who have less enthusiasm about committing their life to their religion will have a weaker belief in the promise of a more benign afterlife. In other words, intrinsic religiosity is expected to foster stronger belief in a more benign afterlife among Christians.

> At first, we want life to be romantic;
> Later, to be bearable;
> Finally, to be understandable.
> *Louise Bogan*

2.2.2. Religiously Enhanced Psychosocial Maturity as a Religious Pathway to Buffer Personal Death Anxiety

2.2.2.1. *Psychosocial Maturity and Personal Death Anxiety*

According to the Meaning Management Theory (Wong, 2008), humans not only have a motivation for survival, but also aspire for meaningful existence. However, death provokes recognition of one's existential insignificance and of futility of what one has

been striving for because death signifies the negation of existence. In addition, death poses an ultimate threat to our sense of meaning (Spilka, Hood, Hunsberger, & Goruch, 2003) because death is very effective at destroying meaning by annihilating the individual and his/her accomplishments (Nozick, 1981). Moreover, as the end of life approaches, aspects of a past that one wishes to be different seem hard to be integrated in relation to the present due to lack of time and energy to reverse them. The discovery that one has not lived fully gives rise to a sense of 'ontological guilt' (Firestone, 1994) and engenders a feeling of existential insignificance. Hence, Erikson, Erikson and Kivnick (1986) argued that older adults' final developmental task was to balance the tension between a sense of (ego) integrity and an opposing sense of despair that later life brings. The term ego integrity was coined by Erikson (1950), and is grounded in coming to terms with the life one has led and the person one has become, as something that had to be. In other words, ego integrity, which is the ability to accept the inalterability of the past and the certitude of mortality's enforced leave-taking, represents another way to cope with the disturbing existential insignificance death brings about.

According to Erikson's idea of ego integrity, the achievement of ego integrity involved two components: cognitive and affective. The cognitive component of ego integrity refers to an evaluative process that focuses on one's attempt to ascribe meaning and order to one's life as a whole and to acknowledge one's life themes. In the present study, the cognitive component comprises of life purpose, existential vacuum, positive attitudes towards ageing and self acceptance. Perceived life purpose refers to a sense of having a life mission and direction and that there is something of lasting significance in one's personal existence. It also reflects a sense of fulfilment from previous goal accomplishment. In contrast, perceived existential vacuum refers to the perception that life is deprived of any significance, that there is nothing to live for and that one's life has been worthless.

With longevity often comes physical frailty, loneliness and dependence on others. Older adults are unlikely to derive happiness from the low value that modern society attaches to the frail, the disabled, and chronically ill older adults. Transitions from the turbulence of youth and industrious middle adulthood to retirement and generativity in later life incur both positive and negative experiences. The realization and discovery of meaning arising from these positive and negative life transitions provide older adults with the necessary motivation for successful ageing. Hence, life purpose and existential vacuum are recognized as two facets of ego integrity.

Self acceptance means embracing both limitations and potentials of oneself. It also means accepting one's inalterable past as part of one's present life. Positive attitudes towards ageing refer to a person's optimistic orientation and feelings concerning his/her personal ageing.

A positive reaction to their own ageing and a defiant attitude towards unchangeable and unavoidable problems in life are likely to help older adults: (a) sustain hope in the face of age-related decline, (b) reconcile with earlier perils, (c) be at peace with one's past and move on, and (d) make the most of their lives resulting in an enhanced psychological well-being in later life. Hence, positive attitudes towards ageing and self acceptance become an important source of ego integrity in later life.

The affective component of ego integrity refers to the conviction that life is worth-living together with its concomitant feelings of satisfaction and contentment. In the present study, it comprises of life satisfaction and life despair. Feelings of life satisfaction are an important factor that brings one to a stage of ego integrity and "has been used as one measure of ego integrity" (Cook, 1998, p. 112). The negative side of ego integrity is life despair which is a sense of disgust and displeasure to self (Erikson, 1968) as a consequence of failure to affirm one's life and mortality.

According to Erikson (1950), ego integrity allows an older adult to approach death without fear. First, constant reconstruction of one's life history enables a person to preserve one's earlier life content. It also enables that person to continually create positive meanings in old age and a personal history that accommodates a future without oneself. Kastenbaum (1979) remarked that older adults who were able to draw strength from their accumulated life experiences could lead to positive qualities, such as a renewed confidence in one's competency, a redefined identity and life meaning. These positive outcomes of self acceptance will counteract their fear of meaningless existence and personal insignificance in the face of death. Hence, attainment of ego integrity helps one to cope with a vulnerable sense of self that has been threatened by death. For example, in a sample with ages ranging from 21 to 79, Amenta and Weiner (1981) found that those who reported higher sense of purpose tended to have lower levels of death anxiety. Ardelt (2008) also found that purpose in life predicted lower fear of death among older adults.

Second, ego integrity is a meaning-producing process that helps people imbue their lives with meaning, thereby restoring their existential significance. Therefore, people who achieve ego integrity are less fearful of death, "the meaning annihilator" (cf. Tomer & Eliason, 2008, p.11). In addition, feelings of satisfaction and accomplishment

that spring from leading a meaningful existence could reduce people's anxiety about the consequences of death on self-fulfilment and worldly involvement. For example, Given and Range (1990) found that elderly people who reported higher life satisfaction also held more positive attitudes towards ageing and had lower death anxiety.

Third, perceived continuity of past, present and future as a result of ego integrity gives rise to a sense of self continuation through time (Reker & Wong, 1988). Such perceived continuation of self provides protection from existential anxieties over life discontinuation.

Erikson's proposed negative association between ego integrity and death anxiety was supported by Fishman's (1992) finding that greater ego integrity was related to lower death anxiety. It was also substantiated by Fortner, Neimeyer and Rybarczyk's (2000, p. 100) comprehensive review finding of "a reliable, negative correlation between measures of ego integrity and death anxiety" among older adults. Hence, ego integrity is expected to lower personal death anxiety.

In contrast, failure to achieve ego integrity engenders fear that time is too short to start a new life (Erikson, 1950). In a sample with ages ranging from 18 to 86, Benton, Christopher and Walter (2007) found that fear of losing meaning and dependence as one ages was related to greater fear of annihilation. The authors reasoned that losses that occurred with the ageing process might prevent an individual from making significant contributions to the world, which reduces his/her opportunities to achieve symbolic immortality. Symbolic immortality refers to the belief that one continues to live on through what remains after one's personal death, such as through one's children and in significant achievements. Contempt for self and life also leaves one with a sense of emptiness, existential disorientation and bitterness towards life. Such state of despair makes confrontation with one's eventual death overwhelming (Erikson, 1950). Hence, feelings of not having a particular meaningful or joyful life can contribute to an increased death anxiety (Fromm, 1976; Smith, 2000). For example, it was found that older adults who had a lower sense of meaning of life reported more fear of death (van Ranst & Marcoen, 2000).

Because Erikson (1950; 1968) viewed generativity as contributing to ego integrity, generativity could also be an important determinant of personal death anxiety in later life. Generativity is "primarily the concern for establishing and guiding the next generation" (Erikson, 1968, p. 138). According to McAdams and de St. Aubin (1992), generativity is motivated by both cultural demand and inner desire. Cultural demand refers to the societal expectations that young adults should dedicate increasing

personal resources towards the preservation and progression of the next generation; while inner desire refers to a deep personal need to be a nurturant and to achieve something that transcends death (McAdams & de St. Aubin, 1992). Both cultural demand and inner desire foster generative concerns among older adults. Generative concerns are thus defined as a person's conscious concern for the next generation's well-being and their perceived contribution to their society.

Being generative stands a better chance of preserving existential meaning in the face of death (Tomer, 2000). This is because rendering services to others not only assures a sense of continuity of self into the next generation, but also ensures progressive development of the human enterprise (McAdams, 1988). So people can feel significant in the knowledge that they continue to connect to on-going human life even after they die. Moreover, helping others enhances a sense of purpose that one is not completely useless (Jewell, 2010; Golsworthy & Coyle, 1999). Cheng (2009) explained that generativity was related to psychological well-being due to perceived respect from the younger generation. For example, people who are capable of passing on practical information and cultural heritage are valued by their society. People with great virtue or significant contributions are often venerated by members of their culture. Hence, a generative life not only prevents older adults from feelings of living an imperfect life, it also gives them meaning and satisfaction to cope with the fear of existential insignificance that death brings about.

Given that both generativity and ego integrity hold specific psychosocial implications for older adults, I coin the last two of Erikson's Stages of Development as psychosocial maturity in later life. In this dissertation, psychosocial maturity in later life is defined as the ability to reflect on and embrace one's life and social responsibility. It is expected that psychosocial maturity lowers personal death anxiety in later life.

2.2.2.2. Intrinsic Religiosity and Psychosocial Maturity in Later Life

Erikson (1950) remarked that the development of ego integrity was reinforced through cultural institutions, such as religion and their representative leaders, based on shared values and practices. This is because social institutions enforce a set of societal values and expectations to make collective existence possible (cf. Reker & Wong, 1988). In other words, ego integrity is embedded in and modified by a social and cultural context in which people live (Schroots, 1996). It follows that religion is one facilitating factor of ego integrity.

First, religion is related to the cognitive component of ego integrity (life purpose, existential vacuum, positive attitudes towards ageing and self acceptance). Frankl (1975) argued that a mature participation in religion helps people find meaning in life. This is because religious activities provide an individual with many social opportunities to demonstrate one's worth and dignity (Spilka, Hood, Hunsberger, & Grosuch, 2003).

Religion also helps older adults recognize their inner energy or resourcefulness which has carried them thus far in life to cope with their experiences of ageing. It focuses more on how a person lives his/her own ageing life than the ageing process per se. For example, Homan and Boyatzis (2009) found that intrinsic religious orientation was positively correlated with body satisfaction among older men and women.

Religion also facilitates the meaning-making process about "the totality of human existence and its vicissitudes" (Ellison, Gay & Glass, 1989, p. 103) by offering a framework for living based on meaning. For example, cancer survivors aged between 39 and 60 reported that religion had helped them accept things that were beyond their control by surrender to God (Ardelt, Ai, & Eichenberger, 2008). In addition, Melia (1999) found that faith, prayer and love of God were important sources of identity formation and meaning in later life.

Second, religion is related to the affective component of ego integrity (life satisfaction and life despair). For instance, Salsman and colleagues (2005) found that the influence of intrinsic religiousness on life satisfaction was mediated by optimism and perceived social support. The authors reasoned that religion fostered a belief that there was more good than bad in life. Such positive thinking engendered a number of positive emotions that uplifted a person. Besides, they explained that religion helped foster a positive life outlook by providing a mechanism for improved social support and an opportunity for sharing. For example, older adults living with HIV/AIDS reported that contacts with others through their religious activities had reduced their feelings of marginality and increased their feelings of acceptance (Siegel & Scrimshaw, 2002).

Since ego integrity evolves from generativity (Erikson, 1950), religion is also expected to promote generativity. In addition, the value of and focus on caring for others and broadening concern to all humankind as pathways to self-transcendance and selflessness have been advocated by many religions (McCoy et al., 2000). In other words, "the desire to care for others was a reason for entering religious life" (Melia, 1999, p. 184). McAdams (2006) found many positive relations between religious involvements and indices of generativity among American adults. For example, regular adult church goers who pray frequently and are concerned about religious issues tend

to have higher generativity. In addition, Fishman (1992) found that religiously observant elderly people tended to score higher in generativity and ego integrity than those who did not observe. Moreover, adults high in generativity tended to report that they were raised in religious families and participated in religious organizations in their childhood (McAdams, 2006).

In sum, the empowering benefits of religion on psychosocial maturity in later life are twofold: (a) fostering an inward turn toward a deepened sense of coherence about life and its challenges, as well as (b) enhancing an outward turn of self toward concern for the well-being of future generations (cf. McFadden, 1999).

Because religion is a means of achieving psychosocial maturity in later life and penetrates deeply into the lives of intrinsically religious people, older adults who are intrinsically oriented towards their religion are expected to achieve higher levels of psychosocial maturity.

2.2.3. Religious Management of Regret as a Religious Pathway to Buffer Personal Death Anxiety

2.2.3.1. Regret and Personal Death Anxiety

Coming to terms with the end of life is a central developmental task in late adulthood as discussed by Erikson, and ego integrity is the result of the positive resolution of this final psychosocial crisis (Erikson, 1950). In achieving ego integrity, there is a need to bring closure to life. According to Butler (1963), as older adults become more aware of their finitude, they are even more likely than younger people to recollect the things and people they encounter in their life. Sometimes, older adults may reminisce and begin to regret having or not having pursued a specific developmental pathway.

What are the common regrets in later life? In a sample with ages ranging from 31 to 61, Kinner, Tribbensee, Rose and Vaughan (2001) found that the most common regrets participants reported were that they wished they had taken better care of their health, education, and close relationships, in particular, with family members. Likewise, Kovach (1991) found that elderly women (a) had regrets about negative events that they had been personally responsible for, (b) lamented over the lack of opportunity to make choices about events in their lives, and (c) were regretful for past experiences that were bad or difficult or involved losses. This finding is consistent with Torges,

Stewart and Miner-Rubino's (2005) discovery that 52% of their middle-aged participants regretted either a missed opportunity or a change in lifestyle or both.

The purpose of life review is to provide a mechanism to pull the threads of one's life into a coherent whole (Butler, 2002), in the hope that one's lived experience is consonant with the values, beliefs and choices that have informed one's present life. "There is a particular emphasis on resolving previously unresolved conflicts [in conducting a life review]" (Fishman, 1992, p.268). Examples of how life review helps people put their life in order include reformulation of life goals, 'resolution of past conflicts and issues, atonement for past acts or inaction, and reconciliation with family members and friends' (Butler, 2002).

Our past decisions leave their imprints on our current well-being. It is during the process of life review that people are made more aware of not having fulfilled their basic aspirations in the past (Torges, Stewart, & Miner-Rubino, 2005). According to Erikson's Psychosocial Theory (1963; 1982), one aspect of ego integrity relates to the extent to which an individual has accepted his/her past triumphs and failures in life. For example, Taft and Nehrke (1990) as well as Wong and Watt (1991) found that elderly people who achieved greater ego integrity tended to be those people who reviewed their life (a) to resolve past conflicts that were still disturbing them, (b) to better understand their past and themselves, and (c) to determine the meaning of life.

One prediction from the Comprehensive Model of Death Anxiety (Tomer & Eliason, 1996; 2000a), which is based on the works of Butler (1963) and Erikson (1950, 1982), is that how people reflect on and evaluate their past regrets will affect their personal death anxiety. Specifically, people who accept the past are more likely to evaluate their past regrets without experiencing excessive negative affects. Successful resolution of past conflicts also gives rise to a sense of completeness with respect to life, which brings about a meaningful closure to life and acceptance of one's eventual death. For example, Grumann and Spiegel (2003) found that five out of 12 terminally ill women (aged between 41 and 91) who reported unresolved issues also expressed fear of death. Likewise, Fishman (1992) found that lower death anxiety was a function of how many remembered events elderly people have worked through.

In contrast, negative affectivity is an outcome of not accepting past regrets. Negative emotional regret appraisal refers to the range of negative emotions people feel towards their regret. Disproportional focus on personal inadequacies could distort the recovery of an individual's personal history. In addition, self blame and feelings of insufficiency could reinforce a person's vulnerable self-esteem. Because death makes

these mistakes uncorrectable and final (Tomer & Eliason, 2008), inability to reconcile past conflicts and transform them into a meaningful reality could lead to increased depression and personal death anxiety. Hence, feelings of guilt for not having accomplished what one expects to achieve are likely to increase one's death anxiety (Tomer & Eliason, 1996; 2000a). Therefore, negative emotional regret appraisal is expected to increase personal death anxiety.

2.2.3.2. Intrinsic Religiosity and Management of Regret

Failure to make progress towards accomplishing one's goals and/or rectifying regrettable behaviours could engender greater distress towards death among older adults than younger people. This is because older adults do not have favourable opportunities to undo the consequences of their regret, such as not having alternative goals to pursue and lack of time to compensate for the damage caused by their regrets (Wrosch, Bauer & Scheier, 2005). Hence, effective coping with regret is essential for older adults to live with their regrets without significant psychological damage in later life, which in turn helps keep their heightened personal death anxiety at a moderate level.

Since suffering evokes in us a wide range of uncomfortable feelings (frustrations, sadness, anger, helplessness), the process of confronting and resolving suffering is a painful one. Frankl (1984) asserted that suffering can be endured if they are for a purpose. Research showed that people coping with loss or trauma are often compelled to reconstruct the meaning of an event because these crises have shattered their assumptions about a benevolent world and self worth (Matthews & Marwit, 2006). Given that religion is a source of support and meaning in the midst of suffering, loss and death for many older people (McFadden, 1996), older adults tend to embrace their religious faith to cope with and find an answer for their sufferings. For example, Koenig, George and Siegler (1988) found evidence for the primacy of religion as coping behaviours reported by older adults who had lived through difficult times in their present study and in a series of prior studies.

In the face of the perils of life, religion functions to help people understand that the problems of bafflement and suffering are not ultimately uninterpretable but comprehensible. In other words, religion influences what people perceive and how they understand what they perceive. Ellison (1994) suggested that religion functioned as a stress-resistance resource by reframing the stressful life events to preserve a just world belief and by subsequent regulation of emotions. For example, in a sample of breast cancer women aged between 32 and 80, Gurm, Stephen, MacKenzie, Doll,

Barroetavena and Cadrll (2008) found that nearly all participants reported spiritual beliefs as providing a positive framework of meaning for understanding cancer, strength, worry and stress reduction, comfort and solace.

In addition, Kirtpatrick (1992) noted the psychological appeal of God as a secure attachment figure who is always accessible when people experience threat or fear. The personal link to a reliable attachment image when needed could lessen people's feelings of helplessness in the face of a negative life event, especially for those who are introverted or keep feelings to themselves. Moreover, both support from religious leaders and congregation members can satisfy a human's need to belong, which reduces his/her feelings of loneliness when an individual needs a helping hand to manage his/her life problems. Furthermore, religions of the world are greatly sensitive to the often painful human condition and offer solutions to the problem of human limitations (Pargament, 1997). For example, religion institutions have been strongly linked with being compassionate and offering charity to the sick (Ellison, 1994). As a result, religion is often called upon in times of stress.

Given the salient role of religion in contributing to ego integrity, I propose that religion could also help people assimilate their past major regrets into their life perspective. However, Pargament (1997, 2002) argued that the efficacy of religious coping for people with crises varied in the way they integrated their religion in order to make sense of their sufferings. In other words, success of religious coping depends on the form of religious coping. Pargament and colleagues (1998) distinguished positive from negative (theistic) religious coping. Positive religious coping reflects a secure connection with God. It also reflects reliance on religion for support, personal growth and comfort. Negative religious coping is characterized by uncertain faith and religious struggle. It also describes belief in divine punishment and demonic acts for a person's failings.

Pargament (1997; 2002) purported that the use of negative religious coping methods were tied to poorer resolution. He outlined two apparently hazardous types of negative religious coping. The first is dissatisfaction with one's congregation, members of one's congregation, and with God. The second is negative religious reframing of events as punishments from God. The main reason why these two are harmful forms of religious coping is that the applicant perceives religion as no longer serving its purposes in coping. Hence, people using negative religious coping tend to feel alienated from the sacred and their religious community. They are also likely to feel hopeless and vulnerable that one is left to suffer alone.

In contrast, positive religious coping serves a variety of adaptive functions. People using positive religious coping tend to find meaning and intimacy with the sacred and their religious community. They are also likely to feel secure and in control because they believe they are always in God's care.

Only three studies did not find an association between positive religious coping and better adjustment (Ai, Park, Huang, Rodgers & Tice, 2007; Pargament, Smith, Koenig, & Perez, 1998; Tarakeshwar, Vanderwerker, Paulk, Pearce, Kasl & Prigerson, 2006). Otherwise, the use of positive religious coping was related to benevolent outcomes; while the use of negative religious coping was related to signs of emotional distress (Ano & Vasconcelles, 2005; Pargament, 1997; 2002). For example, in a sample of adult survivors of childhood sexual abuse aged between 19 and 66, Gall (2006) found that searching for reassurance of God's love and seeking God's help to let go of negative emotions was related to a higher degree of felt resolution of their abuse history; while greater perception that God was unable to influence the stressful situation was negatively related to participant's perceived felt resolution of their abuse history.

In sum, negative religious coping is derived from a fragmented religious orientation (Pargament, 2002), so more use of negative religious coping will make its users fall into a state of disorientation, bitterness and confusion. Such negative affective state may enhance feelings of anger and depression towards the regret. Hence, negative religious coping is expected to increase negative emotional regret appraisal.

Because positive religious coping is marked by a benevolent religious orientation (Pargament, 2002), more use of positive religious coping is likely to help the applicant redefine the negative life event more positively in ways that conserve the benevolence of God, a sense of self worth and the fairness of the world. The re-establishment of a good balance with regard to the relationship between God, self and the world could reduce the applicant's feelings of frustration and sadness arising from a past regret. Hence, positive religious coping is expected to lower negative emotional regret appraisal.

Yet, different religions envision different pathways to transcend human failings. In contrast to the reliance on the supremacy and omnipotence of heavenly salvation from earthly perils and corporeal destruction in the major religions of the West, Eastern traditions address the problem of self-conscious corporeal existence by focusing on spiritual practices that are aimed at the realization of one's nonmaterial spiritual nature (Hart & Goldenberg, 2008).

Moreover, since Christians and Buddhists have different views on human sufferings, it follows that these two religious groups will engage in different religious coping behaviours to deal with their regrets.

Christians' view on suffering. Christians view suffering as an inescapable part of human life (Byock, 1996). A careful examination of the Bible reveals that the Biblical view of suffering is focused more on how humans can overcome it (Langford, 1989), in particular, by comprehending the reasons for suffering in this life. Langford (1989) outlined several purposes of suffering in Christianity which I summarized into three categories: (a) since God once suffered Himself in Christ who entered the world of suffering and died for man's sins, suffering can reveal God's love of Man; (b) through suffering humans can be refined to achieve their true potential and destiny; (c) suffering helps purify people's faith and equip them for work in His Kingdom. Salvation[3] is the only way Christians can completely be free from all sufferings.

Buddhists' view on suffering. The Buddha declared that there was suffering in the First Noble Truth and proceeded to explain the causes that underlie our suffering. According to the Second Noble Truth, suffering consists of not getting what we desire and of getting what we do not desire. In Buddhism, because of impermanence, we cannot continue to possess what we desire and to avoid what we do not desire. True extinction of suffering, as stated in the Third Noble Truth, is brought about by attaining Nirvana. The Buddha thought that we needed wisdom, virtue (moral or ethical training) and concentration (mental disciplines) to eliminate suffering in this lifetime, which is the Fourth Noble Truth of the path leading to the cessation of suffering. His discourse on these three components can be found in the Eightfold Path[4].

With reference to the Eightfold Path[4], there are two major types of Buddhist coping strategies. They are transpersonal faith-based and self-directing Buddhist coping. Transpersonal faith-based Buddhist coping resembles two facets of the Eightfold Path (right view and right intention), which help Buddhist practitioners develop wisdom to understand the truth of suffering and to realize their life purpose. Faith and intrinsic commitment to follow Buddha's teaching are prerequisites for transcending suffering. This is because faith fosters a sense of hope by the promise of possible liberation from suffering within the grasp of everyone. This makes suffering more bearable for the Buddhists. It also clarifies Buddhists' ultimate life purpose (attaining Nirvana) so that they see the necessity of undertaking the Eightfold Path to relieve sufferings and achieve Nirvana. Moreover, wisdom enables life transformation, which propels

Buddhists towards leading an authentic life to exterminate suffering and find true happiness in attaining Nirvana. Hence, transpersonal faith-based Buddhist coping is expected to lower negative emotional regret appraisal.

Self-directing Buddhist coping resembles six facets of the Eightfold Path (right speech, right action, right livelihood, right effort, right mindfulness, and right concentration), which foster Buddhist adherents' moral and mental development to transcend suffering. Moral development is a means to prevent one from inflicting suffering on others or from creating unwholesome karma so as to free oneself from further suffering. Mental development helps Buddhists realize the impermanent and empty nature of all phenomena[5] so that they understand that a lifetime of craving generates karma which leads to suffering. Moreover, mindfulness of thoughts and actions also helps them give up craving and dwelling on distressing emotions. Indeed, belief in karma and acts of merits are two coping strategies that Buddhists use to explain and relieve suffering. For instance, in a small sample of four Thai patients with AIDS with ages ranging from 27 to 61, Nilmanat and Street (2007) found that the notion of karma helped the Buddhist patients make sense of their suffering and to gain moral and spiritual strength to cope with their experiences. They also found that these patients believed in the power of merit-making activities to relieve their suffering. Hence, self-directing Buddhist coping is expected to lower negative emotional regret appraisal.

Faith in honouring the Eightfold Path as the way which leads to the end of suffering can also be expressed in the act of 'Taking the Three Refuges', which highlights the importance of resorting to the Buddha, Buddha Dharma (the Truth pointed out by the Buddha) and Sangha (the community of ordained disciples of the Buddha) in order to achieve Nirvana. I call this Buddhist approach deferring Buddhist coping. The knowledge that Buddha (or Bodhisattva)[6] and Sangha are capable of understanding their suffering and that the Buddha Dharma unfolds the true solution to end suffering offers hope and newfound peace for people in distress. It follows that assenting to the unsurpassed role of the Three Refuges will lessen feelings of helplessness when suffering is an irrefutable fact of life. Hence, deferring Buddhist coping is expected to lower negative emotional regret appraisal.

It should be noted that self-directing and deferring Buddhist coping represents a differing emphasis on self-direction versus reliance on Buddha or Bodhisattva advocated by different schools of Buddhism.[7] Nonetheless, the aforementioned three Buddhist coping are expected to lower negative emotional regret appraisal.

Religion becomes compelling as a way of coping with crisis to those who commit to a life oriented around the sacred (Pargament, 1997). Hence, Pargament (1997) proposed that people chose specific forms of coping based on their religious orientation to influence the outcomes of the events. In other words, Pargament (1997, p. 284) suggested that religious coping methods were the mediators between religious orientation and the consequences of negative life events.

Ai and colleagues (2007) tested the mediating role of religious coping in a sample of patients undergoing major cardiac surgery with ages ranging from 33 to 89. They measured general religiousness in terms of frequencies of religious activities and perceived importance of religion. They found that general religiousness was related to more use of positive religious coping, but was unrelated to the use of negative religious coping with distressing life circumstances. While more use of negative religious coping was associated with greater post-operative distress, the use of positive religious coping was unrelated to the levels of distress after the operation. Likewise, Fitchett, Rybarczyk, DeMarco and Nicholas (1999) examined the mediating role of religious coping in a sample of medical rehabilitation inpatients with ages ranging from 29 to 86. They measured private religiosity in terms of respondents' perceived religiosity and degree of strength and comfort that came from their religion. They found that greater private religiosity was associated with more use of positive religious coping and infrequent use of negative religious coping with disability. They also found that more use of negative religious coping predicted poorer recovery of somatic autonomy.

The aforementioned findings suggest that when religion is fully embedded in a person's life, he/she is more likely to select strategies characterized by a secure relationship with God and religious community to cope with negativity arising from negative life events. This is consistent with McAdams's (2006) observation that, amid adversity, people who had made their religious choices freely and thoughtfully often used positive religious coping, such as praying to God and seeking support from clergy and members of their religious affiliation. In addition, people who consider religious faith as a central part of their life are less likely to use strategies characterized by an insecure relationship with God and religious community to cope with negativity arising from negative life events. It is speculated that their low tendency to use negative religious coping was related to their strong emotional commitment to their religion. Hence, intrinsic religiosity is expected to foster the use of positive religious coping but discourage the use of negative religious coping.

Taken together, two causal mediation hypotheses were derived from the aforesaid three religious pathways to coping with personal death anxiety among older adult Christians:

Hypothesis 1: Intrinsic religiosity lowers personal death anxiety through fostering more benign afterlife beliefs and enhancing psychosocial maturity in later life.

Hypothesis 2: For people with regrets, intrinsic religiosity also lowers personal death anxiety through religious coping with negative emotions arising from regrets.

Figure 1 depicts the three proposed religious pathways to coping with personal death anxiety that were tested in a sample of older adult British Christians.
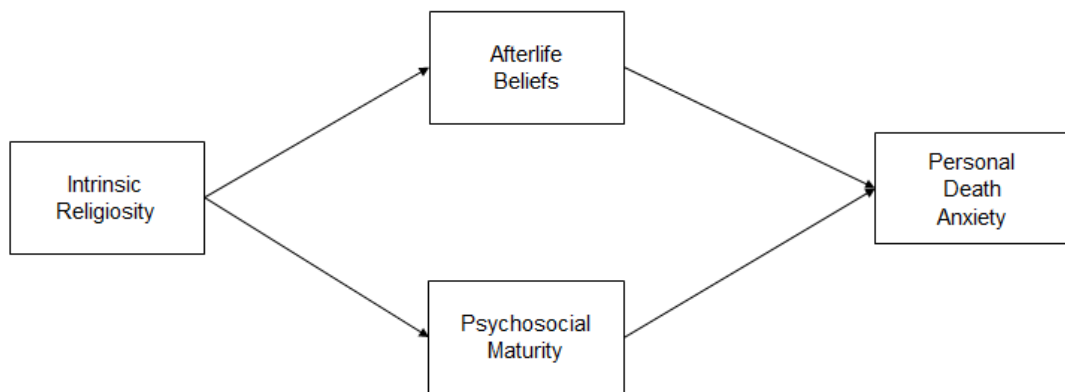
(a) Afterlife beliefs and psychosocial maturity mediation model
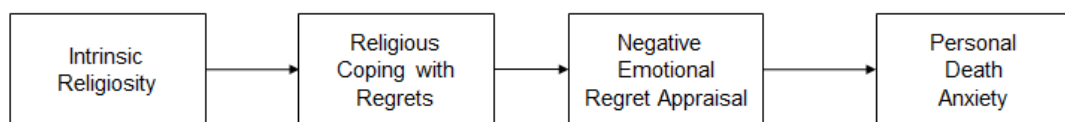
(b) Religious management of regret mediation model

Figure 1. The proposed three religious pathways to coping with personal death anxiety that were tested in a sample of older adult British Christians.

Two hypotheses were also derived from the aforementioned religious pathways to coping with personal death anxiety among older adult Buddhists:

Hypothesis 3: Buddhist reincarnation belief is a weak buffer against personal death anxiety

<u>Hypothesis 4:</u> Transpersonal faith-based, self-directing and deferring Buddhist copings lessen personal death anxiety through lowering negative emotional regret appraisal.

2.3. Confounding Effect of Neuroticism on the Relationship between Intrinsic Religiosity and Personal Death Anxiety

2.3.1. Neuroticism and Personal Death Anxiety

Because religion is a source of emotional healing (Ardelt et al., 2008), there is a need to examine the potential confounding influence of emotional instability, or neuroticism, on the efficacy of two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. According to the Terror Management Theory, people employ anxiety buffering defences to reduce their 'neurotic' concern about death (Strachan, Pyszczynski, Greenberg, & Solomon, 2001) because death anxiety is at the core of all other fears. Thus, neuroticism is indicative of how well one employs effective anxiety buffering defences to manage one's death anxiety (Strachan et al., 2001). For example, McCoy, Solomon, Pyszcsynski, and Greenberg (as cited in McCoy et al., 2000) found that people high in neuroticism exaggerated their estimated life expectancy to bolster their weak anxiety buffers.

In addition, neuroticism is a personality trait characterized by a range of negative emotions such as anxiety, tension, and depression. The broad range of negative mood states, by definition, is a general source of subjective distress (Rylands & Rickwood, 2001). It follows that neurotic people experience anxiety on a daily basis making them even more sensitive to their negative emotions. As a result, their anxiety buffering defences are weak. Therefore, neuroticism is expected to increase personal death anxiety.

Neuroticism could also exert an indirect influence on personal death anxiety through hindering psychosocial maturity in later life. Because neuroticism is characterized by emotional instability, it predisposes an individual to suffer more from his/her life adversities. Highly neurotic people also find it hard to discover meaning in life (Jewell, 2010; Strachan et al., 2001). It comes as no surprise that neuroticism was found to be associated with various sources of distress at the end of life including depression, dissatisfaction with current quality of life, and hopelessness (Chochinov, Kristjanson, Hack, Hassard, McClement, & Harlos, 2006; Stromberg & Jaarsma, 2008). For example, DeNeve and Cooper (1998) found that neuroticism was the strongest predictor of both

happiness and life satisfaction. Indeed, the negative association between neuroticism and life satisfaction was generalizable to the very old age group (Hillera, Jorm, Herlitz, & Winblad, 2001). Because neuroticism reduces a person's adaptation to stress in life and has an aversive impact on an individual's affective well-being, neuroticism is expected to lower psychosocial maturity in later life.

2.3.2.   Intrinsic Religiosity and Neuroticism

Since religion is a stress-resistance resource (Ellison, 1994), religious beliefs and participations could shape the way believers evaluate their negative emotional experiences. Pizarro and Salovey (2002) proposed three ways that religion could improve a believer's emotional regulatory ability. First, religion provides accessible outlets, such as confession or pastoral counselling, for their emotional disclosure and affirmation of forgiveness. Second, emotional engagement with a Higher Power through prayer, rituals and meditation may divert their attentional focus, which lessens the intensity of their negative emotions. Third, religious members have greater access to religious leaders, such as ministers and monks, who are experienced in dealing with their negative emotions. Since intrinsically religious people attribute greater significance to the power of religion, the efficacy of religion in promoting adaptive emotional regulation will be stronger among them. Hence, intrinsic religiosity is expected to lower neuroticism.

Taken together, one causal hypothesis could be derived for the aforesaid confounding effect of neuroticism on the afterlife beliefs and psychosocial maturity joint mediation to coping with personal death anxiety among older adult Christians:

Hypothesis 5: Neuroticism mediates the relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity.

Figure 2 depicts the proposed confounding mediating effect of neuroticism on the afterlife beliefs and psychosocial maturity joint mediation to coping with personal death anxiety that was tested in a sample of older adult British Christians.
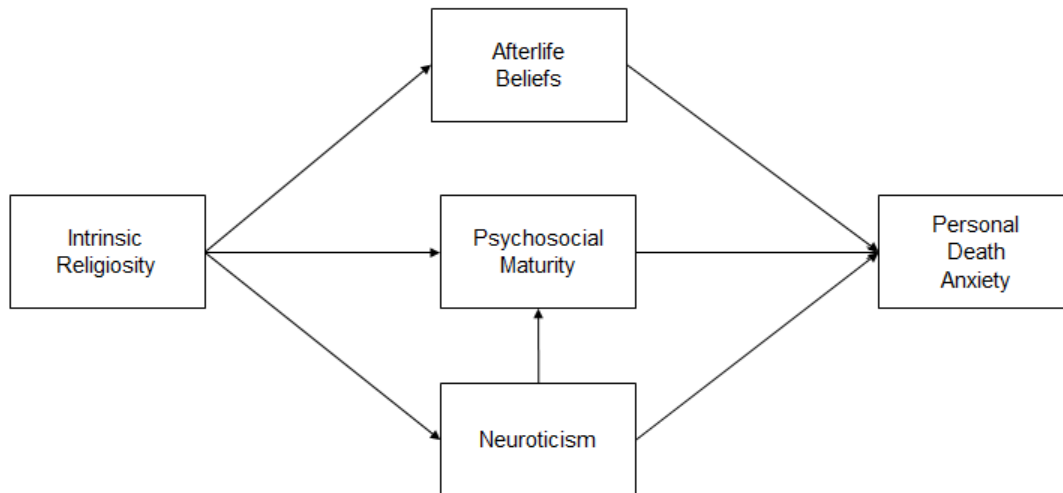
Figure 2. The proposed confounding mediating effect of neuroticism on the afterlife beliefs and psychosocial maturity joint mediation to coping with personal death anxiety that was tested in a sample of older adult British Christians.

2.4. Additional Correlates of Personal Death Anxiety

Religion is but one of many factors in understanding personal death anxiety in later life. Other correlates of personal death anxiety also play a role in understanding that phenomenon. Physical frailty, social desirability, social readjustment, subjective life expectancy, funeral prearrangements, near-death experience, recent positive affects, personal dying anxiety, perceived attraction to death, and traditional Chinese death beliefs have or may have been related to personal death anxiety, which is the major dependent variable of this dissertation. Accordingly, these variables will be examined in turn, with the following rationales and causal hypotheses.

2.4.1.1. Physical Frailty

The grim prospect of age-related physiological decline in later life is likely to reduce the attractiveness of one's future life (Pinquart, Frohlich, Silbereisen, & Wedding, 2005-2006). This is because poor health incapacities older people from self care and can interfere with their own and other people's life. Moreover, poor physical health is a particularly relevant predictor of depression in old age (Rylands & Rickwood, 2001). Some researchers have suggested that physical frailty affected depression through reducing a person's ability to cope with stressful life events (e.g., Murrell & Norris, 1983). Hence, physical frailty is hypothesized to increase personal death anxiety.

<u>Hypothesis 6:</u> Physical frailty increases personal death anxiety.

2.4.1.2. Social Desirability

Death is a sensitive topic, so some older adults may engage in denial to wall off death from their awareness or try to repress death thoughts. Asking questions about death could be upsetting for them. These individuals may be prone to give socially desirable rather than genuine responses to self-report measures of personal death anxiety. For example, they may express low personal death anxiety to appear seemingly serene in the midst of impending death. Hence, it is possible that reporting low personal death anxiety reflects their unwillingness to seriously confront death as an unattractive aspect of their reality (Kastenbaum, 2000b). It follows that people who present themselves in a socially acceptable manner will have a higher tendency to mask and deny their personal death anxiety. Hence, social desirability is hypothesized to lower personal death anxiety.

Hypothesis 7: People who score high in social desirability report lower personal death anxiety.

2.4.1.3. Social Readjustment

Some important life events occur more frequently as people get older, such as widowhood, illness and loss of friends (Hilleras, Jorm, Herlitz, & Winblad, 2001). Being the survivors of accumulated unpleasant life events over the years may have made death and dying less personally traumatic to some older adults (Thorson & Powell, 1988), probably because they have learnt to draw strength from a series of accumulated life experiences. It follows that people who survive more social readjustments tend to become hardier with their increased exposure to harsh realities and are more psychologically prepared to confront personal death. Hence, social readjustment is hypothesized to lower personal death anxiety.

Hypothesis 8: Social readjustment lowers personal death anxiety.

2.4.1.4. Subjective Life Expectancy

Personal death anxiety is a typical emotional reaction among terminally ill patients (Tsai, Wu, Chiu, Hu & Chen, 2005), probably because perceived proximity of death reminds people of their mortal limit. Thus, perceived shortness of life is likely to engender an elevated sense of personal death anxiety among older adults. For example, people tend to overestimate the amount of time they have left to defend against personal death anxiety (cf. Pyszczynski, Greenberg & Solomon, 1999). It

follows that people who view themselves as more distant away from death will have lower personal death anxiety because of their perceived decreased proximity to death. Hence, future time orientation and greater subjective life expectancy are hypothesized to lower personal death anxiety.

Hypothesis 9: Future time orientation and greater subjective life expectancy lower personal death anxiety.

2.4.1.5. Funeral Prearrangements

Death preparation gives people the time and resources to create the funeral they want within budgets. It also allows them to handle personal matters so as to relieve their worry about the consequences of their death on their surviving family. Besides, it empowers elderly people to use the funeral as a means to restore a social standing formerly lost through social marginalization (Howarth, 1998). Moreover, people who make advanced funeral arrangements are likely to be those who are comfortable talking about their personal death. Hence, more funeral pre-arrangements are hypothesized to lower personal death anxiety.

Hypothesis 10: More funeral pre-arrangements lower personal death anxiety.

2.4.1.6. Near-death Experience

Near-death experience research consistently showed that people with near-death experience reported low death fear. Indeed, Stromberg & Jaarsma (2008) found that elderly patients with heart failure who had had a near-death experience held a positive view of death. Martin, Campbell and Henry (2004) suggested that both intense belief in and candid acceptance of the certainty of personal death might have resulted in a decreased fear of death among the survivors of real-life confrontation with mortality. In addition, having survived a very close personal encounter with death is likely to make people feel "more like a letting go than an annihilation" (Martin, Campbell, & Henry, 2004, p. 436). Hence, presence of a near-death experience is hypothesized to lower personal death anxiety.

Hypothesis 11: The presence of a near-death experience lowers personal death anxiety.

2.4.1.7. Positive Recent Affects

Positive events that had preceded the data collection might have influenced the participants' moods and perception. For example, people who have been in an upbeat mood recently may look at life and death through rose-tinted glasses. Since psychosocial maturity in later life can lower personal death anxiety, recent positive moods may also have the same effect on personal death anxiety. Hence, recent positive affects are hypothesized to lower personal death anxiety.

Hypothesis 12: Recent positive affects lower personal death anxiety.

2.4.1.8. Personal Dying Anxiety

Though death and dying are not synonyms (Zisook & Downs, 2004), fear towards the dying process and death per se are inter-related. This is because the dying process is a precursor of death. Besides, awareness of personal death and of a painful personal dying is likely to evoke similar fears, such as fear of a meaningless existence and worry over being a burden to the surviving loved ones. Thus, personal dying anxiety is connected to fear of death and is hypothesized to increase personal death anxiety.

Hypothesis 13: Personal dying anxiety increases personal death anxiety.

2.4.1.9. Perceived Attraction to Death

Some people may see death as a relief from the unbearable suffering of life (Wong et al., 1994). Indeed, a sizeable majority of old people aged over 60 agreed that death was at times a blessing (Riley & Foner, 1968). Such a welcoming attitude to death may be related to the diminished quality of health in later life. In other words, when people are overwhelmed by suffering, death becomes less fearful and more tolerable than a very low quality of life or a painful existence. Hence, perceived attraction to death is hypothesized to lower personal death anxiety.

Hypothesis 14: Perceived attraction to death lowers personal death anxiety.

2.4.1.10.   Traditional Chinese Death Beliefs

Traditional Chinese death beliefs are Chinese views about what constitutes a bad death. They also describe superstitions about any undesirable consequences being

brought about by a death-related subject. Many of them may be dated back to earlier times when death was a taboo. People at that time probably made these negative attributions to death to avoid talking about death or for fear of invoking bad luck. Thus contemporary Chinese people endorsing these beliefs tend to be uncomfortable with the topic of death. Hence, traditional Chinese death beliefs are hypothesized to increase personal death anxiety.

Hypothesis 15: Traditional Chinese death beliefs increase personal death anxiety.

2.5. Conclusions

Embracing an internalized and well-integrated religious faith is proposed to reduce fear provoked by the prospect of personal death among older adults in three ways by: (a) providing reassurance of life continuation through the concept of an afterlife; (b) fostering psychosocial maturity in later life to restore the significance of existence; and (c) managing past regrets to bring closure to life and meaning to its vicissitudes. Empirical evidence predominantly focuses on reliance on the supremacy of a Higher Power to cope with personal death anxiety and earthly suffering in theistic religion. The personal death anxiety buffering power of Buddhist reincarnation beliefs and coping with regret has been under-explored. Because reincarnation is not desirable for Buddhists, Buddhist reincarnation belief is hypothesized to be a weak personal death anxiety buffer. Given the beneficial outcomes of employing theistic positive religious coping, more use of Buddhist coping is hypothesized to reduce participants' negative emotional regret appraisal, a precursor of personal death anxiety. The importance of controlling the confounding influence of neuroticism on the negative relationship between intrinsic religiosity and personal death anxiety is highlighted. Lastly, several potential additional correlates of personal death anxiety are proposed.

Chapter 3:   Overview of the Present Inquiry

In this chapter, I will explain the general criteria by which participants were selected, followed by a description of the research design. I will conclude this chapter with a re-iteration of the set of causal hypotheses and with some additional research questions which will be addressed in this dissertation.

3.1. Older Adult Targets Selection

3.1.1.   British Older Adult Christians Aged 60 or Above

Older adult British Christians aged 60 or above were sampled for four reasons. First, Christianity is one of the greatest religions of the world (Carus, 2003). Second, the increasing secularization in the UK (cf. Paley, 2008) provides the context in which the efficacy of the three proposed religious pathways to coping with personal death anxiety will be examined. Church membership and attendance at church services are among some of the 'indicators' of secularization (Cansanova, 1994). Christianity in the UK is declining, a process indicated by several religious indices (Paley, 2008). For example, according to Brierley, church attendance has gradually dropped from 12% of the population in 1979 to 7.2% in 1999; church membership has decreased from 27% of the population in 1900 to 10% in 2000 (as cited in Paley, 2008). At the same time, belief in a personal God has fallen from 43% in the 50s to 31% in the 90s (Gill et al., 1998, as cited in Paley, 2008) and a further drop to 26% in 2000 (Heald, 2000, as cited in Paley, 2008). Likewise, the proportion of people who have certain belief in God has gone down from 53% in 1966 to 42% in 1988 (Libbey, as cited in Langford, 1989). All these figures point to the fact that religious faith and practice in Britain has declined. The increasing alienation of British citizens from the churches may also indicate the weakening power of religion over their lives.

Third, the significance of religion is poorly represented in British social science research. Perhaps more surprisingly, British social gerontology has neglected the role of belief in adjustment in ageing studies (Coleman, McKiernan, Mills, & Speck, 2007). Hence, studying the efficacy of religious coping with personal death anxiety among older adult British Christians may establish empirical evidence for the significance of religion in successful ageing in the UK. Fourth, since I am studying in the UK for my PhD training, older adult British Christians were sampled because of convenience.

3.1.2.   Hong Kong Chinese Older Adult Buddhists Aged over 54

My choice for recruiting older adult Chinese Buddhists from Hong Kong was dictated by three reasons. First, Buddhism is also one of the greatest world religions (Carus, 2003) and Mahayana Buddhism is more prevalent in China (Chen, 2006; Ludwig, 2004). According to the International Religious Freedom Report 2007, 200 million Mainland Chinese identify themselves as Buddhist, Taoist, or worshippers of 'legendary figures' while there are 700 thousand Buddhists or Taoists in Hong Kong (US Department of State, 2007).

Second, difficulty in communicating with local British Buddhists has led me to recruit Chinese Buddhists. Since little empirical work has been done to examine and measure Buddhist reincarnation belief and Buddhist coping, new scales have to be constructed for my Buddhist sample. While I was still planning where to recruit Buddhists for my dissertation, I went to a local British Buddhist group and attended their weekly gatherings. Because I learn about Buddhism in Chinese language, I found it very hard to understand many terms British Buddhists used. I also discovered that the sutras they chanted were virtually direct English phonetic translation for the Japanese Buddhist sutras. Based on these experiences, I knew that if I were unable to communicate my thoughts on Buddhism with these local British Buddhists, I would not be able to devise good Buddhist reincarnation belief and Buddhist coping with regrets scales for their use. Therefore, I decided to recruit Chinese Buddhists so that my self-constructed Buddhist scales would make more sense to my prospective participants (and myself).

Third, I was born in Hong Kong, so I felt that this would in some way reduce the basic language barrier in contacting and exchanging ideas with Hong Kong Chinese Buddhists. Besides, I was more familiar with the indigenous Buddhist recruitment procedure. Moreover, I had the advantage of ease of follow-up with Chinese Buddhists in Hong Kong during my occasional visits to Hong Kong.

3.2. Design

3.2.1.   Non-Experimental

Death is a source of terror. It follows that "the sensitive nature and complexity of many death-related situations makes experimental manipulation a risky, problematic, and, at times, ethically questionable enterprise" (Kastenbaum, 2000b, p. 113).

3.2.2. Interview and Postal Survey

The method of present investigation for both religious groups was twofold: (a) initial pilot interview and (b) subsequent postal survey. The pilot interview would not only serve as a preparation for the subsequent survey study, but also check if older adults were comfortable to express their attitudes about their personal death, a terrifying question. Besides, participants were taken as the primary information source to ensure that the measurements were suitable. It is possible that some imported American scales are inapplicable for my non-American religious older adults, such as the choice of word and adequacy of rating options. In addition, the quality of Chinese translation of the English scales for use in the Chinese Buddhist sample is unknown. Hence, pilot interview allowed the participants to provide feedback on the scales to be used. For example, is font size large enough for my older adult participants? Is the length of questionnaire too long for older adults who are likely to suffer from fatigue? Are the items accurate and easy to understand?

Given the benefits of conducting interviews with my participants, it may seem puzzling, at first, as to why I turned to use survey instead of interview in my subsequent empirical studies. There are four reasons for the discontinuation of interviews in later stage of my research. First, I speculated that some older people might consider their death-related attitudes and regrets a personal issue that they felt uncomfortable to disclose them to a total stranger (see section 4.3.7). Second, some older people might feel the pressure to give socially acceptable image of a mature sage to impress their interviewer (i.e. me). This is a limitation for all self-report measures, but probably even more so for interviews. Third, some older adults might need some time and personal space to contemplate on their prospective death or to recall an unresolved regretful past event (see section 4.3.7). Postal survey allowed them to do so in their own time. Fourth, the possibility of conducting interview was limited by the extent of my resources. I did not have a driving license, hence, it would be very difficult for me to interview a large and representative sample across the UK and Hong Kong. Besides, I spent most of time and my PhD training in the UK, the chance of interviewing over 100 Chinese Buddhists during my short visits to Hong Kong was low. Moreover, I was not confident in conducting interviews with British participants because I still found some British accents difficult to comprehend. I also worried that my Chinese accent might hinder communication with them. Hence, I thought it better to let my religious older adult participants express their thoughts in written words in their own time.

3.2.3.   Cross-Sectional Paradigm

I employed cross-sectional research paradigm for my British Christian postal survey study. An exploratory cross-sectional design was also chosen for my Chinese Buddhist survey study because of the limited research on Buddhist reincarnation belief and Buddhist coping. Hence, the Chinese Buddhist postal survey study has been the first exploratory study on examining the efficacy of Eastern religious afterlife beliefs and coping with regret in lowering personal death anxiety among older adults. It has also been a pioneer work in developing reliable scales for measuring Buddhist reincarnation belief and coping strategies.

Therefore, the Chinese Buddhist survey study was exploratory; while more weight was placed on my major British Christian survey study to investigate the influence of religious afterlife beliefs, religiously enhanced psychosocial maturity and religious management of a past major regret on personal death anxiety in later life.

3.3. Summary of Causal Hypotheses

The set of causal hypotheses garnered from Chapter 2 are reiterated below. Those tested in the older adult British Christian sample are displayed first, followed by those tested in the older adult Chinese Buddhist sample. Additional research questions were constructed to better understand older adult British Christians and Chinese Buddhists' death attitudes, religious activities and their lived experience of regret.

3.3.1.   Major Cross-Sectional British Christian Survey Study

Hypothesis 1: Intrinsic religiosity lowers personal death anxiety through fostering more benign afterlife beliefs and enhancing psychosocial maturity in later life.

Hypothesis 2: For people with regrets, intrinsic religiosity also lowers personal death anxiety through religious coping with negative emotions arising from regrets.

Hypothesis 5: Neuroticism mediates the relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity.

Hypothesis 6: Physical frailty increases personal death anxiety.

Hypothesis 7: People who score high in social desirability report lower personal death anxiety.

Hypothesis 8: Social readjustment lowers personal death anxiety.

Hypothesis 9: Future time orientation and greater subjective life expectancy lower personal death anxiety.

Hypothesis 10: More funeral pre-arrangements lower personal death anxiety.

Hypothesis 11: The presence of a near-death experience lowers personal death anxiety.

Hypothesis 12: Recent positive affects lower personal death anxiety.

Hypothesis 13: Personal dying anxiety increases personal death anxiety.

Hypothesis 14: Perceived attraction to death lowers personal death anxiety.

Additional research questions: What were the diverse death and dying concerns older adult British Christians held? Why did some of them have no death and dying concerns? What did older adult British Christians regret about? Why did some of them have no regrets? Did religious coping with regret make a unique contribution to mitigating negative emotional regret appraisal, over and above what was accounted for by non-religious coping with regret? Were older adults who still rued a major unresolved regret more fearful of death than those who did not have a major lingering regret? Had they ever had any spiritual experiences? If so, what was their most profound spiritual experience like?

3.3.2.   Exploratory Cross-Sectional Chinese Buddhist Survey Study

Hypothesis 3: Buddhist reincarnation belief is a weak buffer against personal death anxiety.

Hypothesis 4: Transpersonal faith-based, self-directing and deferring Buddhist copings lessen personal death anxiety through lowering negative emotional regret appraisal.

Hypothesis 9: Greater subjective life expectancy lowers personal death anxiety.

<u>Hypothesis 13:</u> Personal dying anxiety increases personal death anxiety.

<u>Hypothesis 15:</u> Traditional Chinese death beliefs increase personal death anxiety.

<u>Additional research questions:</u> What did older adult Chinese Buddhists regret about? How did they explain their regret? Were older adults who had an unresolved regret more fearful of death than those who did not? How did older adult Chinese Buddhists find applying Buddhist coping in daily life? What did they do to cultivate wholesome karma, or make merits?

3.4. Conclusions

This dissertation aims to examine the personal death anxiety buffering power of religious afterlife beliefs, religiously enhanced psychosocial maturity and religious management of regret among religious older adults. The increasing secularization in the UK provides the context in which the efficacy of these three proposed religious pathways to coping with personal death anxiety among older adult British Christians were investigated. Hong Kong Chinese Buddhists were selected to pioneer the construction of a Buddhist reincarnation beliefs and a Buddhist coping strategies scales, as well as to explore their preliminary relations to personal death anxiety. This dissertation used a non-experimental design beginning with a pilot interview which served as a preparation for the subsequent postal survey study. Cross-sectional research paradigm was chosen for both the major British Christian survey study and the Chinese Buddhists survey study. Causal hypotheses regarding the influence of religious afterlife beliefs, psychosocial maturity in later life, religious coping with regret, neuroticism and other variables on personal death anxiety were delineated. A few additional research questions were constructed to better understand older adult British Christians' and Chinese Buddhists' death attitudes, religious activities and their lived experience of regret.

Chapter 4:   Major British Christian Pilot Interview Study

In this chapter, I will explain the aims of the major cross-sectional British Christian pilot interview study. Then, I will describe the method. After that, I will present and discuss the corresponding results.

4.1. Objectives

The aim of this pilot interview study was twofold: (a) to give me a first-hand experience of doing gerontology research in the UK; and (b) to check the applicability of some scales considered for use among older adult British Christians to prepare for the subsequent postal survey study (see Chapter 5).

4.2. Method

4.2.1.   Participants

Twenty older adult British Christians aged 60 or above (10 Catholics and 10 Protestants) were interviewed. The response from one Catholic was discarded because he was later found to be less than 60 years old. For the remaining 19 participants, eight of them were males. There were six participants aged between 60 and 65; two aged between 66 and 70; four aged between 71 and 79; six aged 80 or above; and one female interviewee did not specify which age group she belonged to but claimed to be over 60 years old.

The ten Catholics were recruited from a Roman Catholic church in Southampton via advertisement on its weekly newsletter and/or via its Wednesday luncheon club. The ten Protestants were recruited from an Evangelical church in Southampton via the help of a lady in charge of her older church members' activities.

4.2.2.   Materials

It should be noted that the choice of scales was, in part, subject to the verbal feedback from the pilot interviewees to improve the questionnaire design in the subsequent postal survey study. As a consequence, different scales were used with different

participants, in which case internal reliability coefficients, though relevant, could not be properly calculated.

4.2.2.1. Intrinsic Religiosity

Intrinsic religiosity describes people's commitment to strive for meaning through their religion and to live out their religious faith. Participants' strength of religious faith and the centrality of their religious belief in their life were measured by three items extracted from the Royal Free Questionnaire for Spiritual and Religious Beliefs (King, Speck, & Thomas, 2001) on an 11-point Likert scale. The first item measures the extent to which participants hold to their religious belief, ranging from 0 (*weakly held view*) to 10 (*strongly held view*). The second item measures participants' perceived influence of a Higher Power on their daily life, ranging from 0 (*no influence*) to 10 (*strong influence*). The third item measures participants' perceived influence of a Higher Power on their coping with life events, ranging from 0 (*no help*) to 10 (*a great help*). The Royal Free Questionnaire for Spiritual and Religious Beliefs scale was strongly recommended by my supervisor who had been using it for many of his own British gerontology interview studies (e.g., Coleman, McKiernan, Mills, & Speck, 2007). In addition, it was developed by UK researchers to understand British's religiosity and spirituality, so this scale was highly applicable to my older adult British Christian participants. Besides, this scale also assesses people's religious observance, nature of spiritual experience and near-death experience that were useful in understanding more about my participants' religious experience and practice (see section 4.2.2.10).

This scale was later replaced by Hoge's (1972) 10-item Intrinsic Religious Motivation Scale that measures participants' degree of religious commitment on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*) for two reasons. First, Hoge's (1972) scale is a classic intrinsic religiosity measurement. Hoge intentionally constructed these ten items to match Allport and Ross's (1967) pioneer conceptual distinction between intrinsic and extrinsic religiosity as closely as possible. Since its publication, this scale has appeared in numerous subsequent studies involving the influence of religion on various outcome variables across different age groups. After a thorough review of other existing religiosity measurements (cf. Hill & Wood, 1999), I found that numerous subsequent intrinsic religiosity measurements had adopted many of Hoge's Intrinsic Religious Motivation items. Hence, there has been substantial evidence that Hoge's scale has high validity of measuring people's intrinsic religiosity. Second, the Intrinsic Religious Motivation Scale has three reverse items to control for potential effect of social desirability on self-reported religiosity.

4.2.2.2. Coping with Regrets

Coping with regrets describes how people adapt to and understand their regrets. This study was limited to one past unresolved major life regrets to avoid participants over-reporting regrets. This section was only completed by participants who reported having one major unresolved past regret that was still disturbing them. Participants' coping with regrets was measured by two dimensions, religious coping and non-religious coping. A high score represents more frequent use of the corresponding coping strategy to deal with the identified regret. Non-religious coping was measured as an additional research question to test if religious coping with regret would make a unique contribution to mitigating negative emotional regret appraisal, over and above what was accounted for by non-religious coping.

Religious coping is the use of religion-based cognitions and behaviours to deal with stressful life events (Tix & Fraser, 1998). It is increasingly being separated into positive and negative dimensions (Lavery & O'Hea, 2010). Positive religious coping reflects a secure connection with God. It also reflects reliance on religion for support, personal growth and comfort. Negative religious coping is characterised by uncertain faith and religious struggle. It also describes people's belief in divine punishment and demonic acts for their failings.

Participants' positive and negative religious coping were measured by the modified 63-item RCOPE scale (Pargament, Koenig, & Perez, 2000). The RCOPE was selected because it is the first scale to measure both positive and negative religious coping. Each item was rated on a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*a great deal*). As the present dissertation focused on how often older adult British Christians relied on their religion to cope with their identified regret, some wordings of the original RCOPE scale were changed to make it regret-specific. For example, the term 'situation' or 'problem' was changed to 'this biggest regret'. There are 39 items measuring positive religious coping and 24 items measuring negative religious coping.

However, the RCOPE scale was later replaced by the modified 14-item Brief RCOPE constructed by Pargament, Smith, Koenig, and Perez (1998) to shorten the length of questionnaires. This is because most participants indicated that the 63-item RCOPE scale was too long. Besides, the Brief RCOPE is short and had been validated by its authors in an elderly hospital sample. This Brief RCOPE scale originally measures how people cope with major life stressors, so its items were modified to make them regret-specific, mostly by changing the term 'situation' or 'problem' to 'this biggest regret'. Each item was rated on a 5-point Likert rating scale, ranging from 1 (*not at all*) to 5 (*a*

great deal). There are seven items measuring positive religious coping and seven items measuring negative religious coping.

<u>Additional topics of interest (1): Non-religious coping</u> means dealing with stressful life events cognitively and behaviourally in ways unrelated to religion. Participant's frequency of non-religious coping was measured by 12 items extracted from six subscales of the 63-item original Ways of Coping Questionnaire (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). Each item was rated on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*).

Ways of Coping Questionnaire is a classic inventory of coping with stressful life events that has been used in different age groups. It has eight subscales. These eight subscales are Confrontive Coping, Distancing, Self-Controlling, Seeking Social Support, Accepting Responsibility, Escape-Avoidance, Planful Problem-Solving, and Positive Reappraisal.

The Confrontive Coping subscale measures people's hostile actions to change the situation. This subscale was excluded from this pilot interview study because sometimes the person(s) who caused the biggest life regrets was (were) nowhere to be found, such as parents who abandoned their children at birth. The Distancing subscale measures people's efforts to minimize the significance of the regret. The Self-Controlling subscale measures people's efforts to control and regulate their own emotions. The Seeking Social Support subscale measures people's efforts to seek emotional support and assistance from their social network. The Accepting Responsibility subscale measures people's acknowledgement of personal accountability for the problem. The Escape-Avoidance subscale measures people's wishful thinking that the problem would disappear or be resolved. The Planful Problem-Solving subscale measures people's efforts to analyse the problem through action planning and reappraisal. The Positive Reappraisal subscale measures people's perceived benefits or growth from the problem. This subscale was also excluded because it was very similar to some positive religious coping items (e.g. the Benevolent Religious Reappraisal sub-dimension of the RCOPE scale).

Two items were selected from each of the remaining six subscales. Only the top two greatest factor loadings on each subscale were selected because they were highly representative for the corresponding subscale. In addition, this created a shorter version of a non-religious coping scale.

4.2.2.3. Negative Emotional Regret Appraisal

Negative emotional regret appraisal refers to the range of negative emotions people feel towards their regret. A total of 27 items were used to measure participants' feelings of anger, sorrow and nostalgia related to their identified major life regret. Twenty-two of them were extracted from several prior studies on regrets (Gilovich, & Medvec, 1998; Jokisarri, 2003; Lecci, Okun, & Karoly, 1994; Wrosch & Heckhausen, 2002). Each of them was rated on a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*often*). These subscales were adopted mainly because they were developed from samples of young and/or older adults to measure participants' negative feelings related to their regrets.

The remaining five items were extracted from Wrosch, Bauer, and Scheier's (2005) 5-item Intrusive Thoughts about Life Regrets scale to measure participant's tendency to experience intrusive thoughts about their identified regret on a 4-point Likert scale, ranging from 1 (*not at all*) to 4 (*often*). These five items were chosen because they had been validated in an older adult sample (Wrosch et al., 2005). However, these five items were later deleted because several participants commented that they neither pondered a lot on their major life regret nor found it traumatic.

4.2.2.4. Personal Death Anxiety

Personal death anxiety is defined as a negative emotion arising from the awareness of one's prospective total non-existence (Cicirelli, 2006a). The 8-item Your Own Death subscale (Lester, 1994) was used to measure participants' negative emotions associated with their own death. This scale was chosen because it is the first scale to distinguish people's fear of personal death from their fear of personal dying (see section 4.2.2.8). The latter of which may be a potential significant correlate of personal death anxiety. The response for participants' personal death anxiety was rated on a 7-point Likert scale, ranging from 0 (*not disturbed*) to 6 (*very disturbed*).

However, several participants found some items such as "dying young" and "how it will feel to be dead" did not make sense to them. In addition, some participants also thought it would be better if all eight items could be elaborated. Therefore, Wittkowski's (2001) 6-item Fear of One's Own Death subscale was used to replace Lester's (1994) 8-item Your Own Death subscale. This is because the former was an improved statement-format version of Lester's (1994) scale and participants in subsequent pilot interviews did not have difficulty responding to it. Wittkowski's

(2001) 6-item Fear of One's Own Death subscale used a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*).

4.2.2.5. Additional Correlates (1): Physical Frailty

Physical frailty refers to people's perceived physical weakness in terms of limited mobility and physical strength. Participants' subjective physical health status was measured by the modified Short Form-36 Health Survey Questionnaire (Ware & Sherbourne, 1992) to examine the effect of physical frailty on personal death anxiety. Some items were rated on Likert scale while others on a "Yes" or "No" basis. This scale was selected because it had been extensively used in British clinical studies with elderly patients (e.g., Croft, Jordan, & Jinks 2005; Richmond, Morton, Cross, Wong, Russell, Philips et al., 2010). Originally, there are 36 items nested within ten subscales. Each subscale measures a different dimension of subjective health, but 17 items were discarded because of irrelevance or poor clarity.

The first subscale is the 5-item General Health Perception. It measures a person's favourable or unfavourable self evaluation of general health. Four items measuring participants' health beliefs were discarded because the phrases 'other people' and 'anybody I know' did not make sense to my pilot interviewees or the required comparison could not be made without a clearly specified reference group. The second subscale is the 10-item Physical Functioning subscale. It measures the extent to which health problems have limited a person's physical activities. The third subscale is the 4-item Role Limitation Due to Physical Problems subscale. It measures the extent to which physical health problems have limited a person's usual role activities. The fourth subscale consists of one item measuring the amount of interference on normal social activities caused by physical health problems. The fifth subscale is the 4-item Energy/Vitality subscale. It measures a person's perceived level of energy. Since Energy/Vitality was originally conceptualized as a measure of mental rather than physical health, this subscale was discarded. The sixth subscale is the 2-item Pain subscale which measures a person's perceived level of bodily pain. The seventh subscale is the 3-item Role Limitation Due to Emotional Problems subscale. It measures the extent to which emotional problems have limited a person's usual role activities. This subscale was discarded because it was irrelevant to the measure of physical frailty. The eighth subscale is the 5-item Mental Health subscale. It measures a person's emotional well-being. This subscale was not used in computing a participant's physical frailty score because it was irrelevant to the measure of physical frailty. The ninth subscale is the 1-item Change in Health subscale which measures the extent to which a person's health have improved or worsen over the last six months. The tenth

subscale is the 1-item Social Functioning subscale which is very similar to the fourth subscale, so it was discarded.

4.2.2.6. Additional Correlates (2): Social Desirability

Participants' tendency to project positive images of themselves was measured by the 7-item revised short form of the Marlowe-Crowne Social Desirability Scale – Form X1 (Fischer & Fick, 1993) on a "True" or "False" basis. It was adopted because of its remarkable structural validity (Fischer & Fick, 1993) and its short length to examine the effect of social desirability on personal death anxiety when using self-reported measures.

4.2.2.7. Additional Correlates (3): Subjective Life Expectancy

Subjective life expectancy is an individual's estimates of how long he/she is going to live. It was measured to examine if it was a significant correlate of personal death anxiety. Participants' subjective life expectancy was measured by the 10-item Future Time Perspective Scale (Carstensen & Lang, 1996) on a 5-point Likert scale, ranging from -2 (*very untrue*) to +2 (*very true*). This scale measures the extent to which people believe in having a distant psychological future. There are three reverse items and they were reversely scored. This scale was chosen because it was originally developed for use in older people.

Initially, I did not include subjective life expectancy measurement in this pilot interview study. But after a few pilot interviews, I found that many of them mentioned their coming birthdays or previous birthday celebrations as well as what they had planned for their coming holidays or who would visit them in the near or distant future. It seems to me that these participants expected that they would continue to live for a certain period of time and/or that they would have enough time to accomplish all the plans they had made for their future. Therefore, I incorporated the Future Time Perspective Scale to understand their time perspective and to examine its effect on their personal death anxiety.

4.2.2.8. Additional Correlates (4): Personal Dying Anxiety

Personal dying anxiety is defined as a negative emotional reaction concerning one's dying process. The 8-item Your Own Dying subscale (Lester, 1994) was used to measure participants' negative emotions associated with their own dying. This scale

was chosen because it is the first scale to distinguish people's fear of personal death from personal dying. Personal dying anxiety was examined for its potential effect on personal death anxiety. The response for participants' dying anxiety was rated on a 7-point Likert scale, ranging from 0 (*not disturbed*) to 6 (*very disturbed*).

4.2.2.9. Additional Topics of Interest (2): Regret Profile

<u>Dummy warm-up task: Reminiscence.</u> The 43-item Reminiscence Functions Scale (Webster, 1993) was used to purposefully direct participants to reflect on their past and to offer a smooth transition to subsequent questions related to their major life regret. This scale measures participants' possible uses or functions of reminiscence on a 4-point Likert scale, ranging from 1 (*never*) to 4 (*very frequently*). It has eight dimensions, namely Boredom Reduction, Death Preparation, Identity, Problem-Solving, Conversation, Intimacy Maintenance, Bitterness Revival, and Teach/Inform.

The Boredom Reduction subscale measures people's tendency to reminisce to feel motivated and energized when the environment is not stimulating. The Death Preparation subscale measures people's tendency to reminisce to gain a sense of closure to come to terms with their death. The Identity subscale measures people's tendency to reminisce to promote self understanding and to preserve their own identity. The Problem-Solving subscale measures people's tendency to reminisce to help them solve a current problem. The Conversation subscale measures people's tendency to reminisce as a means for social engagement. The Intimacy Maintenance subscale measures people's tendency to reminisce to keep their memories of their deceased significant others alive. The Bitterness Revival subscale measures people's tendency to remember their difficult life circumstances and episodes of being unjustly treated. The Teach/Inform subscale measures people's tendency to reminisce to teach younger generations.

But the Reminiscence Functions Scale was later discarded because many participants said that they seldom reminisced. They reasoned that it was useless to think about the past that they could not change. If they did, they often kept what they reminisced about to themselves (e.g., remembering their deceased significant others and self reflection) or did it for the sake of teaching younger generations. In addition, subsequent pilot interviewees could recall a past regret without the aid of the Reminiscence Functions Scale. Hence, this scale was no longer used as a facilitator of regret identification.

<u>Regret description.</u> A few self-constructed items were used to understand older adult British Christians' lived experience of regrets. Participants were asked to identify and to briefly describe one of their major life regrets, and then classify them into one or more of the following categories (cf. Jokisarri, 2003): (a) education/academic, (a) family, marriage/intimate relationships, (c) work/occupational, (d) friendships, (e) leisure, hobbies, (f) personal, self-improvement, (g) relatives, (h) health and self-care, (i) wealth/financial, (j) society, community, (k) others, (l) something you did but you wish you hadn't, and (m) something you did not do but wish you had. See Appendix A for the actual questionnaire.

After that, they were asked to evaluate the significance and changeableness of that regret on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*).

4.2.2.10.   *Additional Topics of Interest (3): Religious Activities, Spiritual and Near-Death Experience*

To understand more about the religious, spiritual and near-death experiences of older adult British Christians, six items were extracted from the Royal Free Questionnaire for Spiritual and Religious Beliefs (King, Speck, & Thomas, 2001) to assess people's religious observance, nature of spiritual experience and near-death experience.

4.2.2.11.   *Mood Repair Measures*

The 43-item Revised Stress-related Growth Scale (Armeli, Gunthert & Cohen, 2001) was used to repair moods arising from completing the sections on mortality anxieties as well as regrets. This scale was modified to measure the extent to which participants had changed as a result of the major life regret. Each item was rated on a 5-point Likert scale, ranging from -2 (*greatly decreased*) to +2 (*greatly increased*). Because a few participants commented that this scale was too long, 19 items were randomly selected to create a shorter version of the same scale. However, the shortened version was later excluded because most participants found it very difficult to distinguish life changes as a result of the major life regret from that of ageing, despite the fact that they were explicitly instructed to do so. Hence, ratings of amusing stories was incorporated at the end of the interview as an alternative mood repair measure recommended by my School's ethics committee.

4.2.2.12.   Demographics

Single item gathered information on participant's age group and nationality.

4.2.3.   Procedure

All interviews took about 1.5 hours including 30 minutes break, except one interview went on to three hours. Three Catholics were interviewed at their own residence and six at their affiliated Roman Catholic Church. Eight Protestants were interviewed at their residence and two at a social hall within their affiliated Evangelical church. In the first two interviews, I was accompanied by a fellow postgraduate who coached me on how to conduct interviews with British people. Either the participants filled out the questionnaires on their own or I completed them on their behalf in case of visual or physical impairment. During the interview, all participants were asked to suggest ways of improving the questionnaires.

4.3. Results and Discussion

This section describes (a) some descriptive findings related to intrinsic religiosity, religious practices, personal death and dying anxieties, coping with and appraisal of the major life regret among 19 older adult British Christians, and (b) the directions for improving the major cross-sectional postal survey and research design. Information on the remaining scales not mentioned in (a) could not be presented because of high missing responses. This is because many participants were unable to complete all scales due to my interruptions to ask for comments on the clarity and length of the major scales as well as limited interview time.

4.3.1.   Intrinsic Religiosity and Religious Practices

All participants were highly intrinsically religious except one female participant who did not want to disclose her attitudes towards religion. For the 11 participants who completed the Royal Free Questionnaire for Spiritual and Religious Beliefs, they all reported praying, meditating, reading and studying, and contacting a religious leader as part of their religious practices.

4.3.2.   Low Perceived Personal Death Anxiety but Moderate to High Personal Dying Anxiety

Two participants were reluctant to discuss their death and dying anxieties. As a result, I could only report the findings related to these two mortality anxieties based on the remaining 17 participants. Most of them did not find personal death disturbing. The only two aspects of personal death that disturbed some participants were missing out so much after they die as well as the possibility of punishment and pain in an afterlife. However, more than half of the 17 participants showed moderate to high levels of personal dying anxiety. They were very disturbed by the physical and intellectual degeneration associated with the dying process and/or old age, the possibility of a lonely, slow and/or painful dying process, the loss of dignity and control over the dying process, and the grief of others.

4.3.3.   Frequent Use of Positive but Infrequent Use of Negative Religious Coping

For those nine participants who reported one major life regret, nearly all of them frequently used positive religious coping strategies, such as seeking spiritual support, but rarely used negative religious coping strategies, such as redefining the regret as a punishment from God, in order to cope with their major life regret.

4.3.4.   Frequent Use of Non-religious Emotion-Focused but Infrequent Use of Problem-Focused Coping

Of the final four participants who were provided with the 12-item modified Ways of Coping scale, three of them reported one major life regret. These three older adult British Christians used more non-religious emotion-focused coping such as keeping feelings to oneself than problem-focused coping such as planful problem-solving in order to come to terms with their regret.

4.3.5.   Additional Analyses (1): Types of Reported Major Life Regret

Nine participants reported one major life regret, the majority of which was related to interpersonal relationships. For example, they regretted most about not spending enough time with people before they died or not having good relationships with their

parents. Only one participant wished that she had chosen a different career. Two participants decided not to disclose and/or describe their major life regret.

4.3.6.   Additional Analyses (2): Regret Resolution

Seven participants said they did not have any major life regret. Interestingly, they told me why they had no regret even though I did not ask them for an explanation. Their reasons for the absence of major life regrets can be classified into three groups: (a) they had already resolved their major life regret (e.g., enrolled in courses to compensate for the lack of higher education at younger age, divorced and remarried), (b) the benefit of hindsight, they thought that they made the right decision at that time, and (c) they were content with their life and had no complaints over the imperfections of their past.

4.3.7.   Directions for Improving the Postal Survey and Research Design

Verbal feedback from the participants and my thoughts on these 19 interviews led me to enhance my major British Christian postal survey and research design in three ways. First, I decided to use only short scales in the major postal survey study because many participants found the interview too long and most items within the same scale repetitive. If a scale did not have a short version, relevant items with factor loadings greater than .49 were chosen to construct a shorter version of that scale.

Second, one participant offered me very practical advice on improving the layout of the questionnaires. To make the questionnaires more readable, he suggested that I should use "Arial Narrow" typeface with a font size of 12, and to list the items in table format and insert borders for every two items.

Third, a few participants felt uneasy talking about or revealing their major life regret to a stranger (i.e. me); while others found that it would be helpful if they were allowed more time to identify one major regret in their life. In addition, two participants told me that death and dying was a personal and sensitive topic that they were reluctant to express their mortality anxieties. Moreover, as an interviewer, I found some participants' accents hard to comprehend. Furthermore, I was very conscious about my accent and worried that my participants might be bothered by it. Therefore, I chose to mass mail my major postal surveys to older adult British Christian participants. Using a postal survey research design enabled them to take their time to complete the

questionnaires and to express their death-related attitudes and evaluate their regrets freely and anonymously.

4.4. Conclusions

The descriptive results from the 19 pilot interviews revealed that personal death anxiety was low in later life and that older adults were more concerned about their prospective dying process. In addition, all 19 individuals were highly intrinsically religious. Eight of them reported a major life regret related to close interpersonal relationship and one regretted about her career choice. These people used more positive religious than negative religious coping to deal with the identified regret. They also used more non-religious emotional-focused than problem-focused coping to deal with the identified regret. Feedback from the participants indicated a need for employing short scales and for conducting a postal survey study.

This page is intentionally left blank.

Chapter 5:   Major Cross-sectional British Christian Survey Study

In this chapter, I will explain the aims of the major cross-sectional British Christian survey study. Due to high number of variables of interest, there are two waves of data collection for this cross-sectional survey study. Such a two-tier approach also allowed me to follow-up on the results of my initial survey at Time 2. I will describe the method with reference to each survey. Since this is a cross-sectional study, I will present and discuss the results as a whole.

5.1. Objectives

This cross-sectional survey study was intended to examine the efficacy of the personal death anxiety buffering power of religious afterlife beliefs, religiously enhanced psychosocial maturity and religious management of regret among older adult British Christians who were residing in an increasing secular society. This is the objective of the Time 1 and Time 2 surveys.

The second objective of the Time 2 survey is to make follow-up assessment of the findings of the first postal survey in five ways. First, because of unsatisfactory face validity, social desirability and subjective life expectancy had to be re-assessed for their influence on personal death anxiety in the Time 2 survey. Second, three new variables of interests (mortality acceptance, extrinsic religiosity, and self acceptance coping strategy) were introduced into the Time 2 survey to explore their influence on personal death anxiety. Third, in the Time 2 survey, 24 items were pooled from two prior multidimensional death anxiety measures (Abdel-Khalek, 2002; Florian & Kravetz, 1983) to examine four aspects of personal death anxiety that were unmeasured in the Time 1 personal death anxiety scale. Fourth, the three death-related constructs (personal death anxiety, personal dying anxiety and perceived attraction to death) and three types of negative emotional regret appraisal ('hot' emotions, despair-related emotions, and wishful emotions) were re-assessed in Time 2 to examine their test-retest reliability. Finally, due to the length of the Time 1 survey, psychosocial maturity in later life was limited to measuring people's perceived generative concerns, life satisfaction and life despair. Four other facets of psychosocial maturity in later life (life purpose, existential vacuum, self acceptance and positive attitudes towards ageing) were subsequently measured in the Time 2 survey.

5.2. Method

5.2.1. Participants

In January / February 2008, 608 participants aged over 59 were invited to take part in my major cross-sectional British Christian survey study. Of these, 440 were participants who took part in a previous study of perceived spiritual needs via Saga Magazine in 2003; 166 were volunteers of an older participant pool in my School of Psychology; and the remaining two were two members of a local Protestant church who could not find time to take part in my pilot interview study but wished to help me out.

Three hundred and twenty-one out of 608 participants responded to my Time 1 survey invitation. The response rate for the Time 1 survey (52.79%) was acceptable, owing to the fact that I had incomplete information regarding the SAGA magazine participants' age and the School of Psychology older volunteers' religious background.

Of these, 84 Time 1 survey participants were discarded for the following reasons: (a) 27 participants declined my invitation without giving any reason; (b) 23 participants were either under age 60 or non-Christians; (c) 11 participants returned unopened survey packages to me; (d) eight participants were unable to take part because of poor health; (e) five participants returned empty surveys; (f) five participants did not indicate either their religious beliefs or age group, so they were discarded due to their questionable eligibility; (g) four participants were deceased; and (h) one participant posted her Time 1 survey in 2009, which was way beyond the closing date of submission.

Two hundred and seventeen out of 237 remaining Time 1 survey participants agreed to take part in my June / July Time 2 follow-up survey study six months after the administration of the Time 1 survey. Two hundred and five participants responded to my Time 2 survey invitation.

Of these, 62 Time 2 survey participants were discarded for the following reasons: (a) 46 participants did not believe in the Divinity of Jesus and/or who were not receptive to belief in a personal God as measured by two out of the 12 questions about participants' religious background (see section 5.2.2.22 below); (b) two participants indicated in their Time 2 survey that they were non-Christians; (c) one participant later decided to withdraw from this major British Christian survey study; (d) data for 12 participants could not be recovered due to missing participant code; and (e) one Time 1 survey was lost in transit and so the corresponding Time 2 data was discarded.

Taken together, one hundred and forty-three eligible participants who completed both Time 1 and Time 2 surveys were identified in the end. Table 1 displays the demographics, religious beliefs and practices of these 143 participants.

Table 1

Demographics, Religious Beliefs and Practices of the 143 Identified Eligible Older Adult British Christians

Variable	Responses categories	*N*	(%)
Source of recruitment	SAGA magazine	130	(90.9)
	School of Psychology older participant pool	12	(8.4)
	Southampton local church	1	(0.7)
Age group	Between 60 and 65	17	(11.9)
	Between 66 and 70	30	(21)
	Between 71 and 79	50	(35)
	80 or above	46	(32.1)
Gender	Female	100	(69.9)
	Male	40	(28)
	Undisclosed	3	(2.1)
Ethnicity	British	137	(95.8)
	European	2	(1.4)
	Others	1	(0.7)
	Undisclosed	3	(2.1)
Employment status	Employed	2	(1.4)
	Retired	127	(88.8)
	Others	11	(7.7)
	Undisclosed	3	(2.1)
Marital status	Single	17	(11.9)
	Married	79	(55.2)
	Divorced	11	(7.7)
	Widowed	32	(22.4)
	Undisclosed	4	(2.8)
Religious Beliefs	Catholic beliefs	20	(14.0)
	Protestant beliefs	85	(59.4)
	Both Catholic and Protestant beliefs	30	(21.0)
	Others	4	(5.6)

Theological
religiosity

Belief about immortality	1. I don't know whether there is any kind of life after death, and I don't know if I will ever know	3	(2.1)
	2. I believe immortality is the continued influence of a person's life on family or society	2	(1.4)
	3. I believe in a life after death or some kind, but I really don't know what it would be like	27	(18.9)
	4. While its meaning is somewhat imprecise, I believe in a soul existing after death as a part of a universal spirit	16	(11.2)
	5. I believe in a personal life after death, a soul existing as a specific individual spirit	81	(56.6)
	6. I believe in reincarnation (belief that the soul enters a new body after death)	3	(2.1)
	7. Chose more than one of the above options	11	(7.7)
Conception of afterlife	1. Simple stop existing	1	(0.7)
	2. Reincarnation	2	(1.4)
	3. I have no idea	8	(5.6)
	4. My 'spirit' will have some continuation in the universe	49	(34.3)
	5. Depending on the will of God, I will go to heaven or hell	71	(49.7)
	6. Chose more than one of the above options	12	(8.4)
Belief in a personal God[a]	1. I am sure that God really exists and that He is actively in my life	115	(80.4)
	2. Although I sometimes question His existence, I do believe in God and believe He knows of me as a person	11	(7.7)
	3. I feel that I do believe in a God even though I am not able to explain fully who or what God is	6	(4.2)
	4. I don't know if there is a personal God, but I do believe in a high power of some kind	6	(4.2)
	5. I don't know if there is a personal God or a higher power of some kind, and I don't know if I ever will	5	(3.5)

Perceived God's influence on human history	1. There is no evidence of any intervention of 'God' in human history	2	(1.4)
	2. People who have believed in God have influenced history	19	(13.3)
	3. I believe the unfolding history of man has been within a natural order established by a higher power	5	(3.5)
	4. While I am unable to explain fully who or what God is, I believe He has an influence in the history of man	19	(13.3)
	5. I believe God has and continues to intervene directly and indirectly in the history of man	94	(65.7)
	6. Chose more than one of the above options	4	(2.8)
Belief in the Divinity of Jesus Christ[a]	1. I feel basically that Jesus is Divine, but I have some problems understanding the concept of his Divinity	30	(21)
	2. Jesus is the Divine Son of God and I have no doubts about it	109	(76.2)
	3. Chose both of the above options	4	(2.8)
Conception of prayer	1. 'Prayer' is not a meaningful term to me	2	(1.4)
	2. Prayer is self-evaluation and working out one's problems	1	(0.7)
	3. Prayer is meditation in which thought is directed toward beauty, goodness, comfort, etc	2	(1.4)
	4. Prayer is directing one's thoughts toward a higher power	7	(4.9)
	5. Prayer is speaking to God	128	(89.5)
	6. Chose more than one of the above	3	(2.1)
Conception of sin	1. I believe people err but do not 'sin'	1	(0.7)
	2. Sin is behavior which goes against my own personal principles	4	(2.8)
	3. Sin is behavior which harms other	13	(9.1)
	4. Sin is behavior which goes against social and ethical principles	10	(7)
	5. Sin is failure to live up to the highest spiritual ideas I know	22	(15.4)
	6. Sin is the individual's rejection of God's will for his life	88	(61.5)
	7. Chose more than one of the above options	5	(3.5)
Conception of the Bible	1. The Bible is a collection of literary and historical writings	2	(1.4)
	2. The Bible contains some of man's significant moral and ethical thinking	5	(3.5)
	3. The Bible was written by inspired men and contains valuable spiritual teachings	37	(25.9)
	4. The Bible is God's Word	94	(65.7)
	5. Chose more than one of the above	5	(3.5)

Ritual religiosity

Use of the Bible	1. I read the Bible regularly for devotional purposes	75	(52.4)
	2. I read the Bible, somewhat irregularly, primarily for devotional purposes	38	(26.6)
	3. I read the Bible occasionally for its ethical and moral teachings	6	(4.2)
	4. I read the Bible for diverse purposes	15	(10.5)
	5. I seldom, if ever, read the Bible	7	(4.9)
Practice of prayer	1. Prayer is a regular part of my daily life	132	(92.3)
	2. I usually pray in times of stress or need but rarely at other times	7	(4.9)
	3. I never pray	1	(0.7)
	4. Others	3	(2.1)
Consequential religiosity		2	(1.4)
Frequency of seeking religious advice	1. Almost always	77	(53.8)
	2. Usually	43	(30.1)
	3. Sometimes	16	(11.2)
	4. Seldom	1	(0.7)
	5. Never	3	(2.1)
	6. Others	3	(2.1)
Religious affiliation	1. I am a practicing member of a Christian church	127	(88.8)
	2. I am a non-practicing member of a Christian church	8	(5.6)
	3. None of the above	5	(3.5)
	4. Undisclosed	3	(2.1)

[a]The refined participant inclusion and exclusion criteria

5.2.2. Materials

Scale selection and item inclusion were guided by (a) verbal feedback from the pilot interviewees (see section 4.3.7), (b) spontaneous written feedback from the survey participants, (c) applicability to theistic older adults, (d) desire to better understand participants' death attitudes, religious activities and their lived experience of regret, and (e) the goal of supplementing an existing scale.

To maximize validity, a conservative approach was undertaken to exclude items based on: (a) spontaneous feedback from more than a few participants on item applicability/clarity; (b) item-total correlation cut-off value of .3; and (c) consultation with Prof. Peter Coleman who has expertise in conducting British gerontology and religious studies. Appendix B describes the reasons for each item exclusion.

5.2.2.1. Intrinsic Religiosity

Intrinsic religiosity describes people's commitment to strive for meaning through their religion and to live out their religious faith. Intrinsic religiosity was measured in the Time 1 survey only. Hoge's (1972) 10-item Intrinsic Religious Motivation scale was used to measure participant's intrinsic religiosity on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). This scale is based on Allport and Ross's (1967) distinction between extrinsic and intrinsic religious motivation. It was chosen because its reliability and validity were greater than that of Allport and Ross's Intrinsic-Extrinsic scales (Clements, 1998). In addition, it has been widely used (Koenig, McCullough, & Larson, 2001), thus it is a well-validated measure of intrinsic religious orientation. In addition, it had been reviewed by my pilot interviewees. There are three reverse items to control for the potential effect of social desirability on self-reported measures of religiosity. Each of them was reversely scored. A high score represents high intrinsic religiosity. One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .89.

5.2.2.2. Personal Death Anxiety

Personal death anxiety is defined as a negative emotion arising from the awareness of one's prospective total non-existence (Cicirelli, 2006a). It was measured twice in order to: (a) assess its test-retest reliability; and (b) examine other aspects of personal death concerns that were not tapped in Time 1.

In the Time 1 survey, participants' personal death anxiety was measured by the 9-item Repulsion by Death subscale (Orbach, Milstein, Har-Even, Apter, Tiano, & Elizur, 1991) and one self-constructed item ("The idea that I will be unable to resolve my regrets after my death disturbs me") to supplement the former scale. According to Tomer and Eliason (1996, 2000a), the prospect or possibility of death activates past-related regrets and future-related regrets. From this perspective, I expected that concerns about failure to resolve regrets and accomplish important life goals was one component of personal death anxiety. Hence, to supplement the existing personal death anxiety scale, I self-constructed this item.

Each item was rated on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). The Repulsion by Death subscale was preferred to Wittkowski's (2001) 6-item Fear of One's Own Death subscale that had been reviewed by my pilot interviewees because it: (a) closely resembles the latter and its statement format is easy to understand, and (b) has been clinically validated across different normal and

suicidal adolescent samples but the latter is just recently developed from one student sample and I did not find any subsequent application of the latter. A high score represents high personal death anxiety. Three items were discarded (see Appendix B) and the resultant Cronbach's alpha was .87.

In the Time 2 survey, personal death anxiety was measured by: (a) seven retained Repulsion by Death subscale items in Time 1; (b) the self-constructed item in Time 1; and (c) 24 additional items extracted from two major multidimensional death anxiety scales developed from a theistic sample. These 24 additional items were sampled to encompass the four aspects of personal death concerns that were reported by my older adult British Christian participants in their qualitative data but were not tapped by the Repulsion by Death subscale (see section 5.2.2.19).

The first unmeasured aspect of personal death anxiety is participants' worry over the negative consequences of personal death to their close ones. This aspect was measured by three items from the Parting from Loved Ones subscale (Abdel-Khalek, 2002) and one item from the Consequences to Family and Friends subscale (Florian & Kravetz, 1983).

The second unmeasured aspect of personal death anxiety is participants' fear of losing contact with earthly activities. This aspect was measured by four items from the Losing Worldly Involvement subscale (Abdel-Khalek, 2002), one item from the Loss of Self-fulfillment subscale (Florian & Kravetz, 1983) and three items from the Loss of Social Identities subscale (Florian & Kravetz, 1983).

The third unmeasured aspect of personal death anxiety is participants' fear of not conforming to the standard of their religious faith before death. This aspect was measured by three items from the Transgressions and Failures subscale (Abdel-Khalek, 2002).

The fourth unmeasured aspect of personal death anxiety is participants' fear related to the moment of death and the hereafter. This aspect was measured by three items from the Fear of Pain and Punishment subscale (Abdel-Khalek, 2002) and five modified items from the Transcendental Consequences subscale (Florian & Kravetz, 1983). One original Transcendental Consequences item 'uncertainty of what to expect' was modified into two statements, namely, 'uncertainty of what to expect during the end of my life' and 'uncertainty of what to expect after my death', modification was made due to its vague time reference point related to the phrase 'what to expect'.

One item was discarded (see Appendix B) and the Time 2 personal death anxiety domain was measured by a total of 31 items. Each item was rated on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). These 31 items were subject to a principal components factor analysis with Varimax rotation. A scree plot revealed a flattening of the curve above the first two factors. Thus, a two-factor solution appeared to be most parsimonious and readily interpretable, accounting for a total of 49.32% of the total variance. The factor labels and loadings greater than .3 of these 31 items are presented in Table 2. The factors were conceptually identified as: (a) Fear of Earthly Disengagement (25.90% of the variance) and (b) Fear of Transcendental Consequences (23.42% of the variance). A high score represents great personal death anxiety.

Fear of earthly disengagement represents participants' concerns over the consequences of their personal death on self, goal pursuit, and social world. The Cronbach's alpha was .92 for 18-item fear of earthly disengagement. Fear of transcendental consequences represents participants' fear towards the unknown of the hereafter and the moment of death. The Cronbach's alpha was .90 for the 13-item fear of transcendental consequences.

Table 2

Factor Labels and Loadings Greater Than .3 of the 31-item Personal Death Anxiety

Item		Fear of Earthly Disengagement	Fear of Transcendental Consequences
41	I fear death because death puts an end to my plans and objectives.	.74	-
32	I fear death because of parting from relatives and beloved.	.71	-
43	I fear death because events will take place without me.	.70	-
46	I fear death because life will go on without me.	.66	-
33	I fear death because of leaving behind secular pleasures.	.66	.43
31	I fear death because my life teems with meaningful things.	.66	.32
42	I fear death because of my missing future events.	.66	-
22	I fear death because all my plans will come to an end.	.66	.35
48	I fear death because of my inability to provide for my family.	.65	-
47	I fear death because my family will still need me.	.63	-
40	I fear death because of grieving over what I will leave behind, such as wealth, valuables, etc.	.58	-

19	The thought that one day I will die frightens me.	.57	.52
39	I fear death because of the grieving of loved ones.	.57	-
13	I fear death because my identity will disappear.	.55	.47
15	Thinking about death gives me the shivers.	.54	.39
44	I fear death because I will be forgotten.	.53	.41
16	I fear death because it means that I will not be able to experience and think anymore.	.49	.36
28	I fear death because I worry about my offspring.	.35	-
51	I fear death because of the uncertainty of existence after my death.	-	.80
34	I fear death because of fear of hell and doomsday.	-	.80
27	I fear death because of fear of heavenly punishment.	-	.77
37	I fear death because of my failure to perform religious duties and obligations.	-	.74
29	I fear death because I have too many sins.	-	.66
38	I fear death because of my lack of faith.	-	.65
35	I fear death because of the terrible strenuous moment when the soul parts from the body.	.36	.63
52	I fear death because of death's mysteriousness.	.41	.62
26	Death frightens me more than anything else.	.51	.61
50	I fear death because of the uncertainty of what to expect after my death.	-	.61
11	I fear death because all my mental and spiritual activity will stop.	.44	.51
53	I fear death because of the unknown associated with death.	.30	.49
49	I fear death because of the uncertainty of what to expect during the end of my life.	.33	.39

5.2.2.3. Afterlife Beliefs

Afterlife beliefs refer to people's belief in a life after death. It is sometimes known as literal immortality. Participants' afterlife beliefs were measured by two dimensions, belief in a good afterlife and belief in an unpleasant afterlife, and in the Time 1 survey only. A high score represents strong belief in the corresponding afterlife.

Belief in a good afterlife describes people's belief in a happy life and personal justification after death. It was measured by the 6-item Death as an Afterlife of Reward subscale (Spilka, Stout, Minton, & Sizemore, 1977) on a 5-point Likert scale, ranging from -2 (*definitely false*) to +2 (*definitely true*). This scale was chosen because it is a pioneer measurement of people's pleasant afterlife beliefs. In addition, it is short. Moreover, it was developed from a sample aged between 17 and 83 years, so its usability on older adult sample could be assured. One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .89.

Belief in an unpleasant afterlife describes people's belief in punishment for sins and suffering after death. This scale had been self-constructed because there was no previous scale measuring older people's unpleasant afterlife beliefs. It was constructed with reference to the Death as an Afterlife of Reward subscale (Spilka et al., 1977). It has six items and each item was rated on a 5-point Likert scale, ranging from -2 (*definitely false*) to +2 (*definitely true*). Scree plot from exploratory factor analysis revealed a one-factor solution for this self-constructed scale. The Cronbach's alpha was .64.

5.2.2.4. Psychosocial Maturity in Later Life

Psychosocial maturity in later life is defined as the ability to reflect on and embrace one's life and social responsibility. Participants' psychosocial maturity was measured by seven scales, namely, generative concerns, life satisfaction, life despair, positive attitudes towards ageing, life purpose, existential vacuum, and self acceptance.

Generative concerns are defined as people's conscious concerns for the next generation's well-being and their perceived contribution to the society. Generative concerns were measured in the Time 1 survey only. The 20-item Loyola Generativity scale (McAdams & de St. Aubin, 1992) was used to measure participants' generative concerns on a 4-point Likert scale, ranging from 1 (*never*) to 4 (*very often*). This scale was developed from an older adult sample (McAdams & de St. Aubin, 1992) and had been validated in other older adult samples (McAdams, de St. Aubin, & Logan, 1993). Hence, its usability on older adult sample can be assured. Eight items were discarded (see Appendix B) and the resultant Cronbach's alpha was .85. A high score represents strong generative concerns.

Life satisfaction is a positive life outlook characterized by the feeling that one's life is hopeful and worth living. Life satisfaction was measured in the Time 1 survey only. It was measured by the 7-item Attraction to Life subscale (Orbach et al., 1991) on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). This scale is preferred to the famous 5-item Satisfaction with Life Scale (Diener, Emmons Larsen, & Griffin, 1985) because the former is not only a close resemblance of the latter, but also includes a measure of perceived satisfaction towards one's interpersonal relationship that the latter lacks. Three items were discarded (see Appendix B) and the resultant Cronbach's alpha was .75. A high score represents more life satisfaction.

Life despair is an ominous view of one's life as a whole characterized by pessimism, disconnectedness with family and struggle with the demands of life. Life despair was measured in the Time 1 survey only. It was measured by the 7-item Repulsion by Life subscale (Orbach et al., 1991) on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). This was the shortest life despair scale I could find. One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .67. A high score represents more life despair.

Positive attitudes towards ageing refer to a person's optimistic orientation and feelings concerning his/her personal ageing. It was measured in the Time 2 survey only. Feelings of comfort and ease about one's personal ageing was measured by the 5-item short version of the Attitudes Towards Ageing Scale (O'Hanlon & Coleman, 2004) on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). There are three reverse items and each of them was reversely scored. This scale was selected because it was short and was developed for use with an older adult British sample (cf. O'Hanlon & Coleman, 2004). A high score on this scale is indicative of positive attitudes towards ageing. The Cronbach's alpha was .83.

Life purpose refers to a sense of having life mission and direction that there is something of lasting significance in one's personal existence. It also reflects a sense of fulfilment from previous goal accomplishment. Life purpose was measured only in the Time 2 survey. Reker and Peacock's (1981) 9-item Life Purpose subscale was used to measure the extent to which participants perceived living a meaningful life on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). This subscale was chosen because it had been validated in several mixed-age samples (e.g., Cappeliez & O'Rourke, 2002a, 2002b; Konstam, Holmes, Wilczenski, Baliga, Lester, &

Priest, 2003; Reker, 2005; Thompson, 2007). A high score on this scale is indicative of a great amount of perceived purpose in life. The Cronbach's alpha was .89.

Existential vacuum refers to the perception that life is deprived of any significance, that there is nothing to live for and that one's life is worthless. It was measured only in the Time 2 survey. Reker and Peacock's (1981) 7-item Existential Vacuum subscale was used to measure the extent to which participants perceived lack of meaning in life on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Once again, this subscale was chosen because it had been validated in several mixed-age samples (e.g., Cappeliez & O'Rourke, 2002a, 2002b; Konstam, Holmes, Wilczenski, Baliga, Lester, & Priest, 2003; Thompson, 2007). A high score on this scale is indicative of a great amount of perceived life meaninglessness. One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .79.

Self acceptance refers to acceptance towards and being at peace with one's inalterable past and personal insufficiencies. It was measured only in the Time 2 survey. Wong's (1998) 6-item Self Acceptance subscale was used to measure the extent to which participants accepted what they could not change as part of their life and identity on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*a great deal*). This was the shortest self acceptance scale I could find. A high score on this scale is indicative of great self acceptance. One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .76.

5.2.2.5. Coping with Regrets

Coping with regrets describes how people adapt to and understand their regrets. This study was limited to one past unresolved major life regret to avoid participants over reporting regrets. This section was only completed by participants who reported having one major unresolved past regret that was still disturbing them. Participants' coping with regrets was measured by two dimensions, religious coping and non-religious coping. A high score represents more frequent use of the corresponding coping strategy to deal with the identified regret. Non-religious coping was measured as an additional research question to test if religious coping with regret could make a unique contribution to mitigating negative emotional regret appraisal, over and above what was accounted for by non-religious coping.

Forty-eight participants who reported one unresolved major past regret in Time 1 took part in the Time 2 survey study. Eleven of them no longer rued their identified regret. Four participants did not indicate if they were still lamenting over their identified regret. The remaining 33 participants were still lamenting over their identified major life regret. Since this is a cross-sectional study, the following Cronbach alpha for religious and non-religious coping was computed for 33 participants who reported a major life regret in the Time 1 survey and who continued to rue it in Time 2.

Religious coping is the use of religion-based cognitions and behaviours to deal with stressful life events (Tix & Fraser, 1998). It is increasingly being separated into positive and negative dimensions (Lavery & O'Hea, 2010). Positive religious coping reflects a secure connection with God. It also reflects reliance on religion for support, personal growth and comfort. Negative religious coping is characterised by uncertain faith and religious struggle. It also describes people's belief in divine punishment and demonic acts for their failings. Religious coping was measured in the Time 1 survey only.

Participants' positive and negative religious coping were measured by the modified 14-item Brief RCOPE scale (Pargament, Smith, Koenig, & Perez, 1998) on a 5-point Likert scale, ranging from 1 (*never*) to 5 (*always*). This scale originally measured how people coped with major life stressors, so its items were modified to make them regret-specific, mostly by changing the term 'situation' or 'problem' to 'this biggest regret'. This scale had been validated by its authors in an elderly hospital sample. In addition, these 14 items had been reviewed by my pilot interviewees.

There are seven items measuring positive religious coping. One positive religious coping item was discarded (see Appendix B) and the Cronbach's alpha was .70. There are seven items measuring negative religious coping. One negative religious coping item was discarded (see Appendix B) and the resultant Cronbach's alpha was .77.

Additional topics of interest (1): Non-religious coping means dealing with stressful life events cognitively and behaviourally in ways unrelated to religion. In the Time 1 survey, participants' non-religious coping was measured by a Modified shortened version of The Ways of Coping Questionnaire (Sorlie & Sexton, 2001) on a 5-point Likert scale, ranging from 1 (*never*) to 5 (*always*). This non-religious coping scale originally measures how surgical patients cope with their surgery, so its items were modified to make them regret-specific, mostly by changing the term 'situation' or 'problem' to 'this biggest regret'. To ensure all extracted items measure non-religious

coping, the word 'someone' in five original items was modified to 'non-church member(s)'. For the same reason, the word 'miracle' in one original item was revised to 'miracle that was not an act of God' and the phrase 'professional help' in one item was changed to 'non-religious professional help'.

Twenty-three items with factor loadings greater than .49 were extracted from the Modified shortened version of The Ways of Coping Questionnaire (Sorlie & Sexton, 2001) to conserve the length of the Time 1 survey. This 23-item non-religious coping scale was preferred to the 12 modified items extracted from the Ways of Coping Questionnaire (Folkman et al., 1986) that had been reviewed by my pilot interviewees because the former is based on the latter and was especially developed to access situation-specific coping.

This modified non-religious coping scale consists of five subscales. The first is the Wishful Thinking subscale. It describes people's cognitive attempts to interpret the regret in terms of what might be pleasing to believe instead of verifying with evidence. There are six items measuring wishful thinking, one item was discarded (see Appendix B) and the resultant Cronbach's alpha was .75. The second is the Goal-oriented subscale. It describes people's efforts to analyse the regret through action planning and reappraisal. There are four items measuring goal-oriented coping, two items were discarded (see Appendix B) and the resultant Cronbach's alpha was .68. The third is the Seeking Support subscale. It describes people's efforts to seek emotional support and assistance from their social network. There are five items measuring participants' seeking support coping (X = .80). The fourth is the Thinking it Over subscale. It describes a reflective coping that includes contemplation about the past and other possible alternatives to find solution to the regret. There are four items measuring participants' thinking it over coping, two items were discarded (see Appendix B) and the resultant Cronbach alpha was .71. The fifth is the Avoidance subscale. It describes efforts to minimize the significance of the regret and to escape from having to confront the regret. There are four items measuring avoidance coping, two items were discarded (see Appendix B) and the resultant Cronbach's alpha was .68.

In addition, one self constructed open-ended item asking participants to specify other coping strategies they used was included at the end of this section in the Time 1 survey. Hardly any participants made any additions to the list of religious and non-religious coping strategies provided.

Acceptance had been mentioned by one-third of participants who reported no unresolved major past regret in the Time 1 survey as a coping strategy (see section

5.3.3.3). Hence, it was speculated that acceptance might be an alternative coping strategy that older adults used to regulate their negative emotions arising from their regrets. Diehl, Coyle and Labouvie-Vief (1996) found that older adults tended to downplay the undesirable side of a conflict situation and give it a positive appraisal than younger adults. They reasoned that it was more adaptive and functional for older adults to reframe situations of loss or negative changes in a positive light so as to make the unbearable situations that are beyond their personal control more bearable. Besides, owing to their cumulative life experiences, older adults might have come to accept that certain things in life are unalterable (Diehl et al., 1996). In other words, older people are more likely to reinterpret a negative emotional experience to emphasize the positive aspects in order to maintain optimism in the midst of life regrets in later life (cf. Ardelt, Ai, Eichenberger, 2008). Similarly, acceptance of past adversities and disappointments as unchangeable may serve an adaptive existential function so that the older adult will be able to move forward in life. Hence, acceptance coping is hypothesized to lower negative emotional regret appraisal in the Time 2 survey.

Hypothesis 25: Acceptance coping lowers negative emotional regret appraisal.

Acceptance coping represents people's acknowledgement of their unchangeable past as a pathway to cope with their problem situation. It was only measured in the Time 2 survey. Wong, Reker and Peacock's (2006) 7-item Acceptance subscale was used to explore the influence of acceptance coping on negative emotional regret appraisal on a 5-point Likert scale, ranging from 1 (*never*) to 5 (*always*). This scale was selected because it was the only self acceptance coping scale I could find. A high score on this scale is indicative of greater use of acceptance coping strategy. Two items were discarded (see Appendix B) and the resultant Cronbach's alpha was .71.

5.2.2.6. Negative Emotional Regret Appraisal

Negative emotional regret appraisal refers to the range of negative emotions people feel towards their regret. This section was only completed by participants who reported having one major unresolved past regret that was still disturbing them. Participants' negative emotional regret appraisal was measured by three dimensions, 'hot' emotions, despair-related emotions, and wishful emotions. It was measured in both Time 1 and Time 2 surveys in order to assess its test-retest reliability. All items had been reviewed by my pilot interviewees. Since this is a cross-sectional study, the following Cronbach alpha for negative emotional regret appraisal was computed for 33

participants who reported a major life regret in the Time 1 survey and who continued to rue it in Time 2.

'Hot' emotions refer to feelings of anger and shame. Five items were extracted from various prior studies on regret appraisal (Gilovich & Medvec, 1998; Jokisarri, 2003; Lecci, Okun, & Karoly, 1994; Wrosch & Heckhausen, 2002) to measure participant's intensity of 'hot' emotions towards the regret. Each item was rated on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). The Cronbach's alpha was .84 in Time 1 and .74 in Time 2.

Despair-related emotions refer to feelings of sorrow and helplessness. Four items were extracted from various prior studies on regret appraisal (Gilovich & Medvec, 1998; Jokisarri, 2003; Lecci, et al., 1994; Wrosch & Heckhausen, 2002) to measure participant's intensity of despair-related emotions towards the regret. Each item was rated on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). The Cronbach's alpha was .80 in Time 1 and .79 in Time 2.

Wishful emotions refer to people's nostalgic feelings. Three items were extracted from various prior studies on regret appraisal (Gilovich & Medvec, 1998; Jokisarri, 2003; Lecci, et al., 1994; Wrosch & Heckhausen, 2002) to measure participant's intensity of wishful emotions towards the regret. Each item was rated on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .72 in Time 1 and .82 in Time 2.

5.2.2.7. Confounding Mediator: Neuroticism

Neuroticism is one Big Five trait characterised by 'anxiety, tension, depression and other negative emotional states' (Eysenck, 2004, p. 461). Neuroticism was measured in the Time 1 survey only. It was measured by the Neuroticism subscale (John & Srivastava, 1999) to control for its confounding mediating effect on the negative relationship between intrinsic religiosity and personal death anxiety. This scale has eight items, three of which are reverse items. Each item was rated on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). This was the shortest Big Five neuroticism scale I could find. It has been frequently used when participation time is limited (John & Srivastava, 1999). In addition, its short-phrase item format is

fairly easier to understand (John & Srivastava, 1999). The Cronbach's alpha was .85. A high score represents high neuroticism.

5.2.2.8. Additional Correlates (1): Physical Frailty

Physical frailty refers to people's perceived physical weakness in terms of limited mobility and physical strength. It was measured in the Time 1 survey only. Physical frailty was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. Because the hypothesized protective role of religious management of regret on lowering personal death anxiety only applied to people who still had an unresolved major regret, the variance of personal death anxiety that were explained by this third proposed religious pathway (religious management of regret) would not be partialled out in the hierarchical linear regression (see section 5.3.1.3).

The modified Short-Form 36 Health Survey (Ware & Sherbourne, 1992) was used to measure participants' perceived physical frailty. This scale was selected because it had been extensively used in British clinical studies with elderly patients (e.g., Croft, Jordan, & Jinks 2005; Richmond, Morton, Cross, Wong, Russell, Philips et al., 2010). Seventeen original items were excluded because: (a) nine of them measuring mental health were irrelevant to measuring physical frailty; (b) four items measuring health beliefs were considered ambiguous by my pilot interviewees; (c) three items measuring emotional problems were unrelated to physical frailty; and (d) one item measuring social functioning was very similar to another item measuring the amount of interference on normal social activities so it was discarded.

Eight additional items were self-constructed to measure participants' use of medication and/or treatment, which could be an indication of physical frailty, and to supplement the modified Short-Form 36 Health Survey. Five of them were extracted and modified from the World Health Organization Quality of Life Assessment (The WHO Group, 1998) that assessed participants' dependence on medication or treatment and satisfaction with medical care. These items were constructed based on the WHO's extensive worldwide research on quality of life. The remaining three additional items were self-constructed to measure participants' beliefs about the effectiveness of medical treatment and to assess their need for medical treatment. However, these eight additional items were later discarded and excluded from subsequent analyses (see Appendix B).

Therefore, participants' perceived physical frailty was assessed by 19 retained items from the modified Short-Form 36 Health Survey. These 19 items are nested within six original subscales each measuring a different dimension of subjective health status. The first subscale is the 10-item Physical Functioning subscale. It measures the extent to which health problems have limited a person's physical activities. The Cronbach's alpha was .92. The second subscale is the 4-item Role Limitation Due to Physical Problems subscale. It measures the extent to which physical health problems have limited a person's usual role activities. The Cronbach's alpha was .86. The third subscale consists of one item measuring the amount of interference on normal social activities caused by a person's physical health problems. The fourth subscale is the 2-item Pain subscale which measures a person's perceived level of bodily pain. The Cronbach's alpha was .79. The fifth subscale is the 1-item General Health Perception which measures a person's overall assessment of his/her health status. The sixth subscale is the 1-item Change in Health subscale which measures the extent to which a person's health have improved or worsen over the last six months.

Since the rating scale for each subscale was different (e.g., the Physical Functioning subscale has three rating options but the Role Limitation Due to Physical Problem subscale has two), the score for each subscale was first transformed to a percentage score. The percentage score was calculated by dividing the mean score on items comprising that subscale by its maximum coding value, and then multiplying this mean subscale score by 100. The final perceived physical frailty was calculated by averaging the six subscales' percentage scores, all of which were originally conceptualized as a measure of physical health. A high score indicates great physical frailty.

5.2.2.9. Additional Correlates (2): Social Desirability

Social desirability is a person's tendency to project positive image of himself/herself to others. It was measured both in Time 1 and Time 2 surveys. In the Time 1 survey, participant's social desirability was measured by Fischer and Fick's (1993) 7-item Revised short form of the Marlowe-Crowne Social Desirability Scale – Form X1 on a "True" or "False" basis. Social desirability was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. This scale had been reviewed by my pilot interviewees. A high score represents great social desirability. Three items were discarded (see Appendix B) and the resultant Cronbach's alpha was .59.

In addition to its low reliability, a number of Time 1 survey participants submitted written objections to the True-False format and stated that the word "always" or "never" in the statements was too strong to reflect their personal attitudes and traits, resulting in a number of missing data. Such feedback was unexpected as participants in the pilot interview study did not express such concerns. Hence, social desirability was re-assessed in the Time 2 survey using the 20-item Impression Management subscale (Paulhus, 1998), which has a less restrictive 5-point Likert rating scale and has fewer statements containing "always" or "never". Each item was rated on a 5-point Likert scale, ranging from 1 (*totally disagree*) to 5 (*totally agree*). There are ten reverse items and each of them was reversely scored. According to the scoring manual, one point was added to every '4' or '5' response. A high score on this scale was indicative of greater social desirability. Five items were discarded (see Appendix B) and the resultant Cronbach's alpha was .79.

5.2.2.10.   Additional Correlates (3): Social Readjustment

Social readjustment is defined as the number of major life events that a person has experienced. It was measured in the Time 1 survey only. Social readjustment was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. It was measured by the modified short form of the Social Readjustment Rating Scale (Hobson, Kamen, Szostek, Nethercut, Tiedmann, & Wojnarowicz, 1998). This scale measures the number of recent major life events participants had experienced over the past six months on a "Yes or No" basis. One original item, 'dealing with infertility/miscarriage', was excluded because it is inapplicable to my older adult participants. Fourteen original double barrelled items (e.g., major injury / illness to self) were modified and broken down into two separate items to measure the number of recent major life events more precisely. This modified social readjustment scale has 62 items altogether. This was the shortest yet comprehensive social readjustment scale I could find. A composite score was derived. A high score suggests that the participants had experienced more major life events in the past six months.

5.2.2.11.   Additional Correlates (4): Subjective Life Expectancy

Subjective life expectancy is an individual's estimates of how long he/she is going to live. It was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious

pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. It was measured both in Time 1 and Time 2 surveys.

In the Time 1 survey, participants' subjective life expectancy was measured by the 10-item Future Time Perspective Scale (Carstensen & Lang, 1996) on a 5-point Likert scale, ranging from -2 (*very untrue*) to +2 (*very true*). This scale measures the extent to which people believe in having a distant psychological future. There are three reverse items and they were reversely scored. This scale was originally developed for use in older people and had been reviewed by my pilot interviewees. A high score reflects that the person is more oriented towards his/her future. The Cronbach's alpha was .85.

A few Time 1 survey participants were unable to respond to this scale because the definition of future was ambiguous. They reasoned that Christians believed in life after death, so the word 'future' could refer to "eternity". Hence, the Life Line Task (Lomranz, Shmotkin, Zechovoy, & Rosenberg, 1985), which asked the participants to indicate where they believed they were now on a 20 cm "your life on earth" line, was introduced to re-measure participants' subjective life expectancy in the Time 2 survey. The distance between 'Death' and the point where the participants believed they were now was divided by 20 and then multiplied by 100 to compute a percentage score for this domain. A high score represents a long subjective life expectancy. One advantage of using the Life Line Task over any 1-item direct subjective life expectancy question is that it is less intrusive to ask participants about how long they believe they are expected to live. Besides, this Life Line Task allows its respondents to reflect on their past as well as future so that they are not limited to view life as 'time left to death' but that life can also be 'years gain since birth'.

5.2.2.12.   Additional Correlates (5): Funeral Prearrangements

Funeral prearrangement refers to the extent to which participants had made or would intend to make various funeral arrangements in advance to prepare for their personal death. It was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. Participants' amount of funeral prearrangements was measured only in the Time 1 survey by the modified Coping with Death Scale (Bugen, 1980-1981). This was the only funeral prearrangements scale I could find.

Because the original scale was constructed from a sample of students who completed a death and dying seminar, eleven items were extracted to be used for my older adult sample. Five items were discarded (see Appendix B) and the Cronbach's alpha was .78. A high score reflects that the participant had made or would make great effort to arrange their funeral in advance.

5.2.2.13.   Additional Correlates (6): Near-Death Experience

Near-death experience is a personal experience reported by people who were clinically dead or came close to actual death and are revived. It was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. It was measured only in the Time 1 survey by a self-constructed item asking the participants if they had such an experience on a "Yes or No" basis (cf. King et al., 2001). If they had, they were asked to indicate when it happened and the extent to which that near-death experience had changed their life on a 10-point Likert scale, ranging from 1 (*not at all*) to 10 (*a great deal*).

Twenty participants reported having a near death experience. On average, their near death experience had happened 21 years ago (M = 21.21, SD = 17.36) and had changed their life moderately (M = 5.09, SD = 3.63).

5.2.2.14.   Additional Correlates (7): Recent Positive Affects

Recent positive affects are the presence of positive emotions such as happiness and enthusiasm a short time ago. It was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. Participants' recent positive affects were measured only in the Time 1 survey by the 5-item Mental Health subscale of the Short-Form 36 Health Survey (Ware & Sherbourne, 1992), on a 6-option rating scale, ranging from "all of the time" to "none of the time". This subscale was selected because the Short-Form 36 Health Survey had been extensively used in British clinical studies with elderly patients (e.g., Croft, Jordan, & Jinks 2005; Richmond, Morton, Cross, Wong, Russell, Philips et al., 2010), so it was applicable for use for my older adult British Christian participants. There are three reverse items and each of them was reversely scored. A high score indicates that the participant experienced more positive affects in the past four weeks. The Cronbach's alpha was .79.

5.2.2.15.   Additional Correlates (8): Personal Dying Anxiety

Personal dying anxiety is defined as a negative emotional reaction concerning one's dying process. It was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. It was measured both in Time 1 and Time 2 surveys by the 8-item Fear of Own Dying subscale (Wittkowski, 2001) on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). This was the shortest statement-format personal dying anxiety measurement I could find. It was measured twice to assess its test-retest reliability. The Cronbach's alpha was .91 in Time 1 and .89 in Time 2. A high score represents high personal dying anxiety.

5.2.2.16.   Additional Correlates (9): Perceived Attraction to Death

Perceived attraction to death is people's tendency to idealize death as an improved solution to life's problems. It was measured to examine if it had additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. Participants' perceived attraction to death was measured both in Time 1 and Time 2 surveys by the 7-item Attraction to Death subscale (Orbach et al., 1991) on a 5-point Likert scale, ranging from -2 (*strongly disagree*) to +2 (*strongly agree*). It was measured twice in order to assess its test-retest reliability. Attraction to Death subscale was preferred to the Escape Acceptance subscale (Wong et al., 1994, p.125) because it was based on the "goodness" of death rather than the "badness" of living. Three items were discarded (see Appendix B) and the resultant Cronbach's alpha was .60 both in Time 1 and Time 2 surveys. A high score represents strong attraction to death.

5.2.2.17.   Additional Correlates (10): Extrinsic Religiosity

Given that three of the ten original items on the Intrinsic Religious Motivation scale (Hoge, 1972; see section 5.2.2.1) in the Time 1 survey were extrinsically stated, it was speculated that extrinsic religiosity might have additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety. Extrinsic religiosity represents an instrumental approach to use religion as a means of seeking comfort and social convention. It was measured only in the Time 2 survey. According to the Terror Management Theory, embracing one's cultural

worldview and meeting its prescribed standards reduces one's death anxiety. Because extrinsically religious people have not fully internalized their religious beliefs, they are likely to cast doubts on the possibility of a good afterlife (Spilka et al., 1977). Such fragmented religious worldviews may contribute to an increased personal death anxiety. Hence, extrinsic religiosity is hypothesized to increase personal death anxiety.

Hypothesis 26: Extrinsic religiosity increases personal death anxiety.

Gorsuch and McPherson's (1989) 3-item Extrinsic-personal Religiosity and 3-item Extrinsic-social Religiosity subscales were used to measure participants' extrinsic religious orientation on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). People with extrinsic-personal religious orientation use their religion for comfort and protection in times of personal crises. People with extrinsic-social religious orientation use their religion to enhance social standings, to seek recognition and to make friends at religious worships. Gorsuch and McPherson's extrinsic religiosity scale was chosen because it has been the first scale to explore two different utilitarian approaches to religion and has been validated in several mixed-age samples (Maltby, 2002; Maltby & Lewis, 1997; Maltby, Talley, Cooper, & Leslie, 1995). A high score on this scale is indicative of a high level of extrinsic religiosity. The Cronbach's alpha was .63 for extrinsic-personal religiosity and .84 for extrinsic-social religiosity.

5.2.2.18.   *Additional Correlates (11): Mortality Acceptance*

Mortality acceptance is the acknowledgement of the inevitability of death as a final process of life, when one neither looks forward to it nor fears its occurrence. Death acceptance was found to be an alternative prevalent attitude towards personal death in later life in prior studies (see section 1.2.4.1). In addition, Kubler-Ross (1969) had identified death acceptance as a stage in response to the increasing awareness of eventual personal death after denial. Moreover, nearly one quarter of the Time 1 survey participants who reported no death and dying concerns mentioned death acceptance as their reason for their lack of mortality concerns (see section 5.3.2.3). Thus, it was speculated that mortality acceptance was a resilience factor underlying low personal death anxiety in later life. In addition, it might have additional power to predict personal death anxiety, over and above what was accounted for by the two proposed religious pathways (afterlife beliefs and psychosocial maturity) to coping with personal death anxiety.

In a sample with ages ranging from 22 to 84, Harding, Flannelly, Weaver and Costa (2005) found a negative correlation between death acceptance and death anxiety.

Jewell (2010) also found that recognition of death as an inevitable fact of life was inversely related to fear of death among older British Methodists. Accepting the reality of death may represent a sense of inner peace that signifies the letting go of what is precluded by death, thus it is an essential preparatory step to face the inevitability of personal death. Hence, mortality acceptance is hypothesized to lower personal death anxiety.

Hypothesis 27: Mortality acceptance lowers personal death anxiety.

Mortality acceptance was only assessed in the Time 2 survey. Wittkowski's (2001) 8-item Acceptance of One's Own Dying and Death subscale was used to measure participants' perceived mortality acceptance on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). This scale was selected because it was the only scale I could find that measured both personal dying and death acceptance. One item was discarded (see Appendix B) and the resultant Cronbach's alpha was .88. A high score represents high mortality acceptance.

5.2.2.19.   Additional Topics of Interest (2): Death and Dying Concerns Measure

In the Time 1 survey, two self-constructed questions were used to understand older adults' concerns towards death and dying, which may provide some insights into the resilience factors that underlie low personal death anxiety found among older adults. A self-constructed open-ended question that asked the participants if they had any death and dying-related concerns was used to uncover any unmeasured aspects of personal death anxiety in the Time 1 survey (see section 5.2.2.2). Participants who reported having such concerns were asked to describe them. For those participants reporting no such concerns, they were asked to explain why they did not.

5.2.2.20.   Additional Topics of Interest (3): Regret Resolution and Regret Profile

In the Time 1 survey, two self-constructed items were used to identify how older adults incorporate life regrets into their lives. For example, what is it that older adult British Christians have regrets about? Why do some have no regrets?

Time 1 survey participants who reported having no major unresolved regrets were asked to explain why. Participants who reported having such regret were asked to briefly describe the identified regret and summarise it in three keywords or phrases. They were further asked to classify that regret into: (a) something they did but wished they hadn't; (b) something they did not do but wish they had; (c) something

inconsistent with their religious faith; (d) something completely outside their personal control; (e) something still affecting their current life; and (f) something they considered as a 'scar' or major imperfection in their life.

Next, they were asked how confident they were in lessening that regret before they died and to explain their answer. After that, they were asked to evaluate the significance and changeableness of that regret on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). Participants' perceived significance of the regret was measured by two items and perceived changeableness of the regret was measured by one item. These three items had been reviewed by my pilot interviewees.

In the Time 2 survey, participants were asked to indicate if they were still ruing their unresolved major past regret identified in the Time 1 survey. If not, they were asked to explain why. This section was self-constructed and was only completed by participants who reported an unresolved major past regret in Time 1. Participants who continued to rue their identified unresolved regret were further asked to evaluate the significance and changeableness of that regret using the same items as that of the Time 1 survey.

5.2.2.21.   *Additional Topics of Interest (4): Spiritual Experience*

In the Time 1 survey, a few questions were self-constructed to understand more about older adults' spiritual experiences. Spiritual experience is a sense, feeling or perception of one's connectedness to the sacred. For example, have older adults ever had any spiritual experiences? If so, what is a profound spiritual experience like?

Participants were asked if they had such an experience on a "Yes or No" basis (cf. King et al., 2001). If they had, they were asked to indicate how often such spiritual experience had happened to them and describe the most significant spiritual experience they had had. It was found that 110 participants claimed that they had had at least one spiritual experience. Their description of the most significant spiritual experiences is presented in Appendix E (p. 231).

5.2.2.22.   *Additional Topics of Interest (5): Religious Background*

Because Christianity in the UK is on the decline on every dimension of religious belief and practice (Paley, 2008), this section was constructed as a way to understand more about the characteristics of my older adult British Christians, in particular, their religious background only in the Time 2 survey. A battery of 12 questions extracted from two former studies on multidimensional religiosity (DeJong, Faulkner, & Warland,

1976; Rohrbaugh & Jessor, 1975) was used to tap participants' religious beliefs and practices in three dimensions (see Table 1, p. 63). The reason for choosing these two scales was because they were the most comprehensive yet concise measure of different dimensions of religiosity other than intrinsic/extrinsic religiosity that I could find in the literature.

The first dimension is called Theological Religiosity, which assesses people's beliefs about God, Jesus Christ and life after death. It also measures how people understand the conception of sin, prayer and the Bible. Theological religiosity consists of two items measuring participants' belief about immortality, two items measuring their conception of God, one item measuring their conception of Jesus, one item measuring their conception of prayer, one item measuring their conception of sin, and one item measuring their view of the Bible. Since both multidimensional religiosity scales had one very similar question on immortality belief and one comparable item on the conception of God, these two aspects were measured by a pool of modified rating options from both studies.

More important, among these eight theological religiosity items, the two questions on participants' belief in a personal God and the Divinity of Jesus were used to refine participant inclusion/exclusion criteria for this major British Christian survey study. This is because a few Time 1 survey participants gave me written comments that they disagreed with my classification of Christians into: those holding Catholic beliefs, holding a Protestant beliefs, or holding both Catholic and Protestant beliefs. The imprecise definition of 'Christian' in the Time 1 survey was clarified with reference to the Oxford Advanced Learner's Dictionary's definition of Christianity in the Time 2 survey. In short, a Christian was defined as a person who is at least receptive to belief in a personal God and who believes in the Divinity of Jesus.

The second dimension is known as Ritual Religiosity, which assesses why people read the Bible and how often people pray. Ritual religiosity consists of one item measuring participants' purpose of using the Bible and one item measuring their frequency of praying.

The third dimension is known as Consequential Religiosity, which assesses how often people seek religious advice to cope with personal problems. Consequential religiosity consists of a single item measuring participants' frequency of taking religious advice to deal with serious personal problems.

With reference to Fox's (2005) observation of English behaviours, an additional question was incorporated to gain information on the participants' strength of religious affiliation. This is the question where two Time 2 survey participants indicated that they were non-Christians (see section 5.2.1).

5.2.2.23.   Mood Repair Measures

In the Time 1 survey, two self-constructed sections, namely, personal life encapsulation and Bible verse preference, were introduced to restore participants' mood which might be impaired by the completion of the death-related scales.

In the Time 2 survey, a list of 23 Pleasant Events Schedule items was selected from three prior studies (Lewinsohn & Amenson, 1978; Logsdon & Teri, 1997; MacPhillamy & Lewinsohn, 1971 as cited in Rathus (1999) along with one self-constructed item was used to restore participants' mood which might be impaired by the completion of the death-related scales.

5.2.2.24.   Demographics

In the Time 1 survey, single-item question gathered information on age group, gender, ethnicity, employment status, marital status, and religious beliefs.

The aforementioned Time 1 and 2 survey materials are included in Appendices C and D, respectively. Table 3 provides an overview of scales presented in the Time 1 and Time 2 surveys.

Table 3

Overview of Scales in Time 1 and Time 2 Surveys

Construct	Time 1 survey	Time 2 survey
Intrinsic religiosity	Intrinsic Religious Motivation (Hoge, 1972)	Nil
Personal death anxiety	Repulsion by Death (Orbach et al., 1991) & 1 self-constructed item	Same as Time 1 & 24 items extracted from two major multidimensional death anxiety scales (Abdel-Khalek, 2002; Florian & Kravetz, 1983)
Belief in a pleasant afterlife	Death as an Afterlife of Reward subscale (Spilka et al., 1977)	Nil

Belief in an unpleasant afterlife	6 self-constructed items	Nil
Psychosocial maturity in later life (7 dimensions)	Attraction to Life subscale (Orbach et al., 1991) Repulsion by Life subscale (Orbach et al., 1991) Loyola Generativity scale (McAdams & de St. Aubin, 1992)	Life Purpose subscale (Reker & Peacock, 1981) Existential Vacuum subscale (Reker & Peacock, 1981) Self Acceptance subscale (Wong, 1998) Short version of the Attitudes Towards Ageing Scale (O'Hanlon & Coleman, 2004)
Positive and negative religious coping	Brief RCOPE scale (Pargament, Smith, Koenig, & Perez, 1998)	Nil
Non-religious coping (6 dimensions)	Modified shortened version of The Ways of Coping Questionnaire (Sorlie & Sexton, 2001)	Acceptance subscale (Wong et al., 2006)
Negative emotional regret appraisal	12 items were extracted from four studies on regret appraisal (Gilovich & Medvec, 1998; Jokisarri, 2003; Lecci et al., 1994; Wrosch & Heckhausen, 2002)	Same as Time 1
Neuroticism	Neuroticism subscale (John & Srivastava, 1999)	Nil
Physical frailty	The modified Short-Form 36 Health Survey (Ware & Sherbourne, 1992)	Nil
Social desirability	Revised short form of the Marlowe-Crowne Social Desirability Scale – Form X1 (Fischer & Fick, 1993)	Impression Management subscale (Paulhus, 1998)
Social readjustment	Modified short form of the Social Readjustment Rating Scale (Hobson et al., 1998)	Nil
Subjective life expectancy	Future Time Perspective Scale (Carstensen & Lang, 1996)	Life Line Task (Lomranz et al., 1985)
Future pre-arrangements	Modified Coping with Death Scale (Bugen, 1980-1981)	Nil
Near death experience	Self-constructed section	Nil
Recent positive affects	Mental Health subscale of the Short-Form 36 Health Survey (Ware & Sherbourne, 1992)	Nil

Personal dying anxiety	Fear of Own Dying subscale (Wittkowski, 2001)	Same as Time 1
Perceived attraction to death	Attraction to Death subscale (Orbach et al., 1991)	Same as Time 1
Death and dying concerns	Self-constructed section	Nil
Regret profile	Self-constructed section	Self-constructed section (slightly different from that of Time 1)
Regret resolution	Self-constructed section	Self-constructed section (slightly different from that of Time 1)
Spiritual experiences	Self-constructed section	Nil
Mood repair measures	Self-constructed section	23 items extracted from three prior Pleasant Events Schedule studies (Lewinsohn & Amenson, 1978; Logsdon & Teri, 1997; MacPhillamy & Lewinsohn, 1971 as cited in Rathus (1999) & 1 self-constructed item
Demographics	Self-constructed section	Nil
Extrinsic religiosity	Nil	Extrinsic-personal Religiosity and Extrinsic-social Religiosity subscales (Gorsuch & McPherson, 1989)
Mortality acceptance	Nil	Acceptance of One's Own Dying and Death subscale (Wittkowski, 2001)
Religious background	Nil	12 items extracted from two former studies on multidimensional religiosity (DeJong, Faulkner, & Warland, 1976; Rohrbaugh & Jessor, 1975) & 1 item on strength of religious affiliation (cf. Fox, 2005)

5.2.3. Procedure

Time 1 survey was posted to the participants in January/February 2008. They were given nearly one month to complete and return their surveys back to me by post. Time 2 survey was posted to the participants in late June 2008. Because summer is a time of high travel season, in order to increase the response rate, participants were given nearly two months to complete and return their surveys back to me by post.

5.2.4. Scoring

Due to missing data on some scales, mean score computation was used to score all scales with quantitative data (except physical frailty, social readjustment and subjective life expectancy due to their response format). However, if a participant had 50% or more missing data on a scale, then no mean score was computed for that person on that scale. Instead a dummy "missing data" value was assigned to represent his/her "mean score" for that scale.

5.3. Results

5.3.1. Data Analysis

The proposed religious management of regret as one religious pathway to coping with personal death anxiety was only tested on Time 2 survey participants who still rued their identified unresolved major regret ($n = 33$). Hence, it was tested separately from the other two proposed religious pathways to coping with personal death anxiety, namely, afterlife beliefs and psychosocial maturity.

5.3.1.1. Structural Equation Modelling (SEM)[8]

Given that both afterlife beliefs and psychosocial maturity as two proposed religious pathways to coping with personal death anxiety had identical initial predictor (intrinsic religiosity) and final dependent variable (personal death anxiety), these two religious pathways were combined into one single model (see Figure 1a, p. 33). Since there were two latent mediators (afterlife beliefs and psychosocial maturity), this combined model was evaluated using SEM. EQS 6.1 for Windows was used to run the SEM.

Assessment of SEM model fit. The overall fit of a hypothesized SEM model to the observed data can be tested by several statistics. Four commonly used statistics are Chi Square, Non-normed Fit Index (NNFI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). A non-significant Chi Square test, a value of .90 or greater for NNFI and CFI, and a value of .08 or smaller for RMSEA all indicate a good fit of the model to the observed data.

SEM model selection. SEM model selection aims to 'select a plausible approximating model that balances model bias and sampling variance' (Stanley & Burnham, 1999, p. 475). In comparison of two or more models, the model with smaller values of Akaike's information criterion (AIC) and consistent version of the AIC (CAIC) represents a better fit of the hypothesized model (Hu & Bentler, 1995).

The baseline afterlife beliefs and psychosocial maturity joint mediation SEM structural model would be compared to another model with neuroticism being incorporated into the baseline model (see Figure 2, p. 36). The purpose of comparing these two models is to examine the significance of the confounding mediating effect of neuroticism on the negative relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity.

Parametric SEM assumptions. Many statistical tests assume a normal distribution. There are three typical indices of non-normality to evaluate the distribution of the data, namely, univariate skewness, univariate kurtosis, and multivariate kurtosis (Finney & DiStefano, 2006). The general rule of thumb for the acceptable value of skewness and kurtosis that indicate univariate normality is within the +2 to -2 range, but some authors use the more lenient range from +3 to -3 while other use the more stringent range from +1 to -1 (Garson, 2010). In this dissertation, I chose the +2 to -2 range criteria.

In addition to testing univariate normality, parametric SEM requires that the observed data has a multivariate normal distribution (cf. Finney & DiStefano, 2006). The assumption of multivariate normality implies that each variable is normally distributed with respect to each other in the correctly specified model. Assessments of univariate skewness and kurtosis only serve as an initial test for multivariate normality. If any of the observed scores indicate substantial univariate non-normality, then multivariate normality cannot be assumed (West, Finch & Curran, 1995). However, even if all of the observed variables have univariate normal distribution, the joint distribution may not be multivariately normal (West et al., 1995). Mardia's statistics is a measure of multivariate kurtosis, which is very important for testing this SEM parametric assumption. A value of Mardia's statistic less than 3 indicates that the data are multivariate normal (Finney & DiStefano, 2006; Garson, 2010).

Several remedial estimation techniques approximate X^2 and estimates of standard errors more closely to their true values to deal with non-normal data[9] for a SEM measurement or structural model. For moderately non-normal data, maximum

likelihood based on normal theory estimation is fairly robust to these conditions (Finney & DiStefano, 2006). West and colleagues (1995) recommended the Satorra-Bentler statistics (S-B Scaling) for sample size smaller than 200 and for distribution with moderate departure from normality (e.g., skewness = 2, kurtosis = 7).

It was decided that if the assumptions of normality were supported, SEM with maximum likelihood estimation and listwise case exclusion (N = 133) was used. If the assumptions of normality were violated, non-parametric SEM with S-B Scaling and listwise case exclusion (N = 133) was used. Listwise is preferred to pairwise deletion with regard to SEM because "SEM requires that…sample size should be consistent across every element of the covariance matrix" (Williams, Gavin, & Hartman, 2004, p. 340).

5.3.1.2. Bivariate Correlations

To be consistent with SEM analysis, bivariate correlations with listwise case exclusion (N = 133) were used to examine the relationships among variables specified in the two hypothesized mediation models (Figure 1a, p. 33; Figure 2, p. 36). Similarly, bivariate correlation with listwise case exclusion (N = 137) was used to assess the test-retest reliability of the three death-related constructs (personal death anxiety, personal dying anxiety and perceived attraction to death).

Because the number of people reporting an unresolved major regret and who still rued it was low (n = 33), bivariate correlations with pairwise case exclusion were used to examine the proposed religious management of regret as the third religious pathway to coping with personal death anxiety.

<u>Parametric assumptions.</u> Skewness and kurtosis were used as measures of normality to determine the choice of correlational analysis. If the assumptions of normality were supported, then Pearson's correlation was used. If the assumptions of normality were violated, then Spearman's rho was used.

5.3.1.3. Hierarchical Linear Regression

Two hierarchical linear regressions with listwise case exclusion were run to identify any additional predictors of the two-factor personal death anxiety that were not specified in the final mediation model. Listwise deletion was chosen because it is "very robust to the violations of MCAR [missing completely at random] (or even MAR [missing at random])" for predictor variables for "virtually any kind of regression" (Allison, 2009, p.

75). In addition, listwise deletion usually produces accurate estimates of the true standard errors (Allison, 2009, p. 76).

It should be noted that because the hypothesized protective role of religious management of regret on lowering personal death anxiety only applied to Time 2 survey participants who still rued their unresolved major regret, the variance of personal death anxiety that were explained by religious management of regret would not be partialled out in the additional hierarchical linear regression.

First, bivariate correlations with listwise case exclusion ($N = 124$) were run to identify any significant correlates of personal death anxiety. Then, those significant correlates of personal death anxiety were entered into a hierarchical linear regression to select significant predictors that could explain an additional amount of variance of personal death anxiety, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and possibly neuroticism.

Assumptions of regression. For a regression model to generalise, four additional underlying assumptions must be met. The first assumption is the assumption of no multicollinearity, which means the assumption of no perfect linear relationship between two or more predictors. To meet the assumption of no multicollinearity, the average values of variance inflation factor (VIF) should not be substantially greater than 10 (Bowerman & O'Connell, 1990) and the value of tolerance must be above 0.2 (Menard, 1995).

The second assumption is the assumption of homoscedasticity, which means predictors are assumed to have the same variances. Homoscedasticity is signified by a plot of regression standardised residual against regression standardised predicted residual with randomly and evenly dispersed points.

The third assumption is the assumption of independent residuals, which means the residual terms for any two observations are assumed to be uncorrelated. The Durbin-Watson test statistics value of 2 indicates that residuals are uncorrelated while a value less than 1 or greater than 3 signals correlations among residuals (Durbin & Watson, 1951; Field, 2009).

The fourth assumption is the assumption of normally distributed errors, which means residuals are assumed to be random. Normality of residuals is indicated by a histogram

depicting a bell-shaped curve of the distribution of the residuals and by a normal probability plot with observed residuals falling on a straight line.

If any of the additional regression assumptions were violated, then specific correction formulas were applied to address the corresponding violated assumption.

5.3.1.4. Independent t-Test or Mann-Whitney Test

Additional analyses were run to test for any difference in the levels of personal death anxiety between people who still rued a major unresolved regret and those who did not have a major lingering regret.

Parametric assumptions. In addition to normal sampling distribution, an independent t-test requires homogeneity of variance. Skewness and kurtosis were used as measures of normality. Levene's test for equality of variances was used to test the assumption of homogeneity of variances. If the assumptions of normality and of homogeneity of variances were supported, then an independent t-test was used. If the assumptions of normality and/or of homogeneity of variances were violated, then a Mann-Whitney test was used.

5.3.1.5. Content Analysis for Qualitative Data

The content analysis involved reading through the written texts several times to discover emerging themes. Each theme represents a repetitive topic mentioned frequently by the participants and was labelled with a code. Next, the codes were sorted into broader domains based on their similarities.

5.3.2. SEM and Other Findings with Respect to the Proposed Afterlife Beliefs and Psychosocial Maturity as Combined Religious Pathways to Coping with Personal Death Anxiety

It was hypothesized that intrinsic religiosity lowered personal death anxiety through fostering more benign afterlife beliefs and psychosocial maturity in later life. This hypothesis was tested using SEM.

5.3.2.1. SEM Analysis

Checking the assumptions of univariate normality. To determine the choice of SEM with listwise case exclusion (maximum likelihood estimation for parametric normal data verses S-B Scaling for non-normal data), skewness and kurtosis were first computed to check the assumption of univariate normality. It was found that the value of skewness for three variables fell outside the acceptable range for a normal distribution (see Table 4, p. 98). Hence, the assumption of univariate normality was violated.

Exploring the relationships among variables. Given that the assumption of univariate normality was violated, Spearman's rho with listwise case exclusion ($N = 133$) was computed to explore the relationship between intrinsic religiosity, afterlife beliefs, psychosocial maturity, neuroticism and personal death anxiety. Afterlife beliefs were measured by belief in a good afterlife and belief in an unpleasant afterlife. Psychosocial maturity was measured by generative concerns, life satisfaction, life despair, positive attitudes toward ageing, life purpose, existential vacuum and self acceptance. Personal death anxiety had two factors: fear of earthly disengagement and fear of transcendental consequences. Table 4 depicts the descriptive statistics and bivariate correlations (Listwise $N = 133$) among these twelve variables of interest.

The hypothesized relationships among intrinsic religiosity, afterlife beliefs, psychosocial maturity, neuroticism and personal death anxiety were in the expected directions. It was found that intrinsic religiosity was positively associated with belief in a good afterlife, generative concerns, life satisfaction, life purpose, self acceptance and positive attitudes towards ageing. In addition, intrinsic religiosity was negatively associated with belief in an unpleasant afterlife, life despair, existential vacuum, neuroticism and the two-factor personal death anxiety. Besides, belief in a good afterlife was negatively correlated with the two-factor personal death anxiety while belief in an unpleasant afterlife was positively correlated only with fear of transcendental consequences. Moreover, generative concerns, life satisfaction, life purpose, self acceptance and positive attitudes toward ageing were negatively correlated with the two-factor personal death anxiety; but life despair and existential vacuum were positively correlated with the two-factor personal death anxiety. Furthermore, neuroticism was positively associated with life despair, existential vacuum and the two-factor personal death anxiety, but was negatively associated with generative concerns, life satisfaction, life purpose, self acceptance and positive attitudes toward ageing.

These preliminary correlational results supported the conclusion that: (a) afterlife beliefs and psychosocial maturity were two potential religious pathways to coping with personal death anxiety in later life, and (b) neuroticism could be a significant confounding mediator of the negative relationship between intrinsic religiosity and personal death anxiety.

Table 4

Descriptive Statistics (N = 143) and Bivariate Correlations (Listwise N = 133) among Intrinsic Religiosity, Afterlife Beliefs, Psychosocial Maturity, Neuroticism and Personal Death Anxiety

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. T1 Intrinsic religiosity	–												
2. T1 Belief in a good afterlife	.65**	–											
3. T1 Belief in an unpleasant afterlife	-.24**	-.32**	–										
4. T1 Generative concerns	.42**	.46**	-.24**	–									
5. T1 Life satisfaction	.29**	.26**	-.14	.38**	–								
6. T1 Life despair	-.27**	-.22**	.19*	-.40**	-.51**	–							
7. T2 Life purpose	.41**	.34**	-.21*	.51**	.62**	-.60**	–						
8. T2 Existential vacuum	-.43**	-.34**	.20*	-.35**	-.45**	.48**	-.65**	–					
9. T2 Self acceptance	.33**	.32**	-.27**	.45**	.47**	-.47**	.66**	-.54**	–				
10. T2 Positive attitudes towards ageing	.25**	.19*	-.20*	.33**	.52**	-.44**	.68**	-.52**	.53**	–			
11. T1 Neuroticism	-.31**	-.23**	.26**	-.31**	-.52**	.48**	-.60**	.43**	-.50**	-.51**	–		
12. T2 Fear of earthly disengagement	-.37*	-.35**	.14	-.22*	-.22*	.25**	-.37**	.44**	-.33**	-.37**	.30**	–	
13. T2 Fear of transcendental consequences	-.44**	-.38**	.34**	-.37**	-.26**	.43**	-.43**	.51**	-.40**	-.40**	.37**	.72**	–
Mean	1.29	1.41	-1.83	2.94	1.33	-1.30	3.74	2.16	4.05	4.00	-.60	1.87	1.83
SD	.63	.71	.30	.48	.62	.54	.68	.68	.68	.71	.69	.59	.66
Skewness	-1.17	-1.43	1.98	-.14	-1.52	.81	-.61	.31	-.57	-1.03	.13	.74	1.01
Kurtosis	1.71	2.16	3.05	-.32	3.96	.50	.95	-.39	-.41	1.77	-.18	.95	1.52

Notes. * $p < .05$; ** $p < .01$; T1 = Time 1; T2 = Time 2

Assessing SEM measurement model fit. The measurement models for the two-factor afterlife beliefs and the seven-factor psychosocial maturity latent constructs must be confirmed before proceeding to the structural model specification. The two-factor afterlife beliefs measurement model was under-identified, that is its degree of freedom was less than zero. Hence, its two indicators' measurement errors were constrained to be equal to increase its degree of freedom. With the inclusion of this constraint, the two-factor afterlife beliefs measurement model then became a saturated model, which means it had zero degree of freedom. Because this measurement model has zero degree of freedom, no parameters could be estimated and its model fit could not be assessed.

The latent psychosocial maturity construct was measured by seven indicators, namely, generative concerns, life satisfaction, life despair, positive attitudes towards ageing, life purpose, existential vacuum, and self acceptance. These seven observed variables were specified to yield a one-factor solution (see Figure 3). Figure 3 showed the standardized coefficients of the latent seven-factor psychosocial maturity construct. For the sake of clarity, the measurement errors (residuals of observed variables) were omitted from Figure 3.
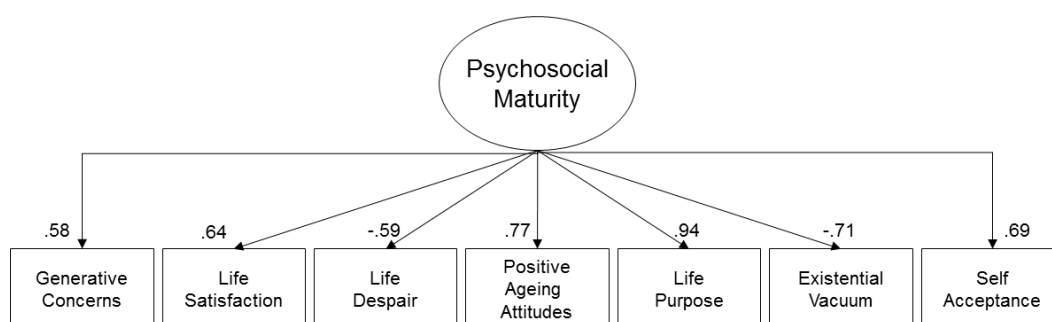
Figure 3. Psychosocial maturity measurement model. S-B scaled X^2(14, listwise N = 133) = 13.61, p > .05, NNFI = 1.00, CFI =1.00, RMSEA < .001.

The Mardia's coefficient for the latent seven-factor psychosocial maturity construct was greater than 3; hence, multivariate normality assumption was rejected. Non-normal SEM with S-B Scaling and listwise case exclusion was used to assess the goodness-of-fit for this measurement model. Non-normal SEM results showed that this latent psychosocial maturity measurement model fitted the observed data very well (S-B scaled X^2(14, listwise N = 133) = 13.61, p > .05, NNFI = 1.00, CFI =1.00, RMSEA < .001). Hence, the measurement model of the latent seven-factor psychosocial maturity construct was confirmed.

Checking the assumption of multivariate normality. Afterlife beliefs and psychosocial maturity as combined religious pathways to coping with personal death anxiety was modelled in Model A (see Figure 4). This is the baseline model. The Mardia's coefficient assessing the multivariate normality of the data distribution for Model A was greater than 3, indicating multivariate non-normality. Hence, non-normal SEM with S-B Scaling and listwise case exclusion was employed and all goodness-of-fit indices were adjusted by this robust estimation method. Figure 4 shows the standardized coefficients of the relationships among latent and observed variables in the mediation model involving intrinsic religiosity, afterlife beliefs, psychosocial maturity and personal death anxiety (Model A). For the sake of clarity, the measurement errors and disturbances (residuals of latent variables) were omitted from Figure 4.
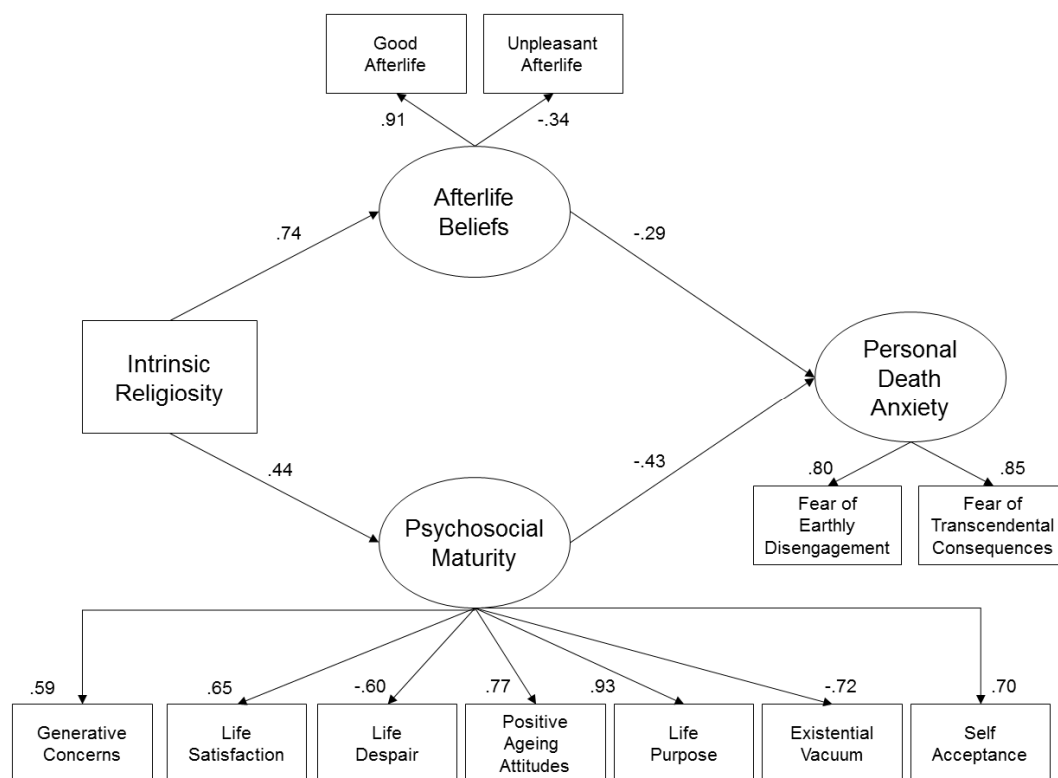
Figure 4. Model depicting the afterlife beliefs and psychosocial maturity joint mediation of the relationship between intrinsic religiosity and personal death anxiety (Model A). S-B scaled X^2(53, listwise N = 133) = 89.17, p < .05, NNFI = .92, CFI = .94, RMSEA = .07.

Assessing SEM structural model fit. As indicated by adequate goodness-of-fit indices, Model A fitted the data well, S-B scaled X^2(53, listwise N = 133) = 89.17, p < .05, NNFI = .92, CFI = .94, RMSEA = .07. The indirect effect of intrinsic religiosity on personal

death anxiety (z = -.41) was significant. As seen from Figure 4, intrinsic religiosity predicted stronger benign afterlife beliefs, which in turn predicted lower personal death anxiety. In addition, intrinsic religiosity predicted stronger psychosocial maturity which in turn predicted lower personal death anxiety. As a result, the efficacy of afterlife beliefs and psychosocial maturity as two religious pathways to coping with personal death anxiety was supported.[10]

Comparing two SEM structural models. Another model (Model B, see Figure 5) was specified to test if neuroticism significantly mediated the negative relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity. Three additional pathways were added to the baseline model (Model A). The first path was specified between intrinsic religiosity and neuroticism to test if lower neuroticism could be predicted from greater intrinsic religiosity. The second was specified between neuroticism and personal death anxiety to test if higher personal death anxiety could be predicted from higher neuroticism. The third path was specified between neuroticism and psychosocial maturity to test if lower self-ratings of psychosocial maturity could be predicted from higher neuroticism. Figure 5 showed the standardized coefficients of the relationships among latent and observed variables in the mediation model involving intrinsic religiosity, afterlife beliefs, psychosocial maturity, neuroticism and personal death anxiety (Model B). For the sake of clarity, the measurement errors and disturbances were omitted from Figure 5.
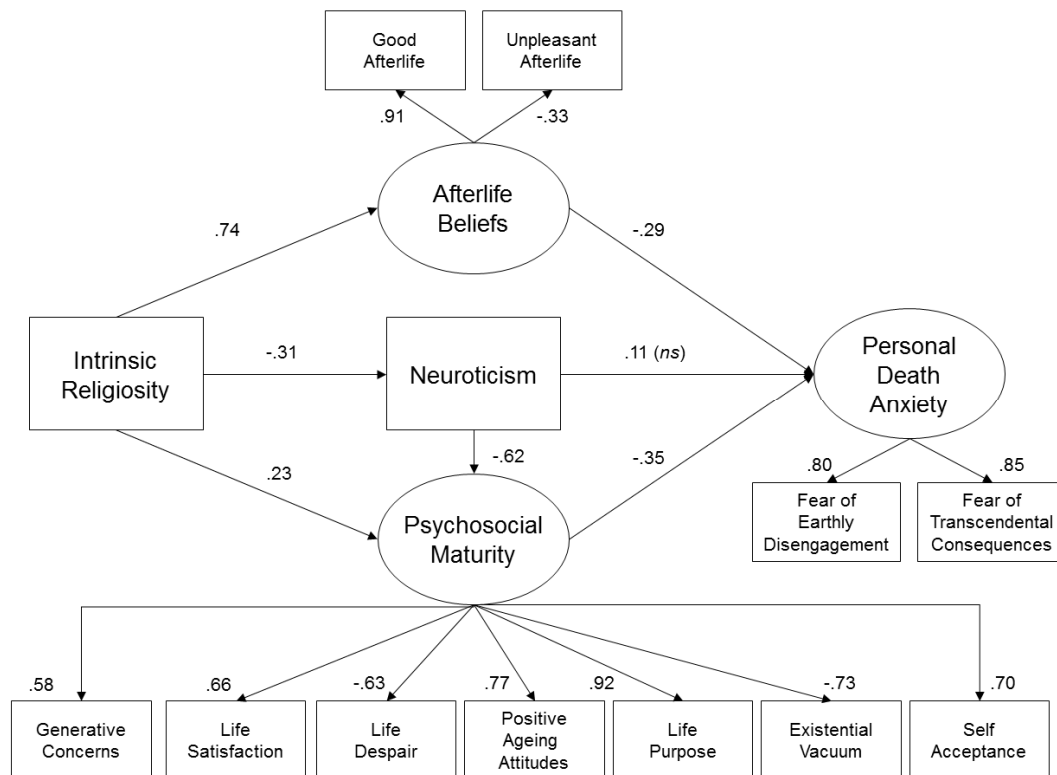
Figure 5. Model depicting the afterlife beliefs, psychosocial maturity and neuroticism joint mediation of the relationship between intrinsic religiosity and personal death anxiety (Model B). S-B scaled X^2(62, listwise N = 133) = 101.44, p < .05, NNFI = .92, CFI = .94, RMSEA = .06.

Checking the assumption of multivariate normality. The Mardia's coefficient for Model B was greater than 3, hence, the assumption of multivariate normality was rejected. Once again, non-normal SEM with S-B Scaling and listwise case exclusion was employed to assess Model B's goodness of fit.

Assessing SEM structural model fit. Non-normal SEM results showed that Model B fitted the data well, S-B scaled χ^2(62, listwise N = 133) = 101.44, p < .05, NNFI = .92, CFI = .94, RMSEA = .06. Indirect effect of intrinsic religiosity on personal death anxiety (z = -.41) was significant.

As seen from Figure 5, neuroticism was not a direct predictor of personal death anxiety. Instead, neuroticism indirectly predicted greater personal death anxiety through predicting lower psychosocial maturity in later life. The presence of neuroticism did not eliminate afterlife beliefs and psychosocial maturity joint mediation.

Model selection. It was found that both the values of AIC and CAIC were lower for Model B (AIC = -22.55, CAIC = -263.75) than for Model A (AIC = -16.82, CAIC = -223.41). Therefore, the mediation model with neuroticism (Model B) was selected and preferred to the mediation model without neuroticism (Model A). It was concluded that neuroticism was a significant confounding mediator of the negative relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity.[10,11] The percentage of variance explained for personal death anxiety by Model B was 36.8%.

Additional analyses. The overlap between belief in an unpleasant afterlife and personal death anxiety measures in the British Christian survey study may have confounded the results related to these two constructs. It was found that results hardly changed once the five confounding items (27, 29, 34, 37, 38) were removed from the personal death anxiety construct. The two corresponding mediation models evinced a good fit to the data. The baseline model without neuroticism explained 36.6% of variance in the personal death anxiety. The indirect effect of intrinsic religiosity on personal death anxiety was significant (z = -.40). The corresponding goodness of fit indices are: SB-scaled X^2 (53, listwise N = 134) = 75.48, p = .02, NNFI = .95, CFI = .96, RMSEA = .05.

The model with neuroticism explained 36.9% of variance in the personal death anxiety. The indirect effect of intrinsic religiosity on personal death anxiety was significant (z = -.40). The corresponding goodness of fit indices are: SB-scaled X^2 (62, listwise N = 133) = 87.86, p = .01, NNFI = .95, CFI = .96, RMSEA = .05.

5.3.2.2. Identifying Additional Predictors of Personal Death Anxiety

Physical frailty, social readjustment, funeral prearrangements, presence of near-death experience, recent positive affects, social desirability, subjective life expectancy, extrinsic religiosity, personal dying anxiety, perceived attraction to death, and mortality acceptance were hypothesized as potential significant correlates of personal death anxiety. Bivariate correlations with listwise case exclusion (N = 124) were used to identify which of these 12 correlates were significantly linked to the two dimensions of personal death anxiety. Significant correlates would then be entered into two hierarchical linear regressions with listwise case exclusion to select which of them could predict an additional variance of each dimension of personal death anxiety, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

Checking the assumptions of univariate normality. It was found that the values of skewness and kurtosis of three potential additional correlates of personal death anxiety fell outside the acceptable range for normality (see Table 5, p. 105). Hence, the assumption of univariate normality was not supported. Table 5 depicts the descriptive statistics and bivariate correlations (listwise N = 124) among the 12 potential correlates and the two-factor personal death anxiety.

Identifying significant correlates of personal death anxiety. Given that the assumption of univariate normality was not supported, Spearman's rho correlation with listwise case exclusion was computed to explore the relationship among these 12 potential correlates and the two-factor personal death anxiety. It was found that physical frailty, social readjustment, subjective life expectancy, extrinsic-personal religiosity and extrinsic-social religiosity were unrelated to the two dimensions of personal death anxiety.

Based on the preliminary correlational results, presence of near-death experience, funeral prearrangements, recent positive affects, social desirability, personal dying anxiety, perceived attraction to death and mortality acceptance were potential additional predictors that could explain a unique variance of the two-factor personal death anxiety that was not captured by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism. Specifically, higher level of personal dying anxiety was associated with greater personal death anxiety. Participants who scored high in recent positive affects, social desirability, who perceived death as attractive and who were more accepting towards their mortality, tended to report lower personal death anxiety. Participants who had a near-death experience, as well as those who had made or would make more funeral prearrangements, tended to report lower fear of earthly disengagement.

Table 5

Descriptive Statistics (N = 143) and Bivariate Correlations (Listwise N = 124) among the 12 Potential Correlates of Personal Death Anxiety and the two-factor Personal Death Anxiety

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. T1 Physical frailty	–													
2. T1 Social readjustment	-.03	–												
3. T1 Funeral prearrangements	-.09	.07	–											
4. T1 Presence of near–death experience	-.22*	.23**	.26**	–										
5. T1 Recent positive affects	.20*	-.02	.23**	-.04	–									
6. T2 Social desirability	.10	.12	-.03	.05	.26**	–								
7. T2 Subjective life expectancy	-.31**	-.05	.10	.16	-.04	.11	–							
8. T2 Extrinsic–personal religiosity	-.15	.09	.09	.13	-.03	-.02	.03	–						
9. T2 Extrinsic–social religiosity	.06	.00	.03	.09	.15	.05	.06	.34**	–					
10. T2 Personal dying anxiety	-.05	-.01	.05	-.02	-.21*	-.20*	-.08	.00	-.13	–				
11. T2 Mortality acceptance	.07	.08	.27**	.27**	.29**	.32**	.00	.12	.15	-.20*	–			
12. T2 Perceived attraction to death	-.08	.05	.14	.14	.21**	.19*	-.07	-.05	.03	-.06	.50**	–		
13. T2 Fear of earthly disengagement	-.01	-.08	-.20*	-.18*	-.17*	-.21*	.05	.07	-.08	.22*	-.65**	-.48**	–	

14. T2 Fear of transcendental experiences	-.10	-.13	-.15	-.11	-.24**	-.32**	-.05	.08	.01	.26**	-.64**	-.56**	.69**	–
Mean	67.58	1.49	1.08	.13	4.01	4.00	81.22	3.19	2.62	3.40	4.17	4.07	1.87	1.83
SD	19.75	1.55	.62	.34	.72	.82	9.05	.82	.94	.80	.59	.65	.59	.66
Skewness	-.84	1.59	-.31	2.09	-1.64	.12	-.74	-.06	.17	-.35	-.69	-.26	.74	1.01
Kurtosis	-.17	3.94	-.56	2.43	3.67	-.24	.50	-.09	-.49	-.35	.72	-.63	.95	1.52

Notes. * $p < .05$; ** $p < .01$; T1 = Time 1; T2 = Time 2

<u>Identifying additional predictors of personal death anxiety.</u> Significant correlates of the two-factor personal death anxiety were further subject to two hierarchical linear regressions with listwise case exclusion to select which one or more of them could explain additional variance of the two dimensions of personal death anxiety, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

Because personal death anxiety had two dimensions, two hierarchical linear regressions were run. In Block 1, intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism were entered using the Enter method. Neuroticism was entered in Block 1 because it was found to be a significant confounding mediator of the negative relationship between intrinsic religiosity and the two-factor personal death anxiety. In Block 2, all significant correlates were entered using the Forward method.

The first hierarchical linear regression was performed with fear of earthly disengagement as the dependent variable. Regression output, before the four additional regression assumptions were checked, showed that mortality acceptance was found to be the only significant additional predictor of fear of earthly disengagement. The VIF values were all well below 10 and the tolerance statistics were above 0.2. Hence, the assumption of no multicollinearity was met. The Durbin-Watson test statistic value for the model was close to 2 and hence the assumption of independent errors was met. The histogram depicting the distribution of residuals revealed a bell-shaped distribution. In addition, the normal probability plot showed the observed residuals falling on a straight line. Hence, the assumption of normally distributed errors was met.

A plot of regression standardised residual against regression standardised predicted residual did not display randomly and evenly dispersed points, indicating heteroscedasticity. Hence, the assumption of homoscedasticity for this hierarchical linear regression was violated. HCSE correction was employed to correct the effect of heteroscedasticity and HC3 test was selected due to its reliability and the small sample size (Long & Ervin, 2000). Because there exists no prior example of reporting hierarchical linear regression with HCSE correction in the literature, each of the seven significant correlates of fear of earthly disengagement was entered separately into the equation. Hence, seven regression models with HCSE correction were run.

It was found that perceived attraction to death and mortality acceptance could predict a significant additional amount of variance with regard to fear of earthly

disengagement, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism (see Table 6). Table 6 shows the summary of HCSE corrected regression analyses for screening significant additional predictors of fear of earthly disengagement, over and above intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

Table 6

Summary of HCSE Corrected Regression Analyses for Identifying Significant Additional Predictors of Fear of Earthly Disengagement (Listwise N = 124)

		β	*SE B* (HC3)
Baseline	Constant	1.94	.63**
	Time 1 Intrinsic religiosity	-.14	.10
	Time 1 Belief in a pleasant afterlife	-.12	.08
	Time 1 Belief in an unpleasant afterlife	-.10	.17
	Time 1 Generative concerns	.01	.13
	Time 1 Life satisfaction	.13	.14
	Time 1 Life despair	-.01	.11
	Time 2 Positive ageing attitudes	-.21	.12
	Time 2 Life purpose	.23	.16
	Time 2 Existential vacuum	.24	.09*
	Time 2 Self acceptance	-.15	.10
	Time 1 Neuroticism	.09	.09
Model 1	Constant	1.86	.63**
	Time 1 Intrinsic religiosity	-.15	.10
	Time 1 Belief in a pleasant afterlife	-.10	.08
	Time 1 Belief in an unpleasant afterlife	-.12	.17
	Time 1 Generative concerns	.04	.13
	Time 1 Life satisfaction	.15	.14
	Time 1 Life despair	.02	.11
	Time 2 Positive ageing attitudes	-.23	.11
	Time 2 Life purpose	.22	.16
	Time 2 Existential vacuum	.27	.09**
	Time 2 Self acceptance	-.12	.10
	Time 1 Neuroticism	.04	.09
	Time 1 Funeral prearrangements	-.14	.07
Model 2	Constant	1.86	.65**
	Time 1 Intrinsic religiosity	-.14	.11
	Time 1 Belief in a pleasant afterlife	-.12	.08
	Time 1 Belief in an unpleasant afterlife	-.11	.17
	Time 1 Generative concerns	.01	.13
	Time 1 Life satisfaction	.12	.14
	Time 1 Life despair	-.01	.11
	Time 2 Positive ageing attitudes	-.20	.12
	Time 2 Life purpose	.23	.16
	Time 2 Existential vacuum	.25	.09*
	Time 2 Self acceptance	-.14	.10
	Time 1 Neuroticism	.09	.09
	Time 1 Presence of near-death experience	-.15	.15

Model 3	Constant	1.42	.78
	Time 1 Intrinsic religiosity	-.14	.10
	Time 1 Belief in a pleasant afterlife	-.12	.08
	Time 1 Belief in an unpleasant afterlife	-.13	.17
	Time 1 Generative concerns	-.02	.14
	Time 1 Life satisfaction	.14	.15
	Time 1 Life despair	.06	.10
	Time 2 Positive ageing attitudes	-.24	.12
	Time 2 Life purpose	.26	.16
	Time 2 Existential vacuum	.27	.09**
	Time 2 Self acceptance	-.12	.10
	Time 1 Neuroticism	.13	.12
	Time 1 Recent positive affects	.09	.12
Model 4	Constant	1.86	.63**
	Time 1 Intrinsic religiosity	-.15	.10
	Time 1 Belief in a pleasant afterlife	-.12	.08
	Time 1 Belief in an unpleasant afterlife	-.10	.17
	Time 1 Generative concerns	.02	.13
	Time 1 Life satisfaction	.14	.14
	Time 1 Life despair	-.01	.11
	Time 2 Positive ageing attitudes	-.20	.12
	Time 2 Life purpose	.22	.16
	Time 2 Existential vacuum	.25	.09*
	Time 2 Self acceptance	-.16	.11
	Time 1 Neuroticism	.09	.09
	Time 2 Social desirability	.02	.06
Model 5	Constant	2.75	.68**
	Time 1 Intrinsic religiosity	-.13	.09
	Time 1 Belief in a pleasant afterlife	.03	.09
	Time 1 Belief in an unpleasant afterlife	-.23	.18
	Time 1 Generative concerns	-.01	.12
	Time 1 Life satisfaction	.08	.13
	Time 1 Life despair	.01	.10
	Time 2 Positive ageing attitudes	-.16	.11
	Time 2 Life purpose	.27	.16
	Time 2 Existential vacuum	.24	.09**
	Time 2 Self acceptance	-.13	.10
	Time 1 Neuroticism	.06	.09
	Time 2 Perceived attraction to death	-.36	.11**
Model 6	Constant	1.73	.68*
	Time 1 Intrinsic religiosity	-.15	.10
	Time 1 Belief in a pleasant afterlife	-.11	.08
	Time 1 Belief in an unpleasant afterlife	-.10	.17
	Time 1 Generative concerns	.00	.13
	Time 1 Life satisfaction	.12	.14
	Time 1 Life despair	-.01	.12
	Time 2 Positive ageing attitudes	-.19	.12
	Time 2 Life purpose	.24	.16
	Time 2 Existential vacuum	.23	.10*
	Time 2 Self acceptance	-.15	.10
	Time 1 Neuroticism	.07	.09
	Time 2 Personal dying anxiety	.05	.07

Model 7	Constant	2.99	.55**
	Time 1 Intrinsic religiosity	-.09	.09
	Time 1 Belief in a pleasant afterlife	-.12	.06
	Time 1 Belief in an unpleasant afterlife	-.07	.14
	Time 1 Generative concerns	.06	.11
	Time 1 Life satisfaction	.15	.11
	Time 1 Life despair	.01	.09
	Time 2 Positive ageing attitudes	.00	.11
	Time 2 Life purpose	.15	.13
	Time 2 Existential vacuum	.25	.08**
	Time 2 Self acceptance	.04	.08
	Time 1 Neuroticism	.04	.07
	Time 2 Mortality acceptance	-.64	.09**
Model 8	Constant	3.16	.57**
	Time 1 Intrinsic religiosity	-.09	.09
	Time 1 Belief in a pleasant afterlife	-.05	.08
	Time 1 Belief in an unpleasant afterlife	-.14	.17
	Time 1 Generative concerns	.04	.12
	Time 1 Life satisfaction	.13	.10
	Time 1 Life despair	.03	.09
	Time 2 Positive ageing attitudes	.00	.11
	Time 2 Life purpose	.19	.13
	Time 2 Existential vacuum	.26	.07**
	Time 2 Self acceptance	.02	.08
	Time 1 Neuroticism	.03	.07
	Time 2 Mortality acceptance	-.57	.13**
	Time 2 Perceived attraction to death	-.15	.14

*$p < .05$; ** $p < .01$

The addition of perceived attraction to death significantly accounted for a further 9.61% of the variance. The addition of mortality acceptance significantly accounted for a further 22.08% of the variance. Since mortality acceptance had a greater unique contribution than perceived attraction to death, another HCSE corrected regression was run to check if perceived attraction to death was a significant additional predictor of fear of earthly disengagement, over and above intrinsic religiosity, afterlife beliefs, psychosocial maturity, neuroticism and mortality acceptance. With the inclusion of mortality acceptance, perceived attraction to death was not a significant predictor of fear of earthly disengagement. It was concluded that only mortality acceptance could explain a significant additional amount of variance with respect to fear of earthly disengagement, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

The second hierarchical linear regression was performed on fear of transcendental consequences. Regression output, before the four additional regression assumptions were checked, showed that personal dying anxiety, attraction to death and mortality acceptance were significant additional predictors of fear of transcendental

consequences. All except the assumption of homoscedasticity for this multiple regression were met. Hence, HCSE correction was employed to correct the effect of heteroscedasticity and HC3 test was selected. Each of the five significant correlates of fear of transcendental consequences was entered separately into the equation. Hence, five regression models with HCSE correction were run.

It was found that perceived attraction to death and mortality acceptance were the only two variables that could predict a significant additional amount of variance with respect to fear of transcendental consequences, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism (see Table 7). Table 7 shows the summary of HCSE corrected regression analyses for screening significant additional predictors of fear of transcendental consequences, over and above intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

Table 7

Summary of HCSE Corrected Regression Analyses for Identifying Significant Additional Predictors of Fear of Transcendental Consequences (Listwise N = 124)

		X	*SE B* (HC3)
Baseline	Constant	3.02	.63**
	Time 1 Intrinsic religiosity	-.28	.13*
	Time 1 Belief in a pleasant afterlife	.01	.09
	Time 1 Belief in an unpleasant afterlife	.39	.19*
	Time 1 Generative concerns	-.15	.12
	Time 1 Life satisfaction	.07	.11
	Time 1 Life despair	.10	.11
	Time 2 Positive ageing attitudes	-.23	.12
	Time 2 Life purpose	.28	.16
	Time 2 Existential vacuum	.25	.09**
	Time 2 Self acceptance	-.04	.08
	Time 1 Neuroticism	.12	.09
Model 1	Constant	2.83	.72**
	Time 1 Intrinsic religiosity	-.28	.13*
	Time 1 Belief in a pleasant afterlife	.02	.09
	Time 1 Belief in an unpleasant afterlife	.38	.19*
	Time 1 Generative concerns	-.18	.13
	Time 1 Life satisfaction	.05	.12
	Time 1 Life despair	.11	.12
	Time 2 Positive ageing attitudes	-.24	.13
	Time 2 Life purpose	.29	.17
	Time 2 Existential vacuum	.25	.09*
	Time 2 Self acceptance	-.05	.09
	Time 1 Neuroticism	.15	.11
	Time 1 Recent positive affects	.06	.10

Model 2	Constant	3.14	.64**
	Time 1 Intrinsic religiosity	-.26	.13*
	Time 1 Belief in a pleasant afterlife	.01	.09
	Time 1 Belief in an unpleasant afterlife	.39	.19*
	Time 1 Generative concerns	-.16	.12
	Time 1 Life satisfaction	.06	.11
	Time 1 Life despair	.10	.12
	Time 2 Positive ageing attitudes	-.24	.12
	Time 2 Life purpose	.28	.16
	Time 2 Existential vacuum	.24	.09*
	Time 2 Self acceptance	-.03	.08
	Time 1 Neuroticism	.12	.09
	Time 2 Social desirability	-.04	.06
Model 3	Constant	3.91	.70**
	Time 1 Intrinsic religiosity	-.25	.12*
	Time 1 Belief in a pleasant afterlife	.16	.09
	Time 1 Belief in an unpleasant afterlife	.30	.19
	Time 1 Generative concerns	-.18	.11
	Time 1 Life satisfaction	.03	.11
	Time 1 Life despair	.12	.10
	Time 2 Positive ageing attitudes	-.19	.12
	Time 2 Life purpose	.29	.16
	Time 2 Existential vacuum	.23	.08*
	Time 2 Self acceptance	-.02	.09
	Time 1 Neuroticism	.10	.08
	Time 2 Perceived attraction to death	-.34	.10**
Model 4	Constant	2.83	.68**
	Time 1 Intrinsic religiosity	-.27	.13*
	Time 1 Belief in a pleasant afterlife	.02	.09
	Time 1 Belief in an unpleasant afterlife	.42	.19*
	Time 1 Generative concerns	-.18	.12
	Time 1 Life satisfaction	.05	.11
	Time 1 Life despair	.08	.12
	Time 2 Positive ageing attitudes	-.21	.12
	Time 2 Life purpose	.27	.17
	Time 2 Existential vacuum	.21	.10*
	Time 2 Self acceptance	-.04	.08
	Time 1 Neuroticism	.11	.09
	Time 2 Personal dying anxiety	.08	.07
Model 5	Constant	4.00	.56**
	Time 1 Intrinsic religiosity	-.21	.12
	Time 1 Belief in a pleasant afterlife	.01	.08
	Time 1 Belief in an unpleasant afterlife	.42	.16*
	Time 1 Generative concerns	-.10	.10
	Time 1 Life satisfaction	.09	.09
	Time 1 Life despair	.12	.09
	Time 2 Positive ageing attitudes	-.03	.12
	Time 2 Life purpose	.20	.14
	Time 2 Existential vacuum	.25	.07**
	Time 2 Self acceptance	.13	.08
	Time 1 Neuroticism	.08	.06
	Time 2 Mortality acceptance	-.58	.09**

Model 6	Constant	4.28	.61**
	Time 1 Intrinsic religiosity	-.21	.12
	Time 1 Belief in a pleasant afterlife	.07	.09
	Time 1 Belief in an unpleasant afterlife	.38	.17*
	Time 1 Generative concerns	-.12	.10
	Time 1 Life satisfaction	.07	.09
	Time 1 Life despair	.13	.09
	Time 2 Positive ageing attitudes	-.04	.12
	Time 2 Life purpose	.22	.14
	Time 2 Existential vacuum	.24	.07**
	Time 2 Self acceptance	.12	.08
	Time 1 Neuroticism	.08	.06
	Time 2 Mortality acceptance	-.50	.10**
	Time 2 Attraction to death	-.15	.10

*$p < .05$; ** $p < .01$

The addition of perceived attraction to death significantly accounted for a further 6.52% of the variance while mortality acceptance had significantly explained an additional 14.66% of the variance. Since mortality acceptance had a greater unique contribution than perceived attraction to death, another HCSE corrected regression was run to check if perceived attraction to death was a significant additional predictor of fear of transcendental consequences, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity, neuroticism and mortality acceptance. With the inclusion of mortality acceptance, perceived attraction to death was not a significant predictor of fear of transcendental consequences. It was concluded that only mortality acceptance could explain a significant additional amount of variance with respect to fear of transcendental consequences, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism. Indeed, mortality acceptance was found to be the only significant additional predictor of the two-factor personal death anxiety, over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity, and neuroticism.[10]

5.3.2.3. Additional Analyses

Qualitative analysis of participants' concerns over death and dying. To supplement the quantitative results, a content analysis was carried out to find other sources of death and dying anxieties that were untapped by the Repulsion by Death subscale in the Time 1 survey, as well as protective factors underlying the lack of death and dying concerns among some older adult British Christians in their own words. Four participants did not respond to this section.

Ninety participants identified at least one death and dying concern, and these concerns could be categorized into ten domains. The majority of participants (66.67%) dreaded a bad death. Bad death was described in many forms. The overriding fear was a long and painful dying process. Participants who spoke of a bad death might also worry about loss of dignity and about inability to self care due to mental and physical decline. Some participants did not want to die alone or feared that they would have no one to call on when they were very unwell or close to death. Others dreaded being unprepared to meet God after their death. Some participants were fearful of an unnatural death, such as being buried alive. Others feared about receiving inadequate care near the end of life.

The second death and dying concern (32.22%) related to becoming a financial and/or emotional burden to the family or carers. For example, some participants dreaded pre-deceasing their spouse who might still need them and worried that their surviving spouse would be unable to cope after their death.

The third death and dying concern (16.67%) centred on the lack of control or being helpless over the quality of end-of-life care. Inability to self care and being dependent on others due to worsening bodily functions were particularly worrying to some participants. Others dreaded whether anyone could be trusted to look after them when they were unable to communicate their needs. They also feared that others would make unsolicited end-of-life decisions on their behalf or would not carry out their living will.

Around 15 per cent of the participant remarked that they had death and dying concerns but "dread" was too strong a term with which to describe their mortality concerns. The fifth death and dying concerns (11.11%) was about departure from people or things they enjoyed or loved. Several participants did not wish to leave their family and friends or feared that death would put an end to their pleasant life.

The sixth death and dying concern (10%) related to past unpleasant death-related experiences, such as having close family members or friends who suffered from a painful lingering death or who received inadequate care at the end of life. I suspected that these participants might fear suffering in a similar manner before they died.

Interestingly, five participants (5.55%) were doubtful of a promised afterlife, despite their belief in God. The eighth death and dying concern (5.55%) was fear towards the possibility, vulnerability or actual diagnosis of a life-threatening illness, such as cancer

or dementia, which would decrease their quality of life and increase their dependency on others. This was followed by concerns about the well-being of their surviving non-Christian family members whom they believed they might not meet after their death or who might not attain salvation (2.22%). Lastly, one participant (1.11%) reported a longing for longevity.

Taken together, the qualitative data on older adult British Christians' written death and dying concerns mainly centred on their anxieties over dying in a horrific and undignified way. It also uncovered four areas of personal death anxiety that warranted further investigation in the Time 2 survey. The first is their worry over the grieving of their close ones and disruptions to their significant interpersonal relationships that might be caused by their personal death. The second is their fear of losing worldly involvement. The third is their fear of not conforming to the standard of their religious faith. Probably because God is the gatekeeper to heaven, some Christian participants might worry about the consequences of being unprepared to meet God after death. The fourth is their fear of ambiguity at the moment of death and the unknown in the hereafter.

Qualitative analysis of participants' lack of death and dying concerns. Forty-nine participants claimed that they did not have any death and dying concerns and some respondents nominated more than one reason for their response. Their reasons could be categorized into six domains. More than two-third of them (77.55%) explained that their faith in an afterlife, God and/or Jesus Christ had helped them face mortality without fear. They believed that they would meet their Creator and His Son after death. They also believed that death was a transition to a better place than here on Earth. In addition, some of them were very reassured of a promised afterlife because they had a strong belief in the Scriptures. Others believed that God would sustain them near the end of life.

The second reason for their lack of mortality concern (26.53%) centred on the fact that death was inevitable, so some participants found it pointless to fear death and thought it was more sensible to accept the reality of death. Some of them went on to reason that death was part of God's will, so they did not dread mortality.

The third reason for their lack of mortality concern (24.49%) related to their past pleasant death-related experiences, such as witnessing the good death of others. I suspected that these participants might think that they could die with dignity and integrity just like those fortunate people whom they witnessed had died in peace.

Some of them were also convinced by the personal testimony of people who survived a near-death experience.

The fourth reason for their lack of mortality fear (16.32%) related to legitimating death. Some participants considered old age as a right time to die. Rather than worrying about death, they focused on the present and were thankful for the blessings in their lives.

About 14 per cent of the participants did not dread death because they said they could be reunited with those who had died. Lastly, six participants (12.24%) said that they had no death and dying concerns because they believed they would be supported or would be well cared for when they were dying. They also believed that there would be medication available to relieve their suffering if they needed it. Others were positive that they would have access to good hospice care when needed.

Taken together, three major themes emerged from the older adult British Christians' account of their lack of death and dying concerns. The first and foremost is their faith, which sustained their belief in achieving a good afterlife and in reuniting with the dead. The second is their preparation for and acknowledgement of death as an inevitable reality of life. Indeed, mortality acceptance may be a resilience factor underlying low personal death anxiety in later life, a trend that has been observed by many prior studies (see section 1.2.4.1). Hence, mortality acceptance was incorporated into and examined in the Time 2 survey for its potential correlation with personal death anxiety (see section 5.2.2.18). The third is their past pleasant experiences with the dying of others, which is speculated to have lessened their fear of the dying process.

Test-retest reliability for death-related attitudes. Three death-related attitudes were measured both in Time 1 and Time 2 surveys. They are personal death anxiety, personal dying anxiety and perceived attraction to death. Given that the values of skewness and kurtosis were within the range under the univariate normality assumption, Pearson's correlation with listwise case exclusion was run to examine the test-retest reliability for these three death-related attitudes. It should be noted that correlation was performed on the same set of retained personal death anxiety items as measured by the Repulsion by Death subscale to be consistent across Time 1 and Time 2 surveys. Test-retest reliability was moderate for personal death anxiety and personal dying anxiety, but was fair for perceived attraction to death. Table 8 shows the

descriptive statistics and bivariate correlations with listwise case exclusion (*N* = 137) among three death-related attitudes across Time 1 and Time 2 surveys.

Table 8

Descriptive Statistics (N = 143) and Bivariate Correlations (Liswise N = 137) among Three Death-Related Attitudes across Time 1 and Time 2 Surveys

		1.	2.	3.	4.	5.	6.
1.	Time 1 Perceived attraction to death	-					
2.	Time 1 Personal dying anxiety	-.03	-				
3.	Time 1 Personal death anxiety	-.36**	.42**	-			
4.	Time 2 Perceived attraction to death	.48**	-.11	-.46**	-		
5.	Time 2 Personal dying anxiety	-.11	.73**	.34**	-.11	-	
6.	Time 2 Personal death anxiety	-.24**	.33**	.64**	-.46**	.31**	-
	Mean	.91	.54	-1.14	4.07	3.40	1.88
	SD	.71	.94	.71	.65	.80	.66
	Skewness	-.45	-.64	.75	-.26	-.35	.97
	Kurtosis	.57	-.02	.50	-.63	-.35	1.12

*p < .05; **p < .01

5.3.3. Correlational Findings with Respect to the Proposed Religious Management of Regret as a Religious Pathway to Coping with Personal Death Anxiety

It was hypothesized that intrinsic religiosity predicted lower personal death anxiety by encouraging more use of positive religious coping and by discouraging the use of negative religious coping to mitigate the intensity of negative emotional regret appraisal. Since only 33 participants continued to rue their identified regret, the proposed religious management of regret as a religious pathway to coping with personal death anxiety was only examined among these 33 participants. Due to the small sample size, this hypothesis was explored using correlation with pairwise case exclusion.

5.3.3.1. Checking the Assumptions of Univariate Normality

Skewness and kurtosis were computed to check the assumption of univariate normality. It was found that the value of kurtosis for negative religious coping fell

outside the acceptable range for a normal distribution (see Table 9, p. 119). Hence, the assumptions of univariate normality were violated.

5.3.3.2. *Exploring the Relationships among Variables*

Given that the assumptions of univariate normality were violated, Spearman's rho was computed to explore the relationships between intrinsic religiosity, coping strategies, negative emotional regret appraisal and personal death anxiety. Table 9 shows the descriptive statistics and bivariate correlations with pairwise case exclusion ($n = 33$) among intrinsic religiosity, six non-religious coping strategies, two religious coping strategies, three negative emotional regret appraisals and the two-factor personal death anxiety.

It was found that greater intrinsic religious motivation was related to lower levels of personal death anxiety. However, none of the three negative emotional regret appraisals was related to personal death anxiety. Intrinsic religious motivation was neither related to positive religious coping nor negative religious coping. More use of non-religious goal-oriented coping but infrequent use of negative religious coping was associated fewer despair-related emotions. Positive religious coping and the other five non-religious coping were unrelated to any of the three dimensions of negative emotional regret appraisal. Since the linkage between negative emotional regret appraisal and personal death anxiety was non-significant, the efficacy of religious management of regret as a religious pathway to coping with personal death anxiety was not supported.[10]

Table 9

Descriptive Statistics and Bivariate Correlations among Intrinsic Religiosity, Six Non-religious Coping Strategies, Two Religious Coping Strategies, Three Negative Emotional Regret Appraisals and Personal Death Anxiety among People who Still Rued a Major Life Regret (N = 33)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. T1 Intrinsic religiosity	–													
2. T1 Goal-oriented coping	.15	–												
3. T1 Seek support coping	.05	.32	–											
4. T1 Wishful thinking coping	.18	.22	.29	–										
5. T1 Avoidance coping	.05	.38*	-.18	-.00	–									
6. T1 Think it over coping	.18	.49**	.36*	.59**	.27	–								
7. T2 Acceptance coping	-.08	.26	.03	.19	.43*	.46*	–							
8. T1 Negative religious coping	-.13	.01	.17	.17	-.04	.03	-.27	–						
9. T1 Positive religious coping	.32	.38*	.33	.50**	.03	.50**	.18	.08	–					
10. T2 Despair-related emotions	-.02	-.50**	-.14	.12	-.34	-.17	-.17	.41*	.09	–				
11. T2 Hot emotions	-.08	-.35	-.04	.08	-.16	-.03	-.18	.25	.23	.67**	–			
12. T2 Wishful emotions	-.14	.02	.13	.28	-.16	.15	.06	.23	.30	.49**	.23	–		
13. T2 Fear of earthly disengagement	-.36*	-.03	.12	.04	.02	.15	.08	-.06	-.12	-.06	.16	-.31	–	

14. T2 Fear of transcendental consequences													
-.41*	-.09	-.01	-.17	.06	-.03	.19	.10	-.23	-.08	.06	-.31	.67**	–
Mean 1.17	2.53	1.45	2.95	2.62	2.68	3.87	1.37	3.27	3.45	2.50	2.72	1.96	1.87
SD .65	1.10	.62	.86	1.09	1.37	.66	.54	.80	.96	1.04	1.38	.72	.73
Skewness -.71	.27	1.12	.32	.60	.15	.04	2.37	.10	-.19	1.10	.24	.86	1.33
Kurtosis -.37	-.58	-.00	.24	-.17	-1.47	-.69	6.89	-.21	-1.31	.48	-1.18	1.00	2.31

Notes. *p < .05; **p < .01; T1 = Time 1; T2 = Time 2

5.3.3.3. Additional Analyses

Regret profile. Thirty-three participants reported one major unresolved past regret that they still rued, the majority (63.63%) of which was related to close interpersonal relationships (e.g., not spending enough time with one' children and dying parents, divorce, the death of one's child, being childless, did not forgive one's mother while she was alive, poor relationship with one's child or romantic partner). The second (18.18%) largest group of regret dealt with self improvement (e.g., lack of assertiveness, not realizing one's full potential or ability, poor anger management). The third common regret (6%) related to not pursuing educational opportunities. One (3%) regretted not publishing a manuscript. One participant (3%) lamented over his/her deprived life experience (e.g., lack of childhood friends due to frequent home moving). Another participant (3%) regretted not having seen God's operation more often. One participant (3%) did not wish to disclose her regret.

In Time 1, on average, these 33 participants perceived their identified regret as somewhat important (M = 3.42, SD = .96) and as having a somewhat impact on their life (M = 3.90, SD = 1.15). But they thought that they were unlikely to change their identified regret (M = 1.86, SD = .91).

Similarly, in Time 2, on average, these 33 participants perceived their identified regret as somewhat important (M = 3.38, SD = 1.30) and as having a somewhat impact on their life (M = 3.53, SD = 1.30). But they thought that they were unlikely to change their identified regret (M = 1.51, SD = .92).

Perceived confidence in being less regretful before death. Among the 33 participants who continued to rue their identified regret, 13 had no confidence in being less regretful about the major regret before they died. They gave various reasons to account for their lack of confidence which could be categorized into seven domains. The majority (46.15%) explained that the party that was affected could not be found, or was unaware or was deceased. Hence, they were unable to resolve their regret. Three participants (23.07%) mentioned their efforts to make up for what they had done were in vain. Three participants (23.07%) thought that it was too late to resolve their regret which had happened long ago. Three participants (23.07%) said that they could not go back in time or have a second chance to reverse the situation. About 15% of participants thought that they could not make up for what they did. The same

proportion of participants reasoned that they could not forgive themselves, even though they knew they had been forgiven by God. One participant (7.69%) did not find it worthwhile to 'make waves' to resolve the regret now.

Twelve out of 33 participants reported that they had little confidence in being less regretful about the major regret before they died. Their various reasons to account for their little confidence could be categorized into eight domains. The majority (25%) explained that they could not change what happened. Two participants (16.67%) could neither forget nor stop ruing their regret. Two participants (16.67%) reasoned that they could not or were unlikely to resolve their regret. About 16% of participants explained that their regret was in the past, and one of them found that it had happened a long time ago. Three participants gave one of the following reasons to account for their little confidence: (a) he/she was unsure how things might turn out if he/she had done things differently; (b) he/she was unsure if God had forgiven him/her; and (c) he/she needed the other party to resolve the regret and did not feel in control of the resolution outcome. One participant did not provide any written comments on this section.

Two out of 33 participants reported that they had some confidence in being less regretful about the major regret before they died. They gave one or more of the followings reasons: (a) he/she trusted that God would help him/her resolve the regret in time; (b) it was pointless to dwell on regret; (c) he/she could not go back in time; and (d) he/she had learnt something out of the 'painful' experience.

Six out of 33 participants reported that they had great/much confidence in being less regretful about the major regret before they died. Their various reasons to account for their great confidence could be categorized into seven domains. Nearly one-third of them found it a waste of time to dwell on regret. The same proportion of participants explained that they either believed or had witnessed God's work in their lives. Five participants gave one of the following reasons to account for their confidence: (a) he/she thought that regret would fade with time; (b) he/she had accepted that age had limited his/her potential; (c) he/she was content to become the person he/she was now as a result of the experience; (d) he/she believed that he/she was in God's hands; and (e) he/she tried to look for the positives in the situation such as appreciated little tokens of love from his/her spouse.

Non-religious coping with regret. Non-religious coping with regret was explored to see if religious coping with regret made a unique contribution to mitigating negative

emotional regret appraisal, over and above what was accounted for by non-religious coping. In order to support the unique contribution of religious coping, bivariate correlations (pairwise case exclusion) between non-religious coping and negative emotional regret appraisal as well as between religious coping and negative emotional regret appraisal needed to be established. In addition, partial correlations between religious coping and negative emotional regret appraisal needed to be significant, even after controlling the effect of non-religious coping on negative emotional regret appraisal.

Given that the assumptions of univariate normality were violated (see Table 9, p. 119), Spearman's rho with pairwise case exclusion was computed to explore the relationships among non-religious coping, religious coping and negative emotional regret appraisal. It was found that only negative religious coping and non-religious goal-oriented coping were significantly related to greater despair-related emotions. Positive religious coping and the other five non-religious coping were unrelated to negative emotional regret appraisal (see Table 9, p. 119).

After partialling out the influence of all six types of non-religious coping, the correlation between negative religious coping and despair-related emotions was marginally significant ($p = .058$). Since only negative religious coping was related to one of the three negative emotional regret appraisals, it was concluded that religious coping did not make a unique contribution in explaining the variance of negative emotional regret appraisal, over and above what was accounted for by non-religious coping.

Test-retest reliability for negative emotional regret appraisal. Negative emotional regret appraisal was measured in both Time 1 and Time 2 surveys. Given that the values of skewness and kurtosis were within the range under the univariate normality assumption, Pearson's correlation was run to assess the test-retest reliability for this construct. Pairwise case exclusion was employed because of the small sample size ($n = 33$). Table 10 shows the descriptive statistics and bivariate correlations with pairwise case exclusion ($n = 33$) among three negative emotional regret appraisals across Time 1 and Time 2 surveys. The test-retest reliability for the three negative emotional regret appraisal was moderate ($r = .57$) to high ($r = .83$).

Table 10

Descriptive Statistics and Bivariate Correlations (n = 33) among Three Negative Emotional Regret Appraisals across Time 1 and Time 2 Surveys

	1.	2.	3.	4.	5.	6.
1. Time 1 Despair-related emotions	-					
2. Time 1 'Hot' emotions	.64**	-				
3. Time 1 Wishful emotions	.39*	.20	-			
4. Time 2 Despair-related emotions	.57**	.52**	.38*	-		
5. Time 2 'Hot' emotions	.411	.83**	.27	.65**	-	
6. Time 2 Wishful emotions	.37*	.07	.80**	.53**	.20	-
Mean	3.34	2.34	2.56	3.45	2.50	2.72
SD	1.05	1.18	1.25	.96	1.04	1.38
Skewness	-.18	.96	.46	-.19	1.10	.24
Kurtosis	-.85	-.00	-.71	-1.31	.48	-1.18

*$p < .05$; ** $p < .01$

Regret resolution among participants who reported having no regret in the Time 1 survey. Seventy-six participants reported having no major unresolved past regret that was still disturbing them and some respondents nominated more than one reason for their response. Their reasons can be categorized into nine domains. Most of these participants (36.84%) said that religious support or guidance was the key. They believed that God used them to exercise His will on Earth. They felt they were protected by the omnipotent God, who had plans for them and who strengthened them so that they were made perfect. They also believed in the power of prayers and that their prayers had been answered. In addition to the support they received from the church, they made decisions in accordance with the Biblical principles, so they did not have any lingering regrets.

The second reason for their lack of major past unresolved regrets (32.89%) was that they chose not to dwell on regrets and accepted them as part of their life. They explained that it was pointless to dwell on regrets and thought it would be more productive or adaptive to live with regrets and move on. Some of them said that they could not change the past and do anything about what had happened, so they did not rue their past mistakes. Hence, they tended to either concentrate on the future or live in the present taking each day as it came.

The third reason for their lack of major past unresolved regrets (30.26%) was that the participants counted their blessings. They were content with their life and considered

themselves fortunate to have a loving family or happy marriage. Some of them had led a full, interesting and fulfilling life despite having disappointments in the past. Others thought about the positive side of their setbacks in life. They reckoned that even if they were given a second chance, things might not necessarily have turned out to be better. Another way to count their blessings is to make downward comparison with others' misfortune and to feel that other people's lives were much worse than theirs.

The fourth reason for their lack of major past unresolved regrets (19.73%) was their belief in God's forgiveness. They thought that God had forgiven their failings because: (a) they contended that the merciful God understood their situations, (b) they trusted that God could take away all their sins; and (c) they believed that Jesus Christ had already died for their sins. Since they felt they were being forgiven by God, they did not have any major regrets.

About 15 per cent of the participants reasoned that because they were either compensated for their loss (e.g., received education later in life) or they had successfully dealt with their regrets, they did not have any major unresolved past regret. Others remarked they did their best to make restitution or repent, so they did not linger on their past mistakes.

It was not uncommon for respondents (14.47%) to say that they perceived benefits or growth as a result of their past mistakes to overcome their regrets. They explained that they could learn from their past experiences to improve their future. They also mentioned that they had found meaning in their mistakes.

Five participants (6.57%) offered justifications for their past actions or inactions. These participants reasoned that their decisions to take action or not were made under a particular context. Some of them also said that their disappointments in life were outside personal control, for example, during wartime.

Three participants (3.94%) did not find their past mistakes significant enough to cause a major problem in their life and/or these mistakes had lost their importance over time. Finally, lack of time to think about old grievances accounted for why one participant (1.31%) had no major unresolved regret. This participant remarked that old age left one with less time to reminisce on one's past mistakes.

<u>Regret resolution among Time 2 survey participants who no longer rue on their identified regret.</u> Eleven participants who reported an unresolved regret in Time 1 gave

reasons as to why they no longer rued their identified regret in Time 2. Some of them nominated more than one reason. Their responses could be organized into 11 categories. First, most of them (30.43%) claimed that they had accepted the regret as part of their life and that past was past. Second, a number of participants (21.73%) explained that they no longer lamented over their past mistakes because they now counted their blessings, such as being content with a good life, and felt better off by making downward comparison to other people. Third, the same proportion of participants (21.73%) reasoned that religious support was the answer. They reported that they had formed a wonderful relationship with God and Jesus Christ. They also decided to surrender to God, to seek God's grace and mercy, as well as to ask for help from church members to stop ruing their past mistakes. Fourth, 17.39% of the participants commented that because they could not change the past, they no longer felt regretful towards their past actions or inactions. Fifth, 17.39% of the participants discovered new paths and directions as a result of their identified regret, hence, they did not rue their past mistakes.

About 13 per cent of the participants gave the following two reasons to explain why they no longer lamented over their identified regret: (a) they did not want to dwell on it any more; or (b) they believed that God had forgiven them or they had forgiven their perpetrator. About 9 per cent of the participants gave the following two reasons to account for their not lamenting over their identified regret: (a) their identified regret had lost its importance over time; or (b) they had received compensation.

Finally, each of the three remaining participants proposed a different reason to explain why he/she no longer lamented over his or her regret in Time 2: (a) he or she had resolved it; (b) it was outside his or her personal control to prevent that regret from happening; and (c) he or she had already dealt with the problem, for example, by reducing the number of meetings with a sibling whom he or she did not want to be with.

Presence vs. absence of a major lingering regret. According to Erikson (1950, 1982), failure to come to terms with one's successes and failures and accept them as inevitable leads to death anxiety. Moreover, the presence of unresolved regret was found to lower people's well-being (Torges, Stewart, & Nolen-Hoeksema, 2008). Hence, it would be interesting to know if people who still rued a major unresolved past regret experienced more personal death anxiety than those who did not have a major lingering regret.

Given that personal death anxiety met the normality assumption and the assumption of homogeneity of variances, an independent sample *t*-test was conducted to examine if older adult British Christians who still rued their major life regret had different levels of personal death anxiety than those who did not have a lingering regret. Results showed that both groups did not differ in fear of earthly disengagement, $t(138) = 1.03$, $p > .05$, and in fear of transcendental consequences, $t(139) = .47$, $p > .05$.

5.4. Discussion

SEM results showed that intrinsic religiosity had a significant negative indirect effect on personal death anxiety through fostering more benign afterlife beliefs, psychosocial maturity and emotional stability. It should be noted that SEM is unable to establish causality (Hoyle & Panter, 1995). Hence, it was concluded that the final model (Model B) was consistent with the causal mediation hypothesis but the exact nature of the associations of constructs could not be demonstrated.

5.4.1. Afterlife Beliefs as a Religious Pathway to Coping with Personal Death Anxiety

Internalization of a personal religious system fostered a stronger belief in an afterlife of reward. Such more benign afterlife beliefs was hypothesised to have an ameliorative effect on personal death anxiety by reducing people's worries over life discontinuation after death and the uncertainty of the state of the hereafter. When people believe that death is likely to lead to a rewarding and deserving afterlife rather than an afterlife of pain and punishment, they are less likely to view death with fear but to see it as a meaningful transition to a better life. This finding is consistent with the prediction from the Terror Management Theory that belief in an afterlife, or literal immortality, is an effective cultural worldview to buffer against death anxiety.

5.4.2. Psychosocial Maturity in Later Life as a Religious Pathway to Coping with Personal Death Anxiety

Older adult British Christians who were highly intrinsically religious were found to report greater psychosocial maturity in later life. Such enhanced ability to accept and embrace one's life and social responsibility predicted lower personal death anxiety. Personal death anxiety can be a manifestation of fear of an imperfect life. When old adults perceived that they had lived fully and contributed to the society, they were

more likely to approach their personal death with a minimum of anxiety. This result is consistent with Erikson's Psychosocial Theory with regard to the influence of ego integrity on death anxiety. It also highlighted the importance of quest for meaning among seniors as well as the interconnection between life and death attitudes.

5.4.3.   Neuroticism as an Additional Religious Pathway to Coping with Personal Death Anxiety

Neuroticism was found to be a significant confounding mediator of the negative relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity. Because most religions have a deep appreciation of human distress (Pargament, 1997), religion is able to relieve the anxieties of its members by offering several means to regulate their negative emotions. For example, religion provides accessible outlets such as confession or pastoral counselling for emotional disclosure. People also feel better in their belief in the efficacy of prayer and their belief that there is a benevolent Higher Power. Hence, intrinsic religiosity predicted lower neuroticism, which in turn exerted an indirect effect on personal death anxiety through hindering psychosocial maturity in later life. One possible explanation for the neuroticism mediation is that neuroticism reduces a person's adaptation to stress in life, so neurotics are less effective in achieving psychosocial maturity and managing their personal death anxiety.

5.4.4.   Religious Management of Regret as a Religious Pathway to Coping with Personal Death Anxiety

The present results failed to support the efficacy of religious management of regret to lower personal death anxiety in later life. Specifically, negative emotional regret appraisal was found to be unrelated to personal death anxiety. It was speculated that negative emotional regret appraisal might be more predictive of depression than of personal death anxiety. This is because negative emotional states are likely to drive a person into negative patterns of thinking, rather than fearful death thoughts, leading to depression. The same reason was used to explain why there was no difference in personal death anxiety between older adult British Christians who rued a major life regret and those who did not have a major lingering regret.

5.4.5. Regret Profile

The most prevalent major unresolved life regret that was still disturbing the participants related to close interpersonal relationships. Older adult British Christians mostly lamented over spending insufficient time or having poor relationship with their significant others. This is congruent with Socio-emotional Selectivity Theory (Carstensen, Issacowitz & Charles, 1999), which posits that elderly people retain rewarding relationships and discard less rewarding ones as they grow older to maximize their positive affect and minimize their negative affect. Given the affective consequences of close relationships with significant others, older adults were more likely to regret their loss of or failure to sustain significant social network in their earlier days.

5.4.6. Significant Correlates of Personal Death Anxiety

Contrary to the findings of Fortner, Neimeyer, and Rybarczyk (2000), physical frailty was found to be unrelated to personal death anxiety in the present survey study. Perhaps owing to their relatively better health (in comparison to hospital inpatients), older adult British Christians with more deteriorated physical functioning did not express greater personal death anxiety than their healthier counterparts.

One obvious reason for the lack of association between social readjustment and personal death anxiety is that most of the major life events examined did not occur in the last six months (cf. Hilleras, Jorm, Herlitz, & Winblad, 2001).

Greater personal dying anxiety was significantly correlated with personal death anxiety. In other words, even for intrinsically religious people who believed in a more benign afterlife and who attained greater psychosocial maturity, the prospect of pain and loss of independence at the end of life could still trigger them into fearing their own demise. This may suggest that personal dying anxiety is a universal dread, regardless of whether one has a religious belief or not. Yet, personal dying anxiety did not explain an additional variance over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

Social desirability was re-assessed in the Time 2 survey using the Impression Management subscale. It was found that older adult British participants' self-favouring bias significantly interfered with their responses to death-related self-reports. This finding supports the application of proximal death defences when thoughts of death are in current focal consciousness, which was proposed by Terror Management Theory.

These proximal defences include overestimation of one's life expectancy and underestimation of one's vulnerability to diseases (Pyszczynski, Greenberg, & Solomon, 1999). Assuming that all older adult British Christians were made mortality salient by completing the Time 2 survey, those who scored high on impression management were more likely to report lower personal death anxiety to defend against the anxiety related to death, a subject they might not enjoy dwelling on. Yet, social desirability did not explain an additional variance over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism.

Subjective life expectancy was re-assessed in the Time 2 survey using the Life Line task. It was found that subjective life expectancy on Earth was unrelated to personal death anxiety. In other words, increased subjective proximity to personal death did not predict greater older adult's personal death anxiety. Probably because Christians believe in an eternal afterlife, their perceived years left to live on Earth are relatively brief, and thus, is not predictive of personal death anxiety.

Extrinsic religiosity was found to be unrelated to personal death anxiety. This demonstrated that when religion is not integrated into one's life, religion can only provide a partial buffer against personal death anxiety. In other words, certain religious orientations may have little or no bearing on lowering their level of personal death anxiety. When religion is not internalized, literal beliefs about a pleasant afterlife, though superficially acquired, may be questioned (Spilka, Stout, Minton, Sizemore, 1977). This is in line with the prediction of Terror Management Theory that embracing a comforting cultural worldview helps an individual to manage their personal death anxiety.

Perceived attraction to death was negatively related to personal death anxiety. This is consistent with Comprehensive Model of Death Anxiety (Tomer & Eliason, 1996; 2000a) that death meaningfulness is one major determinant of death anxiety. When people see death as an attractive state of 'mystical unity with a universal entity that provides protection and strength' (cf. Orbach et al., 1991, p. 399), such perceived meaningfulness of death is likely to reduce their personal death anxiety. Yet, perceived attraction to death did not explain an additional variance over and above what was accounted for by intrinsic religiosity, afterlife beliefs, psychosocial maturity, neuroticism and mortality acceptance.

Mortality acceptance was found to be a significant additional predictor of personal death anxiety, over and above intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism. According to the five-stage Model of Death and Dying

(Kubler-Ross, 1969), dying people will eventually recognize that denial as a defence against death anxiety cannot continue. The power of religion in buffering personal death anxiety in early and mid-life are likely to become less effective in managing older adults' fear of death as the reality of one's impending death is readily apparent. In addition to develop psychosocial maturity, people still need to come to some form of death acceptance in order to overcome their personal death anxiety. It is speculated that being able to accept the inevitability of death helps people let go of their earthly engagement and make preparation for death, which is related to lower personal death anxiety. The negative relationship between mortality acceptance and personal death anxiety also mirrors the role of honest mortality acknowledgement on decreasing the fear of death among near-death experience survivors (Martin et al., 2004). It also corroborates the finding that an acceptance of its finality or a lack of death anxiety was more pronounced among religious older adults (Swenson, 1961).

5.4.7.   Personal Death Anxiety

Exploratory factor analysis output of personal death anxiety in the Time 2 survey revealed two components, which supported the multidimensional model of fears that older adults attribute to death (cf. Mikulincer & Florian, 2008). These two factors are fear of earthly disengagement and fear of transcendental consequences. Fear of earthly disengagement consists of concerns over the consequences of personal death on self, goal pursuit, and social world. It is about difficulty in letting loose of one's established foothold and precious social ties, both of which have sustained oneself through the trajectory of life this far. This first factor corresponds to Mikulincer and Florian's (2008) intrapersonal and interpersonal facets of their Tri-dimensional Model of Fear of Personal Death. Their intrapersonal and interpersonal dimensions of personal death anxiety represent people's fear toward death as a threat to self fulfilment and a disruption to one's interpersonal relationships.

Fear of transcendental consequences refers to the fear of the unknown of the hereafter and the moment of death. This second factor parallels Mikulincer and Florian's (2008) transpersonal facet of their Tri-dimensional Model of Fear of Personal Death, which represents people's worries towards the idea of an unknown spiritual future. Fear of transcendental consequences may be a distinctive component of personal death anxiety for people with an afterlife belief that may or may not be religiously based. If one dimension of personal death anxiety is made up of fear of transcendental consequences, should one then expect that people who disbelieve in an afterlife will experience less personal death anxiety than those who do believe? For example, Florian and Mikulincer (2004) found that religious beliefs tended to arouse greater fear

related to punishment in the hereafter in religious students than non-religious students. On the one hand, people without an afterlife belief are free from fear of damnation in the hereafter. On the other hand, without an afterlife, the present life on Earth appears to be short and fragile. The belief that one will have nothing left after death and that life will go on without oneself is unthinkable, making it hard for people who disbelieve in an afterlife to let go of their attachment to earthly life. In addition, the pain arising from separation from life and earthly possession as well as loss of their social identity may greatly arouse their fear of earthly disengagement. Hence, it is still unclear if people with and without an afterlife belief will differ significantly in their levels of personal death anxiety.

5.5. Conclusions

The findings of this major cross-sectional survey study supported the efficacy of afterlife beliefs and psychosocial maturity as religious pathways to coping with personal death anxiety in an increasingly secular society. Neuroticism was a significant confounding mediator of the negative relationship between intrinsic religiosity and personal death anxiety, over and above afterlife beliefs and psychosocial maturity. Religious management of regret was unable to predict lower personal death anxiety. In other words, intrinsic religiosity was found to predict lower personal death anxiety by: (a) offering reassurance that death is not the end of life; (b) enhancing psychosocial maturity to restore existential significance to life; and (c) fostering emotional stability. Finally, mortality acceptance was a significant additional predictor of personal death anxiety, over and above these three aforementioned religious pathways.

Chapter 6:   Exploratory Chinese Buddhist Pilot Interview Study

In this chapter, I will explain the aims of the exploratory cross-sectional Chinese Buddhist pilot interview study. Then, I will describe the method. After that, I will present and discuss the corresponding results.

6.1. Objectives

The aim of this pilot interview study was threefold: (a) to decide if I had sufficient time and resources to construct a Buddhist coping scale; (b) to check the applicability of a self-constructed Buddhist coping scale and the Chinese version of death and dying measures; and (c) to prepare for the subsequent cross-sectional survey study (see Chapter 7).

6.2. Method

6.2.1.   Participants

Between August and September 2007, three Hong Kong Chinese older adult Buddhists aged 60 or above were recruited with the help of a person-in-charge of a Buddhist centre in Hong Kong. All of them were official Buddhists. This is indicated by the fact that they had taken a special Buddhist ceremony (i.e. Taking the Three Refuges) confirming their religious faith, which was similar to Christian confirmation in the UK. All of them were retired. Two of them were males and one female. The female participant was illiterate.

6.2.2.   Materials

It should be noted that all Western imported measures were first translated into Chinese by me and then were back translated into English by two bilinguals to compensate for their differing levels of English fluency. All materials used were presented in Chinese. Internal reliability coefficients could not be properly calculated because of the very small sample size ($N = 3$). In addition, due to my interruptions to ask for comments on the clarity and length of the scales as well as participant illiteracy, these participants were unable to complete all scales.

6.2.2.1. Personal Death Anxiety

Personal death anxiety is defined as a negative emotion arising from the awareness of one's prospective total non-existence (Cicirelli, 2006a). Participants' personal death anxiety was measured by the 6-item Your Own Death subscale (Lester, 1994). This scale was chosen because its wordings were much simpler for my older adult Chinese Buddhists, most of which had not received formal education. The responses for participants' perceived personal death anxiety were rated on a 7-point Likert scale, ranging from 0 (*not disturbed*) to 6 (*very disturbed*).

6.2.2.2. Buddhist Coping with Regrets

Buddhist coping with regrets describes how people adapt to and understand their regrets through Buddhism. This section was self-constructed and was only completed by participants who reported having one major past regret.

To my knowledge, there is no existing Buddhist coping measurement. Hence, it was essential to construct one with reference to a classic theistic religious coping scale, RCOPE (Pargament, Koenig, & Perez, 2000), and supplementary Buddhist information booklets. A 68-item Buddhist coping measure was constructed based on 46 items modified from the RCOPE scale and the content of several Buddhist information materials. These Buddhist information materials were freely distributed from Buddhist centres in Hong Kong and Taiwan. Participants' frequency of applying each strategy to cope with their major life regret was rated on a 6-point Likert scale, ranging from 0 (*never*) to 5 (*often*).

I extracted and modified 46 items from Pargament et al.'s (2000) RCOPE for three reasons. First, because RCOPE is a theistic religious coping scale and Buddhism is not a theistic religion, any reference to God had to be changed to Buddha or Bodhisattva, who were considered as enlightened teachers by Buddhists. Second, Buddhists do not appraise adversity as being punished by God or an act of a devil, rather they see it as the product of unwholesome karma. Third, some wordings of the original RCOPE scale were changed to make it regret-specific. For example, the term 'situation' or 'problem' were changed to 'this biggest regret'.

The remaining 22 items were constructed with reference to supplementary Buddhist information booklets to tap three under-explored Buddhist-specific coping, namely, merit making, meditation, and Buddhist observance such as chanting sutras. Merit making describes people's efforts to do something wholesome for other people and/or

the environment to cultivate more wholesome karma and reduce the effect of unwholesome karma.

6.2.2.3. Negative Emotional Regret Appraisal

Negative emotional regret appraisal refers to the range of negative emotions people feel towards their regret. A total of 15 items were used to measure participants' feelings of anger, sorrow and nostalgia related to their identified major life regret. They were extracted from several prior studies on regrets (Gilovich, & Medvec, 1998; Jokisarri, 2003; Lecci, Okun, & Karoly, 1994; Wrosch & Heckhausen, 2002). Each of them was rated on a 5-point Likert scale, ranging from 1 (*none*) to 5 (*a great deal*). These items were adopted based on my pilot interviews with older adult British Christians (see section 4.2.2.3).

6.2.2.4. Correlates of Personal Death Anxiety: Personal Dying Anxiety

Personal dying anxiety is defined as a negative emotional reaction concerning one's dying process. Participants' personal dying anxiety was measured by the 8-item Your Own Dying subscale (Lester, 1994). This scale was chosen because its wordings were much simpler for my older adult Chinese Buddhists, most of which had not received formal education. The responses for participants' perceived personal dying anxiety were rated on a 7-point Likert scale, ranging from 0 (*not disturbed*) to 6 (*very disturbed*).

6.2.2.5. Additional Topics of Interest (1): Regret Profile and Conceptualization of Regret

This section largely resembles the regret profile materials in Chapter 4 (see section 4.2.2.9 and Appendix A), except that the participants were not given the Reminiscence Functions Scale. It was only completed by participants who reported having one major past regret. Participants were asked to identify and to briefly describe one of their major life regrets, and then classify them into one or more of the following categories (see Jokisarri, 2003): (a) education/academic, (a) family, marriage/intimate relationships, (c) work/occupational, (d) friendships, (e) leisure, hobbies, (f) personal, self-improvement, (g) relatives, (h) health and self-care, (i) wealth/financial, (j) society, community, (k) others, (l) something you did but you wish you hadn't, and (m) something you did not do but wish you had.

After that, they were asked to evaluate the significance and changeableness of their identified regret on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). These items were adopted based on my pilot interviews with older adult British Christians (see section 4.2.2.9).

Participants who reported having one major past regret were asked to express their Buddhist conception of regret and to comment on my suggested regret classification system that was based on life domains. This is because, according to the Law of Causality,[5] human sufferings are a result of past unwholesome karma in Buddhism. Hence, it would be interesting to explore how Buddhists conceptualize and understand regret.

6.2.2.6. Additional Topics of Interest (2): Difficulties in Applying Buddhist Coping in Daily Life

Besides one's orientation system (Pargament, 1997), other factors that prevent people from using religious coping had been under-explored. Hence, a self-constructed question was used to ask participants to identify any difficulties in applying Buddhist coping in daily life.

6.2.3. Procedure

All participants were interviewed in the office located on the same floor next to a Buddhist centre. Two participants were interviewed twice because I asked for their help on improving the self-constructed Buddhist coping scale. During the interviews, all participants were requested to comment on the applicability of the scales presented to them. Each interview lasted for about one hour, but one went on to two hours because one male participant agreed to spend more time with me to help improve my self-constructed Buddhist coping scale.

6.3. Results and Discussion

6.3.1. Lack of Personal Death and Dying Anxieties

Only one participant completed both the personal death and dying anxiety measures and he did not report any difficulties in answering the questions. All three participants said they were neither afraid of death nor dying. The female participant reasoned that she was contented with her life and believed that she would die in her bed (or in sleep

which signifies a good death). She also believed that people close to her would not grieve because she died in old age (i.e. natural or legitimate death). One male participant said he did not fear death because Buddhist teachings enabled him to transcend his death fears. The other male participant did not explain why he had no mortality fears.

6.3.2. Buddhist Coping with Regret

Only one participant explicitly stated that he regretted getting married. Since this participant found many modified Pargament et al.'s (2000) RCOPE items inapplicable, he selectively answered those items he found suitable. In general, he often relied on Buddhist teachings to make sense of and to stop dwelling on his major life regret. Besides, he often practised many Buddhist rituals (e.g., meditation, worship of Buddha and/or Bodhisattva either at home or in the Buddhist temples) and made merits to improve his future. Interestingly, he did not seek advice from Buddhist monks or abbots. The other male participant did not explicitly reveal his major life regret because he thought regret was not clearly defined in my measures.

6.3.3. Low Levels of Negative Emotional Regret Appraisal

The male participants who regretted getting married had no negative emotions towards his major life regret. He reasoned that he understood why he suffered from this regret after he started to affiliate with Buddhism. In addition, he said that once the affected person truly understood the root of his/her unwholesome karma, he or she would no longer resent the negative consequences of regret.

6.3.4. Additional Analyses

6.3.4.1. Regret Profile and Conceptualization of Regret

The female participant reported having no regret in her life. One male participant regretted getting married because marriage had made he become more attached to earthly life (i.e. he could not be liberated from the suffering of separation). Yet, this male participant commented that the word "regret" might not be suitable to Buddhists for he considered "regret" to be sufferings, both physical and mental, brought about by unwholesome karma. The second male participant, when asked, defined regret as moral actions one did not take that resulted in severe consequences for others.

Moreover, the two male participants disagreed with my regret classification system based on life domains. One categorized regret according to the lasting severity of negative consequences, namely, short-term (i.e. only this life is affected) and long-term (i.e. many successive lives are affected). The other participant classified regret based on two dichotomous dimensions. The first dimension refers to two mutually exclusive views, which is 'one knew one should take action but did not' versus 'one knew and took actions'. The second dimension also concerns two mutually exclusive views, which is 'other people knew one had lingering hard feelings about the regret' versus 'other people did not know that one continued to lament over the regret'.

Furthermore, the two male participants had different opinions regarding the causes of regret. One said not abiding by the Five Precepts (i.e., do not kill, do not steal, do not lust, do not make inappropriate speech, and do not take intoxicant) led to regret. The other thought that not taking moral actions to warn others about the possible severe consequences when one should resulted in regret.

6.3.4.2. Difficulties in Applying Buddhism in Daily Life

One male participant thought that a restless mind, external disturbances such as noise and the visits of friends, and bad karmic interferences precluded one from chanting and reading sutras mindfully. The other male participant remarked that any one of the eight crises (i.e. deafness, physical disability, blindness, muteness, being born in a time when no one knows Buddha, being born after the death of Buddha, not believing in Buddhist teaching, the fact that one never meets a sage) hindered one's effort to apply Buddhist coping. The female participant did not mention any difficulties in practising Buddhism. She only said that she just simply followed what she was taught about performing her religious duties.

6.3.5.   Directions for the Cross-Sectional Survey Study

I must confess that this pilot interview was conducted in an impromptu way. This is because I was seriously struggling with the scope of my exploratory survey study inquiry and with the scale construction I could handle at that time. I expressed my concerns and worries to the person-in-charge of the Buddhist centre, and he agreed to advise me on constructing a Buddhist reincarnation scale and to help me find available Buddhist laity (i.e. more knowledgeable Buddhists) to comment on the self-constructed Buddhist coping scale (see section 7.2.2.2) in the subsequent survey study. Hence, I decided to conduct a cross-sectional survey study to explore the efficacy of Buddhist

reincarnation beliefs and Buddhist management of regret on lowering older adults' personal death anxiety.

In the three interviews, I found that not all participants conceptualized regret as a product of unwholesome karma. For example, one participant defined regret as failure to act according to one's moral principles. Hence, I decided to ask the participants in the cross-sectional survey study to identify one most regretful event and explain why it had happened to them to learn more about older adult Chinese Buddhists' attribution of the causes of their regret. Since the current regret classification based on life domain was unsatisfactory, it was discontinued for use in the subsequent cross-sectional survey study.

The male participant who was willing to help me improve the self-constructed Buddhist coping scale suggested that I incorporated four additional Buddhist coping strategies to deal with regrets. These four Buddhist coping strategies relate to charitable acts, making genuine repentance (i.e. vow that one will never commit the same unwholesome act again), cultivating acceptance or tolerance (e.g., not to harbour resentment towards people who wronged oneself, accept the fact that suffering is part of one's earthly life) and abiding by the Five Precepts (i.e., do not kill, do not steal, do not lust, do not make inappropriate speech, and do not take intoxicant). Hence, the self-constructed Buddhist coping scale was revised to include these four additional areas in the cross-sectional survey study.

The small Chinese Buddhist sample I managed to recruit was mainly a result of my strict age criteria and study design. The Buddhist centre person-in-charge and one male participant told me that Hong Kong Chinese people aged 60 or above were rarely literate or if they were, they were seldom free to do an one hour interview outside their residence (I agreed with the latter especially because I noticed that those adults who came to this Buddhist centre were mostly retired or had very little family obligations). As a result, in order to increase the response rate in the cross-sectional postal survey study, I decided to reduce the lower limit of age criterion to 55 in the hope that I would be able to recruit more literate participants. I also decided to request the Buddhist centre people-in-charge or volunteers to help me identify any eligible interested parties and pass my survey to them.

6.4. Conclusions

The three older adult Chinese Buddhist interviewees in this study neither feared their personal death nor dying. Different participants had different conceptions of regret

and of its causes. The only participant who explicitly reported a regret did not harbour any negative emotions about his regret and frequently used self-discipline to cope with his regret. The self-constructed Buddhist coping scale was partially successful and needed further refinement to include four under-explored Buddhist coping strategies. Poor concentration, external disturbances and unfavourable living and physical health conditions were identified as obstacles to apply Buddhism in daily life. A cross-sectional survey study was commissioned with the promise of help from some Buddhist laity on scale construction. Age requirement for participating in the subsequent survey study was lowered to increase response rate.

Chapter 7:   Exploratory Chinese Buddhist Survey Study

In this chapter, I will explain the aims of the exploratory cross-sectional Chinese Buddhist survey study. Then, I will describe the method. Next, I will present the results and finally, discuss the corresponding results.

7.1. Objectives

This cross-sectional survey study was intended to validate two self-constructed measurement scales, namely, of Buddhist reincarnation belief and Buddhist coping with regret. It also aimed to examine the efficacy of Buddhist reincarnation belief and Buddhist coping with regret on lowering personal death anxiety among older adult Chinese Buddhists.

7.2. Method

It should be noted that all Western imported measures (negative emotional regret appraisal, personal death and dying anxieties, subjective life expectancy and self acceptance) had been translated into Chinese for use in my Chinese Buddhist sample. These scales were first translated into Chinese by me and then were back translated into English by two bilinguals to compensate for their differing levels of English fluency. All materials used were presented in the Chinese language.

7.2.1. Participants

A Chinese Buddhist was eligible to take part in this exploratory Buddhist survey study only if he or she: (a) was age over 54, (b) had taken the Three Refuges, and (c) was able to read and write Chinese. Taking the Three Refuges is an official Buddhist confirmation ceremony. Because Chinese people usually incorporate Confucian philosophy, Taoist teaching and their own needs in understanding Buddhist teaching (Lin, 2003), attendance at such ceremony is essential to distinguish a Buddhist from other religious followers.

Three hundred and eleven surveys were distributed to prospective eligible participants via personal referral from Buddhist laity and volunteers from 13 Buddhists centres, and a secretary of an academic Buddhist study division of a university. The geographic

locations of the 13 Buddhist centres and the university were well dispersed across Hong Kong.

One hundred and fifty-seven participants responded to my invitation. Among them, 16 participants were further discarded for the following reasons: (a) three of them were under age 55; (b) three of them did not indicate their age; (c) four of them had not yet taken the Three Refuges; (d) two of them returned blank surveys; (e) two of them were unable to take part due to physical illness; and (f) two of them did not give consent to the use of their data. Hence, there were 141 eligible participants remaining and their demographic characteristics are displayed in Table 11.

Table 11

Demographic Characteristics of the 141 Eligible Chinese Buddhists

Variable	Response categories	*N*	(%)
Age group	Between 55 and 59	73	(51.8)
	Between 60 and 64	33	(23.4)
	Between 65 and 69	20	(14.2)
	Between 70 and 70	12	(8.5)
	80 or above	3	(2.1)
Gender	Male	44	(31.2)
	Female	96	(68.1)
	Undisclosed	1	(0.7)
Marital status	Single	15	(10.6)
	Married	88	(62.4)
	Divorced	13	(9.2)
	Widowed or separated	25	(17.7)
Disciplinarian of the Five Precepts	Yes	116	(82.3)
	No	24	(17)
	Undisclosed	1	(0.7)
Employment status	Employed	39	(27.7)
	Retired	80	(56.7)
	Others	19	(13.5)
	Undisclosed	3	(2.1)
Living arrangements	Alone	18	(12.8)
	With family members	119	(84.4)
	Others	3	(2.1)
	Undisclosed	1	(0.7)

7.2.2. Materials

7.2.2.1. Buddhist Reincarnation Beliefs

Perhaps due to theoretical paucity, little empirical work had been done to examine and measure (Buddhist) reincarnation belief. The only three studies that did did not tap the Buddhist reincarnation concept accurately. It should be noted that these three publications were conducted on undergraduate samples. The earliest published study that dealt with belief in reincarnation measurement was done by Hui, Chan and Chan (1989). A close examination of their Buddhist and Taoist Belief About Death subscale items revealed that this subscale was more applicable for Taoists but had low face validity to measure Buddhist reincarnation belief. This is because some of its items referred to achieving longevity and becoming a god-like eternal spirit which represent the ultimate goals for Taoists but not for Buddhists. The second study was carried out by Alprin and Lester (1995). Their three-item belief in reincarnation measure is simple: a feeling that one has past lives, 'a belief that people in their present lives had connections with their past lives' and 'experiences of déjà vu' (p. 1018). However, Buddhists place more emphasis on the next than past incarnations as well as the cessation of reincarnation. Hence, this scale is insufficient to reflect Buddhist reincarnation belief. The third study was done by Burris and Bailey (2009). Their Reincarnation subscale is perhaps an extension of Alprin and Lester's (1995) to include the possibility of reincarnation into a different body. Yet, in Buddhist reincarnation, a being does not necessarily have a body, for example god and hungry ghosts. Hence, this scale is incomplete. Because these three available reincarnation scales do not reflect the Buddhist reincarnation concept accurately, it is necessary to develop one that does and examine its relation to personal death anxiety.

With reference to Buddhist information booklets and after consultation with one instructor of a Buddhist centre, eight items were self-constructed to measure Buddhists' beliefs in reincarnation on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). These eight items were subjected to a principal components factor analysis with Varimax rotation. Results revealed one factor with eigen value greater than one. Hence, a one-factor solution was chosen for this Buddhist reincarnation beliefs domain. This scale measures one's strength of belief in karma as the determinant of one's next rebirth, reincarnation as imprisonment, and the possibility to transcend reincarnation. A high score represents strong endorsement of Buddhist reincarnation beliefs. The Cronbach's alpha was .82.

7.2.2.2. Buddhist Coping with Regrets

Buddhist coping with regrets describes how people adapt to and understand their regrets through Buddhism. This section was self-constructed and was only completed by participants who reported having one most regretful event.

A 41-item Buddhist coping measure was constructed by refining the earlier version of my self-constructed Buddhist coping scale that appeared in my pilot interview study (see section 6.2.2.2). Specifically, I retained 17 modified items from Pargament et al.'s (2000) RCOPE based on the feedback from the male pilot interviewee who indicated to me which RCOPE items were applicable for use in a Buddhist sample.

The remaining 24 refined items were constructed based on several free Buddhist teaching materials and consultation with four Buddhist laity (two of them were instructors in Buddhist centres) to tap into the under-explored aspects of Buddhist coping such as Buddhist observance, the application of merit making and abiding by the Five Precepts. Helpful feedback from the male pilot interviewee was also incorporated in revising these 24 items (see section 6.3.5).

Participants' frequency of applying each strategy to cope with their most regretful event was rated on a 5-point Likert scale, ranging from 0 (*never*) to 4 (*often*). These 41 items were subject to a principal components factor analysis with Varimax rotation. A scree plot revealed a flattening of the curve above the first three factors. Thus, a three-factor solution appeared to be most parsimonious and readily interpretable, accounting for a total of 53.59% of the total variance. The factor labels and loadings greater than .3 of these 41 items are presented in Table 12. The factors were conceptually identified as: (a) Self-directing coping (22.02% of the variance), (b) Deferring coping (21.54% of the variance), and (c) Transpersonal faith-based coping (10.03% of the total variance). One item "When dealing with this biggest regret, I ignored the advice that was inconsistent with Buddhism" was discarded because it had a factor loading lower than .3 on the three factors.

Table 12

Factors and Factor Loadings greater than .3 of the Self-constructed Buddhist Coping Scale (n = 71)

Item		Self-Directing	Deferring	Transpersonal Faith-Based
34	I tried to uphold the Precept of no lying to deal with this biggest regret.	.93	-	-
33	I tried to uphold the Precept of no sexual misconduct to deal with this biggest regret.	.90	-	-
37	I tried to be diligent in discarding evil thoughts and actions that have already arisen to deal with this biggest regret.	.89	-	-
32	I tried to uphold the Precept of no stealing to deal with this biggest regret.	.89	-	-
31	I tried to uphold the Precept of no killing to deal with this biggest regret.	.84	-	-
35	I tried to uphold the Precept of no taking of intoxicants to deal with this biggest regret.	.81	-	-
38	I tried to be diligent in fostering undeveloped good thoughts and actions to deal with this biggest regret.	.80	-	-
36	When dealing with this biggest regret, I tried to tolerate physical and verbal abuse directed at me.	.66	-	-
41	When dealing with this biggest regret, I tried to dedicate the resulting merits that I got from my virtuous deeds to specific others or all sentient beings.	.58	.51	-
30	When dealing with this biggest regret, I tried to impart my knowledge about Buddhism to others.	.57	.36	.39
40	When dealing with this biggest regret, I tried to do meritorious deeds to reduce my bad karma.	.55	.42	-
24	When dealing with this biggest regret, I meditated to calm my mind.	.50	-	-
26	When dealing with this biggest regret, I joined the conferences or study groups held by Sangha or laity to find ways to improve its impact on me.	.39	.31	-
8	I made decisions about what to do to deal with this biggest regret without Buddha's or Bodhisattva's help.	.35	-	-
22	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would reduce my bad karma.	-	.84	-
21	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would relieve my sufferings.	-	.83	-
4	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would relieve my worries.	-	.79	-

7	When dealing with this biggest regret, I pleaded with Buddha or Bodhisattva to make things turn out okay.	-	.78	-
29	When dealing with this biggest regret, I chanted "Namo Amitabha" or other Buddhas' or Bodhisattvas' names.	.31	.76	-
20	When dealing with this biggest regret, I recited Buddhist Sutras and Mantras.	-	.75	-
5	When dealing with this biggest regret, I did what I could and put the rest in Buddha's or Bodhisattva's hands.	-	.72	-
27	When dealing with this biggest regret, I worshipped and made offerings to Buddha or Bodhisattva at home.	.30	.65	-
11	When dealing with this biggest regret, I looked for a stronger connection with Buddha or Bodhisattvas.	-	.61	-
14	When dealing with this biggest regret, I sought support from Buddhists.	-	.59	
6	When dealing with this biggest regret, I did not do much, just expected Buddha or Bodhisattva to solve my problems for me.	-	.58	-.34
39	I wholeheartedly repented and reformed my bad deeds (bad karma) in front of Buddha or Bodhisattvas.	.45	.52	.33
2	When dealing with this biggest regret, I believed I was affected by the bad deeds I made in my past lives (bad karmic effect).	.33	.52	-
28	When dealing with this biggest regret, I worshipped and made offerings to Buddha or Bodhisattva at Buddhist centres or temples.	.41	.50	-
1	When dealing with this biggest regret, I tried to use Buddha Dharma to make me stronger.	.37	.46	.43
9	I looked to Buddha Dharma for strength, support, and guidance to deal with this biggest regret.	-	.45	.45
10	When dealing with this biggest regret, I focused on studying Buddhism to stop worrying about it.	-	.42	.30
19	I seek advice from Sangha to deal with this biggest regret.	-	.40	-
13	When dealing with this biggest regret, I ignored advice that was inconsistent with Buddhism.	-	-	-
18	When dealing with this biggest regret, I used Buddha Dharma to help me get rid of my greed, anger, and ignorance.	-	-	.70
16	When dealing with this biggest regret, I discovered new life purpose through Buddha's teachings.	.43	-	.69
23	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would improve my fortune.[a]	-	-.39	.63

17	When dealing with this biggest regret, I tried to find a completely new life through Buddhism.	.32	-	.51
3	When dealing with this biggest regret, I doubted Buddha's teachings.[a]	-	-	.47
15	When dealing with this biggest regret, I disagreed with Buddha's teachings.[a]	-	-	.45
12	When dealing with this biggest regret, I wondered whether Buddha or Bodhisattvas had abandoned me.[a]	-	-	.44
25	When dealing with this biggest regret, I read books and used audio-visual materials about Buddhism to help my cultivation.	.31	-	.39

[a]Reverse item.

The self-directing Buddhist coping refers to the coping strategies characterized by self-reliance and upholding the Five Precepts to deal with regret. There are 14 items measuring self-directing coping. The Cronbach's alpha was .92.

The deferring Buddhist coping refers to passivity in regret resolution and reliance on enlightened masters (i.e. Buddha or Bodhisattvas), their doctrines or spiritual teachers (i.e. Sanghas) to deal with regret. There are 18 items measuring deferring coping. The Cronbach's alpha was .92.

The transpersonal faith-based Buddhist coping refers to the use of strategies that enable one to sustain faith in Buddhism and to foster right mindfulness of life purpose. There are eight items measuring transpersonal faith-based coping. Four items had negative factor loadings and were reversely scored. A high score represents more frequent use of the corresponding Buddhist coping.

7.2.2.3. Negative Emotional Regret Appraisal

Negative emotional regret appraisal refers to the range of negative emotions people feel towards their regret. This section was only completed by participants who reported having one most regretful event. Participants' negative emotional regret appraisal was measured by two dimensions, namely 'hot' emotions and despair-related emotions. The amount of perceived wishful emotions was not measured in this exploratory survey study due to problematic Chinese translations of the range of wishful emotions during the survey design phrase, and thus was excluded from this survey study.

'Hot' emotions refer to feelings of anger and shame. Three items were extracted from two prior studies on regret appraisal (Jokisarri, 2003; Wrosch & Heckhausen, 2002) to measure participant's intensity of 'hot' emotions towards the regret. Each item was rated on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). The Cronbach's alpha was .84.

Despair-related emotions refer to feelings of sorrow and helplessness. Three items were extracted from various prior studies on regret appraisal (Gilovich & Medvec, 1998; Jokisarri, 2003; Lecci, Okun, & Karoly, 1994; Wrosch & Heckhausen, 2002) to measure participant's intensity of despair-related emotions towards the regret. Each item was rated on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). The Cronbach's alpha was .79.

These six items either had been successfully administered in my major British Christian survey study (see section 5.2.2.6) or had been reviewed by a participant in the pilot interview study (see section 6.2.2.3). A high score indicates that the participants evaluate the corresponding negative regret appraisal dimension more intensely.

7.2.2.4. Personal Death Anxiety and its Correlates (1): Personal Dying Anxiety

Personal death anxiety is defined as a negative emotion arising from the awareness of one's prospective total non-existence (Cicirelli, 2006a). Personal dying anxiety is defined as a negative emotional reaction concerning one's dying process.

Participants' perceived personal death and dying anxiety was measured by the 15-item Chinese Death Anxiety Scale (Wu, Tang, & Kwok, 2002) on an 'Agree/Disagree' basis. Actually, the Chinese Death Anxiety Scale is the Chinese version of the Templer Death Anxiety Scale (Templer, 1970) which was designed to measure people's fear towards a wide range of death and dying experiences. There are six reverse items in the Chinese Death Anxiety Scale, and each of them was reversely scored. This scale was chosen because it had been validated in a Hong Kong Chinese elderly sample (Wu et al., 2002).

Seven additional items were extracted from two major multidimensional death anxiety scales (Abdel-Khalek, 2002; Florian & Kravetz, 1983), which were developed from theistic samples who believed in an afterlife, to encompass aspects of personal death and dying anxieties not sufficiently tapped by the Chinese Death Anxiety Scale. The first aspect relates to the consequences of personal death on self fulfilment. One item

was extracted from the Fear of Losing Worldly Involvements subscale (Abdel-Khalek, 2002).

The second aspect relates to the consequences of personal death on one's close social network. Two modified items were extracted from the Consequences to Family and Friends subscale (Florian & Kravetz, 1983) and two items were extracted from the Parting from Loved Ones subscale (Abdel-Khalek, 2002). Modifications were made to clarify the statement, such as changing "worry about one's offspring" to "worry about the consequence of my death to my offspring". Statement refinement also helped improve understanding, such as extending "relatives will not overcome sorrow" to "relatives and friends will not overcome sorrow after I die".

The third aspect relates to Buddhist death conceptions such as karma and reincarnation. Two items extracted from the Religious Transgression and Failure subscale (Abdel-Khalek, 2002) were modified, because: (a) the phrase 'lack of faith' in one item was unclear and was revised to 'lack of faith in Buddhism'; (b) the term 'sin' in another item was changed to 'unwholesome deeds (unwholesome karma)' to make it applicable to a Buddhist sample.

Given the dichotomous response of this domain, these 22 items were subjected to hierarchical cluster analysis to explore its factor structure (see Figure 6). Dendrogram revealed two clusters, namely, personal death anxiety and personal dying anxiety. The Cronbach's alpha was .72 for the 17-item personal death anxiety and was .66 for the 5-item personal dying anxiety. A high score represents high personal death or dying anxiety.
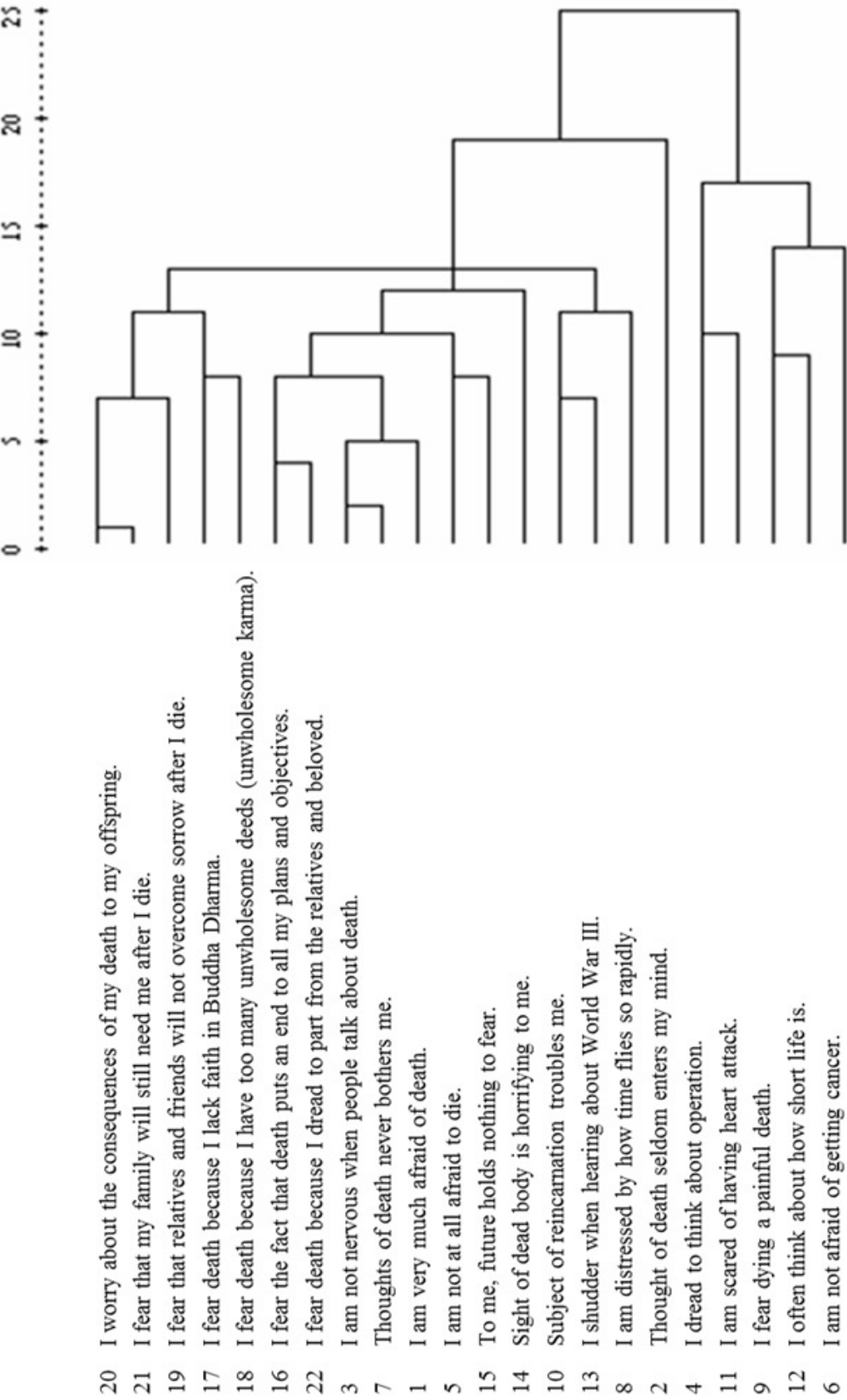
Figure 6. Dendrogram for the 22 personal death and dying anxiety items in the exploratory cross-sectional Chinese Buddhist survey study (N = 141).

7.2.2.5. Correlates of Personal Death Anxiety (2): Subjective Life Expectancy

Subjective life expectancy is an individual's estimates of how long he/she is going to live. It was measured to examine if it was a significant correlate of personal death anxiety. Participants' subjective life expectancy was measured by the modified Life Line Task (Lomranz, Shmotkin, Zechovoy, & Rosenberg, 1985). Participants were asked to indicate where they believed they were now on a 15-cm "your present life" line. The word 'present' was deliberately added to the line label because Buddhists believe that one can have more than one life. This scale was chosen because it had been successfully administered in my major British Christian survey study (see section 5.2.2.11).

The distance between 'Death' and the point where the participants believed they were now was divided by 15 and then multiplied by 100 to compute a percentage score for participants' subjective life expectancy. A high score represents a long subjective life expectancy.

7.2.2.6. Correlates of Personal Death Anxiety (3): Traditional Chinese Death Beliefs

Traditional Chinese death beliefs are Chinese views about what constitutes a bad death. They also describe superstitions about undesirable consequences being brought by reference to a death-related subject. Chinese normally incorporate different Eastern religions and Confucianism into their faith (cf. Lin, 2003) and older people may hold some superstitious folklore beliefs about death before they choose to become a Buddhist. The Chinese Death Belief Scale (Ho, Nu, Chow, Chan, Tang, Tin, et al., 2007) was used to examine the relationship between traditional Chinese death-related beliefs and personal death anxiety on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A high score represents strong endorsement of traditional Chinese death beliefs. The Cronbach's alpha was .76. This scale was chosen because it was the only scale that had been validated among Hong Kong Chinese across different age groups by its authors.

7.2.2.7. Additional Topics of Interest (1): Regret Profile

Dummy warm-up task: Reminiscence. A reminiscence task was self-constructed to facilitate identification of a past regret by the participants. An old Hong Kong photo was shown to the participants and they were asked to indicate if they could recognize

it. If they could, they were asked to briefly describe any memories associated with this old Hong Kong photo.

Regret description. This section has been self-constructed to understand how older adults incorporate life regrets into their lives. For example, what is it that older adult Chinese Buddhists have regrets about?

Participants were asked to indicate if they had any events that did not turn out as they wished. If yes, they were asked to indicate if they had one event that they felt most regretful. If yes, they were asked to describe what had happened in that event and to explain why it had happened to them. Since feedback from my pilot interviews revealed various conceptions of regret, the question why that regret had happened to the participant was used to explore older adult Chinese Buddhists' attribution of the causes of regret thereby understanding their conception of regret.

For those participants who identified one single most regretful event, they were asked to evaluate the impact and changeableness of that regret on a 5-point Likert scale, ranging from 1 (*not at all*) to 5 (*a great deal*). Participants' perceived impact of the regret on their life was measured by one item and perceived changeableness of the regret was also measured by one item. Both items had been successfully administered in my major British Christian survey study (see section 5.2.2.20).

7.2.2.8. Additional Topics of Interest (2): Ease of Applying Buddhism in Daily Life

Besides one's orientation system (Pargament, 1997), other factors that prevent people from using religious coping had been under-explored. Hence, a self-constructed question was used to ask participants to evaluate how easy or difficult it was to apply Buddhist coping in daily life.

7.2.2.9. Additional Topics of Interest (3): Ways of Merit Making

Given that little is known about how Buddhists perform merits making, which represents one way to cope with negative life events, a self-constructed open-ended question was used to understand Buddhist merit-making practices.

7.2.2.10. Demographics

Singe-item questions were used to gather participants' demographic information related to their age group, gender, marital status, employment status, living arrangements, whether the participant had taken the Three Refuges, and whether the participant was a disciplinarian of the Five Precepts. An official Buddhist must take the Three Refuges, but is not required to abide by the Five Precepts. Those official Buddhists who are also disciplinarians of the Five Precepts are considered to be more serious and advanced Buddhists.

7.2.2.11. Mood Repair Measure

Wong's (1998) 6-item Self-acceptance subscale was used as a mood repair measure. This scale measures the extent to which participants accept what they could not change on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A high score on this scale was indicative of great acceptance towards irreversible past. The Cronbach's alpha was .70.

An English version of all the aforementioned materials with all corresponding item number retained is shown in Appendix F.

7.2.3. Procedure

From September to December 2008, 311 surveys with enclosed stamped return envelopes were sent to 13 Buddhist centres, one academic Buddhist studies division of a university and four Buddhist volunteers to distribute to eligible participants. Participants receiving a survey were allowed to complete the survey in their own time and to post it to me by the end of 2008. The deadline was deliberately scheduled before the Chinese New Year to prevent any discomfort participants and/or their close ones might experience while filling out the death-related questionnaires during the festive time. This is because Chinese people generally are reluctant or uneasy to talk about the topic of death (Lin, 2003) and some family members of the participants may regard the subject of death as taboo and may find my survey offensive.

7.2.4. Scoring

Due to missing data on some scales, mean score computation was used to score all scales with quantitative data (except subjective life expectancy). However, if a

participant had 50% or more missing data on a scale, then no mean score was computed for that person on that scale and a dummy "missing data" value would be assigned to represent his/her "mean score" for that scale.

7.3. Results

7.3.1. Data Analysis

The proposed religious management of regret as a religious pathway to coping with personal death anxiety was only tested on older adult Chinese Buddhists who reported one most regretful event (n = 71). In other words, this pathway was tested separately from the proposed afterlife beliefs as a religious pathway to coping with personal death anxiety.

7.3.1.1. Bivariate Correlations

Due to the exploratory nature of this Chinese Buddhist survey, bivarate correlations with pairwise case exclusion were used to examine the relationship between Buddhist reincarnation beliefs and personal death anxiety. Additional bivariate correlations with pairwise case exclusion were used to identify any significant correlates of personal death anxiety, which might predict an additional amount of variance over and above what was accounted for by Buddhist reincarnation beliefs.

Because the number of participants reporting one major regret was low (n = 71), bivariate correlations with pairwise case exclusion were also used to examine the proposed religious management of regret as a religious pathway to coping with personal death anxiety among older adult Chinese Buddhists.

Parametric assumptions. Skewness and kurtosis were used as measures of normality to determine the choice of correlational analysis. If the assumptions of normality were supported, then Pearson's correlation was used. If the assumptions of normality were violated, then Spearman's rho was used.

7.3.1.2. Independent t-Test or Mann-Whitney Test

Additional analyses were done to test for any difference in the levels of personal death anxiety between people who reported one most regretful event and those who did not.

<u>Parametric assumptions.</u> In addition to normal sampling distribution, an independent *t*-test requires homogeneity of variance. Skewness and kurtosis were used as measures of normality. Levene's test for equality of variances was used to test the assumption of homogeneity of variances. If the assumptions of normality and the homogeneity of variances were supported, then an independent *t*-test was used. If the assumptions of normality and/or of homogeneous variances were violated, then a Mann-Whitney test was used.

7.3.1.3. Content Analysis for Qualitative Data

The content analysis involved reading through the written texts several times to discover emerging themes. A theme represents a repetitive topic mentioned frequently by the participants and was labelled with a code. Next, the codes were sorted into broader domains based on their similarities.

7.3.2. Correlational Findings with Respect to the Proposed Afterlife Beliefs as a Religious Pathway to Coping with Personal Death Anxiety

It was hypothesized that Buddhist reincarnation beliefs would be a weak personal death anxiety buffer because reincarnation is not a source of solace to Buddhists.

7.3.2.1. Checking the Assumptions of Univariate Normality

The values of skewness and kurtosis for both Buddhist reincarnation beliefs and personal death anxiety were computed to check the assumptions of univariate normality. It was found that the value of kurtosis for personal death anxiety was greater than 2 (see Table 13). Hence, the assumption of univariate normality was violated and Spearman's rho was used. Table 13 shows the descriptive statistics and bivariate correlations among Buddhist reincarnation beliefs, subjective life expectancy, traditional Chinese death beliefs, personal dying anxiety and personal death anxiety.

Table 13

Descriptive Statistics and Bivariate Correlations among Buddhist Reincarnation Beliefs, Subjective Life Expectancy, Traditional Chinese Death Beliefs, Personal Dying Anxiety and Personal Death Anxiety (N = 141)

	1.	2.	3.	4.	5.
1. Buddhist reincarnation beliefs	-				
2. Subjective life expectancy	-.13	-			
3. Traditional Chinese death beliefs	-.23**	-.06	-		
4. Personal dying anxiety	.13	.07	-.01	-	
5. Personal death anxiety	.08	.02	.05	.45**	-
Mean	4.18	29.82	1.99	.60	.23
SD	.53	14.76	.43	.31	.17
Skewness	-.23	1.17	-.10	-.46	1.18
Kurtosis	-.32	3.41	.21	-.83	2.22

*p < .05; **p < .01

7.3.2.2. Exploring the Relationship between Buddhist Reincarnation Beliefs and Personal Death Anxiety

Buddhist reincarnation beliefs were found to be unrelated to personal death anxiety, r_s = .08, p > .05 (see Table 13). It was concluded that Buddhist reincarnation beliefs were unable to predict lower personal death anxiety. Yet such beliefs did not predict greater their personal death anxiety. Hence, there was no evidence to support the efficacy of afterlife beliefs as a religious pathway to coping with personal death anxiety in this cross-sectional Chinese Buddhist survey study.

7.3.2.3. Identifying Additional Correlates of Personal Death Anxiety

Subjective life expectancy, traditional Chinese death beliefs and personal dying anxiety were incorporated into the present study as potential significant additional correlates of personal death anxiety among older adult Chinese Buddhists.

Checking the assumptions of univariate normality. It was found that the values of kurtosis for subjective life expectancy and personal death anxiety exceeded the acceptable normality upper limit of 2 (see Table 13). Hence, the assumption of normality was violated.

Identifying significant correlates of personal death anxiety. Given the violation of normality assumption, Spearman's rho was computed to explore the relationship between subjective life expectancy, traditional Chinese death beliefs, personal dying

anxiety and personal death anxiety. It was found that subjective life expectancy and traditional Chinese death beliefs were unrelated to personal death anxiety, while higher levels of personal dying anxiety were associated with higher levels of personal death anxiety, $r_s = .45$, $p < .01$. Based on the preliminary correlation results, personal dying anxiety was the only significant correlate of personal death anxiety.

7.3.3. Correlational Findings with Respect to the Proposed Religious Management of Regret as a Religious Pathway to Coping with Personal Death Anxiety

It was hypothesized that more use of Buddhist coping (self-directing, deferring, and transpersonal faith-based) lowered personal death anxiety by mitigating the intensity of negative emotional regret appraisal. Seventy-four out of 141 eligible participants reported having one most regretful event. Among them, three reported more than one regrets. Since it was unclear which regret they coped with, their data on regret management were discarded. Hence, the following analyses with regard to the proposed efficacy of religious management of regret as a religious pathway to coping with personal death anxiety were done on the remaining 71 participants who identified one most regretful event. Due to the small number of participants reporting a major regret, this hypothesized religious pathway was explored using correlation.

7.3.3.1. Checking the Assumptions of Univariate Normality

The values of skewness and kurtosis were computed for the three Buddhist coping strategies, two negative emotional regret appraisals and personal death anxiety to test the assumptions of univariate normality. It was found that all values of skewness and kurtosis fell within the acceptable range and thus the assumption of univariate normality was supported (see Table 14) and Pearson's correlation was used. Table 14 depicts the descriptive statistics and bivariate correlations among Buddhist coping with regret, negative emotional regret appraisal and personal death anxiety.

Table 14

Descriptive Statistics and Bivariate Correlations among Buddhist Coping with regret, Negative Emotional Regret Appraisal and Personal Death Anxiety (n = 71)

	1.	2.	3.	4.	5.	6.
1. Self-directing coping	-					
2. Deferring coping	.38**	-				
3. Transpersonal faith-based coping	.29**	.16	-			
4. Despair emotions	-.15	.04	-.37**	-		
5. 'Hot' emotions	-.25*	-.03	-.40**	.68**	-	
6. Personal death anxiety	.13	.09	-.04	.22	.24*	-
Mean	2.35	2.06	3.07	.55	.55	.27
SD	.83	.75	.55	.59	.57	.19
Skewness	-.79	-.20	-.65	1.10	1.03	1.13
Kurtosis	.39	-.42	.19	.60	.57	1.73

*$p < .05$; ** $p < .01$

7.3.3.2. Exploring the Relationships among Variables

Pearson's correlation was computed to examine the relationship between Buddhist coping with regret, negative emotional regret appraisal and personal death anxiety. It was found that more frequent use of self-directing coping as well as transpersonal faith-based coping was associated with lower levels of 'hot' emotions. More use of transpersonal faith-based coping was also associated with fewer despair-related emotions. None of the three Buddhist coping strategies was related to personal death anxiety. Only more 'hot' emotions were significantly associated with greater personal death anxiety. Since the link between Buddhist coping with regret and personal death anxiety was non-significant, the proposed religious management of regret as a religious pathway to coping with personal death anxiety was not supported.

7.3.3.3. Additional Analyses

Regret profile. The majority of regrets reported (74.64%) related to family, marriage or intimate relationships. Under this category, most participants found divorce and the death of significant others most regretful. Several participants (5.63%) lamented over their financial problems such as loss of property and investment failure. Three participants (4.22%) preferred not to disclose their regret. Three participants (4.22%) regretted not affiliating with Buddhism sooner. Two participants (2.81%) identified a past vulnerable incident that threatened their personal safety as most regretful. Two participants (2.81%) described regrets about missed opportunity to receive education.

Each of the remaining four participants (1.40%) described a different regret. These regrets related to occupational choice, health, community, and irrational thinking.

On average, these 71 participants perceived their identified regret as having a slight impact on their life (*M* = 1.28, *SD* = .78) and thought that their identified regret was not at all changeable (*M* = .69, *SD* = .94).

The cause of regret. Eighteen participants (25.35%) thought that they had that most regretful event as a result of their cumulative karma or the Law of Causality. Seventeen participants (23.94%) reasoned that regret was an inherent aspect of their lives due to the impermanence of all phenomena. The remaining participants identified one or more reasons as the cause of their regrets, which can be classified into four domains: (a) ignorance or naivety in their youth that they were unaware of the consequences of poor decision-making; (b) fatalism; (c) external locus of control such as company managerial decision, infidelity of the other spouse and family's disapproval; and (d) deficit in personality such as being rebellious, egocentric, feeble or stubborn that they were incapable to handle the regretful incident.

Presence vs. absence of one most regretful event. According to the Comprehensive Model of Death Anxiety, failure to come to terms with one's regret was expected to increase one's personal death anxiety. Hence, it would be interesting to know if participants who had one most regretful event experienced more personal death anxiety than those who did not.

Given that personal death anxiety met the normality assumption and the assumption of homogeneity of variances, an independent sample *t*-test was conducted to examine if older adult Chinese Buddhists who did and did not report one most regretful event differed in their personal death anxiety. It was found that participants who reported one most regretful event (*M* = .27, *SD* = .19) displayed significantly higher levels of personal death anxiety than those who did not (*M* = .19, *SD* = .14), *t*(131) = 2.60, *p* = .01.

Qualitative analysis on the ease of applying Buddhism to everyday life. The majority (37.58%) found applying Buddhism in daily life difficult. Neutral or ambivalent attitudes towards the ease of application (25.53%) was the next most popular views to be expressed. To a lesser extent, 21.98% of the participants found that application of

Buddhism in daily life was easy. The remaining 14.89% response consists of either missing or irrelevant information and was discarded.

Those participants who found applying Buddhism in daily life difficult reasoned that humans had deep-rooted bad karmas and had been influenced by three destructive impulses (greed, anger, ignorance) over many aeons. In addition, they thought that the human determination to alter unwholesome karma was weak, so it was very hard for humans to apply Buddhism to everyday life. Moreover, they commented that societal demands in a work setting made the application of Buddhism very difficult. For example, some employees need to drink to socialize with their clients or bosses but drinking alcohol was against the Precept of not taking intoxicants in Buddhism. They also found maintaining good conducts increasingly difficult nowadays because of more frequent aversive interpersonal encounters and growing egocentrism that sprang from a highly competitive world. In their opinion, it was no longer easy to be compassionate and to tolerate others' misbehaviours. Furthermore, they commented that because materialism was on the rise, humans were now facing more temptations that made satisfying one's desires more difficult. All these challenges in the modern world made it harder to be aware of one's bad habits and apply Buddhism in daily life. Moreover, illiteracy or limited education made some participants unable to learn and apply Buddhism. Other reasons why it was difficult to apply Buddhism in daily life included absent-mindedness, laziness and differing receptiveness to Buddha's teachings.

In contrast, those participants who found applying Buddhism in daily life easy argued that, with time and diligence in practice, one could practise Buddha's teachings with ease. In particular, abiding by the Five Precepts, finding a good teacher, seeking Buddha Dharma (the Truth pointed out by the Buddha), genuine repentance and being thankful all facilitated the application of Buddhism in daily life. Furthermore, some of these participants thought that Buddha Dharma enabled them to understand they were responsible for their conduct, so they were capable to correct their bad habits and easily apply Buddhism. Besides, different schools of Buddhism abounded so one could easily choose a school that suited one's needs and apply Buddhism happily. In addition, these participants considered the prevalence of unpleasant encounters in daily life as an opportunity to apply Buddhism to regulate behaviours and to promote personal growth.

Given the aforementioned opposing views on the ease of applying Buddhism in daily life, it is not surprising to discover that one quarter of the participants endorsed a mixed view on this issue. They agreed that unwholesome karma and living in the contemporary world filled with many distorted facts were two significant hindrances to

the application of Buddhism. Yet, depending on one's persistence, strength of faith and determination to follow Buddha's teaching, good habits could be formed with time and arduous practice. They also commented that a different upbringing background, lifestyle and living arrangement could influence how easily one could apply Buddhism in daily life. They thought that, without the affinity of right condition (person, events, and time), one's effort to apply Buddhism would be futile. Besides, not all Buddhist disciplines were equally hard to follow. For example, people had more personal control to amend one's bad behaviours than to change the other person, especially individuals who did not accept Buddhism and disbelieved in the Law of Causality. In other cases, abiding by the Five Precepts was considered more difficult than chanting Sutras. In sum, these participants believed that the ease of applying Buddhism in daily life lies in the eye of beholder. They said that the present life was just one of our many lives. If one learnt to treasure each life, one had the chance to build a better future. They were optimistic that anyone could attain Buddhahood with supreme determination. They believed that it was through struggle for inner transformation that humans counteracted the difficulty in applying Buddhism to everyday life.

Qualitative analysis on merit making. Nearly all participants reported more than one way of making merits and their responses were categorized into five domains: (a) generous giving of wealth such as alms for the needy through charity, donation for printing Buddhist texts, patronage to support the Sangha and the temple; (b) volunteering such as maintaining the order and cleanliness of the affiliated Buddhist centres or temples and doing charitable work; (c) self cultivation to get rid of bad conducts such as joining some short-term Buddhist training courses, attending some seminars given by Sangha, reading more about and studying Buddhism, repentance, self reflection, abiding by the Five Precepts, chanting and meditation; (d) formation of harmonious relationships with others such as caring for the welfare of others and the environment, paying visits to others, bringing happiness to others, helping others to solve their problems, and imparting knowledge of Buddhism to their children; and (e) dedication of one's own merits to other sentient beings via prayer, vows, Buddhist activities and ceremonies. It should be noted that many participants stated that they did not seek merits on purpose (i.e. they did not have a self-serving motive), rather they did what should be done and tried their best to devote themselves to others' well-being.

7.4. Discussion

7.4.1. Afterlife Beliefs as a Religious Pathway to Coping with Personal Death Anxiety

In contrast to the efficacy of more benign Christian afterlife beliefs, Buddhist reincarnation beliefs were found to be an ineffective psychological insulation against personal death anxiety among older adult Chinese Buddhists. This lack of relationship between Buddhist reincarnation beliefs and personal death anxiety suggested that not all religious afterlife (or literal immortality) beliefs have the same death anxiety buffering power as proposed by Terror Management Theory.

Terror Management Theory starts off with an assumed dual self concept where humans are equipped with some mental abilities to self reflect. This mind-body duality is considered to be at the root of all sufferings in Buddhism.[5] Terror Management Theory also posits that humans have an innate desire for continued existence. According to Buddhism, craving for immortality (i.e. one kind of permanence) leads to karma which generates the cycle of reincarnation. Buddhists believe that life and death is a part of an on-going wheel of reincarnation propelled by the power of karma. Although one can be reborn into an upper realm of existence, reincarnation also renews sufferings (Kumar, 2002; Sorabji, 2006) - the suffering of existence, of happiness and sadness, of youth and ageing, of health and sickness, of pain and death. Hence, it is not a source of solace for Buddhists. As a result, the concept of reincarnation after death is not considered an effective way to cope with personal death in Buddhism. Hence, Buddhist reincarnation beliefs were unrelated to personal death anxiety.

7.4.2. Religious Management of Regret as a Religious Pathway to Coping with Personal Death Anxiety

7.4.2.1. Buddhist Coping with Regret

The development of a Buddhist coping scale is a pioneering step towards developing research on Eastern religious coping measures because the existing religious coping scales are mainly theistic in contrast to non-theistic stance of Buddhism. It also provides a useful tool to study Buddhist coping across various Schools of Buddhism such as Tibetan Buddhism and across different stressors such as trauma and bereavement. The results of exploratory factor analysis indicated that the self-constructed Buddhist coping with regret scale was a multidimensional instrument applicable for assessing the repertoire of coping strategies Chinese Buddhists used to cope with their major regret.

Three factors were identified. They are self-directing, deferring, as well as transpersonal faith-based coping. The first and the third factors correspond very well with different facets of the Eightfold Path,[4] which is a Buddhist practical guidance regarding the cessation of all sufferings. The second factor corresponds very well with Taking the Three Refuges (Buddha, Buddha Dharma, and Sangha), which is an official Buddhist confirmation ceremony.

Self-directing coping emphasizes an individual's active role of problem-solving and represents self reliance on making right efforts and upholding the Five Precepts to cope with the most regretful event. It resembles six facets of the Eightfold Path (right speech, right action, right livelihood, right effort, right mindfulness, and right concentration), which fosters adherents' mental and moral development to overcome afflictive emotions arising from sufferings. Specifically, moral development through behavioural regulation helps Buddhists understand the Law of Causality and karma; while mental development through meditation helps discourage dwelling on the past or distressing emotions. Hence, the use of self-directing coping was associated with fewer 'hot' emotions arising from the most regretful event.

Deferring coping reflects an individual's passivity in regret resolution and represents reliance on enlightened masters (i.e. Buddha or Bodhisattvas), their doctrine, or spiritual teachers (i.e. Sangha) while undermining one's personal responsibility to cope with the most regretful event. It resembles Taking the Three Refuges, which highlights the importance of resorting oneself to the Buddha, Buddha Dharma and Sangha to restore one's true nature to end suffering. Negativity is a common response to setbacks and disappointments. When people are frustrated and in despair, they appreciate having someone who is capable of understanding their suffering and showing a way out of their sufferings. Seeking support from and knowing that Buddha or Bodhisattva and Sangha are compassionately available when people need help offer newfound peace and lessen feelings of helplessness. However, the Three Refuges cannot take away their suffering but only show them that they are responsible for their own suffering. Hence, delegating responsibility to and passively waiting for the Three Refuges to resolve their regrets were not conductive to lessen their suffering. Thus, more use of deferring coping strategies was not associated with lower negative emotional regret appraisal. Besides, deferring coping may only be helpful in situations where one has very little control over the negative life events (Pargament, 1997). Since most of the reported regrets resulted from mismanagement of close interpersonal relationship which was within personal control, deferring coping was unrelated to negative emotional regret appraisal.

Transpersonal faith-based coping describes efforts to develop faith in Buddhism and right mindfulness of life purpose. It resembles two facets of the Eightfold Path (right view and right intention), which help its adherents develop wisdom to understand the truth of suffering and develop will to transform one's life. People are so often preoccupied with daily life tasks and self preservation that when they are dealing with life problems they stray from true purpose of life. More use of transpersonal faith-based coping not only enabled Buddhists to clarify their ultimate life goal but also gave them hope to end their adversities (i.e. attaining Nirvana). Hence, it was related to lower emotional distress towards the most regretful event.

7.4.2.2. Buddhist Management of Regret was Unrelated to Personal Death Anxiety

The lack of relationship between Buddhist coping with regret and personal death anxiety may suggest that Buddhist management of a single major regret was insufficient to counteract all the retributions produced by unwholesome karma cumulated over many aeons and to liberate oneself from suffering. Hence, success in managing the negative emotions arising from one major regret through religion was ineffective to lower older adult Chinese Buddhists' personal death anxiety.

7.4.2.3. Presence of Regret and Personal Death Anxiety

Buddhists believe that when a person's cumulative unwholesome outweighs his/her wholesome karma, this person will be reborn into a lower realm of existence. Since evidence from quantitative data showed that most older adult Chinese Buddhists attributed regret to unwholesome karma, which could signify a possible worse rebirth, so those who had one most regretful event had higher personal death anxiety than those who did not.

7.4.2.4. Regret Profile

The most common regrets most older adult Chinese Buddhists reported dealt with close personal relationships, especially between their deceased parent and themselves. This finding indicates that most Chinese Buddhist elderly people still live under the strong influence of filial piety. This Confucian concept of filial piety encompasses respect, honour, devotion and obligations within the parent-child relationship (Tsai, 1999; Zhan, 2004). Filial piety is developed to maintain the family system so that the elders are revered and cared for (Tsai, 1999; Zhan, 2004). It is not surprising that the

majority of the Chinese Buddhist older adults lamented over their inadequacy in fulfilling and accommodating their deceased parent's wishes, typically near the end of life.

7.4.2.5. *Buddhists' Account for the Cause of Regret*

According to Buddhism, one must bear the consequences of one's karma like a boomerang effect. Hence, regret was considered as a product of unwholesome karma by most Buddhists. Such definition of regret was supported by the prevalent attribution older adult Chinese Buddhist respondents gave to account for the causes of their most regretful event. This finding is also in line with previous studies that found Thai AIDS patients viewed karma as the causes of their infection (e.g., Nilmanat & Street, 2007; Ross et al., 2007).

7.4.3. Significant Correlates of Personal Death Anxiety

Subjective life expectancy was found to be unrelated to personal death anxiety. In other words, perceived decreased distance from death was not associated with greater personal death anxiety. According to Buddhism, one never truly dies because of reincarnation and life is not limited to a short span of a hundred years. Because existence continues without interruptions with reincarnation until one achieves Nirvana, subjective life expectancy in the present lifetime is relatively brief and not predictive of personal death anxiety. This result and explanation are similar to the non-significant relationship between subjective life expectancy and personal death anxiety in my survey sample of older adult British Christians who believe in an eternal afterlife.

The Chinese Death Beliefs Scale consists of negative attributes some Chinese people attach to death and bereaved people. It also reflects a traditional Chinese emphasis on biological symbolic immortality through descendants (Jochim, n.d.). Because discussion on the origin of these traditional Chinese death beliefs is beyond the scope of the present inquiry, interested parties are encouraged to read an online article written by Jochim (n.d.) and a publication by Hus, O'Connor and Lee (2009) on this subject. In Buddhism, these beliefs represent a rather limited understanding of death. According to Buddhism, without a correct understanding of the true nature of death, the mere mention of death often provokes fear in people's minds resulting in a desire for longevity and avoidance of death-related subject. Because the Buddhist concept of death is unlike what these traditional Chinese death beliefs describe, traditional Chinese death beliefs were unrelated to personal death anxiety.

Fear towards the dying process and death per se was found to be inter-related because the dying process is a precursor of death. In addition, a painful dying process not only is difficult to endure, but also places a substantial burden of responsibility on one's family carers. Furthermore, both personal dying and death anxieties can be seen as manifestations of suffering of sickness and ageing incurred within reincarnation. Hence, personal dying anxiety was positively related to personal death anxiety among older adult Chinese Buddhists.

7.5. Conclusions

There was no evidence to support the efficacy of Buddhist reincarnation beliefs and Buddhist management of regret on lowering personal death anxiety. Two reasons were offered to account for these findings: (a) reincarnation was not a desirable pathway by which to transcend death; and (b) management of a single major regret was insufficient to liberate one from suffering. Personal dying anxiety but not traditional Chinese death beliefs was found to be a significant correlate of personal death anxiety.

Chapter 8:   General Discussion

First, I will compare and contrast five findings from both the major British Christian and the exploratory Chinese Buddhist postal survey studies. Then, I will highlight the unique contributions of these two studies. Next, I will generate several implications from these two studies. Finally, I will make some recommendations for future studies on religion and personal death anxiety in later life.

8.1. Comparison of and Contrast between the Findings of the Two Survey Studies

8.1.1.   Personal Death Concerns Related to the Hereafter

In the British Christian sample, exploratory factor analysis output of personal death anxiety revealed two components. The first component was described as fear of earthly disengagement. Fear of earthly disengagement has to do with fears of the pain and grieving of loved one when one has died, of not having made the best use of life, of oblivion after death, and of being no longer active and functioning. The second component is known as fear of transcendental consequences. Fear of transcendental consequences represents existential fears about the journey into the unknown terrains of death. For example, what will happen at the moment of death, will there be an afterlife, could there be a punishment in the hereafter? In the Chinese Buddhist sample, personal death anxiety consists of fear of earthly disengagement and uneasiness towards the subject of reincarnation.

In other words, personal concerns related to the hereafter were applicable for both older adult British Christian and Chinese Buddhist participants. This finding suggested that anxiety towards transcendental experience might be unique to people who believe in an afterlife, particularly more so for religious people. Religious afterlife beliefs propose that death is not a total loss of self. Yet, the state of an afterlife is either determined by God or karma and therefore remains unknown or unknowable. Because of inability to comprehend their hereafter, people holding religious afterlife beliefs are more inclined to embed their worries about the hereafter into their personal death anxiety.

8.1.2. Varying Effects of Religious Afterlife Beliefs on Personal Death Anxiety

Religious afterlife beliefs were measured in terms of belief in a pleasant afterlife and belief in an unpleasant afterlife among the British Christians; while it was measured in terms of belief in reincarnation among the Chinese Buddhists. More benign Christian literal immortality beliefs were found to be an effective psychological insulation against personal death anxiety, but Buddhist reincarnation beliefs were not. It should be noted that, although Buddhist reincarnation beliefs did not predict lower older adult Chinese Buddhists' personal death anxiety, it was not associated with greater anxiety towards personal death.

One reason for the varying effects of religious afterlife beliefs on personal death anxiety lies in the fact that afterlife is not equally favoured by the older adult British Christians and Chinese Buddhists. For Christians, success in meeting the standard of being a good Christian over a lifetime is rewarded with a good afterlife, so more benign Christian afterlife beliefs were associated with lower personal death anxiety. However, Buddhists believe that happiness and fortune in this life and the next rebirth are the products of past (wholesome and unwholesome) karma, so are misery and tragedy. Hence, success in living an authentic Buddhist life in one lifetime does not always lead to rebirth in an upper realm of existence. In addition, reincarnation is wrought with sufferings because residual unwholesome karma can be carried forward from past incarnations to the next rebirth. Therefore, Buddhist reincarnation beliefs were unrelated to personal death anxiety.

Moreover, Christians believe that once one enters into Heaven, this person remains in Heaven forever. However, Buddhists believe that no being can stay permanently in any of the six realms of existence,[2] even heaven. Buddhists believe that the realm of heaven is transitory and when their wholesome karma is exhausted, they must face rebirth in a less happy realm. Hence, Buddhist reincarnation beliefs were unrelated to personal death anxiety.

8.1.3. Religious Management of Regret Failed to Predict Lower Personal Death Anxiety

The lack of personal death anxiety buffering power of religious management of regret is consistent with the finding that "the existence of a religious meaning structure did not appear to lessen feelings of grief" among bereaved older adults who distinguished

these feelings of grief from making sense of their loss through their religious beliefs (Golsworthy & Coyle, 1999, p. 36). One possible explanation to account for this lack of relationship is that negative emotional regret appraisal may be related to depression more strongly than to personal death anxiety. This is because when people still linger on their negative emotions arising from their regret, they will have less time to take productive actions to alleviate their negative emotional state leading to depression.

8.1.4. Negative Association between Negative Emotional Regret Appraisal and Religious Coping

Both British Christian and Chinese Buddhist survey studies showed that nearly half of all participants involved religion in coping with their major life regret. For older adult British Christians, frequent use of negative religious coping which is characterized by a fragmented religious orientation was associated with higher levels of despair-related emotions. More use of transpersonal faith-based Buddhist coping was related to fewer despair-related and 'hot' emotions among older adult Chinese Buddhists. In the Chinese Buddhist survey study, transpersonal faith-based Buddhist coping partly consists of negative theistic coping items that were modified to be applicable to Buddhist samples and were reversely scored. Hence, it seems reasonable to assume that higher scores on these negative coping items reflects religious doubts and that doubts about Buddhism was associated with greater negative emotional evaluation towards the most regretful event.

These findings from both survey studies highlighted the fact that religious doubts could be a source of vulnerability and stress in the lives of religious older adults who were dealing with their major life regret. The suggested centrality of religious devotion in coping with suffering is consistent with the finding that uncertain faith characterized by doubts and hopes had a detrimental effect on depressive symptoms (Coleman, McKiernan, Mills, & Speck, 2007). It is also in line with Krause, Ingersoll-Dayton, Ellison and Wulff's (1999) finding that religious doubts tended to increase depressive symptomatology and decrease positive affect among young and middle-aged adults. It also corroborates the negative association between religious doubts and life satisfaction revealed in another mixed-age sample study (Gauthier, Christopher, Walter, Mourad & Marek, 2006).

Gauthier and colleagues (2006) suggested three reasons to account for the negative impact of religious doubts on psychological well-being. First, having misgivings about one's religion provokes fear of not being accepted by one's church. Second, one no longer benefits from the meaning previously provided by one's religion. Third, holding

religious doubts increases one's feelings of guilt and shame. Hence, more use of religious coping that reflects religious doubts and loss of faith would increase religious older adults' feelings of vulnerability, bitterness and despair, and is associated with more intense negative emotional evaluation towards their major life regret.

8.1.5. Varying Effects of Major Lingering Regret on Personal Death Anxiety

The presence of a major lingering regret was related to greater personal death anxiety among older adult Chinese Buddhists, but was not predictive of older adult British Christians' personal death anxiety. Most Buddhists believe that regret is the product of their unwholesome karma and when their unwholesome karma outweighs their wholesome karma, they will be reborn into a lower realm of existence. Since the presence of regret signifies the effect of residual unwholesome karma on this life and could affect their next rebirth, older adult Chinese Buddhists with one most regretful event would have a higher level of personal death anxiety than those who did not.

Christians do not believe that the effect of a major life regret will be carried over into their afterlife unless it involves a hideous sin. In addition, Christians can always repent and ask for God's forgiveness for their mistakes before they die because they believe God has the power to eliminate the consequences of their mistakes. Their belief in God's forgiveness over their failings may have reduced the saliency of a major lingering regret on their personal death anxiety.

8.2. Unique Contributions of the Major British Christian Survey Study

8.2.1. Personal Death Anxiety Buffering and Psychosocial Maturity Enhancing Power of Religion in an Increasingly Secular Society

To my knowledge, this has been the first study that demonstrates the personal death anxiety buffering and psychosocial maturity enhancing power of religion in an increasingly secular society. Most prior studies exploring the relationship between religious variables and personal death anxiety only centred on religiosity and belief in an afterlife, so such finding has shed light on the additional role of religiously enhanced psychosocial maturity in defending personal death anxiety in the context of Christianity. In addition, the finding that religious faith predicted greater psychosocial

maturity provided empirical evidence for the significance of religion in successful ageing among British older adults. Moreover, the afterlife beliefs and psychosocial maturity joint mediation model suggest that how well older adults cope with their personal death anxiety depends on their ability to make sense of life and afterlife through their internalized religious faith. Furthermore, the lack of association between extrinsic religiosity and personal death anxiety suggested that not all religious orientations are beneficial to lowering personal death anxiety (A. Gregg, personal communication, February 16, 2012).

8.2.2.   Afterlife Beliefs as Fear-based and Psychosocial Maturity as Meaning-based Religious Personal Death Anxiety Defences

The personal death anxiety buffering power of religious afterlife beliefs was supported and consistent with Terror Management Theory's prediction. Terror Management Theory predicts that when we become mortality salient, we will engage in defensive responses to minimize personal death anxiety by 'calling upon our repertoire of individual (self-esteem) or societal (worldview) buffering strategies' (Kastenbaum, 2000b, p. 153). In this British Christian survey study, more benign Christian afterlife beliefs were found to be an effective religious fear-based defence against personal death anxiety. This is because these afterlife beliefs provided believers reassurance of life continuation beyond death and demystified the unknown of the hereafter.

The proposed efficacy of religiously enhanced psychosocial maturity on lowering personal death anxiety was supported and consistent with Meaning Management Theory's prediction. Meaning Management Theory (Wong, 2000) predicts that when we encounter a mortality salient situation, we will engage in proactive responses to maximize death acceptance and self actualization through the quest for meaning. This result was consistent with the causal hypothesis that religiously enhanced psychosocial maturity was an effective religious meaning-based defence against personal death anxiety. This is because the value of caring for others with equanimity and a deeper appreciation of a life well-lived enabled older adult Christians to regain a sense of meaning thereby restoring the meaning of existence.

8.2.3.   Religious Regulation of Neuroticism as an Alternative Religious Pathway to Coping with Personal Death Anxiety

Neuroticism could thrust an individual into a vicious cycle of experiencing frustration and anxiety leading to psychological maladjustment that is associated with impaired

psychosocial maturity in later life, which is related to greater personal death anxiety. By influencing believers' emotional experience, religion is able to help believers regulate a range of negative emotions and resolve struggles with the issues of meaning as an alternative way to cope with their personal death anxiety.

For example, people suffering from emotional instability could seek emotional and spiritual support from members of their congregations or Biblical Scriptures to cope with their emotional distress and to restore their existential significance. Moreover, the emotional appeal of a sense of cosmic justice and a belief in a benevolent God is helpful as an antidote and a means to overcome emotional instability (neuroticism) thereby fostering more psychosocial maturity to buffer an individual's personal death anxiety.

8.2.4.   The Positive and Negative Side of an Afterlife

Whenever the possibility of an afterlife is mentioned in a research study, it is usually framed in a positive way, as a source of hope that there will be no suffering in the hereafter (cf. Exline, 2003; Exline & Yali, 2007). The dark side of an afterlife has been under-explored. It was found that older adult British Christians' afterlife beliefs consisted of a stronger belief in a pleasant afterlife and a weaker belief in an unpleasant afterlife. Such Christian afterlife beliefs partially mediated the inverse relationship between intrinsic religious motivation and personal death anxiety.

The distinction between belief in a pleasant and an unpleasant afterlife is important, because it highlights the fact that it is the religious belief of an immortal self that continues in bliss, rather than in torment, that insulates Christians from the upsurges of personal death anxiety. This argument is supported by the finding that the correlation coefficients between belief in a pleasant afterlife and fear of transcendental consequences differed significantly from that of between belief in an unpleasant afterlife and fear of transcendental consequences, $t = -5.77$, $p < .01$. Moderate correlation between belief in a pleasant and an unpleasant afterlife ($r_s = -.32$, $p < .05$) has further supported that these two constructs are inter-related but not the same.

8.3. Unique Contributions of the Exploratory Chinese Buddhist Survey Study

8.3.1. Refinement of Buddhist Reincarnation Beliefs Measure

Current knowledge of Buddhist reincarnation beliefs is not as extensive as that of Christian afterlife beliefs. The only three existing reincarnation beliefs measurements (Alprin & Lester, 1995; Burris & Bailey, 2009; Hui, Chan, & Chan, 1989) did not sufficiently tap into the core of Buddhist reincarnation beliefs, which are karma, six realms of existence and the possibility to transcend reincarnation. Hence, a measure of Buddhist reincarnation beliefs was constructed with the help of a knowledgeable Buddhist instructor and with reference to several Buddhist information booklets. This self-constructed Buddhist reincarnation beliefs scale differs from that of Hui, Chan and Chan's (1995) Buddhist and Taoist Belief subscale in that the latter was more applicable to Taoists than Buddhists. This self-constructed Buddhist reincarnation beliefs scale also extended the reincarnation beliefs measurement constructed by Alprin and Lester (1995) as well as by Burris and Bailey (2009) by introducing the concept of the six of realms of existence and the ways leading to the cessation of reincarnation. In other words, the self-constructed Buddhist reincarnation beliefs scale in the present study is a more refined and improved measurement for Buddhists' belief in reincarnation than earlier scales.

8.3.2. Development of a (Non-theistic) Buddhist Coping Scale

There is a huge body of studies on non-religious and theistic coping with life adversities, but the wide range of Buddhist coping activities remains virtually unexplored. It is interesting to note that, even though Pargament and colleagues' (2000) RCOPE scale was designed for theistic populations, some of their items could be modified to suit non-theistic Buddhists. For example, the word 'God' could be replaced by "Buddha or Bodhisattva".

Three factors emerged from the exploratory factor analysis of Buddhist coping with one most regretful event and two of them corresponded with the Eightfold Path on relieving the sufferings of sentient being in the contemporary world.

Self-directing coping corresponds to six facets of the Eightfold Path. It focuses on moral and mental development as a means to end suffering, in particular, by precluding Buddhists from committing unwholesome deeds and from being inattentive to their thoughts. This is because unwholesome deeds that spring out of ill-will and desire will generate unwholesome karma resulting in more future sufferings for oneself and others. Besides, being mindful of one's thoughts and actions will discourage one from committing unwholesome deeds and from dwelling on sufferings. Hence, moral

and mental development that arose from using self-directing coping was related to fewer Buddhists' aversive feelings towards their identified regrets.

Transpersonal faith-based coping corresponds with two facets of the Eightfold Path. It represents an alternative means to end suffering by developing wisdom to understand the truth of suffering and developing mindfulness of life purpose to transform one's life. This is because ignorance of the root of suffering and ultimate life goal prevents one from living an authentic life. It also deprives one of contentment and true happiness in attaining Nirvana. Hence, reassurance of the possibility of ending all sufferings and a sense of direction arising from using transpersonal faith-based coping was related to lower emotional distress towards the most regretful event among older adult Chinese Buddhists.

The third factor, deferring coping, corresponds to Taking the Three Refuges. It stresses on the importance of reliance on enlightened masters (i.e. Buddha or Bodhisattvas), their doctrines or spiritual teachers (i.e. Sangha) as a way to end suffering. This is because external support from the enlightened ones, their disciples and expounded doctrines will guide one to uncover one's true nature and comprehend the cause of one's sufferings. However, avoiding responsibility for personal failings and passively waiting a solution from the Three Refuges were not constructive to lessen their suffering, because the Three Refuges could not eliminate a person's sufferings but showed him/her that he/she was responsible for his/her own sufferings. Hence, more use of deferring coping strategies was not associated with lower negative emotional regret appraisal.

8.4. Implications

8.4.1. Coping with Personal Death Anxiety

8.4.1.1. Religious Support

In the major British Christian survey study, intrinsic religious motivation predicted lower personal death anxiety by fostering more benign afterlife beliefs, psychosocial maturity in later life and emotional stability. Religious support is recommended to help older adult Christians cope with their personal death anxiety by: (a) reinforcing their religious belief such as in a merciful loving God who promises them a good afterlife, (b) increasing their involvement in social activities to establish a sense of purpose that they are not completely useless; and (c) encouraging them to live by the standards of

their religious faith as a source of guidance to understand life's vicissitudes and to regulate their negative emotions. This is because older adults can find comfort in the conviction of a promised good afterlife and in the reflection of life worth living. Such feelings of comfort are likely to reduce their fear of earthly disengagement and of transcendental consequences.

The findings of the exploratory Chinese Buddhist survey study suggested that understanding and believing in reincarnation was insufficient to help Buddhist older adults face their own death without fear. Instead of encouraging older adult Buddhists to seek entrance into the transient upper realms of existence, they are encouraged to take Buddhist teachings and practices seriously in order to obtain Nirvana, which signifies the end of reincarnation.

One aspect of personal death anxiety arises from fear related to the hereafter in both the older adult British Christian and Chinese Buddhist survey samples. Death is believed to be the beginning of a life that Christians or Buddhists can hardly imagine with their limited knowledge. For Christians, their next life is determined by God. For Buddhists, their next rebirth is based on their karma. Hence, religious support is needed to remind religious older adults of the standards of achieving their ultimate religious goal – either fellowship with God or attaining Nirvana; while redirecting them onto a desired spiritual path. When one is supported to live according to one's religious code, one is likely to feel at ease about the unknown of the hereafter and experience lower levels of personal death anxiety. Another way to offer religious encouragement is through organized religious support groups or spiritual mentors who have the necessary expertise on addressing existential issues.

8.4.1.2. Enhancing Psychosocial Maturity in Later Life

Life review may be a promising way to promote psychosocial maturity in later life. This is because successful life review could restore the meaning of existence. For example, older people could be encouraged to discuss and/or write about their memories, life achievements and regrets. Retrospective evaluation of one's personal history could be a liberating experience because it allows older adults to examine the way they have lived their lives, to discover unrecognized meaning in the past and to gain insight for future planning.

Psychosocial maturity in later life could also be fostered through programs designed to increase interactions with younger people and participations in social activities. Such exchanges provide companionship and opportunities for shared learning and

perspective. They also enable older people to feel significant in the knowledge that they continue to connect to and cared by the younger generation.

8.4.2. Coping with Major Life Regret

Infrequent use of negative religious coping strategies in the major British Christian survey study and more frequent use of transpersonal faith-based Buddhist coping strategies in the exploratory Chinese Buddhist survey study were associated with fewer despair-related emotions arising from a major regret.

It is difficult for individuals who question the truthfulness of their religious doctrines to believe in a protecting God or the benefits of Buddhism to alleviate suffering and pain associated with their major life regret. Such detrimental effect of religious doubt on negative emotional regret appraisal is further complicated by feelings of shame and guilt for lacking faith in their religion. Hence, counsellors are advised to help older adult clients resolve their crises of religious doubt as a means to decrease the deleterious effects of harmful religious coping on their negative emotional state associated with their major life regret. For example, the counsellor may assist his or her older adult clients to draw upon previous spiritual experiences and strength to reduce their religious doubts.

8.5. Limitations and Future Studies

8.5.1. Indigenous Research with British Christians

In the British Christian survey, some participants disagreed with the Time 1 Christian inclusion/exclusion criteria, which was based on the type of participants' religious beliefs (Catholic, Protestant, or both Catholic and Protestant). With reference to the Oxford dictionary definition of a Christian, I defined a Christian as someone who believed in the Divinity of Jesus and was receptive to belief in a personal God in the Time 2 survey. However, due to a lack of consensus on what it means to be a Christian in the UK, the present findings cannot be generalized to all Christian denominations within the UK.

One limitation of using a self-report personal death anxiety measure with British participants is that the emotionally charged items can impair their reporting of their true death attitudes. Quite a number of my British Christian participants in the major survey study commented that 'fear', 'dread' and 'disturb' were too strong an

expression to accurately describe their attitudes towards death. Their feedback was consistent with 'the importance of not being earnest rule' underlying the English behaviours observed by Fox (2005). 'At the most basic level, an underlying rule in all English conversation is the proscription of "earnestness"…the English are probably more acutely sensitive than any other nation to the distinction between "serious" and "solemn"…Seriousness is acceptable, solemnity is prohibited…Serious matters can be spoken of seriously, but one must never take oneself too seriously' (Fox, 2005, p. 62).

However, it should be noted that no British pilot interviewees complained about the use of such emotional expressions in the personal death anxiety measurement. Similarly, no older adult British Christians were dissatisfied with the use of such emotional expression in measuring their personal dying anxiety in the Time 1 and Time 2 surveys. It is speculated that death is still a covert taboo in the UK and that strong negative emotional reactions to the awareness of one's prospective death (i.e. personal death anxiety) are prohibited in both spoken and written English in the UK, at least among some older adults. Future studies are advised to replace words such as 'fear' by 'distress' or 'concerns' to make the emotional expressions used in well-established American death anxiety measurement more applicable for use in a British sample.

8.5.2. Indigenous Research with Chinese Older Adults

One inclusion criterion for the cross-sectional Chinese Buddhist survey study was that the participants had to be literate to ensure that they were competent to complete the survey. In other words, generalizability of the findings related to Buddhist reincarnation beliefs and Buddhist coping was limited by participants' literacy proficiency. It follows that the corresponding results may not be applicable to illiterate older adult Chinese. Hence, other researchers may wish to advance this by conducting interviews with illiterate older adult Chinese Buddhists to elucidate their understanding of Buddhist reincarnation beliefs and their actual application of Buddhist coping in coming to terms with their regrets.

8.5.3. Measurement Refinement

One unique contribution of the exploratory cross-sectional Chinese Buddhist survey study is the development of a self-constructed Buddhist reincarnation belief scale. However, it is also important to recognize that this Buddhist reincarnation scale is not yet perfect, thus it needs further modification. For example, belief in past incarnations

is part of Buddhist reincarnation beliefs but was not reflected in the self-constructed scale. So, one way to refine the self-constructed Buddhist reincarnation scale in future studies is to incorporate items that measure participants' belief in past lives (cf. Alprin & Lester, 1995).

8.5.4. Replication

8.5.4.1. Cross-cultural Comparison Studies

Results from the major British Christian study showed that a more benign Christian afterlife belief was a significant personal death anxiety buffer while that of the exploratory Chinese Buddhist survey study showed that Buddhist reincarnation belief was unrelated to personal death anxiety. Because these two studies were done among older adults from different religious and national backgrounds, the varying effects of different religious afterlife beliefs could be an artefact of cultural difference. Further studies are recommended to replicate the major British Christian survey study in a Chinese Christian context and the exploratory Chinese Buddhist study in a British Buddhist context, so that any cultural specific findings can be identified from comparable religious samples.

8.5.4.2. Cross-religion Comparison Studies

Future studies can also be directed at replication of the major British Christian study in other theistic groups, such as in a Muslim sample. It is hypothesized that more benign Muslim afterlife belief will also be a significant mediator between Muslim intrinsic religiosity and personal death anxiety because of its promise of a rewarding afterlife.

The influence of reincarnation beliefs on personal death anxiety can be explored in a Hindu sample that believes in reincarnation. Hindus believes in the role of karma in reincarnation but, unlike Buddhists, they consider reincarnation as the ultimate goal of uniting the individual soul (Atam) with Brahman (God) after many rebirths (Brooks, 2004). Therefore, Hindus may hold more favourable views towards reincarnation than the Buddhists as Hindus believe that reincarnation advances the individual soul to reconcile with Brahman as the final salvation. Hence, it is hypothesized that stronger Hindu reincarnation belief will be a significant personal death anxiety buffer.

8.5.5. Experimental Research on Religious Pathways to Coping with Personal Death Anxiety

Although the final afterlife beliefs, psychosocial maturity and neuroticism joint mediation model in the major British Christian survey study was consistent with a set of causal mediation hypotheses, causality could not be established by SEM (Hoyle & Panter, 1995). Thus, future experimental studies should clarify the causal direction of the hypothesized mediation.

Inspired by the lexical decision experiment done by Walker and colleagues (2011), future experiments could be done on matched pairs of religious participants who would be implicitly primed with either religious or non-religious words before completing a survey on their religious and death attitudes. Participants would be assigned into one of the following priming conditions: (a) religious positively valenced emotion-laden words (moral, heaven, angel, saviour, god, virtue); (b) sacred emotion words (reverent, wonder, awe, glory, love, happy); or (c) neutral words unrelated to religion (car, career, colour, brick, reader, worker). These lists of words were adopted from Walker and colleagues' (2011) study.

Another possible experimental research is to ask half of the religiously matched participants to meditate on their most favoured passage in the Holy Scriptures before completing the survey. The other half of the participants would be the control group and just complete the survey without meditation. It is speculated that, after the experimental manipulation, participants in the (a) religious positively valanced emotional prime condition, (b) sacred emotional prime condition, or (c) Biblical passage meditation group would report greater intrinsic religiosity than those in the (d) non-religious neutral prime condition, or (e) no Biblical passage meditation group. The main effect of intrinsic religiosity on afterlife beliefs, psychosocial maturity, and personal death anxiety would then be examined to determine the causal relationships among these variables.

8.5.6. Symbolic Immortality as an Alternative Correlate of Personal Death Anxiety

According to the Terror Management Theory, cultural worldviews that foster a sense of symbolic immortality can protect its adherents from their existential anxiety. This is because symbolic immortality pertains to human need for life continuity and

relatedness. Symbolic immortality refers to the belief that one continues to live on after one's personal death through an extension of oneself, such as one's children and in significant achievements.

Generativity could be seen as a way of achieving symbolic immortality via broadening one's social identity through work and deeds. By transforming one's concern for self into a broader concern for future generations, generative traces stand a better chance of preservation. The finding that generativity was negatively correlated with personal death anxiety supports the tenants of the Terror Management Theory regarding the importance of symbolic immortality beliefs in defending against the threat of personal death

Future studies are suggested to examine the personal death anxiety buffering power of symbolic immortality. One promising way is to look at the kinds of activities that older adults engage in to encourage continued emotional attachment with the survivors after their death. For example, Unruh (1983) identified three strategies the dying used to apportion their identity to survivors. The first method was known as solidifying identities. The dying people might solidify their identities by documenting their personal history through autobiographies, journals, poems, organ donation and leaving specific instructions regarding their funeral. The second method was known as accumulating artefacts. The dying people might preserve their identities by accumulating artefacts which represented their past accomplishments and sentiments so as to remind the survivors of who and what they once were. The third method was known as distributing artefacts. Distribution of artefacts enabled the receiver to protect special memories or images of and on behalf of the deceased. The three strategies Unruh (1983) described which dying people used to preserve their self image to the survivors are similar to the funeral prearrangements British older adult Christians made in the major survey study. Therefore, future studies are recommended to examine the personal death anxiety buffering power of symbolic actions older people carried out to preserve their personal legacy.

8.5.7. Other Predictors of Psychosocial Maturity in Later Life

In the major British Christian survey study, the latent seven-factor psychosocial maturity construct was posited to be predicted by intrinsic religiosity only. It is also plausible that psychosocial maturity was predicted by other factors. For example, psychosocial maturity in later life may be a product of mellow attitude to life. Specifically, people with greater personal growth are likely to report more psychosocial maturity as they move along the life span. Hence, future studies are advised to

investigate other precursor of psychosocial maturity and their relationship with personal death anxiety in later life.

8.5.8. Towards Personal Dying Anxiety Study

Both older adult British Christians and Chinese Buddhists who experienced greater personal dying anxiety also experienced greater personal death anxiety. This consistent finding highlights the need for future studies to investigate ways to reduce their anxiety towards physical and mental decline during their dying process. For example, future research may examine the effects of traditional pain management such as physical and occupational therapy interventions (cf. Health Care Association of New Jersey, 2006) on relieving older adults' personal dying anxiety. Alternatively, further scientific investigation could be done on the effects of mindfulness-based training programs such as reduction of pain symptoms (Carmody & Baer, 2008) and sensitivity (Grant & Rainville, 2009) on alleviating older adults' personal dying anxiety.

8.5.9. Coping with Personal Death Anxiety via Self Detachment (Self Negation)

Terror Management Theory proposes the cultural construction of an immortal self as a means to defend against the constant terror of death (McCoy et al., 2000). However, the lack of relationship between Buddhist reincarnation beliefs and personal death anxiety suggested that not all religious afterlife beliefs are effective defence against personal death anxiety proposed by Terror Management Theory. This is because, in Buddhism, craving for and/or preserving a permanent self is the root of suffering and creates karma because all phenomena including the concept of self are transient. It follows that fear of death may be a manifestation of humans' aversion for their inability to withstand impermanence or a frustration towards the fruitless human desire for impermanent phenomena to be permanent (e.g., the desire to preserve finite life). Hence, I propose detachment from self preservation, or self negation, as an alternative approach to management of personal death anxiety. It is recommended that future studies investigate whether the development of wisdom to live with an awareness of life's transitoriness and the practice of selfless compassion are helpful in reducing one's attachment with self preservation and earthly engagement, thereby lessening people's personal death anxiety.

8.5.10. Guided Self-Critique of the Present Research

By courtesy of my examiners' comments, I have been encouraged to take a more critical perspective to acknowledge the unused potentials and additional limitations of my PhD study, and to advance the present research in purposeful directions. This section has seven parts.

8.5.10.1.   *Inconsistency over Measure Selection*

The choice of measure has important implications for the results of research, especially those intervention studies conducted on clinical samples. Many scales have been developed and made available to measure most variables of interest in the current investigation, such as intrinsic religiosity and personal death anxiety. However, the rationale for measure inclusion, exclusion and replacement are not well-defined and well-assessed in the present research (R. Woods & A. Gregg, personal communication, February 16, 2012). Clearer and more explicit guidelines are needed for measure selection. Future research should therefore develop quality criteria to evaluate possible measures prior to administrating them to respondents. Issues that are pertinent to thorough and adequate measure selection include psychometric properties and research utility of the available scales, definition of concepts, degree of literacy required, readability, length and complexity. It is hoped that the development of explicit quality criteria will provide investigators and interested readers better informed choices when selecting a measure, and will promote quality assurance in future research and evaluation. It is also important that future research strives to make creative use of the range of measures available, for example, by testing the mediation models on different measures of intrinsic religiosity (A. Gregg, personal communication, February 16, 2012).

8.5.10.2.   *Modification of an Existing Well-Established Scale*

The SF-36 Health Survey is a widely used and well-validated tool to measure health status (Gladman, 1998). 'In the absence of a demonstrably better scale, the SF-36 probably remains the best bet as a measure of health, if that is what is wanted' (Gladman, 1998, p.3). As an inexperienced user of the SF-36 Health Survey, I may have attributed too much significance to a few pilot interviewees' reported difficulty in answering four general health beliefs items (see p. 52). Similar concerns about these general health beliefs questions have also surfaced in an earlier study on older people (Mallinson, 1998, p. 327). But I did not investigate these issues more rigorously before

deciding to remove those four 'unclear' items from the SF-36 Health Survey (prior to administrating it) in the British Christian survey study. Thus, the SF-36 Health Survey has been modified (to measure physical frailty) in a manner that restricts comparison across samples, studies, time and applications.

Because the SF-36 Health Survey has 'very good measurement properties (in all age groups) and reference values are available' (Ferrer & Alonso, 1998, p. 755), strategies to improve its item clarity should be considered before discarding the survey or modifying its content. A better understanding of the SF-36 Health Survey applicability to a sample could be usefully explored in future study, for example, by providing an open-ended comment section at the end of the survey that invites respondents to provide qualitative response to explain items which they have left missing and/or find unclear.

8.5.10.3.   Further Discussion and Examination of the Religious Management of Regret Findings

In the British Christian survey study, results on religious management of regret need to be interpreted with caution and should not be extrapolated to a larger population or be used to make broad conclusions, due to its small sample size (n = 33). Therefore, the corresponding findings are tentative at best (A. Gregg, personal communication, February 16, 2012), preliminary in nature until they are to be further replicated and validated by future studies employing larger samples in different settings.

Though the small sample size of the study on religious management of regret makes any conclusions tentative, the findings related to the reasons why some participants (n = 11) no longer rued their major life regrets could provide useful insights into how such regrets were successfully managed or resolved in the short-term (i.e. 6 months). As uncovered in their narrative reflections, they reported an array of both religiously and non-religiously oriented coping strategies to come to terms with their identified regret. In terms of the former, many seek spiritual support from God and church members while a few believed in God's forgiveness of their failings (see p. 126). These findings suggested that those religious coping strategies that enabled the applicants to seek support from the sacred and congregation were constructive to the integration of older adults' remembered past life regret. In addition, they added to the growing body of research that demonstrated a positive relationship between positive religious coping and adjustment (Pargament, 1997). It is interesting to note that no negative religious coping, such as punitive religious appraisal of regrets, were reported by these eleven participants. It is speculated that negative religious coping strategies, which are

characterised by religious distress and malignant religious reinterpretation, are not useful in helping older adult Christians come to terms with their major life regrets. Such argument is line with the finding that uncertain faith has negative implications on well-being in later life (Coleman et al., 2007). Nonetheless, with a small sample size, caution must be applied when interpreting this qualitative data related to religious coping with major life regret.

Only very few older adult British Christians reported a major life regret and even fewer continued to linger on it. The reasons for this low number are unclear. It is speculated that giving the respondents a choice to indicate whether they had a major life regret may have contributed to the small sample size and attrition. Future studies should consider alternative approaches to examining the religious management of regret pathway (R. Woods, personal communication, February 16, 2012). One way to tackle the issue of insufficient sample reporting regret is to ask all participants to identify a situation that has led to a major life regret and to evaluate its intensity. After that, participants will be asked to report the emotions, consequences, and coping strategies associated with that regret.

One may also argue that regrets which disappeared over the two data collection time points were not so major (A Gregg, personal communication, February 16, 2012). Hence, the nature of life regret and its persistence are in need of more in-depth further investigation, such as by means of case study investigation.

8.5.10.4.   *Need for Systematic Review of Evidence*

Due to practical constraints, this research cannot provide a systematic review of the three religious pathways on defending against personal death anxiety in later life. Researchers who wish to conduct a systematic review in the future may consider search terms such as intrinsic religiosity, intrinsic religious orientation, intrinsic religious motivation, afterlife beliefs, belief in an afterlife, life after death, hereafter, heaven, hell, reincarnation, six realms of existence, religious coping, religious management, stress, adjustment, adversity, and well-being. These keywords could be searched from databases such as PsyINFO and Medline. Regarding the study selection and data extraction, researchers may consider including primary studies done on older adults aged over 59 and published from 1997 onwards. They may also exclude articles that are letter to editor, case study, comment, notes, when conducting a systematic review on the three religious pathways on defending against personal death anxiety in later life.

8.5.10.5.   Missed Opportunities to Conducting Longitudinal Study

Due to available academic support and practical constraints, a cross-sectional research paradigm was adopted. The findings from both survey studies, two of which are accepted for publication in peer-review journals (see Declaration of Authorship, p. xvii), are limited by the use of a correlational design. As a cross-sectional study, it is impossible to draw inferences regarding the causal priority of variables. Hence, it is recommended that future research be longitudinal if it is to provide more definitive answers on the psychological benefits of religion in defending against personal death anxiety in later life. Moreover, longitudinal study has other advantages over the current cross-sectional design, such as its ability to establish developmental trajectories, thereby enabling prediction for future outcomes from data collected at earlier time points.

8.5.10.6.   Missed Opportunity to Conducting Comparative Studies

The present British Christian survey findings are consistent with the burgeoning literature on the relevancy of religion in the lives of older adults (e.g., Moody, 2005) and have extended it specifically to those residing in an increasingly secular society. However, one limitation in the British Christian survey study lies in the narrowness of the studied sample, which is, older adults who belong to the minority of the British population holding to or being open to orthodox Christian beliefs. A wider future study including people with heterogeneous religious and spiritual beliefs would be advantageous. This is because it allows researchers to better understand what impact diverse beliefs may have on the joint afterlife beliefs, psychosocial maturity and neuroticism mediation model (R. Woods, personal communication, February 16, 2012).

For those who wish to achieve a more complete understanding of the relationship between religious attitudes and personal death anxiety, it is recommended that they follow up my study in populations of diverse religious and secular character. For example, further work could be done to examine how living in a secular society affects religious practice, afterlife beliefs, coping, psychosocial maturity, regret management, or the impact of religious faith on personal death anxiety (A. Gregg, personal communication, February 16, 2012). More broadly, more research is needed to examine the impact of factors other than secularism on the relationship between religious attitudes and personal death anxiety.

Given the distinctive differences between Christians' and Buddhists' views on afterlife beliefs and coping with suffering, the possibilities for comparative study between these

two religious groups are rich. However, the use of different scales such as personal death anxiety in both survey studies has precluded reliable comparison of the conclusions drawn from the two survey studies (R. Woods, personal communication, February 16, 2012). Hence, future comparative religious studies are advised to implement parallel scales across samples. By doing so, similarities and differences between different samples could be identified. In addition, the corresponding results could be compared to benchmark data published in the literature.

8.5.10.7.   Missed Opportunities to Testing Rival Hypotheses

There appears to be a low recognition of the need of testing rival hypotheses in the British Christian survey study (A. Gregg, personal communication, February 16, 2012). For example, neuroticism could be a generalized contributor to most variables in the causal mediation model (A. Gregg, personal communication, February 16, 2012). A potential framework for future studies will be to test an alternative mediation model where neuroticism is partialled out of both predictors and dependent variables (A. Gregg, personal communication, February 16, 2012). In addition, future studies should also consider testing the hypothesis that neuroticism affects personal death anxiety, intrinsic religiosity, afterlife beliefs, and psychosocial maturity (A. Gregg, personal communication, February 16, 2012).

Similarly, possible association between variables being in other directions could not be tested in causal hypotheses. For example, there is little appreciation of the bi-directional relationship between funeral pre-arrangements and personal death anxiety. In the present study, more funeral pre-arrangements were hypothesized to lower personal death anxiety. It is also possible that people with lower personal death anxiety feel more able to make arrangements for their funerals (R. Woods, personal communication, February 16, 2012). Since the direction of the relationship is less clear, it is more appropriate to propose associative hypotheses in this case. Examination of the associative hypothesis that personal death anxiety and funeral pre-arrangements are significantly related will be a direction for future exploratory studies.

8.6. Conclusions

The findings of the two survey studies differ in: (a) the effects of religious afterlife belief on personal death anxiety, and (b) the effect of past major lingering regret on personal death anxiety. Despite these differences, three similar findings emerged: (a) both cultural groups reported personal death concerns related to the hereafter; (b) religious management of regret was not related to lower personal death anxiety, and

(c) using religious coping characterized by religious doubt was associated with stronger negative emotional regret appraisal. Unique contributions of these two studies centred on: (a) the personal death anxiety buffering and psychosocial maturity enhancing power of religion in an increasingly secular society; (b) the discovery of religious regulation of neuroticism as an alternative personal death anxiety defence in later life; and (c) investigation of under-explored unpleasant afterlife beliefs, Buddhist reincarnation beliefs and non-theistic Buddhist coping. Several implications have been drawn with a particular emphasis on the importance of religious support in coping with personal death anxiety and major life regret. Several limitations were recognized: (a) lack of agreement in the definition of being a Christian, (b) the effect of using strong emotional wordings on self-reported death-related attitudes in British samples, (c) imperfect measurement of Buddhist reincarnation beliefs, and (d) SEM's inability to establish causality. Future studies are advised to conduct replications with comparative samples or using experimental design, to examine other ways to lower personal dying anxiety, and to test the efficacy of symbolic immortality as well as self detachment (self negation) on coping with personal death anxiety.

This page is intentionally left blank.

APPENDICES

Appendix A: Self-constructed Major Life Regret Classification Measure

When people look into their past, they sometimes feel that something could have been done in a different way. Some things or goals might have been left unfulfilled, or some things or goals should have been fulfilled. One can call these kinds of thoughts regret. In retrospect, do you still ponder on such things? If yes, is there anything that you regret most (the biggest regret) during your life? If yes, we would appreciate as much detail as possible.

What is it about?
X education/academic
X family, marriage/intimate relationships
X work/occupational
X friendships
X leisure, hobbies
X personal, self-improvement
X relatives
X health and self-care
X wealth/financial
X society, community
X other

X something you did but wish you hadn't
X something you did not do but wish you had

This page is intentionally left blank.

Appendix B: Reasons for Item Exclusion in Time 1 and Time 2 British Surveys

Construct	Item	Reasons
Time 1	Content	Reasons for exclusion
Intrinsic religiosity	4. My faith sometimes restricts my actions.	Its item–total correlation was less than .3
Personal death anxiety	9. The idea that I will be unable to resolve my regrets after my death disturbs me.	This item may be an overlapping item between religious coping with regret and personal death anxiety.
	12. I fear the idea that there is no return from death.	Many participants found it might imply reincarnation, which was inconsistent with Christian's afterlife beliefs.
	20. I am afraid of death because my body will rot.	Some participants found it inapplicable as they would be cremated.
Belief in a pleasant afterlife	2. I believe in a cleansing and rebirth of myself after I die.	Many participants found it might imply reincarnation which was inconsistent with Christian's afterlife beliefs.
Psychosocial maturity in later life – Life satisfaction	15. I feel that close people make me feel good.	Many participants found the meaning of 'close people' ambiguous.
	22. I can see myself as being very successful in the future.	It was inapplicable to most of the older adult participants who were retired.
	27. I like to do many things.	It was discarded due to poor clarity.
Psychosocial maturity in later life – Life dissatisfaction	18. I don't ask for help even when things are very tough for me.	Its item–total correlation was less than .3

Psychosocial maturity in later life – Generative concerns	3. I think I would like the work of a teacher.	A number of participants indicated that they were once teachers in their spontaneous feedback.
	5. I do not volunteer to work for a charity, 14. In general, my actions do not have a positive effect on others, and 15. I feel as though I have done nothing of worth to contribute to others)	Participants found them very difficult to answer and thus refused to respond
	9. I believe that society cannot be responsible for providing food and shelter for all homeless people.	Most participants found item nonsensical.
	10. Others may say that I have made unique contribution to society and 17. Other people say that I am a very productive person	Many participants said it was impossible to know what other people thought of them.
	11. If I were unable to have children of my own, I would like to adopt children.	It was inapplicable to many participants as they either had their own children, or adopted some children, or were unable to adopt a child due to old age.
Religious coping - Positive	33. When dealing with this biggest regret, I sought God's help to let go of my anger.	Many participants did not feel angry about their regret.
Religious coping - Negative	36. When dealing with this biggest regret, I wondered whether my church had abandoned me.	Its item-total correlation was less than .3
Non-religious coping – Wishful thinking	6. I went along with fate to deal with this biggest regret; sometimes I just have had back luck.	Its item-total correlation was less than .3

Non-religious coping – Goal-oriented	1. When dealing with this biggest regret, I just concentrated on what I had to do next – the next step, and 2. I tried to analyze this biggest regret in order to understand it better.	Their item–total correlations were less than .3
Non-religious coping – Thinking it Over	16. I drew on my past experience to deal with this biggest regret; I was in a similar situation before, and 18. When dealing with this biggest regret, I made a promise to myself that things would be different next time.	They were not applicable to most reported regrets that only happened once in life.
Non-religious coping – Avoidance	7. When dealing with this biggest regret, I tried to keep my feelings to myself, and 13. When dealing with this biggest regret, I kept non-church member(s) from knowing how bad things were.	Their item–total correlations were less than .3
Negative emotional regret appraisal – Wishful Emotions	12. How contemplative do you feel now if you consider this biggest regret?	Many participants found it poorly worded.
Physical frailty	Five items extracted and modified from the World Health Organization Quality of Life Assessment (The WHO Group, 1998) and two self-constructed items	Many participants found the definition of medical treatment and medication ambiguous. For example, they questioned if spectacles and vitamin supplements were kinds of medical treatment or medication.
	One self-constructed item, "My illness/disease is curable".	Many participants found that the term "illness/disease" unclear that it could mean anything ranging from cancer to common cold, so they were unable to answer.
Social desirability	1. I like to gossip at times, 3. I'm always willing to admit it when I make a mistake, and 5. At times I have really insisted in having things my way.	Their item–total correlations were less than .3

	Content	Reasons for exclusion
Funeral pre-arrangements	6. I have bought / will buy a life insurance.	It was inapplicable to most participants as they were too old to buy one.
	8. I have purchased / will purchase my own cemetery plot.	It was inapplicable to some participants who would prefer cremation.
	10. I have signed / will sign a card to be an organ donor.	It was inapplicable to many participants as they thought most of their organs would be worn out by the time of their death.
	7. I have prepared / will prepare my will, and 11. I have prepaid / will prepay my funeral.	Their item–total correlations were less than .3.
Perceived attraction to death	28. Death is actually an eternal life.	Most participants found it poorly worded.
	31. Many problems can be solved by death only, and 35. In some situations it is better to die than go on living.	Their item–total correlations were less than .3.
Time 2	**Content**	**Reasons for exclusion**
Psychosocial maturity – existential vacuum	11. I try new activities or areas of interest and then soon lose their attractiveness.	Its item–total correlation was less than .3.
Psychosocial maturity – self acceptance	1. I have learned that setbacks and disappointments are an inevitable part of life.	Its item–total correlation was less than .3.
Non–religious coping – Acceptance	5. When dealing with this biggest regret, I look at unavoidable life events as part of my lot in life, and 7. When dealing with this biggest regret, I don't worry about the past or the future, I accept each day as it comes.	Their item–total correlations were less than .3.
Personal death anxiety	9. The idea that I will be unable to resolve my regrets after my death disturbs me.	This item may be an overlapping item between religious coping with regret and personal death anxiety.

194

Social desirability	5. I sometimes try to get even rather than forgive and forget, 8. When I hear people talking privately, I avoid listening, 10. I always declare everything when asked by police or customs officials, 11. When I was young I sometimes stole things, 17. I have pretended to be sick to get out of work or school.	Their item-total correlations were less than .3
Perceived attraction to death	20. Many problems can be solved by death only, 23. In some situations it is better to die than go on living, and 25. Death can be a state of rest and calm.	Their item-total correlations were less than .3
Mortality acceptance	12. To me, the dying process means the completion of my life.	Its item-total correlation was less than .3

Note. All the excluded items listed above were discarded after the return of the postal survey.

This page is intentionally left blank.

Appendix C: Major British Christian Time 1 Survey Materials

Social Desirability

Below are a number of statements concerning **personal attitudes and traits**. Read each statement and **decide whether it is true or false** by **circling** either 'True' or 'False'.

1.	I like to gossip at times. [a,c]	True	False
2.	There have been occasions when I took advantage of someone. [a]	True	False
3.	I'm always willing to admit it when I make a mistake. [c]	True	False
4.	I sometimes try to get even, rather than forgive and forget. [a]	True	False
5.	At times I have really insisted on having things my way. [a,c]	True	False
6.	I have never been irked when people expressed ideas very different from my own.	True	False
7.	I have never deliberately said something that hurt someone's feelings.	True	False

Intrinsic Religiosity

For each question, please **circle** *one* **number** that best describes your **religious beliefs**.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	My faith involves all of my life.	-2	-1	0	+1	+2
2.	One should seek God's guidance when making every important decision.	-2	-1	0	+1	+2
3.	In my life, I experience the presence of the Divine.	-2	-1	0	+1	+2
4.	My faith sometimes restricts my actions. [c]	-2	-1	0	+1	+2
5.	Nothing is as important to me as serving God as best I know how.	-2	-1	0	+1	+2
6.	I try hard to carry my religion over into all my other dealings in life.	-2	-1	0	+1	+2
7.	My religious beliefs are what really lie behind my whole approach to life.	-2	-1	0	+1	+2
8.	It doesn't matter so much what I believe as long as I lead a moral life. [a]	-2	-1	0	+1	+2

9.	Although I am a religious person, I refuse to let religious considerations influence my everyday affairs. [a]	-2	-1	0	+1	+2
10.	Although I believe in my religion, I feel that there are many more important things in life. [a]	-2	-1	0	+1	+2

Death and Dying Concerns Measure

The inevitable journey at the end of our lives, however brief or extended it may be, will deeply affect us and those close to us. Yet few of us actually talk at length about that journey and what it may mean.
– Kokua Mau website

Do you have any concerns related to your own dying and death? Please **tick ☑ *one* box**.
☐ No, please proceed to p. 5. **Why** do you say you have **no death and dying concerns** (p. 4)? We would appreciate as much detail as possible about your reasons. Your information will help us strengthen the professional support to the dying and the bereaved persons.
☐ Yes, given the space below, please kindly tell us **anything that makes you dread about your own death and dying** as well as **why** you have such concerns. We would appreciate as much detail as possible about your own death and dying concerns. Your information will help us strengthen the professional support to the dying and the bereaved persons.

Recent Major Life Events

During the **past 6 months**, have you **experienced** the following events? Please **tick ☑**.

1. ☐	Death of spouse [b]	11. ☐	Detention in jail or other institution
2. ☐	Death of a mate [b]	12. ☐	Major injury to close family member [b]
3. ☐	Death of close family member	13. ☐	Major illness to close family member [b]
4. ☐	Major injury to self [b]	14. ☐	Foreclosure on loan [b]
5. ☐	Major illness to self [b]	15. ☐	Foreclosure on mortgage [b]
6. ☐	Death of spouse [b]	16. ☐	Divorce
7. ☐	Death of a mate [b]	17. ☐	Being a victim of crime
8. ☐	Death of close family member	18. ☐	Being the victim of police brutality
9. ☐	Major injury to self [b]	19. ☐	Infidelity
10. ☐	Major illness to self [b]	20. ☐	Experiencing domestic violence [b]

21. ☐ Experiencing sexual abuse [b]

22. ☐ Separation or reconciliation with spouse [b]

23. ☐ Separation or reconciliation with a mate [b]

24. ☐ Being fired / laid-off [b]

25. ☐ Being unemployed [b]

26. ☐ Experiencing financial problems / difficulties

27. ☐ Death of close friend

28. ☐ Surviving a disaster

29. ☐ Becoming a single parent

30. ☐ Assuming responsibility for sick or elderly loved one

31. ☐ Loss of or major reduction in health insurance / benefits

32. ☐ Self being arrested for violating the law [b]

33. ☐ Close family member being arrested for violating the law [b]

34. ☐ Major disagreement over child support / custody / visitation

35. ☐ Experiencing in an auto accident [b]

36. ☐ Involved in an auto accident [b]

37. ☐ Being disciplined at work [b]

38. ☐ Being demoted at work [b]

39. ☐ Adult child moving in with you [b]

40. ☐ You moving in with adult child [b]

41. ☐ Child develops behaviour or learning problem

42. ☐ Experiencing employment discrimination [b]

43. ☐ Experiencing sexual harassment [b]

44. ☐ Attempting to modify addictive behaviour of self

45. ☐ Discovering / attempting to modify addictive behaviour of close family member

46. ☐ Employer reorganisation / downsizing

47. ☐ Getting married / remarried

48. ☐ Changing employers / careers

49. ☐ Failure to obtain / qualify for a mortgage

50. ☐ Experiencing discrimination / harassment outside workplace

51. ☐ Release from jail

52. ☐ Spouse begins / ceases work outside the home [b]

53. ☐ Mate begins / ceases work outside the home [b]

54. ☐ Major disagreement with boss

55. ☐ Major disagreement with co-worker

56. ☐ Change in residence

57. ☐ Finding appropriate child care / day care

58. ☐ Experiencing a large unexpected monetary gain

59. ☐ Changing positions (transfer, promotion)

60. ☐ Gaining a new family member

61. ☐	Changing work responsibilities		66. ☐	Beginning / ceasing formal education
62. ☐	Child leaving home		67. ☐	Receiving a ticket for violating the law
63. ☐	Obtaining a home mortgage			
64. ☐	Obtaining a major loan other than home mortgage			
65. ☐	Retirement			

Physical Frailty – Medication/Medical Treatment items

The following section is about your **views related to your health**, how you feel and how well you have been able to do your usual activities. If you are unsure how to answer any questions, please give the best answer you can. For each question, please mark your answer by **ticking ☑ *one* box**.

9. These questions are about your **medication(s) and/or treatment(s) during the past 4 weeks.**

		All of the time	Most of the time	Some of the time	A little of the time	None of the time
a)	How often do you need any medication to function in your daily life? [b, c]	☐	☐	☐	☐	☐
b)	How often do you need any medical treatment to function in your daily life? [b, c]	☐	☐	☐	☐	☐
c)	How often do you need medical aids to function in your daily life? [b, c]	☐	☐	☐	☐	☐
d)	How often do you worry about not having enough money to fund your medical treatment? [c]	☐	☐	☐	☐	☐

Physical Frailty – Physical Functioning

3. The following items are about activities you might do during a typical day. **Does your health now limit you** in these activities? If so, how much?

		Yes, limited a lot	Yes, limited a little	No, not limited at all
a)	**Vigorous activities**, such as running, lifting heavy objects, participating in strenuous sports	☐	☐	☐
b)	**Moderate activities**, such as moving a table, pushing a vacuum cleaner, bowling or playing golf	☐	☐	☐
c)	Lifting or carrying groceries	☐	☐	☐
d)	Climbing **several** flights of stairs	☐	☐	☐
e)	Climbing **one** flight of stairs	☐	☐	☐
f)	Bending, kneeling or stooping	☐	☐	☐
g)	Walking **more than a mile**	☐	☐	☐
h)	Walking **half a mile**	☐	☐	☐
i)	Walking **100 yards**	☐	☐	☐
j)	Bathing or dressing yourself	☐	☐	☐

Physical Frailty – Role Limitation due to Physical Problems

4. During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health?**

		Yes	No
a)	**Cut down the amount of time** you spend on work or other activities	☐	☐
b)	**Accomplished less** than you would like	☐	☐
c)	Were **limited** in the **kind** of work or other activities	☐	☐
d)	Had **difficulty performing** the work or other activities (e.g., it took extra effort)	☐	☐

Physical Frailty – Interference on Normal Social Activities Caused by Physical Health Problems

5. During the **past 4 weeks**, to what extent has your physical health interfered with your normal social activities with family, friends, neighbours or groups?

Not at all ☐
Slightly ☐
Moderately ☐
Quite a bit ☐
Extremely ☐

Energy/Vitality (Excluded from Physical Frailty Computation)

8. These questions are about **how you feel** and how things have been with you **during the past 4 weeks.** For each question, please give the one answer that comes closest to the way you have been feeling.

		All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
a)	Did you feel full of life?[c]	☐	☐	☐	☐	☐	☐
e)	Did you have a lot of energy?[c]	☐	☐	☐	☐	☐	☐
g)	Did you feel worn out? [a,c]	☐	☐	☐	☐	☐	☐
i)	Did you feel tired? [a,c]	☐	☐	☐	☐	☐	☐

Physical Frailty – Pain

6. How much bodily pain have you had in the **past 4 weeks?**

None ☐
Very mild ☐
Mild ☐
Moderate ☐
Severe ☐
Very severe ☐

9. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including work outside the house and housework)?

Not at all ☐
Slightly ☐
Moderately ☐
Quite a bit ☐
Extremely ☐

Physical Frailty – General Health Perception

1. **In general**, would you say your health is:

<div align="right">

Excellent ☐
Very good ☐
Good ☐
Fair ☐
Poor ☐
</div>

10. How **true** or **false** is each of the following statements for you?

		Definitely True	Mostly True	Mostly False	Definitely False
a)	My illness/disease is curable. [c]	☐	☐	☐	☐
b)	My medical treatment is painless. [c]	☐	☐	☐	☐
c)	I am satisfied with my medical treatment. [b, c]	☐	☐	☐	☐
d)	I have easy access to good medical care. [b, c]	☐	☐	☐	☐

Physical Frailty – Change in Health

2. **Compared to 6 months ago**, how would you rate your health in general now?

<div align="right">

Much better than 6 months ago ☐
Somewhat better than 6 months ago ☐
About the same ☐
Somewhat worse now than 6 months ago ☐
Much worse now than 6 months ago ☐
</div>

Recent Positive Moods

11. These questions are about **how you feel** and how things have been with you **during the past 4 weeks.** For each question, please give the one answer that comes closest to the way you have been feeling.

		All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
b)	Have you been a very nervous person? [a]	☐	☐	☐	☐	☐	☐
c)	Have you felt so down in the dumps that nothing could cheer you up? [a]	☐	☐	☐	☐	☐	☐
d)	Have you felt calm and peaceful?	☐	☐	☐	☐	☐	☐
f)	Have you felt downhearted and blue? [a]	☐	☐	☐	☐	☐	☐
h)	Have you been a happy person?	☐	☐	☐	☐	☐	☐

Subjective Life Expectancy

Please read each statement concerning **your attitudes towards your future** and **circle** *one* **number** that best indicates **your agreement** with it.

		Very untrue	Untrue	Neutral	True	Very true
1.	Many opportunities await me in the future.	-2	-1	0	+1	+2
2.	I expect that I will set many new goals in the future.	-2	-1	0	+1	+2
3.	My future is filled with possibilities.	-2	-1	0	+1	+2
4.	Most of my life lies ahead of me.	-2	-1	0	+1	+2
5.	My future seems infinite to me.	-2	-1	0	+1	+2
6.	I could do anything I want in the future.	-2	-1	0	+1	+2
7.	There is plenty of time left in my life to make new plans.	-2	-1	0	+1	+2
8.	I have the sense that time is running out. [a]	-2	-1	0	+1	+2
9.	There are only limited possibilities in my future. [a]	-2	-1	0	+1	+2
10.	As I get older, I begin to experience time as limited. [a]	-2	-1	0	+1	+2

Regret Measure

The process of recalling memories from our personal past is called **reminiscence**, an activity engaged in by adults of all ages. Recalling earlier times can happen spontaneously or deliberately, privately or with other people, and may involve remembering both happy and sad episodes. When people look into their past, they sometimes feel that some **things or goals might have been left unfulfilled** or **should have been fulfilled**. One can call these **regrets**.

In retrospect, do you have **one *biggest unresolved* past regret** in your life **that is still disturbing you**? Please **tick** ☑
☐ No, please proceed to p. 14. **Why** do you say you **do not have** any regrets (p. 12)? Your information is very valuable for developing ways to counsel those people who are distressed by their life regrets.

Regret Description

In retrospect, do you have **one *biggest unresolved* past regret** in your life **that is still disturbing you**? Please **tick** ☑
☐ Yes, given the space below, please describe it. We would appreciate some details about this biggest regret. Please use **3 keywords / phrases** to summarise this biggest unresolved past regret you just recalled.

Regret Classification

What is your biggest unresolved past regret identified (p. 12) about? Please **tick** ☑ *one* **or** *more* **boxes**.
☐ It is something you did but wish you hadn't.
☐ It is something you did not do but wish you had.
☐ It is something inconsistent with your religious faith.
☐ It is something completely outside your personal control.

☐ It is still affecting your current life.
☐ It is something you consider as a 'scar' or major imperfection in your life.

How **confident are you in lessening your level of regret** towards this biggest unresolved past regret you identified (p. 12) **before you die**? Please **tick ☑** *one* **box**.

☐ I have no confidence that I will be less regretful about this biggest regret before I die (**proceed to p. 15**). **Why** do you say you have **no confidence** that you will be less regretful about this biggest regret before you die (p. 12)? Your information is very valuable for developing ways to counsel those people who are distressed by their life regrets.

☐ I have little confidence that I will be less regretful about this biggest regret before I die (**proceed to p. 16**). **Why** do you say you have **little confidence** that you will be less regretful about this biggest regret before you die (p. 12)? Your information is very valuable for developing ways to counsel those people who are distressed by their life regrets.

☐ I have great / much confidence that I will be less regretful about this biggest regret before I die (**proceed to p. 17**). **Why** do you say you have **great/much confidence** that you will be less regretful about this biggest regret before you die (p. 12)? Your information is very valuable for developing ways to counsel those people who are distressed by their life regrets.

Non-religious – Goal Oriented

Obviously, different people deal with regret in different ways, but we are interested in **how much or how frequently you tried to do** what the item says to **deal with this biggest unresolved past regret you identified (p. 12)**. Don't answer on the basis of what worked or not – just whether or not you did it. Try to rate each item separately in your mind from the others. Make you answers as true **for you** as you can. For each item, **circle** *one* **number** that best applies to you.

	Never	Seldom	Some-times	Often	Always
1. When dealing with **this biggest regret**, I just concentrated on what I had to do next – the next step.[c]	1	2	3	4	5
2. I tried to ppals **this biggest regret** in order to understand it better. [c]	1	2	3	4	5
3. I bargained or compromised to get something positive from **this biggest regret**.	1	2	3	4	5
8. When dealing with **this biggest regret**, I looked for the silver lining, so to speak. I tried to look on the bright side of things.	1	2	3	4	5

Non-religious Coping – Seek Support

		Never	Seldom	Some-times	Often	Always
4.	I talked to non-church member(s) to find out more about how to deal with **this biggest regret**. [b]	1	2	3	4	5
9.	I got non-religious professional help to deal with **this biggest regret**. [b]	1	2	3	4	5
10.	I talked to non-church member(s) who could do something concrete about **this biggest regret**. [b]	1	2	3	4	5
12.	When dealing with **this biggest regret**, I asked non-church member(s) I respect for advice. [b]	1	2	3	4	5
15.	I talked to non-church member(s) about how I was feeling to deal with **this biggest regret**. [b]	1	2	3	4	5

Non-religious Coping – Wishful Thinking

		Never	Seldom	Some-times	Often	Always
5.	When dealing with **this biggest regret**, I hoped a miracle that was not an act of God would happen. [b]	1	2	3	4	5
6.	I went along with fate to deal with **this biggest regret**; sometime I just have bad luck. [c]	1	2	3	4	5
20.	When dealing with **this biggest regret**, I daydreamed or imagined a better time or place than the one I was in.	1	2	3	4	5
21.	I wished that **this biggest regret** would go away or somehow be over with.	1	2	3	4	5
22.	When dealing with **this biggest regret**, I had fantasies or wishes about how things might turn out.	1	2	3	4	5
23.	I prepared myself for the worst to deal with **this biggest regret**.	1	2	3	4	5

Non-religious Coping – Avoidance

		Never	Seldom	Some-times	Often	Always
7.	When dealing with **this biggest regret**, I tried to keep my feelings to myself.[c]	1	2	3	4	5
11.	When dealing with **this biggest regret**, I did not let it get to me. I refused to think too much about it.	1	2	3	4	5
13.	When dealing with **this biggest regret**, I kept non-church member(s) from knowing how bad things were. [b,c]	1	2	3	4	5
14.	I made light of **this biggest regret.** I refused to get too serious about it.	1	2	3	4	5

Non-religious Coping – Thinking It Over

		Never	Seldom	Some-times	Often	Always
16.	I drew on my past experience to deal with **this biggest regret**; I was in a similar situation before. [c]	1	2	3	4	5
17.	I knew what had to be done to deal with **this biggest regret**, so I doubled my efforts to make things work.	1	2	3	4	5
18.	When dealing with **this biggest regret**, I made a promise to myself that things would be different next time. [c]	1	2	3	4	5
19.	I came up with a couple of different solutions to deal with **this biggest regret**.	1	2	3	4	5

Religious Coping – Negative Religious Coping

		Never	Seldom	Someti mes	Often	Always
24.	When dealing with **this biggest regret**, I questioned the power of God.	1	2	3	4	5
26	When dealing with **this biggest regret**, I felt punished by God for my lack of devotion.	1	2	3	4	5
29	When dealing with **this biggest regret**, I decided the devil made this happen.	1	2	3	4	5
31	When dealing with **this biggest regret**, I wondered if God had punished me for it.	1	2	3	4	5
32	When dealing with **this biggest regret**, I wondered whether God had abandoned me.	1	2	3	4	5
36.	When dealing with **this biggest regret**, I wondered whether my church had abandoned me. [c]	1	2	3	4	5
37.	When dealing with **this biggest regret**, I questioned God's love for me.	1	2	3	4	5

Religious Coping – Positive Religious Coping

		Never	Seldom	Some-times	Often	Always
25.	I tried to put my plans into action together with God to deal with **this biggest regret**.	1	2	3	4	5
27.	I focused on religion to stop worrying about **this biggest regret**. [b]	1	2	3	4	5
28.	I sought God's love and care to deal with **this biggest regret**.	1	2	3	4	5
30.	I tried to see how God might be trying to strengthen me in **this biggest regret**. [b]	1	2	3	4	5
33.	When dealing with **this biggest regret**, I sought help from God in letting go of my anger. [c]	1	2	3	4	5
34.	When dealing with **this biggest regret**, I asked forgiveness for my sins.	1	2	3	4	5

35.	I looked for a stronger connection with God to deal with **this biggest regret**.	1	2	3	4	5
38.	Others, please specify:	1	2	3	4	5

Perceived Importance of the Regret

For each question please **circle *one* number** that best indicates your <u>**present attitudes**</u> **toward this biggest unresolved past regret** you identified (p. 12).

		Not at all		Somewhat		A great deal
1.	**Now**, how important this biggest regret is for you?	1	2	3	4	5

Perceived Impact of the Regret on Life

		Not at all		Somewhat		A great deal
2.	**Now**, how much impact has this biggest regret had on your life?	1	2	3	4	5

Perceived Changeableness of the Regret

		Not at all		Somewhat		A great deal
3.	**Now**, is it still possible to change this biggest regret?	1	2	3	4	5

Negative Emotional Regret Appraisal – Perceived Amount of Despair-related Emotions

		Not at all		Somewhat		A great deal
4.	How desperate do you feel **now** if you think about this biggest regret?	1	2	3	4	5
7.	How helpless do you feel **now** if you think about this biggest regret?	1	2	3	4	5
10.	How sorrowful do you feel **now** if you think about this biggest regret?	1	2	3	4	5
15.	How disappointed do you feel **now** if you think about this biggest regret?	1	2	3	4	5

Negative Emotional Regret Appraisal – Perceived Amount of Hot Emotions

		Not at all		Somewhat		A great deal
5.	How irritated do you feel **now** if you think about this biggest regret?	1	2	3	4	5

8.	How angry do you feel **now** if you think about this biggest regret?	1	2	3		4	5
11.	How embarrassed do you feel **now** if you think about this biggest regret?	1	2	3		4	5
13.	How disgusted do you feel **now** if you think about this biggest regret?	1	2	3		4	5
14.	How guilty do you feel **now** if you think about this biggest regret?	1	2	3		4	5

Negative Emotional Regret Appraisal – Perceived Amount of Wishful Emotions

		Not at all				Somewhat			A great deal
6.	How nostalgic do you feel **now** if you think about this biggest regret?	1	2	3			4		5
9.	How sentimental do you feel **now** if you think about this biggest regret?	1	2	3			4		5
12.	How contemplative do you feel **now** if you consider this biggest regret? [c]	1	2	3			4		5

Neuroticism

This section is about **how you see yourself**. Please **circle *one* number** that best indicates the extent to which you agree or disagree with each characteristic.

	I see myself as someone who….	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	is depressed, blue	-2	-1	0	+1	+2
2.	is relaxed, handles stress well [a]	-2	-1	0	+1	+2
3.	can be tense	-2	-1	0	+1	+2
4.	worries a lot	-2	-1	0	+1	+2
5.	is emotionally stable, not easily upset [a]	-2	-1	0	+1	+2
6.	can be moody	-2	-1	0	+1	+2
7.	remains calm in tense situations [a]	-2	-1	0	+1	+2
8.	gets nervous easily	-2	-1	0	+1	+2

Psychosocial Maturity – Perceived Generative Concerns

For each statement, please **circle *one* number** that best describes **your relationship with others**.

		Never	Seldom	Fairly often	Very often
1.	I try to pass along the knowledge I have gained through my experiences.	1	2	3	4
2.	I do not feel that other people need me. [a]	4	3	2	1
3.	I think I would like the work of a teacher. [c]	1	2	3	4
4.	I feel as though I have made a difference to many people.	1	2	3	4
5.	I do not volunteer to work for a charity. [a, c]	4	3	2	1
6.	I have made and created things that have had an impact on other people.	1	2	3	4
7.	I try to be creative in most things that I do.	1	2	3	4
8.	I think that I will be remembered for a long time after I die.	1	2	3	4

9.	I believe that society cannot be responsible for providing food and shelter for all homeless people. [a, c]	4	3	2	1
10.	Others would say that I have made unique contributions to society. [c]	1	2	3	4
11.	If I were unable to have children of my own, I would like to adopt children. [c]	1	2	3	4
12.	I have important skills that I try to teach others.	1	2	3	4
13.	I feel that I have done nothing that will survive after I die. [a]	4	3	2	1
14.	In general, my actions do not have a positive effect on others. [a, c]	4	3	2	1
15.	I feel as though I have done nothing of worth to contribute to others. [a, c]	4	3	2	1
16.	I have made many commitments to many different kinds of people, groups, and activities in my life.	1	2	3	4
17.	Other people say that I am a very productive person. [c]	1	2	3	4
18.	I have a responsibility to improve the neighbourhood in which I live.	1	2	3	4
19.	People come to me for advice.	1	2	3	4
20.	I feel as though my contributions will exist after I die.	1	2	3	4

Belief in a Pleasant Afterlife

Read each statement carefully, and **circle *one* number** that best represents <u>your afterlife beliefs</u>.

		Definitely false	Mostly false	Neutral	Mostly true	Definitely true
1.	I believe my death is an entrance to a place of ultimate satisfaction.	-2	-1	0	+1	+2
2.	I believe in a cleansing and rebirth of myself after I die. [c]	-2	-1	0	+1	+2
5.	I believe in resurrection and reward after I die.	-2	-1	0	+1	+2
6.	I believe my death is an union with God and eternal bliss.	-2	-1	0	+1	+2
9.	I believe my death is an opportunity to give up this life in favour of a better one.	-2	-1	0	+1	+2
10.	I believe my death is the doorway to heaven and ultimate happiness.	-2	-1	0	+1	+2

Belief in an Unpleasant Afterlife

		Definitely false	Mostly false	Neutral	Mostly true	Definitely true
3.	I believe my death is a doorway to hell and ultimate torment.	-2	-1	0	+1	+2
4.	I believe my death is a transition to a more unpleasant life than this earthly life.	-2	-1	0	+1	+2
7.	I believe I will meet Satan and suffer eternal pain.	-2	-1	0	+1	+2
8.	I believe I will be punished for my sins after I die.	-2	-1	0	+1	+2
11.	I believe I will experience hunger/thirst after I die.	-2	-1	0	+1	+2
12.	I believe my death is an entrance to a place of ultimate agony.	-2	-1	0	+1	+2

Funeral Prearrangements

Read each statement carefully, and **circle** *one* **number** that best describes <u>**your death-related arrangements**</u>.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I am aware of the full array of services from funeral homes.	-2	-1	0	+1	+2
2.	I am aware of the variety of options for disposing of bodies.	-2	-1	0	+1	+2
3.	I am familiar with funeral pre-arrangement.	-2	-1	0	+1	+2
4.	I talk about my death with family and friends.	-2	-1	0	+1	+2
5.	I know who to contact when I am about to die.	-2	-1	0	+1	+2
6.	I have bought / will buy a life insurance. [c]	-2	-1	0	+1	+2
7.	I have prepared / will prepare my will.[c]	-2	-1	0	+1	+2
8.	I have purchased / will purchase my own cemetery plot. [c]	-2	-1	0	+1	+2
9.	I have planned / will plan my funeral service.	-2	-1	0	+1	+2
10	I have signed / will sign a card to be an organ donor. [c]	-2	-1	0	+1	+2
11	I have prepaid / will prepay my funeral. [c]	-2	-1	0	+1	+2

211

Near Death Experience

1.   Have you ever had a **near death experience** in which you almost died but were
      revived? Please **tick ☑**.
☐ No (please go to question 2)
☐ Yes, when did it happen?
It happened _____ month(s) _____ year(s) ago.

Please **circle** *one* **number** to best indicates how much it has changed your life.

Not at all									**A great deal**
1	2	3	4	5	6	7	8	9	10

Spiritual Experience

2.   Have you ever had a **spiritual experience** (unrelated to drugs or alcohol) in
      which you experience the presence of God or Higher Power? Please **tick ☑**.
☐ No (proceed to p. 25)
☐ Yes, how often has this happened to you? _____
Please briefly describe the **most significant** spiritual experience you had:

Personal Death Anxiety

Assuming that the following **dying and death**-related situations may happen to
you, for each statement, **circle** *one* **number** that best represents your **attitudes
towards life and death**.

		Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
9.	The idea that I will be unable to resolve my regrets after my death disturbs me.[c]	-2	-1	0	+1	+2
12.	I fear the idea that there is no return from death. [c]	-2	-1	0	+1	+2
13.	I fear death because all my mental and spiritual activity will stop.	-2	-1	0	+1	+2
16.	I fear death because my identity will disappear.	-2	-1	0	+1	+2
19.	Thinking about death gives me the shivers.	-2	-1	0	+1	+2
20.	I am afraid of death because my body will rot. [c]	-2	-1	0	+1	+2
21.	I fear death because it means that I will not be able to experience and think anymore.	-2	-1	0	+1	+2
29.	The thought that one day I will die frightens me.	-2	-1	0	+1	+2
33.	I fear death because all my plans will come to an end.	-2	-1	0	+1	+2
38.	Death frightens me more than anything else.	-2	-1	0	+1	+2

Personal Dying Anxiety

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	The thought that my dying could be long and painful is unbearable to me.	-2	-1	0	+1	+2
2.	I feel fear at the very idea of dying slowly and in agony someday.	-2	-1	0	+1	+2
3.	The physical decline that accompanies a slow dying process disturbs me.	-2	-1	0	+1	+2
4.	I am afraid of my dying being prolonged by medical equipment.	-2	-1	0	+1	+2
5.	The thought of being left alone when I am dying someday is terrible for me.	-2	-1	0	+1	+2
6.	I am afraid of dying a painful death one day.	-2	-1	0	+1	+2
7.	I am afraid of being treated as a mere object when I lie dying.	-2	-1	0	+1	+2
8.	The possibility of losing my personal dignity when I am dying appals me.	-2	-1	0	+1	+2

Attraction to Death

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
17.	I know people who have died and I believe that I will meet them when I die.	-2	-1	0	+1	+2
26.	Death can change things for the better.	-2	-1	0	+1	+2
28.	Death is actually an eternal life. [c]	-2	-1	0	+1	+2
31.	Many problems can be solved by death only.[c]	-2	-1	0	+1	+2
32.	I believe death can bring a great relief from suffering.	-2	-1	0	+1	+2
35.	In some situations it is better to die than go on living.[c]	-2	-1	0	+1	+2
36.	Death can be a state of rest and calm.	-2	-1	0	+1	+2

Psychosocial Maturity – Life Despair

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
11.	Life seems to be one long and difficult struggle.	-2	-1	0	+1	+2
18.	I don't ask for help even when things are very tough for me.[c]	-2	-1	0	+1	+2

23.	I feel that I am not important to my family.	-2	-1	0	+1	+2
24.	Sometimes I feel that my family will be better off without me.	-2	-1	0	+1	+2
25.	Sometimes I feel that my problems can't be solved.	-2	-1	0	+1	+2
30.	I don't like to spend time with my family.	-2	-1	0	+1	+2
39.	No one really loves me.	-2	-1	0	+1	+2

Psychosocial Maturity – Life Satisfaction

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
10.	Most of the time I feel happy.	-2	-1	0	+1	+2
14.	Even though things may be tough at times I think it's worth living.	-2	-1	0	+1	+2
15.	I feel that close people make me feel good. ᶜ	-2	-1	0	+1	+2
22.	I can see myself as being very successful in the future. ᶜ	-2	-1	0	+1	+2
27.	I like to do many things. ᶜ	-2	-1	0	+1	+2
34.	I am very hopeful.	-2	-1	0	+1	+2
37.	I enjoy many things in life.	-2	-1	0	+1	+2

Mood Repair Measures – Personal Life Encapsulation

Everyone has a story to tell, to preserve and even to pass on to future generations. **What** is the **essence** of **your life** that you would like **to share with** and/or **to be remembered** by people close to you?

Mood Repair Measures – Bible Verse Preference
You may find many verses in the Bible relevant and meaningful to you. We would like to know **which** is your **favourite** verse of the Bible, and **why**.

Demographics
Finally, could you tell us your…(For each item, please **tick ☑ *one* appropriate box**)

Age:
☐ between 60 – 65
☐ between 66 – 70
☐ between 71 – 79
☐ 80 or above

Sex:
    ☐ Female
    ☐ Male

Ethnicity:
☐ British
☐ European, please specify: _____
☐ Indian
☐ Others, please specify: _____

Employment status:
☐ Employed
☐ Retired
☐ Others, please specify: _____

Marital status:
☐ Single
☐ Married
☐ Divorced
☐ Widowed
☐ Decide not to disclose

Do you consider yourself holding:
      ☐ Catholic beliefs
      ☐ Protestant beliefs
      ☐ Both Catholic and Protestant beliefs

Notes. [a]Reverse item. [b]Modified item. [c]Discarded item.

This page is intentionally left blank.

Appendix D: Major British Christian Time 2 Survey Materials

Social Desirability

Using the scale below as a guide, **circle** a number to indicate how much you agree with each statement.

		Totally disagree	Disagree	Neutral	Agree	Totally agree
1.	I sometimes tell lies if I have to.	1	2	3	4	5
2.	I never cover up my mistakes.	1	2	3	4	5
3.	There have been occasions when I have taken advantage of someone.	1	2	3	4	5
4.	I never swear.	1	2	3	4	5
5.	I sometimes try to get even rather than forgive and forget.[c]	1	2	3	4	5
6.	I always obey laws, even if I'm unlikely to get caught.	1	2	3	4	5
7.	I have said something bad about a friend behind his/her back.	1	2	3	4	5
8.	When I hear people talking privately, I avoid listening.[c]	1	2	3	4	5
9.	I have received too much change from a salesperson without telling him or her.	1	2	3	4	5
10.	I always declare everything when asked by police or customs officials.[c]	1	2	3	4	5
11.	When I was young I sometimes stole things.[c]	1	2	3	4	5
12.	I have never dropped litter on the street.	1	2	3	4	5
13.	I sometimes drive faster than the speed limit.	1	2	3	4	5
14.	I never read sexy books or magazines.	1	2	3	4	5
15.	I have done things that I don't tell other people about.	1	2	3	4	5
16.	I never take things that don't belong to me.	1	2	3	4	5
17.	I have pretended to be sick to get out of work or school.[c]	1	2	3	4	5

		Totally disagree	**Disagree**	**Neutral**	**Agree**	**Totally agree**
18.	I have never damaged a library book or store merchandise without reporting it.	1	2	3	4	5
19.	I have some pretty awful habits.	1	2	3	4	5
20.	I don't gossip about other people's business.	1	2	3	4	5

Subjective Life Expectancy

Imagine that the following line is **your life line on Earth**, please

1. locate yourself with a **CROSS (X)** on the following line at the point where you believe you are **now**.
2. use a downward **arrow (↓)** above the following line to indicate the beginning of **age 60**.

Your life on Earth

Birth
Death

Psychosocial Maturity – Attitudes towards Ageing

Using the scale below as a guide, **circle a number** to indicate how much you agree with each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I feel content about my own ageing.	1	2	3	4	5
2. Old age can be a very happy time of life.	1	2	3	4	5
3. I see my old age mainly as a time of loss.ᵃ	1	2	3	4	5
4. I worry I will have nothing to offer anyone when I am old.ᵃ	1	2	3	4	5
5. Life loses its meaning when you become old.ᵃ	1	2	3	4	5

Psychosocial Maturity – Life Purpose

Using the scale below as a guide, **circle** a number to indicate how much you agree with each statement.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.	Every day is constantly new and different.	1	2	3	4	5
6.	In achieving life's goals, I have felt completely fulfilled.	1	2	3	4	5
7.	In thinking of my life I see a reason for my being here.	1	2	3	4	5
9.	I get a great thrill out of just being alive.	1	2	3	4	5
10.	The meaning of life is evident in the world around us.	1	2	3	4	5
12.	My life is running over with exciting good things.	1	2	3	4	5
13.	I have discovered a satisfying life purpose.	1	2	3	4	5
15.	Life to me seems very exciting.	1	2	3	4	5
16.	Basically, I am living the kind of life I want to live.	1	2	3	4	5

Psychosocial Maturity – Existential Vacuum

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I feel that some element which I can't quite define is missing from my life.	1	2	3	4	5
2.	I daydream of finding a new place for my life and a new identity.	1	2	3	4	5
4.	I feel a need to develop clearer goals for my life.	1	2	3	4	5
5.	I have experienced the feeling that while I am destined to accomplish something important, I cannot put my finger on just what it is.	1	2	3	4	5
8.	I feel the lack of and a need to find a real meaning and purpose in my life.	1	2	3	4	5
11.	I try new activities or areas of interest and then soon lose their attractiveness.[c]	1	2	3	4	5
14.	I seem to change my main objectives in life.	1	2	3	4	5

Psychosocial Maturity – Self Acceptance

Please read each statement carefully and indicate to what extent each item **characterizes your own life** by **circling** the appropriate number according to the following scale.

	Not at all	Slightly	Moderately	Quite a bit	A great deal
1. I have learned that setbacks and disappointments are an inevitable part of life.[c]	1	2	3	4	5
2. I am at peace with myself.	1	2	3	4	5
3. I accept my limitations.	1	2	3	4	5
4. I am at peace with my past.	1	2	3	4	5
5. I accept what cannot be changed.	1	2	3	4	5
6. I have learned to live with suffering and make the best of it.	1	2	3	4	5

Regret Re-assessment

1. You reported having **one biggest unresolved past regret** in your life **that was still disturbing you in the first survey** (January/February 2008). Are you still ruing this biggest unresolved past regret (see separate attachment) **now**? Please **tick ☑**.

☐ Yes, I am still ruing this biggest unresolved past regret. (Please go to question 2)
☐ No, I no longer rue this biggest unresolved past regret. Given the space below, please kindly tell us your reason(s) why you no longer rue this biggest unresolved past regret, and then answer question 2 and 3.

Non-religious Coping – Acceptance

2. To what extent do you usually use each of the following strategies to cope with the biggest unresolved past regret you identified?

	Never	Seldom	Sometimes	Often	Always
1. When dealing with **this biggest regret**, I accept what has happened because eventually things will work out as well as can be expected.	1	2	3	4	5
2. When dealing with **this biggest regret**, I learn to live with it, because nothing much can be done about it.	1	2	3	4	5
3. When dealing with **this biggest regret**, I accept / tolerate life as it is and make the best of it.	1	2	3	4	5
4. When dealing with **this biggest regret**, I learn to accept the negative realities of life.	1	2	3	4	5
5. When dealing with **this biggest regret**, I look at unavoidable life events as part of my lot in life.[c]	1	2	3	4	5
6. When dealing with **this biggest regret**, I accept it because no matter how bad things are they could always be worse.	1	2	3	4	5

7. When dealing with **this biggest**   1   2   3   4   5
    regret, I don't worry about the
    past or the future, I accept each
    day as it comes.[c]

Perceived Importance of Regret

3. For each question, please **circle** *one* **number** that best indicates your <u>**present**</u>
    <u>**attitude**</u> **toward this biggest unresolved past regret you identified (see**
    separate attachment).

	Not at all		Somewhat		A great deal
4. **Now**, how important is this biggest regret for you?	1	2	3	4	5

Perceived Impact of Regret on Life

	Not at all		Somewhat		A great deal
5. **Now**, how much impact has this biggest regret had on your life?	1	2	3	4	5

Perceived Changeableness of Regret

	Not at all		Somewhat		A great deal
6. **Now**, is it still possible to change this biggest regret?	1	2	3	4	5

Negative Emotional Regret Appraisal – Despair-related Emotions

	Not at all		Somewhat		A great deal
4. How desperate do you feel **now** if you think about this biggest regret?	1	2	3	4	5
7. How helpless do you feel **now** if you think about this biggest regret?	1	2	3	4	5
10. How sorrowful do you feel **now** if you think about this biggest regret?	1	2	3	4	5
14. How disappointed do you feel **now** if you think about this biggest regret?	1	2	3	4	5

Negative Emotional Regret Appraisal – 'Hot' Emotions

	Not at all		Somewhat		A great deal
5. How irritated do you feel **now** if you think about this biggest regret?	1	2	3	4	5
8. How angry do you feel **now** if you think about this biggest regret?	1	2	3	4	5
11. How embarrassed do you feel **now** if you think about this biggest regret?	1	2	3	4	5
12. How disgusted do you feel **now** if you think about this biggest regret?	1	2	3	4	5
13. How guilty do you feel **now** if you think about this biggest regret?	1	2	3	4	5

Negative Emotional Regret Appraisal – Wishful Emotions

		Not at all		Somewhat		A great deal
6.	How nostalgic do you feel **now** if you think about this biggest regret?	1	2	3	4	5
9.	How sentimental do you feel **now** if you think about this biggest regret?	1	2	3	4	5

Extrinsic Religiosity – Extrinsic-personal Religiosity

Please **circle** one number that best indicates the extent to which you agree with each statement.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2.	I pray mainly to gain relief and protection.	1	2	3	4	5
3.	What religion offers me most is comfort in times of trouble and sorrow.	1	2	3	4	5
4.	Prayer is for peace and happiness.	1	2	3	4	5

Extrinsic Religiosity – Extrinsic-social Religiosity

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I go to church because it helps me to make friends.	1	2	3	4	5
5.	I go to church to spend time with my friends.	1	2	3	4	5
6.	I go to church mainly because I enjoy seeing people I know there.	1	2	3	4	5

Personal Dying Anxiety

Assuming that the following **dying and death**-related situations may happen to you, for each statement, **circle one number** that best represents your **attitudes towards death**.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	The thought that my dying could be long and painful is unbearable to me.	1	2	3	4	5
2.	I feel fear at the very idea of dying slowly and in agony someday.	1	2	3	4	5
3.	The physical decline that accompanies a slow dying process disturbs me.	1	2	3	4	5
4.	I am afraid of my dying being prolonged by medical equipment.	1	2	3	4	5
5.	The thought of being left alone when I am dying someday is terrible for me.	1	2	3	4	5

6. I am afraid of dying a painful death one day.	1	2	3	4	5
7. I am afraid of being treated as a mere object when I lie dying.	1	2	3	4	5
8. The possibility of losing my personal dignity when I am dying ppals me.	1	2	3	4	5

Personal Mortality acceptance

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6.	I have a positive attitude to the process of dying as a necessary stage in my life.	1	2	3	4	5
12.	To me, the dying process means the completion of my life.[c]	1	2	3	4	5
18.	The fact that I will die someday is something absolutely natural for me.	1	2	3	4	5
24.	I have a positive attitude to the process of dying as part of my life.	1	2	3	4	5
30.	Basically, I am ready to accept that I have to die one day.	1	2	3	4	5
36.	Somehow, the knowledge of my death is a part of my life that I view positively.	1	2	3	4	5
45.	My death is a part of a wider scheme of things that I treat positively.	1	2	3	4	5
54.	The dying process contributes toward rounding off my life.	1	2	3	4	5

Attraction to Death

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
14.	I know people who have died and I believe that I will meet them when I die.	1	2	3	4	5
17.	Death can change things for the better.	1	2	3	4	5
20.	Many problems can be solved by death only.[c]	1	2	3	4	5
21.	I believe death can bring a great relief from suffering.	1	2	3	4	5
23.	In some situations it is better to die than go on living.[c]	1	2	3	4	5
25.	Death can be a state of rest and calm.[b,c]	1	2	3	4	5

Personal Death Anxiety

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
10.	The idea that I will be unable to resolve my regrets after my death disturbs me.[c]	1	2	3	4	5
11.	I fear death because all my mental and spiritual activity will stop.	1	2	3	4	5
13.	I fear death because my identity will disappear.	1	2	3	4	5
15.	Thinking about death gives me the shivers.	1	2	3	4	5
16.	I fear death because it means that I will not be able to experience and think anymore.	1	2	3	4	5
19.	The thought that one day I will die frightens me.	1	2	3	4	5
22.	I fear death because all my plans will come to an end.	1	2	3	4	5
26.	Death frightens me more than anything else.	1	2	3	4	5
27.	I fear death because of fear of heavenly punishment.	1	2	3	4	5
28.	I fear death because I worry about my offspring.	1	2	3	4	5
29.	I fear death because I have too many sins.	1	2	3	4	5
31.	I fear death because my life teems with meaningful things.	1	2	3	4	5
32.	I fear death because of parting from relatives and beloved.	1	2	3	4	5
33.	I fear death because of leaving behind secular pleasures.	1	2	3	4	5
34.	I fear death because of fear of hell and doomsday.	1	2	3	4	5
35.	I fear death because of the terrible strenuous moment when the soul parts from the body.	1	2	3	4	5
37.	I fear death because of my failure to perform religious duties and obligations.	1	2	3	4	5
38.	I fear death because of my lack of faith.	1	2	3	4	5

39.	I fear death because of the grieving of loved ones.	1	2	3	4	5
40.	I fear death because of grieving over what I will leave behind, such as wealth, valuables, etc.	1	2	3	4	5
41.	I fear death because death puts an end to my plans and objectives.	1	2	3	4	5
42.	I fear death because of my missing future events.	1	2	3	4	5
43.	I fear death because events will take place without me.	1	2	3	4	5
44.	I fear death because I will be forgotten.	1	2	3	4	5
46.	I fear death because life will go on without me.	1	2	3	4	5
47.	I fear death because my family will still need me.	1	2	3	4	5
48.	I fear death because of my inability to provide for my family.	1	2	3	4	5
49.	I fear death because of the uncertainty of what to expect during the end of my life.	1	2	3	4	5
50.	I fear death because of the uncertainty of what to expect after my death.	1	2	3	4	5
51.	I fear death because of the uncertainty of existence after my death.	1	2	3	4	5
52.	I fear death because of death's mysteriousness.[c]	1	2	3	4	5
53.	I fear death because of the unknown associated with death.[c]	1	2	3	4	5

Religious Background – Theological Religiosity

Please **tick** ☑ **one** box for each statement about **your beliefs** to indicate your response.

1. Which **one** of the following statements comes **closest** to your **present** belief about life after death (immortality)?[c]
   - ☐ I do not believe in immortality in any sense.
   - ☐ I don't know whether there is any kind of life after death, and I don't know if I will ever know.
   - ☐ I believe immortality is the continued influence of a person's life on family or society.
   - ☐ I believe in a life after death of some kind, but I really don't know what it would be like.

☐ While its meaning is somewhat imprecise, I believe in a soul existing after death as a part of a universal spirit.
☐ I believe in a personal life after death, a soul existing as a specific individual spirit.
☐ I believe in reincarnation (belief that the soul enters a new body after death).

2. Which **one** of the following statements comes **closest** to what you **currently** feel will probably happen to you after death?
☐ Simply stop existing.
☐ Reincarnation.
☐ I have no idea.
☐ My "spirit" will have some continuation in the universe.
☐ Depending on the will of God, I will go to heaven or hell.

3. Which **one** of the following statements comes **closest** to your **present** belief about God?[c]
☐ I am sure that God really exists and that He is active in my life.
☐ Although I sometimes question His existence, I do believe in God and believe He knows of me as a person.
☐ I feel that I do believe in a God even though I am not able to explain fully who or what God is.
☐ I don't know if there is a personal God, but I do believe in a higher power of some kind.
☐ I don't know if there is a personal God or a higher power of some kind, and I don't know if I ever will.
☐ I don't believe in a personal God or in a higher power.

4. Which **one** of the following statements comes **closest** to your **present** belief about Jesus?
☐ Frankly, I am not sure the historical Jesus existed.
☐ I think Jesus was only a man.
☐ I think Jesus was only a man, although an extraordinary one.
☐ I feel that Jesus was a great religious prophet, but I don't feel He was the Son of God any more than all of us are the children of God.
☐ Jesus is best understood as a symbol of goodness; whether he existed or not is unimportant.
☐ I feel basically that Jesus is Divine, but I have some problems understanding the concept of His Divinity.
☐ Jesus is the Divine Son of God and I have no doubts about it.

5. Which **one** of the following statements comes **closest** to your **present** belief about the idea that God has and continues to act in the history of man?
☐ There is no evidence of any intervention of "God" in human history.
☐ People who have believed in God have influenced history.
☐ I believe the unfolding history of man has been within a natural order established by a higher power.
☐ While I am unable to explain fully who or what God is, I believe He has an influence in the history of man.
☐ I believe God has and continues to intervene directly and indirectly in the history of man.

6. Which **one** of the following statements comes **closest** to your **present** conception of prayer?
☐ "Prayer" is not a meaningful term to me.
☐ Prayer is self-evaluation and working out one's problems.
☐ Prayer is meditation in which thought is directed toward beauty, goodness, comfort, etc.
☐ Prayer is directing one's thoughts toward a higher power.
☐ Prayer is speaking to God.

7. Which **one** of the following statements comes **closest** to expressing your **present** conception of sin?
    - ☐ I do not believe in "sin".
    - ☐ I believe people err but do not "sin".
    - ☐ Sin is behavior which goes against my own personal principles.
    - ☐ Sin is behavior which harms others.
    - ☐ Sin is behavior which goes against social and ethical principles.
    - ☐ Sin is failure to live up to the highest spiritual ideas I know.
    - ☐ Sin is the individual's rejection of God's will for his life.

8. Which **one** of the following statements comes **closest** to your **present** view of the Bible?
    - ☐ The Bible is a collection of myths and fantasies.
    - ☐ The Bible is a collection of literary and historical writings.
    - ☐ The Bible contains some of man's significant moral and ethical thinking.
    - ☐ The Bible was written by inspired men and contains valuable spiritual teachings.
    - ☐ The Bible is God's Word.

Religious Background – Ritual Religiosity

9. Which **one** of the following statements comes **closest** to describing your **current** use of the Bible?
    - ☐ I read the Bible regularly for devotional purposes.
    - ☐ I read the Bible, somewhat irregularly, primarily for devotional purposes.
    - ☐ I read the Bible occasionally for its ethical and moral teachings.
    - ☐ I read the Bible occasionally for literacy or historical purposes.
    - ☐ I read the Bible for diverse purposes.
    - ☐ I seldom, if ever, read the Bible.
    - ☐ I never read the Bible.

10. Which **one** of the following statements comes **closest** to describing your **present** practice of prayer?
    - ☐ Prayer is a regular part of my daily life.
    - ☐ I usually pray in times of stress or need but rarely at other time.
    - ☐ I pray only during formal ceremonies.
    - ☐ I never pray.

Religious Background – Consequential Religiosity

11. When you have a serious personal problem, how often do you take religious advice or teaching into consideration?
    - ☐ Almost always.
    - ☐ Usually.
    - ☐ Sometimes.
    - ☐ Seldom.
    - ☐ Never.

Religiosity Profile – Religious Affiliation
12. Could you tell us your religion?
    - ☐ I am a practising member of a Christian church.
    - ☐ I am a non-practising member of a Christian church.
    - ☐ I am spiritually inclined but don't really 'belong' to Christianity.
    - ☐ I am an agnostic about God.
    - ☐ None of the above, please specify: _____

Mood Repair Measure – Modified Pleasant Events Schedule

Finally, during **the past 4 weeks**, did you **engage** in any of the following activities **and find** it **enjoyable**. Please **tick** ☑ *one* or *more* **boxes**.

  ☐ Seeing old friends
  ☐ Being in the country
  ☐ Having friends come to visit
  ☐ Seeing beautiful scenery
  ☐ Being with friends
  ☐ Watching wild animals
  ☐ Being with happy people
  ☐ Expressing my love to someone
  ☐ Being told I am loved
  ☐ Making contributions to religious, charitable, or political groups
  ☐ Buying things for yourself
  ☐ Rearranging or redecorating your room or house
  ☐ Going to church functions
  ☐ Talking about philosophy or religion
  ☐ Eating good meals
  ☐ Meditating or doing yoga
  ☐ Shopping
  ☐ Talking about politics or public affairs
  ☐ Exercising (walking, dancing, etc.)
  ☐ Grooming (wearing makeup, shaving)
  ☐ Planning trips or vacation abroad
  ☐ Doing voluntary work
  ☐ Wearing favourite / expensive / new clothes
  ☐ Others, please specify:
       _____

Notes. [a]Reverse item. [b]Discarded item. [c]Modified item.

This page is intentionally left blank.

Appendix E: Qualitative Analysis of Participants' Most Significant Spiritual Experience

One hundred and ten participants reported that they had a spiritual experience. Among them, 17 participants' written accounts were irrelevant to description of spiritual experience and most of which were mere expression of one's devotion to God/Jesus. Three participants did not describe their most intense spiritual experience. In addition, one participant could not remember the experience and another found it too personal to disclose in the survey. The remaining 88 participants' most significant spiritual experience descriptions could be categorized into the following 12 domains.

About 38% of them reported feelings of presence of God or Jesus Christ, often in prayer or worship. Some of them felt being filled with Holy Spirit or being spiritually cleansed by God. The second common description (29.54%) was related to experiencing a sense of peace, calmness, and/or reassurance. The third common description (14.77%) was hearing a voice speaking to oneself. Perceived answer to prayers or guidance was considered the most significant spiritual experience by nine participants (9.09%). Seven participants (7.95%) reported seeing God or Jesus Christ in a vision and some of them described it as a 'dream-like' experience. The sixth common description (6.81%) referred to a sense of light or glow on parts of one's body. Five participants (5.68%) reported a feeling of being 'looked after', or 'protected', or helped. Three participants (3.40%) described a healing experience of oneself and/or others as spiritually significant to them. About 3% of participants mentioned experiences of the Holy Spirit or God at work in life in their description of their most significant spiritual experience. Two participants (2.27%) reported similar experiential transcendence in terms of feelings of oneness with God or the universe. Three participants (2.27%) reported hearing a voice of or seeing the deceased. Two participants (2.27%) recalled incidents of speaking or knowing words that were unbeknown to him/her as his/her most intense spiritual experience. Finally, seven participants reported one of the following when he/she described his/her most significant spiritual experience: (a) feeling of strength; (b) detection of unexplained aroma; (c) feeling of having no body weight; (d) having received a strong inner message; (e) vision of beautiful scenery; (f) 'draining feelings that caused floods of tears'.

This page is intentionally left blank.

Appendix F: English Version of the Exploratory Buddhist Survey Materials

Demographics

Please tell us your....
Age group:
- ☐ 55 – 59
- ☐ 60 – 64
- ☐ 65 – 69
- ☐ 70 – 79
- ☐ 80 or above

Gender:
- ☐ Male
- ☐ Female

Marital status:
- ☐ Never married
- ☐ Married
- ☐ Divorced
- ☐ Widowed / separated

Employment status:
- ☐ Working
- ☐ Retired
- ☐ Others, please specify: _____

Living arrangement:
- ☐ Alone
- ☐ With other family members
- ☐ Others, please specify: _____

Have you taken the Three Refuges of the Buddha?
- ☐ Yes
- ☐ No

Are you a disciplinarian of the Five Precepts?
- ☐ Yes
- ☐ No

Subjective Life Expectancy

Imagine that the following line is your present life line, please use a cross (x) to indicate **where you think you are now**.

```
|——————————————————————————————————————————————————|
Birth                        Your present life                        Death
```

Dummy Warm-up Task: Reminiscence

Above is an **old Hong Kong** picture. Do you recognize it? Please tick ☑.
- ☐ No. Please go to Section 4 (p. 4).
- ☐ Yes. Please briefly describe what kind of memories this picture brings back to you.

Regret Description

After so many years, many things have happened in your life. When you look into your past, you may remember both happy and sad episodes. Are there any events that did not turn out as you wish? Please tick ☑.
- ☐ No, please go to section 7 (p. 8).
- ☐ Yes. Among them, is there a single event that you feel most regretful?
- ☐ No, please go to section 7 (p.8).
- ☐ Yes. Please answer question 1 and 2 first.

1. **What** had happened?
2. **Why** do you think it had happened to you?

Perceived Significance of the Regret

Please **circle** one number that best indicates your **present attitudes** toward this biggest regret you just identified (p. 4).

	If you think about this biggest regret,	Not at		Quite a	A great
1.	how much impact it has had on you **now**?	all	Slightly	bit	deal

Perceived Changeableness of the Regret

	If you think about this biggest regret,	Not at		Quite a	A great
2.	is it still possible to change it **now**?	all	Slightly	bit	deal

Negative Emotional Regret Appraisal – Despair-related Emotions

If you think about this biggest regret,

3.	how desperate do you feel **now**?	Not at all	Slightly	Quite a bit	A great deal
5.	how helpless do you feel **now**?	Not at all	Slightly	Quite a bit	A great deal
7.	how sorrowful do you feel **now**?	Not at all	Slightly	Quite a bit	A great deal

Negative Emotional Regret Appraisal – 'Hot' Emotions

If you think about this biggest regret,

4.	how irritated do you feel **now**?	Not at all	Slightly	Quite a bit	A great deal
6.	how angry do you feel **now**?	Not at all	Slightly	Quite a bit	A great deal
8.	how embarrassed do you feel **now**?	Not at all	Slightly	Quite a bit	A great deal

Buddhist Coping – Self directing

Obviously, different people deal with regret in different ways, but we are interested in **how much or how frequently you tried to do** what the item says to **cope with** this biggest regret (please refer to p.4). For each item, **circle** one adverb that best indicates your response.

8.	I made decisions about what to do to deal with this biggest regret without Buddha's or Bodhisattva's help.[a]	Never	Seldom	Sometimes	Often	Always
24.	When dealing with this biggest regret, I meditated to calm my mind.	Never	Seldom	Sometimes	Often	Always
26.	When dealing with this biggest regret, I joined the conferences or study groups speeches held by Sangha or laity to find ways to improve its impact on me.	Never	Seldom	Sometimes	Often	Always
30.	When dealing with this biggest regret, I tried to impart my knowledge about Buddhism to others.	Never	Seldom	Sometimes	Often	Always
31.	I tried to uphold the Precept of no killing to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
32.	I tried to uphold the Precept of no stealing to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
33.	I tried to uphold the Precept of no sexual misconduct to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
34.	I tried to uphold the Precept of no lying to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
35.	I tried to uphold the Precept of no taking of intoxicants to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always

36.	When dealing with this biggest regret, I tried to tolerate physical and verbal abuse directed at me.	Never	Seldom	Sometimes	Often	Always
37.	I tried to be diligent in discarding evil thoughts and actions that have already arisen to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
38.	I tried to be diligent in fostering undeveloped good thoughts and actions to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
40.	When dealing with this biggest regret, I tried to do meritorious deeds to reduce my bad karma.	Never	Seldom	Sometimes	Often	Always
41.	When dealing with this biggest regret, I tried to dedicate the resulting merits that I got from my virtuous deeds to specific others or all sentient beings.	Never	Seldom	Sometimes	Often	Always

Buddhist Coping – Deferring

1.	When dealing with this biggest regret, I tried to use Buddha Dharma to make me stronger.	Never	Seldom	Sometimes	Often	Always
2.	When dealing with this biggest regret, I believed I was affected by the bad deeds I made in my past lives (bad karmic effect).	Never	Seldom	Sometimes	Often	Always
4.	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would relieve my worries.	Never	Seldom	Sometimes	Often	Always
5.	When dealing with this biggest regret, I did what I could and put the rest in Buddha's or Bodhisattva's hands.	Never	Seldom	Sometimes	Often	Always
6.	When dealing with this biggest regret, I did not do much, just expected Buddha or Bodhisattva to solve my problems for me.	Never	Seldom	Sometimes	Often	Always
7.	When dealing with this biggest regret, I pleaded with Buddha or Bodhisattva to make things turn out okay.	Never	Seldom	Sometimes	Often	Always
10.	When dealing with this biggest regret, I focused on studying Buddhism to stop worrying about it.	Never	Seldom	Sometimes	Often	Always
11.	When dealing with this biggest regret, I looked for a stronger connection with Buddha or Bodhisattvas.	Never	Seldom	Sometimes	Often	Always
14.	When dealing with this biggest regret, I sought support from Buddhists.	Never	Seldom	Sometimes	Often	Always

19.	I seek advice from Sangha to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
20.	When dealing with this biggest regret, I recited Buddhist Sutras and Mantras.	Never	Seldom	Sometimes	Often	Always
21.	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would relieve my sufferings.	Never	Seldom	Sometimes	Often	Always
22.	When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would reduce my bad karma.	Never	Seldom	Sometimes	Often	Always
27.	When dealing with this biggest regret, I worshipped and made offerings to Buddha or Bodhisattva at home.	Never	Seldom	Sometimes	Often	Always
28.	When dealing with this biggest regret, I worshipped and made offerings to Buddha or Bodhisattva at Buddhist centres or temples.	Never	Seldom	Sometimes	Often	Always
29.	When dealing with this biggest regret, I chanted "Namo Amitabha" or other Buddhas' or Bodhisattvas' names.	Never	Seldom	Sometimes	Often	Always
39.	I wholeheartedly repented and reformed my bad deeds (bad karma) in front of Buddha or Bodhisattvas.	Never	Seldom	Sometimes	Often	Always

Buddhist Coping – Transpersonal Faith-based

3.	When dealing with this biggest regret, I doubted Buddha's teachings.[b]	Never	Seldom	Sometimes	Often	Always
9.	I looked to Buddha Dharma for strength, support, and guidance to deal with this biggest regret.	Never	Seldom	Sometimes	Often	Always
12.	When dealing with this biggest regret, I wondered whether Buddha or Bodhisattvas had abandoned me.[b]	Never	Seldom	Sometimes	Often	Always
15.	When dealing with this biggest regret, I disagreed with Buddha's teachings.[b]	Never	Seldom	Sometimes	Often	Always
16.	When dealing with this biggest regret, I discovered new life purpose through Buddha's teachings.	Never	Seldom	Sometimes	Often	Always
17.	When dealing with this biggest regret, I tried to find a completely new life through Buddhism.	Never	Seldom	Sometimes	Often	Always
18.	When dealing with this biggest regret, I used Buddha Dharma to help me to get rid of my greed, anger, and ignorance	Never	Seldom	Sometimes	Often	Always

| 23. | When dealing with this biggest regret, I prayed that Buddha or Bodhisattva would improve my fortune. [b] | Never | Seldom | Sometimes | Often | Always |
| 25. | When dealing with this biggest regret, I read books and used audio-visual materials about Buddhism to help my cultivation. | Never | Seldom | Sometimes | Often | Always |

Difficulty of Applying Buddhism
1. Do you find practicing what Buddha taught in daily life easy or difficult? Why? Please write down your thoughts.

Ways of Merit Making
2. How do you usually do meritorious deeds? Please write down your actions.

Buddhist Reincarnation Beliefs

Please read each statement carefully, and **choose** one adjective that best represents your **attitudes**.

1.	I believe without death transcendence, everyone must reincarnate.	SD	Disagree	Neutral	Agree	SA
2.	I believe, during reincarnation, those with more good deeds than bad deeds are more likely to be born in good realms (heaven, humans, Asura).	SD	Disagree	Neutral	Agree	SA
3.	I believe, during reincarnation, those with more bad deeds than good deeds are more likely to be born in bad realms (animals, hungry ghosts, hell).	SD	Disagree	Neutral	Agree	SA
4.	I believe, if one has evil mind (greed, anger, ignorance) at the time of death, then he or she is likely to be born in bad realms.	SD	Disagree	Neutral	Agree	SA
5.	I believe, if one gives charity and cultivates fortune or one's family does such things on behalf of oneself at the time of death, then he or she is likely to be born in good realms.	SD	Disagree	Neutral	Agree	SA
6.	I believe, if one chants Sautras and recites Buddha's or Bodhisattvas' name or one's family does such things on behalf of oneself at the time of death, then he or she is likely to be born in good realms.	SD	Disagree	Neutral	Agree	SA
7.	I believe all sentient beings must experience the pain of reincarnation, except Buddha or Arhat.	SD	Disagree	Neutral	Agree	SA
8.	I believe one must rely on one's strength, others' strength and the power of the Three Refuges (Buddha, Buddha Dharma, and	SD	Disagree	Neutral	Agree	SA

Sangha) to prevent reincarnation.

Traditional Chinese Death Beliefs

9.	I believe thinking or talking about death can bring bad luck.	SD	Disagree	Neutral	Agree	SA
10.	I believe seeing a dead body or a coffin can bring misfortune.	SD	Disagree	Neutral	Agree	SA
11.	I believe a painful or early death is a result of past misdeeds.	SD	Disagree	Neutral	Agree	SA
12.	I believe a bereaved families should not be socially active in the months following the death.	SD	Disagree	Neutral	Agree	SA
13.	I believe visiting the home of the deceased can bring misfortune.	SD	Disagree	Neutral	Agree	SA
14.	I believe parents should never attend his or her children's funeral.	SD	Disagree	Neutral	Agree	SA
15.	I believe talking about death in the presence of a dying person would accelerate death.	SD	Disagree	Neutral	Agree	SA
16.	I believe dying without a son is 'no face'.	SD	Disagree	Neutral	Agree	SA

Personal Death Anxiety

Many people have different **feelings towards death**. Here are some comments they expressed. Please each statement carefully, and **circle** one appropriate adjective to indicate your agreement.

		Agree	Disagree
1.	I am very much afraid of death.	Agree	Disagree
2.	Thought of death seldom enters my mind.[b]	Agree	Disagree
3.	I am not nervous when people talk about death.[b]	Agree	Disagree
5.	I am not at all afraid to die.[b]	Agree	Disagree
7.	Thought of death never bothers me.[b]	Agree	Disagree
8.	I am distressed by how time flies so rapidly.	Agree	Disagree
10.	Subject of reincarnation troubles me.	Agree	Disagree
13.	I shutter when hearing about World War III.	Agree	Disagree
14.	Sight of dead body is horrifying to me.	Agree	Disagree
15.	To me, future holds nothing to fear.[b]	Agree	Disagree
16.	I fear that death it puts an end to all your plans and objectives.	Agree	Disagree
17.	I fear death because I lack faith in Buddha Dharma.[c]	Agree	Disagree
18.	I fear death because I have too many bad deeds (bad karma).[c]	Agree	Disagree
19.	I fear that relatives and friends will not overcome sorrow after I die.	Agree	Disagree
20.	I worry about the consequences of my death to my offspring.	Agree	Disagree
21.	I fear that my family will still need me after I die.	Agree	Disagree
22.	I fear death because I dread to part from the relatives and beloved.	Agree	Disagree

Personal Dying Anxiety

		Agree	Disagree
4.	I dread to think about operation.	Agree	Disagree
11.	I am scared of having heart attack.	Agree	Disagree
9.	I fear dying a painful death.	Agree	Disagree
12.	I often think about how short life is.	Agree	Disagree
6.	I am not afraid of getting caner.[b]	Agree	Disagree

239

Self Acceptance

Buddhism not only addresses the existential questions, it also emphasizes on living in the present moment to live a meaningful life. I am interested in **how you view your present life**. Read each statement carefully, and **circle** one appropriate adjective to indicate your agreement.

1.	I have learned that setbacks and disappointments are an inevitable part of life.	SD	Disagree	Neutral	Agree	SA
2.	I am at peace with myself.	SD	Disagree	Neutral	Agree	SA
3.	I accept my limitations.	SD	Disagree	Neutral	Agree	SA
4.	I am at peace with my past.	SD	Disagree	Neutral	Agree	SA
5.	I accept what cannot be changed.	SD	Disagree	Neutral	Agree	SA
6.	I have learned to live with suffering and make the best of it.	SD	Disagree	Neutral	Agree	SA

Notes. [a]Discarded item. [b]Reverse item. [c]Modified item.

References

Abdel-Khalek, A. M. (2002). Why do we fear death? The construction and validation of the Reasons for Death Fear scale. *Death Studies, 26*, 669-680.

Ai, A. L., Park, C. L., Huang, B., Rodgers, W., & Tice, T. N. (2007). Psychosocial mediation of religious coping styles: A style of short-term psychological distress following cardiac surgery. *Personality and Social Psychology Bulletin, 33*, 867-882.

Aldrich, C. K., & Mendkoff, E. (1963). Relocation of the aged and disabled: A mental study. *Journal of the American Geriatrics Society, 11*, 185-194.

Allison, P. A. (2009). Missing data. In R. E. Millsap & A. Maydeu-Olivares (Eds.), *The SAGE handbook of quantitative methods in psychology* (pp. 72-89). New Delhi, India, SAGE Publications India Pvt Ltd.

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

Alprin, L., & Lester, D. (1995). Belief in reincarnation and locus of control. *Psychological Reports, 76*, 1018.

Alvarado, K. A., Templer, D. I., Bresler, C., & Thomas-Dobson, S. (1995). The relationship of religious variables to death depression and death anxiety. *Journal of Clinical Psychology, 51*, 202-204.

Amenta, M. M., & Weiner, A. W. (1981). Death anxiety and purpose in hospice workers. *Psychological Reports, 49*, 920.

Angell, G. B., Dennis, B. G., & Dumain, L. E. (1998). Spirituality, resilience, and narrative: Coping with parental death. *Families in Society: The Journal of Contemporary Human Services, 79*, 615-630.

Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology, 61(4)*, 461-480.

Ardelt, M. (2008). Wisdom, religiosity, purpose in life, and attitudes toward death. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 139-158). NY: Lawrence Erlbaum Associates.

Ardelt, M., Ai, A., Eichenberger, S. E. (2008). In search for meaning: The differential role of religion for middle-aged and older persons diagnosed with a life-threatening illness. *Journal of Religion, Spirituality & Aging, 20(4)*, 288-312.

Ardelt, M., & Koenig, C. S. (2006). The role of religion for hospice patients and relatively healthy older adults. *Research on Aging, 28(2)*, 184-215.

Argyle, M., & Beit-Hallahmi, B. (1975). *The social psychology of religion*. London: Routledge & Kegan Paul.

Armeli, S., Gunthert, K. C., & Cohen, L. H. (2001). Stressor appraisals, coping, and post-event outcomes: The dimensionality and antecedents of stress-related growth. *Journal of Social and Clinical Psychology, 20*, 366-395.

Armstrong-Coster, A. (2004). *Living and dying with cancer*. Cambridge: Cambridge University Press.

Arndt, J., Greenberg, J., Pyszczynski, T., Solomon, S. (1997). Subliminal exposure to death-related stimuli increases defense of the cultural worldview. *Psychological Science, 8*, 379-385.

Batson, C. D., & Stocks, E. L. (2004). Religion: Its core psychological functions. In J. Greenberg, S. L. Koole., & T. Pyszcyzynski (Eds.), *Handbook of experimental existential psychology* (pp. 141-155). NY: The Guilford Press.

Batten, M., & Oltjenbruns, K. A. (1999). Adolescent sibling bereavement as a catalyst for spiritual development: A model for understanding. *Death Studies, 23*, 529-546.

Baum, S. K. (1983). Older people's anxiety about afterlife. *Psychological Reports, 52*, 896-898.

Becker, E. (1973). *The denial of death*. New York: The Free Press.

Bentler, P. (1992). *EQS program manual*. LA: BMDP Statistical Software.

Benton, J. P., Christopher, A. N., & Walter, M. I. (2007). Death anxiety as a function of aging anxiety. *Death Studies, 31*, 337-350.

Berger, P. (1969). *The sacred canopy: Elements of a sociological theory of religion*. NY: Doubleday.

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.

Blacker, D. (1998). Education as immortality: Toward the rehabilitation of an ideal. *Religious Education, 93*, 7-28.

Blazer, D., & Palmore, E. (1976). Religion and aging in a longitudinal panel. *The Gerontologist, 16*, 82-85.

Bowerman, B. L., & O'Connell, R. T. (1990). *Linear statistical models: An applied approach* (2nd ed.). Belmont, CA: Duxbury.

Boylin, W., Gordon, S. K., & Nehrke, M. F. (1976). Reminiscing and ego integrity in institutionalized elderly males. *The Gerontologist, 16*, 118-124.

Bradley, D. B. (1999-2000). The meaning of volunteering in the lives of older adults. *Generations, 23*, 45-50.

Brooks, N. (2004). Overview of religions. *Clinical Cornerstone, 6*, 7-16.

Browne, M. W., Cudeck, R. (1993). Alternative ways of assessing model fit. In K. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.

Buckman, R. (1988). *I don't know what to say*. London: Macmillan and Papermac.

Bugen, L. A. (1980-1981). Coping: Effects of death education. *OMEGA: Journal of Death and Dying, 11*, 175-183.

Burris, C. T., & Bailey, K. (2009). What lies beyond: Theory and measurement of afterdeath beliefs. *The International Journal for the Psychology of Religion, 19*, 173-186.

Butler, R. N. (1963). Life review: An interpretation of reminiscence in the aged. *Psychiatry, 4*, 1-18.

Butler, R. N. (1995). Ageism. In G. L. Maddox (Ed.), *The encyclopedia of aging* (2 ed., pp. 35-36). NY: Springer.

Butler, R. N. (2002). *Age, death, and life review*. Retrieved August 6, 2009, from Hospice Foundation of America We site: *http://www.hospicefoundation.org/teleconference/2002/butler.asp*

Byock, I. R. (1996). The nature of suffering and the nature of opportunity at the end of life. *Clinics in Geriatric Medicine, 12*, 237-252.

Campbell, W. K., Bonacci, A. M., Shelton, J., Exline, J. J., Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment, 83*, 29-45.

Cansanova, J. (1994). *Public religions in the modern world*. Chicago, IL: University of Chicago Press.

Caplan, S. E., Haslett, B. J., & Burleson, B. R. (2005). Telling it like it is: The adaptive function of narratives in coping with loss in later life. *Health Communication, 17(3)*, 233-251.

Cappeliez, P., & O'Rourke, N. (2002a). Personality traits and existential concerns as predictors of the functions of reminiscence in older adults. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 57B(2)*, P116-P123.

Cappeliez, P., & O'Rourke, N. (2002b). Profiles of reminiscence among older adults: Perceived stress, life attitudes, and personality variables. *The International Journal of Aging & Human Development, 54(4)*, 255-266.

Carmdoy, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine, 31*, 23-33.

Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist, 54*, 165-181.

Carstensen, L. L., & Lang, F. R. (1996). *Future Time Perspective Scale*. Unpublished manuscript. Stanford University. Retrieved June 14, 2007, from *http://www-psych.standford.edu/~lifespan/doc/FTP_english.pdf*

Carstensen, L. L., Gross, J. J., & Fung, H. H. (1998). The social context of emotional experience. In K. W. Schaie & M. P. Lawton (Eds.), *Annual Review of Gerontology and Geriatrics, 17*. New York: Springer.

Carus, P. (2003). *Gospel of the Buddha*. Varanasi, India: Pilgrims Publishing.

Chang, S. O., Kim, J. H., Kong, E. S., Kim, C. G., Ahn, S. Y., & Cho, N. O. (2008). Exploring ego-integrity in older adults: A Q-methodology study. *International Journal of Nursing Studies, 45*, 246-256.

Chaplin, S. (2000). *The psychology of time and death*. Ashland, OH: Sonnet Press.

Chen, Y-H. (2006). Coping with suffering: The Buddhist perspective. In P. T. P. Wong & L. C. J. Wong (Eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 73-89). NY: Springer Science+Business Media Inc.

Cheng, S. T. (2009). Generativity in later life: Perceived respect from younger generation as a determinant of goal disengagement and psychological well-being. *Journal of Gerontology: Psychological Sciences, 64B*, 45-54.

Chin-Kung, Venerable Master. (1999). *Buddhism: The wisdom of compassion and awakening*. Taipei, Taiwan: The Corporate Body of the Buddha Educational Foundation.

Chochinov, H. M., Kristjanson, L. J., Hack, T. F., Hassard, T., McClement, S., & Harlos, M. (2006). Personality, neuroticism, and coping towards the end of life. *Journal of Pain and Symptom Management, 32(4)*, 332-341.

ChXdrXn, P. (1998). *When things fall apart*. London: Element.

Cicirelli, V. G. (2000). Older adult's ethnicity, fear of death, and end-of-life decisions. In A. Tomer (Ed.), *Death attitudes and the older adult* (pp. 175-191). Philadelphia, PA: Brunner-Routledge.

Cicirelli, V. G. (2002). Fear of death in older adults: Predictions from Terror Management Theory. *Journal of Gerontology: Psychological Sciences, 57*, 358-366.

Cicirelli, V. G. (2003). Older adults' fear and acceptance of death: A transitional model. *Ageing International, 28*, 66-81.

Cicirelli, V. G. (2006a). Fear of death in mid-old age. *Journal of Gerontology: Psychological Sciences, 61B*, P75-P81.

Cicirelli, V. G. (2006b). *Older adults' views on death*. NY: Springer Publishing Company.

Cicirelli, V. G. (2009). Sibling death and death fear in relation to depressive symptomatology in older adults. *Journals of Gerontology Series B: Psychological Sciences & Social Sciences, 64*, 24-32.

Clements, R. (1998). Intrinsic religious motivation and attitudes towards death among the elderly. *Current Psychology, 17(2-3)*, 237-248.

Cluff, C. B., Rev. (1984). Pastoral enlightenment for seniors: Do they need it? Do they want it? *Journal of the American Geriatrics Society, 32*, 609-613.

Coleman, P. G., McKiernan, F., Mills, M., & Speck, P. (2007). In sure and uncertain faith: Belief and coping with loss of spouse in later life. *Ageing & Society, 27*, 869-890.

Collett, L. J., & Lester, D. (1969). The fear of death and the fear of dying. *Journal of Psychology, 72*, 179-181.

Conte, H. R., & Weiner, M. B., Plutchik, R. (1982). Measuring death anxiety: Conceptual, psychometric, and factor-analytic aspects. *Journal of Personality and Social Psychology, 43*, 775-785.

Cook, E. A. (1998). Effects of reminiscence on life satisfaction of elderly female nursing home residents. *Health Care for Women International, 19(2)*, 109-118.

Cottingham, J. (2003). *On the meaning of life.* London: Routledge.

Croft, P., Jordan, K., & Jinks, C. (2005). "Pain elsewhere" and the impact of knee pain in older people. *Arthritis and Rheumatism, 52(8)*, 2350-2354.

Dahlsgaard, K., Peterson, C., & Seligman, M. E. P. (2005). Shared virtue: The convergence of valued human strengths across culture and history. *Review of General Psychology, 9*, 203-213.

Dave, G., & Vincent, J. (1998). Religion and old age. *Ageing and Society, 18*, 101-110.

Davidson, B., & Thomas, A. (2002). Buddhism and group analysis. *Group Analysis, 35*, 57-71.

Davie, G., & Vincent, J. (1998). Religion and old age. *Ageing and Society, 18*, 101-110.

Daya, R. (2000). Buddhist psychology, a theory of change processes: Implications for counsellors. *International Journal for the Advancement of Counselling, 22*, 257-271.

Debate of the Age Health and Care Study Group. (1999). *The future of health and care of older people: The best is yet to come.* London: Age Concern.

DeJong, G. F., Faulkner, J. E., & Warland, R. H. (1976). Dimensions of religiosity reconsidered: Evidence from a cross-cultural study. *Social Forces, 54*, 866-889.

DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin, 124*, 197-229.

Dezutter, J., Soenens, B., Luyckx, K., Bruyneel, S., Vansteenkiste, M., Duriez, B., & Hutsebaut, D. (2009). The role of religion in death attitudes: Distinguishing between religious belief and style of processing religious contents. *Death Studies, 33*, 73-92.

Diehl, M., Coyle, N., & Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the life span. *Psychology and Aging, 11*, 127-139.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71-75.

Diggory, J. C., Rothman, D. Z. (1961). Values destroyed by death. *Journal of Abnormal and Social Psychology, 63*, 205-210.

Drolet, J-L. (1990). Transcending death during early adulthood: Symbolic immortality, death anxiety, and purpose in life. *Journal of Clinical Psychology, 46*, 148-160.

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

Durbin, J., & Watson, G. S. (1951). Testing for serial correlation in least squares regression, II. *Biometrika, 30*, 159-178.

Ellison, C. G. (1994). Religion, the life stress paradigm, and the study of depression. In J. S. Levin (Ed.), *Religion in aging and health: Theoretical foundations and methodological frontiers* (pp. 79-121). CA: Sage.

Ellison, C. G., Gay, D. A., & Glass, T. A. (1989). Does religious commitment contribute to individual life satisfaction. *Social Forces, 68(1)*, 100-123.

Erikson, E. H. (1950). *Childhood and society*. New York: Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis*. UK, London: Faber & Faber.

Erikson, E. H. (1979). Reflections on Dr. Borg's life cycle. In D. D. Van Tassel (Ed.), *Aging, death and the completion of being* (pp. 29-68). Philadelphia, PA: University of Pennsylvania Press.

Eriskon, E. H. (1982). *The life cycle completed*. New York: Norton.

Erikson, E. H., Erikson, J. M., & Kivnick, H. Q. (1986). *Vital involvement in old age*. NY: Norton.

Exline, J. J. (2003). Belief in heaven and hell among Christians in the United States: Denominational differences and clinical implications. *OMEGA, 47*, 155-168.

Exline, J. J., & Yali, A. M. (2007). Heaven's gates and hell's flames: Afterlife beliefs f Catholic and Protestant undergraduates. *Research in the Social Scientific Study of Religion, 17*, 235-260.

Eysenck, M. W. (2004). *Psychology: An international perspective*. UK, East Sussex: Psychology Press Ltd.

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.

Ferrer, M., & Alonso, J. (1998). The use of the Short Form (SF)-36 questionnaire for older adults. Comments on Age and Ageing. *Age and Ageing, 1998, 27(6)*, 755-756.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Dubai: Oriental Press.

Field, D. (2000). Older people's attitudes towards death in England. *Mortality, 5*, 276-297.

Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. In G. R. Hancock & R. O. Mueller (Eds.), *Structural Equation Modelling: A second course* (pp. 269-314). Greenwich, CT: The Information Age Publishing.

Firestone, R. W. (1994). Psychological defences against death anxiety. In. R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 217-241). Washington, DC: Taylor & Francis.

Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne Social Desirability Scale. *Educational and Psychological Measurement, 53*, 417-424.

Fisher, B. J. (1995). Successful aging, life satisfaction, and generativity in later life. *International Journal of Aging and Human Development, 41*, 239-250.

Fishman, S. (1992). Relationships among an older adult's life review, ego integrity, and death anxiety. *International Psychogeriatrics, 4*, 267-277.

Fitchett, G., Rybarczyk, B. D., DeMarco, G. A., Nicholas, J. J. (1999). The role of religion in medical rehabilitation outcomes: A longitudinal study. *Rehabilitation Psychology, 44*, 333-353.

Flint, G. A., Gayton, W. F., & Ozmon, K. L. (1983). Relationship between life satisfaction and acceptance of death by elderly persons. *Psychological Reports, 53*, 290.

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.

Florian, V., & Mikulincer, M. (2004). A multifaceted perspective on the existential meanings, manifestations, and consequences of the fear of personal death. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 54-70). NY: The Guilford Press.

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 50*, 992-1003.

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

Fortner, B. V., Neimyer, R. A., & Rybarczyk, B. (2000). Correlates of death anxiety in older adults: A comprehensive review. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 95-108). Philadelphia, PA: Brunner-Routledge.

Fox, K. (2005). *Watching the English: The hidden rules of English behaviour*. Britain: Hodder & Stoughton.

Frankl, V. E. (1975). *The unconscious God.* NY: Simon and Schuster.

Frankl, V. (1984). *Man's searching for meaning.* New York: Washington Square Press.

Franks, K., Templer, D. I., Cappelletty, G. G., Kauffman, I. (1999-1991). Exploration of death anxiety as a function of religious variables in gay men with and without AIDS. *OMEGA, 22*, 43-50.

Fromm, E. (1976). The will to live. *Preventive Medicine, 5*, 518-521.

Fry, P. S. (2003). Perceived self-efficacy domains as predictors of fear of the unknown and fear of dying among older adults. *Psychology and Aging, 18*, 474-486.

Gall, T. L. (2006). Spirituality and coping with life stress among adult survivors of childhood sexual abuse. *Child Abuse & Neglect, 20*, 829-844.

Garrett, G. (1991). A natural way to go? Death and bereavement in old age. *Professional Nurse, 6*, 744-746.

Garson, D. (2010). *Testing of assumptions.* Retrieved February 19, 2010, from North Carolina State University, Syllabus for Quantitative Applications in Public Administration Web site:
http://faculty.chass.ncsu.edu/garson/PA765/assumpt.htm

Gauthier, K. J., Christopher, A. N., Walter, M. I., Mourad, R., & Marek, P. (2006). Religiosity, religious doubt, and the need for recognition: Their interaction relationship with life satisfaction. *Journal of Happiness Studies, 7*, 139-154.

Gesser, G., Wong, P. T. P., & Reker, G. T. (1987-1988). Death attitudes across the life-span: The development and validation of the death attitude profile: *OMEGA, 18*, 113-128.

Gilovich, T., & Medvec, V. H. (1998). Varieties of regret: A debate and partial solution. *Psychological Review, 105*, 602-605.

Giordano,J. A. (2008). Foreword. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. ix-xi). Philadelphia, PA: Brunner-Routledge.

Given, J. E., & Range, L. M. (1990). Life satisfaction and death anxiety in elderly nursing home and public housing residents. *Journal of Applied Gerontology, 9(2)*, 224-229.

Gjonca, E., & Marmot, M. (2005). Patterns of illness and mortality across the adult lifespan. In M. Johnson (Ed.), *The Cambridge handbook of age and ageing* (pp. 106-120). United Kingdom: Cambridge University Press.

Gladman, J. R. F. (1998). Assessing health status with the SF-36 (Editorial). *Age and Ageing, 27(3)*, 3.

Goldenberg, J. L., Pyszczynski, T., McCoy, S. K., & Greenberg, J., & Solomon, S. (1999). Death, sex, love, and neuroticism: Why is sex such a problem? *Journal of Personality and Social Psychology, 77*, 1173-1187.

Golsworthy, R., & Coyle, A. (1999). Spiritual beliefs and the search for meaning among older adults following partner loss. *Mortality, 4(1)*, 21-40.

Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/extrinsic measurement: I/E-revised and single-item scales. *Journal for the Scientific Study of Religion, 28*, 348-354.

Gowans, C. W. (2003). *Philosophy of the Buddha*. NY: Routledge.

Grant, J. A., & Rainville, P. (2009). Pain sensitivity and analgesic effects of mindful states in Zen Meditators: A cross-section study. *Psychosomatic Medicine, 71*, 106-114.

Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of the need of self-esteem: A terror management analysis. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 189-212). New York: Springer-Verlag.

Greenberg, J., Pyszczynski, T., Solomon, S., Pinel, E., Simon, L., & Jordon, K. (1993). Effects of self-esteem on vulnerability-denying defensive distortions: Further evidence of an anxiety buffering function of self-esteem. *Journal of Experimental Social Psychology, 29*, 229-251.

Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., et al. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldviews. *Journal of Personality and Social Psychology, 58*, 308-318.

Greenberg, J., Solomon, S., & Pyszczynski, T. (1997). Terror management theory of self esteem and cultural worldviews: Empirical assessments and conceptual refinements. In M. Zanna (Ed.), *Advances in experimental social psychology, 29*, 61-141. San Diego: Academic Press.

Greenberger, E. (1965). Fantasies of women confronting death. *Journal of Consulting Psychology, 29*, 252-260.

Grossbaum, M. F., & Bates, G. W. (2002). Correlates of psychological well-being at midlife: The role of generativity, agency and communion, and narrative themes. *International Journal of Behavioral Development, 26*, 120-127.

Grosse-Holtforth, M., Pathak, A., Koenig, H. G., Cohen, H. J., Pieper, C. F., & Vanhook, L. G. (1996). Medical illness, religion, health control and depression of institutionalized medically ill veterans in long-term care. International Journal of Geriatric Psychiatry, 11, 613-620.

Grundmann, C. H., & Truemper, D. G. (2004). Christianity and its branches. In K. L. Mauk, C-A. Aprn, & N. A. Schmidt (Eds.), *Spiritual care in nursing practice* (pp. 83-99). Philadelphia, PA: Lippincott Williams & Wilkins.

Grunmann, M. F., & Spiegel, D. (2003). Living in the face of death: Interviews with 12 terminally ill women on home hospice care. *Palliative and Supportive Care, 1*, 23-32.

Gurm, B. K., Stephen, J., MacKenzie, G., Doll, R., Barroetavena, M. C., & Cadrll, S. (2008). Understanding Canadian Punjabi-speaking South Asian women's experience of breast cancer: A qualitative study. *International Journal of Nursing Studies, 45*, 266-276.

Hall, B. A. (1998). Patterns of spirituality in persons with advanced HIV disease. *Research in Nursing & Health, 21*, 143-153.

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 and Culture, 8*, 253-261.

Hart, J., & Goldenberg, J. L. (2008). A Terror Management perspective on spirituality and the problem of the body. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 91-113). NY: Lawrence Erlbaum Associates.

Hayes, A. F., & Cai, L. (2007) Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods, 39*, 709-722.

Health Care Association of New Jersey. (2006). *Pain management guideline.* Hamilton, NJ: Health Care Association of New Jersey. Retrieved July 25, 2009, from *http://www.guideline.gov/summary/pdf.aspx?doc_id=9744&stat=1&string*=

Heinz, D. (1999). *The last passage: Recovering a death of our own.* NY: Oxford University Press.

Hendricks, J., & Hendricks, C. D. (1973). Defining the situation: Reflection of life styles in funeral eulogies. *OMEGA, 4*, 57-63.

Hill, P. C., & Wood, R. W. Jr. (1999). *Measures of religiosity.* Birmingham, Alabama: Religious Education Press.

Hilleras, P. K., Jorm, A. F., Herlitz, A., & Winblad, B. (2001). Life satisfaction among the very old: A survey on a cognitively intact sample aged 90 years or above. *International Journal of Aging and Human Development, 52(1)*, 71-90.

Ho, A. H. Y., Nu, S-M., Chow, A., Chan, C. H. Y., Tang, A. C. W., Tin, A. F. et al. (2007). *Perception of death across the adult span: A close examination of the death attitude profile among the general Hong Kong population.* Paper presented at the ENABLE International Symposium on Death, Dying and Bereavement 2007, Hong Kong.

Hobson, C. J., Kamen, J., Szostek, J., Nethercut, C. M., Tiedmann, J. W., & Wojnarowicz, S. (1998). Stressful life events: A revision and update of the Social Readjustment Rating Scale. *International Journal of Stress Management, 5*, 1-23.

Hoelter, J. W. (1979). Multidimensional treatment of fear of death. *Journal of Consulting and Clinical Psychology, 47*, 996-999.

Hoge, D. R. (1972). A validated intrinsic religious motivation scale. *Journal for the Scientific Study of Religion, 11*, 369-376.

Holcomb, L. E., Neimeyer, R. A., & Moore, M. K. (1993). Personal meanings of death: A content analysis of free-response narratives. *Death Studies, 17*, 299-318.

Homan, K. J., & Boyatzis, C. J. (2009). Body image in older adults: links with religion and gender. *Journal of Adult Development, 16*, 230-238.

Howarth, G. (1998). 'Just live for today'. Living, caring, ageing and dying. *Ageing and Society, 18*, 673-689.

Hoyle, R. H., & Panter, A. T. (1995). Writing about structural equation models. In R. H. Hoyle (Ed.), *Structural equation modelling: Concepts, issues, and applications* (pp. 158-216). CA: SAGE Publications, Inc.

Hsing Yun, Venerable Master. (2003a). *The Buddhist perspective on cause and condition*. Retrieved January 01, 2007, from Buddha's Light Publishing Web site: *http://www.blpusa.com/download/bies10.pdf*

Hsing Yun, Venerable Master. (2003b). *Food for thought: Ten of life's common concerns*. Retrieved January 01, 2007, from Buddha's Light Publishing Web site: *http://www.blpusa.com/download/bies08.pdf*

Hsing-Yun, Venerable Master. (2003b). *The unique characteristics of Buddhism*. Retrieved on January 01, 2007 from Buddha's Light Publishing Website: *http://www.plpsa.com/DownloadBooklet/Step_1.htm*

Hsu, C-Y., O'Connor, M., & Lee, S. (2009). Understandings of death and dying for people of Chinese origin. *Death Studies, 33(2)*, 153-174.

Hu, L., & Bentler, P. M. (1995). Evaluating mode fit. In R. H. Hoyle (Ed.), *Structural Equation Modelling: Concepts, issues and applications* (pp. 76-99). London: Sage.

Hui, C. H., Hui, I. S. Y., & Chan, J. (1989). Death cognition among Chinese Teenagers: Belief about consequences of death. *Journal of Research in Personality, 23*, 99-117.

James, W. (1902). The varieties of religious experience: A study in human nature.

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events. *Social Cognition, 7*, 113-116.

Janoff-Bulman, R. (1992). *Shattered assumptions*. New York: Free Press.

Jeffers, F. C., Nichols, C. R., & Eisdorfer, C. (1961). Attitudes of older persons towards death: A preliminary study. *Journal of Gerontology, 16*, 53-66.

Jewell, A. (2010). The importance of purpose in life in an older British Methodist sample: Pastoral implications. *Journal of Religion, Spirituality & Aging, 22(3)*, 138-161.

Jing-Yin. (2006). Death from the Buddhist view: Knowing the unknown. In C. L. W. Chan & A. Y. M. Chow (Eds.), *Death, dying and bereavement: A Hong Kong Chinese experience* (pp. 93-103). Hong Kong: Hong Kong University Press.

Jinpa, G. T. (1999). The foundations of a Buddhist psychology of awakening. In G. Watson, S. Batchelor, & G. Claxton (Eds.), *The psychology of awakening: Buddhism, science, and our day-to-day lives* (pp. 10-22). London: Rider.

Jochim, C. (n.d.). *Chinese beliefs*. Retrieved on August 27 2009, from *http://www.deathreference.com/Ce-Da/Chinese-Beliefs.html*

John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.)*, Handbook of Personality: Theory and research* (2nd ed., pp. 102-138). NY: The Guilford Press.

Johnson, C. L., & Barer, B. M. (1997). *Life beyond 85 years old: The aura of survivorship*. NY: Springer Publishing Company, Inc.

Jokisarri, M. (2003). Regret appraisals, age, and subjective well-being. *Journal of Research in Personality, 37*, 487-503.

Jonas, E., & Fischer, P. (2006). Terror Management and Religion: Evidence that intrinsic religiousness mitigates worldview defense following mortality salience. *Journal of Personality and Social Psychology, 91*, 553-567.

Kalish, R. A., & Reynolds, D. (1977). *Death and ethnicity: A psychocultural study*. Los Angeles, CA: University of Southern California Press.

Kastenbaum, R. (1979). *Growing old: Years of fulfillment*. London: Harper & Row Ltd.

Kastenbaum, R. (2000a). Death anxiety. In G. Fink (Ed.), *Encyclopedia of stress* (Vol. 1, pp. 645-651). CA: Academic Press.

Kastenbaum, R. (2000b). Death attitudes and aging in the 21st century. In A. Tomer (Ed.), *Death attitudes and the older adult* (pp. 257-288). PA: Brunner-Routledge.

Kaunonen, M., & Koivula, M. (2006). Cultural healthcare issues in Finland. In I. Papadopoulos (Ed.), *Transcultural health and social care: Development of socially competent practitioners* (p. 203-219). London: Elsevier.

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

Kenny, D. A. (2009). *Mediation*. Retrieved June 13, 2011, from *http://www.davidakenny.net/cm/mediate.htm*

Kenyon, G. M. (2000). Philosophical foundations of existential meaning. In G. T. Reker & K. Chamberlain (Eds.), *Exploring existential meaning: Optimizing human development across the life span* (pp. 7-22). CA: Sage Publications, Inc.

Keown, D. (2005). End of life: The Buddhist view. *Lancet, 366*, 952-955.

King, M., Speck, P., & Thomas, A. (2001). The Royal Free Interview for Spiritual and
        Religious Beliefs: Development and validation of a self-report version.
        Psychological Medicine, 31, 1015-1023.

Kinner, R. T., Tribbensee, N. E., Rose, C. A., & Vaughan, S. M. (2001). In the final
        analysis: More wisdom from people who have faced death. *Journal of
        Counseling and Development, 79*, 171-177.

Kirkpatrick, L. A. (1992). An attachment-theory approach to the psychology of religion.
        International Journal for the Psychology of Religion, 2, 3-28.

Koenig, H. G., George, L. K., & Siegler, I. C. (1988). The use of religion and other
        emotion-regulating coping strategies among older adults. *The Gerontologist,
        28*, 303-310.

Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and
        health*. NY: Oxford University Press.

Konstam, V., Holmes, W., Wilczenski, F., Baliga, S., Lester, J., & Priest, R. (2003).
        Meaning in the lives of caregivers of individuals with Parkinson's disease.
        Journal of Clinical Psychology in Medical Settings, *10(1)*, 17-26.

Kopp, S. W. (2008-2009). The influence of death attitudes and knowledge of end of life
        options on attitudes toward physician-assisted suicide. *OMEGA, 58*, 299-311.

Kovach, C. R. (1991). Content analysis of reminiscences of elderly women. *Research in
        Nursing and Health, 14*, 287-295.

Krause, N., Ingersoll-Dayton, B., Ellison, C. G., & Wulff, K. M. (1999). Aging, religious
        doubt, and psychological well-being. *The Gerontologist, 39*, 525-533.

Kubler-Ross, E. (1969). *On death and dying*. London: Macmillian.

Kumar, S. M. (2002). An introduction to Buddhism for the cognitive-behavioral
        therapist. *Cognitive and Behavioral Practice, 9*, 40-43.

Kurlychek, R. T. (1976). Level of belief in afterlife and four categories of fear of death
        in a sample of 60+ year-olds. *Psychological Reports, 38*, 228.

Langford, D. (1989). *Where is God in all this? A study of the spiritual care of the
        terminally ill*. Southampton, UK: Countess Mounbatten House.

Langle, A., & Probst, C. (2000). Existential questions of the elderly. *International
        Medical Journal, 7*, 193-196.

Lapierre, S., Bouffard, L., & Bastin, E. (1997). Motivational goal objects in later life.
        International Journal of Aging and Human Development, 45, 287-303.

Lavery, M. E., & O'Hea, E. L. (2010). Religious/spiritual coping and adjustment in
        individuals with cancer: Unanswered questions, important trends, and future
        directions. *Mental Health, Religion & Culture, 13*, 55-65.

Lazarus, R. S., & Lazarus, B. N. (2006). *Coping with aging*. NY: Oxford University Press.

Lecci, L., Okun, M. A., & Karoly, P. (1994). Life regrets and current goals as predictors of psychological adjustment. *Journal of Personality and Social Psychology, 66*, 731-741.

Lester, D. (1994). The Collett-Lester Fear of Death Scale. In R. A. Neimyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 45-60). Washington, DC: Taylor & Francis.

Lester, D., Aldridge, M., Aspenberg, C., Boyle, K., Radsniak, P., & Waldron, C. (2001-2002). What is the afterlife like? Undergraduate beliefs about the afterlife. *OMEGA, 44*, 113-126.

Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Personality and Social Psychology, 68*, 151-158.

Lewinsohn, P. M., & Amenson, C. S. (1978). Some relations between pleasant and unpleasant mood-related events and depression. *Journal of Abnormal Psychology, 87*, 644-654.

Lewis, C. S. (1962). *The problem of pain*. NY: Macmillan Publishing Co.

Lifton, R. J. (1979). *The broken connection*. NY" Simon & Schuster.

Lifton, R. J. (1983). *The broken connection: On death and the continuity of life*. New York: Basic Books.

Lin, A. H-M H. (2003). Factors related to attitudes toward death among American and Chinese older adults. *OMEGA, 47*, 3-23.

Logsdon, R. G., & Teri, L. (1997). The Pleasant Events Schedule-AD: Psychometric properties and relationship to depression and cognition in Alzheimer's Disease patients. *The Gerontologist, 37*, 40-45.

Lomranz, J., Shmotkin, D., Zechovoy, A., & Rosenberg, E. (1985). Time orientation in Nazi concentration camp survivors. *American Journal of Orthopsychiatry, 55*, 230-236.

Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *American Statistician, 54*, 217-224.

Ludwig, T. M. (2004). Buddhist traditions. In K. L. Mauk & C-A, Aprin (Eds.), *Spiritual care in nursing practice* (pp. 151-163). Philadelphia, PA: Lippincott Williams & Wilkins.

MacKinnon, J. G., & White, H. (1985). Some heteroskedasticity consistent covariance matrix estimators with improved finite sample properties. *Journal of Econometrics, 29*, 53-57.

MacPhillamy, D. J., & Lewinsohn, P. M. (1971). *Pleasant Events Schedule, Form III-S*. Unpublished manuscript, University of Oregon.

Mahoney, M. J., & Graci, G. M. (1999). The meanings and correlates of spirituality: Suggestions from an exploratory survey of experts. *Death Studies, 23*, 521-528.

Mak, M. H. J. (2002). Accepting the timing of one's death: An experience of Chinese hospice patients. *OMEGA, 45*, 245-260.

Mallinson, S. (1998). The Short-Form 36 and older people: Some problems encountered when using postal administration. *Journal of Epidemiology and Community Health, 52*, 324-328.

Maltby, J. (2002). The Age Universal I-E Scale-12 and orientation toward religion: Confirmatory factor analysis. *Journal of Psychology: Interdisciplinary and Applied, 136(5)*, 555-560.

Maltby, J., & Lewis, C. A. (1997). The reliability and validity of a short scale of attitudes towards Christianity among USA, English, Republic of Ireland, and Northern Ireland adults. *Personality and Individual Differences, 22(5)*, 649-654.

Maltby, J., Talley, M., Cooper, C., & Leslie, J. C. (1995). Personality effects in personal and public orientations toward religion. *Personality and Individual Differences, 19(2)*, 157-163.

Manfredi, C., & Pickett, M. (1987). Perceived stressful situations and coping strategies used by the elderly. *Journal of Community Health Nursing*, 4, 99-100.

Markides, K. S. (1983). Aging, religiosity, and adjustment: A longitudinal analysis. *Journal of Gerontology, 38*, 621-625.

Marlatt, G. A. (2002). Buddhist philosophy and the treatment of addictive behavior. *Cognitive and Behavioral Practice, 9*, 44-50.

Marrone, R. (1999). Dying, mourning, and spirituality: A psychological perspective. *Death Studies, 23*, 495-519.

Marshall, V. W. (1975). Age and awareness of finitude in developmental gerontology. *OMEGA, 6*, 113-129.

Marshall, V. W. (1982). Death and dying. In D. J. Mangen & W. A. Peterson (Eds.), *Research instruments in social gerontology: Vol. 1. Clinical and social psychology* (pp. 303-381). Minneapolis, MN: University of Minnesota Press.

Martin, L. L., Campbell, W. K., & Henry, C. D. (2004). The roar of awakening: Mortality acknowledgement as a call to authentic living. In J. Greenberg, S. L., Koole., & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 431-448). NY: The Guildford Press.

Martin, D., & Wrightsman, L. S. Jr. (1965). The relationship between religious behavior and concern about death. The *Journal of Social Psychology, 65*, 317-323.

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand Reinhold.

Maslow, A. H. (1970). *Motivation and personality* (2nd ed). New York: Harper & Row.

Matthews, L. T., & Marwit, S. J. (2006). Meaning reconstruction in the context of religious coping: Rebuilding the shatter assumptive world. *OMEGA, 53*, 87-104.

McAdams, D. P. (1988). *Power, intimacy and the life story: Personological inquiries into identity*. NY: The Guilford Press.

McAdams, D. P. (2006). *The redemptive self: Stories Americans live by*. NY: Oxford University Press.

McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology, 62*, 1003-1015.

McAdams, D. P., de St. Aubin, E., & Logan, R. L. (1993). Generativity among young, midlife, and older adults. *Psychology and Aging, 8*, 221-230.

McCoy, S. K., Pysczynski, T., Solomon, S., & Greenberg, J. (2000). Transcending the self: A terror management perspective on successful aging. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 37-63). Philadelphia, PA: Taylor & Francis.

McFadden, S. H. (1996). Religion, spirituality, and aging. In J. E. Birren & K. W. Schaie (Eds.), *Handbooks of the psychology of aging* (4th ed., pp. 162-177). NY: Academic Press.

McFadden, S. H. (1999). Religion, personality, and aging: A life span perspective. *Journal of Personality, 67(6)*, 1081-1104.

Menard, S. (1995). *Applied logistic regression analysis*. Sage university paper series on quantitative applications in the social sciences, 07-106. Thousand Oaks, CA: Sage.

Melia, S. P. (1999). Continuity in the lives of elder Catholic women religious. International Journal of Ageing and Human Development, 48(3), 175-189.

Mikulincer, M., & Florian, V. (2008). The complex and multifaceted nature of the fear of personal death: The multidimensional model of Victor Florian. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 39-64). New York: Lawrence Erlbaum Associates.

Mikulincer, M., & Florian, V. (2008). The complex and multifaceted nature of the fear of personal death: The multidimensional model of Victor Florian. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 39-64). NY: Lawrence Erlbaum Associates.

Moody, H. R. (1986). Meaning of life and the meaning of old age. In T. R. Cole & S. A. Gadow (Eds.), *What does it mean to grow old? Reflections from the humanities* (pp. 9-40). Durham, NC: Duke University Press.

Moody, H. R. (2005). *Religion, spirituality, and aging: A social work perspective*. NY: The Haworth Social Work Practice Press.

Moore, S. F., & Myerhoff, B. G. (1977). *Secular ritual*. The Netherlands, Assen: Van
      Gorcum.

Moore, C. C., & Williamson, J. B. (2003). In C. D. Bryant (Ed.), *Handbook of death and
      dying: Vol. 1. The presence of death* (pp. 3-13). Thousand Oaks, CA: SAGE
      Publications, Inc.

Moremen, R. D. (2004-2005). What is the meaning of life? Women's spirituality at the
      end of the life span. *OMEGA, 50*, 309-330.

Moreno, R. P., de la Funte Solana, E. I., Rico, M. A., & Fernandez, L. M. L. (2008-2009).
      Death anxiety in institutionalized and non-institutionalized elderly people in
      Spain. *OMEGA, 58*, 61-76.

Munnichs, J. M. A. (1966). *Old age and finitude: A contribution to psychogerontology*.
      Basel: S. Karger.

Murrell, S., & Norris, F. (1983). Resources, life events and changes in psychological
      states: A prospective framework. *American Journal of Community Psychology,
      11*, 473-491.

Narayanasamy, A. (2001). Spiritual care: *A practical guide for nurses and health care
      practitioners* (2nd ed.). Wiltshire: Quay Books.

Nehrke, M. (1973). *Perceived generational differences in attitudes toward death.* Paper
      presented at the 26th annual scientific meeting of the Gerontological Society,
      Miami Beach, FL.

Neimeyer, R. A. (1994). *Death anxiety handbook: Research, instrumentation, and
      application.* Washington, DC: Taylor & Francis.

Neimeyer, R. A., & Chapman, K. M. (1980). Self/ideal discrepancy and fear of death:
      Testing an existential hypothesis. *OMEGA*, 11, 23-240.

Neimeyer, R. A., & Fortner, B. V. (1995). Death anxiety in the elderly. In G. Maddox
      (Ed.), *Encyclopedia of aging* (2nd ed, pp. 107-129). NY: Springer.

Neimeyer, R. A., & Moore, M. K. (1994). Validity and reliability of the Multidimensional
      Fear of Death Scale. In R. A. Neimeyer (Ed.), *Death anxiety handbook:
      Research, instrumentation, and application* (pp. 103-119). Washington, DC:
      Taylor & Francis.

Neimeyer, R. A., Moser, R. P., & Wittkowski, J. (2003). Assessing attitudes toward dying
      and death: Psychometric considerations. *OMEGA, 47*, 45-76.

Nilmanat, K., & Street, A. F. (2007). Karmic quest: Thai family caregivers promoting a
      peaceful death for people with AIDS. *Contemporary Nurse, 27*, 94-103.

Noyes, R. (1980). Attitude change following near-death experiences. *Psychiatry, 43*,
      234-242.

Nozick, R. (1981). *Philosophical explanations*. Cambridge, MA: Harvard University
      Press.

O'Hanlon, A., & Coleman, P. G. (2004). Attitudes towards ageing: Adaptation, development and growth into later years. In J. F. Nussbaum & J. Coupland (Eds.), *Handbook of communication and ageing research* (2nd ed., pp. 31-63). Mahwah, NJ: Lawrence Erlbaum Associates.

Orbach, I. (2008). Existentialism and suicide. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 281-316). New York: Lawrence Erlbaum Associates.

Orbach, I., Milstein, I., Har-Even, D., Apter, A., Tiano, S., & Elizur, A. (1991). A Multi-attitude suicide tendency scale for adolescents. *Psychological Assessment, 3*, 398-404.

Osarchuk, M., & Tatz, S. (1973). The effects of fear of death on beliefs in afterlife. *Journal of Personality and Social Psychology, 27*, 256-260.

Osgood, N. J. (2000). Ageism and elderly suicide: The intimate connection. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 157-173). Philadelphia, PA: Brunner-Routledge.

Paley, J. (2008). Spirituality and secularization: Nursing and the sociology of religion. *Journal of Clinical Nursing*, *17(2),* 175-186.

Pargment, K. I. (1997). *The psychology of religion and coping: Theory, research, practice.* NY: The Guilford Press.

Pargament, K. I. (2002). The bitter and the sweet: An evaluation of the costs and benefits of religiousness. *Psychological Inquiry, 13*, 168-181.

Pargament, K. I., Ano, G. G., & Wachholtz, A. B. (2005). The religious dimension of coping: Advances in theory, research, and practice. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 479-495). NY: Guilford Press.

Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology, 56*, 519-543.

Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major stressors. *Journal for the Scientific Study of Religion, 37*, 710-724.

Park, C. L. (2005a). Religion and meaning. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 295-314). NY: Guilford Press.

Park, C. L. (2005b). Religion as a meaning making framework in coping with life stress. *Journal of Social Issues, 61(4)*, 707-780.

Paulhus, D.L. (1998). *Manual for the Balanced Inventory of Desirable Responding (BIDR-7).* Toronto/Buffalo: Multi-Health Systems.

Pevey, C. F., Jones, T. J., & Yarber, A. (2008-2009). How religion comforts the dying: a qualitative inquiry. *OMEGA, 58*, 41-59.

Pinquart, M., Frohlich, C., Silbereisen, R. K., & Wedding, U. (2005-2006). Death acceptance in cancer patients. *OMEGA, 52*, 217-235.

Pizarro, D., & Salovey, P. (2002). Religious systems as "emotionally intelligent" organizations. *Psychological Inquiry, 13(3)*, 220-222.

Pryce, G. (2002). *Heteroscedasticity: Testing and correcting in SPSS*. Retrieved on March 13 2010, from *http://pages.infinit.net/rlevesqu/Tutorials/HeteroscedasticityTestingAndCorrectingInSPSS.zip*

Pysczynski, T., Greenberg, J., & Solomon, S. (1999). A dual process of defense against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review, 106*, 835-845.

Quinn, P. K., & Rezenikoff, M. (1985). The relationship between death anxiety and the subjective experience of time in the elderly. *International Journal of Aging and Human Development, 21*, 197-210.

Rapgay, L. (2006). A Buddhist approach to end-of-life care. In C. M. Puchalski (Ed.), *A time for listening and caring: Spirituality and the care of the chronically ill and dying* (pp. 131-137). New York: Oxford University Press.

Rasmussen, C. A., & Brems, C. (1996). The relationship of death anxiety to age and psychosocial maturity. *Journal of Psychology, 130*, 141-144.

Rathus, S. A.(1999). *Alleviating depression (Getting out of the dumps)*. Retrieved March 22, 2009, from http://www.wadsworth.com/psychology_d/templates/student_resources/0155060678_rathus/pml/pml33.html

Reker, G. T. (2005). Meaning in life of young, middle-aged, and older adults: Factorial validity, age, and gender invariance of the Personal Meaning Index (PMI). *Personality and Individual Differences, 38(1)*, 71-85.

Reker, G. T., & Peacock, E. J. (1981). The Life Attitude Profile (LAP): A multidimensional instrument for assessing attitudes toward life. *Canadian Journal of Behavioral Science, 13*, 264-273.

Reker, G. T., & Wong, P. T. P. (1988). Towards a theory of personal meaning. In J. E. Birrem & V. L. Bengston (Eds.), *Emergent theories of aging* (pp. 214-246). NY: Springer Publishing Co.

ReligionFacts. (2004). Reincarnation and afterlife in Buddhism. Retrieved on 19 August, 2009 from *http://www.religionfacts.com/buddhism/beliefs/afterlife.htm*

Rhudick, P. J., & Dibner, A. (1961). Age, personality, and health correlates of death concerns. *Journal of Gerontology, 16*, 44-49.

Richardson, V., & Sands, R. (1986). Death attitudes among mid-life women. *OMEGA: Journal of Death and Dying, 17(4)*, 327-341.

Richmond, S., Morton, V., Cross, B., Wong, I. C. K., Russell, I., Philips, Z. et al. (2010). Effectiveness of shared pharmaceutical care for older patients" RESPECT trial findings. *British Journal of General Practice, 60(570)*, e10-e19.

Riley, M. W., & Foner, A. (1968). *Ageing and society: Vol. 1: An inventory of research findings*. NY: Russell Sage Foundation.

Ritzema, R. J. (1979). Attribution to supernatural causation: An important component of religious commitment. *Journal of Psychology and Theology, 7*, 286-293.

Rocke, C., & Cherry, K. E. (2002). Death at the end of the 20th century: Individual processes and developmental tasks in old age. *International Journal of Aging and Human Development, 54*, 315-333.

Rohrbaugh, J., & Jessor, R. (1975). Religiosity in youth: A personal control against deviant behavior. *Journal of Personality, 43*, 136-155.

Rose, B. M., & O'Sullivan, M. J. (2002). Afterlife beliefs and death: An exploration of the relationship between afterlife expectations and fear of death in an undergraduate population. *OMEGA, 45(3)*, 229-243.

Ross, R., Sawatphanit, W., & Suwansujarid, T. (2007). Finding peace (kwam sa-ngob jai): A Buddhist way to live with HIV. *Journal of Holistic Nursing, 25(4)*, 228-235.

Russac, R. J., Gatliff, C., Reece, M., & Spottswood, D. (2007). Death anxiety across the adult years: An examination of age and gender effect. *Death Studies, 31*, 549-561.

Rylands, K. J., & Rickwood, D. J. (2001). Ego-integrity versus ego-despair: The effect of "accepting the past" on depression in older women. *International Journal of Aging and Human Development, 53(1)*, 75-89.

Salsman, J. M., Brwon, T. L., Brechting, E. H., & Carkson, C. R. (2005). The link between religion and spirituality and psychological adjustment: The mediating role of optimism and social support. *Personality and Social Psychology Bulletin, 31*, 522-535.

Schroepfer, T. A. (2006). Mind frames towards dying and factors motivating their adoption by terminally ill elders. *Journal of Gerontology: Social Sciences, 61B*, S129-S139.

Schroots, J. J. F. (1996). Theories of aging: Psychological, In J. E. Birren (Ed.), *Encyclopedia of gerontology: Age, aging, and aged* (pp. 557-567). San Diego: Academic Press.

Shravasti-Dhammika, Venerable Master. (2005). *Good question good answer*. Hong Kong: Buddhist Youth Association Ltd.

Schenck, D. P., & Roscoe, L. A. (2009). In search of a good death. *Journal of Medical Humanities, 30*, 61-72.

Siegel, K., & Scrimshaw, E. W. (2002). The perceived benefits of religious and spiritual coping among older adults living with HIV/AIDS. *Journal for the Scientific Study of Religion, 41*, 91-201.

Smith, A. G. (2000). Exploring death anxiety with older adults through developmental transformation. *The Arts in Psychotherapy, 27*, 321-331.

Solomon, S., Greenberg, J., & Pysczynski, T. (1991). Terror management theory of social behavior: The psychological functions of self-esteem and cultural worldviews. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 93-159). San Diego, CA: Academic Press.

Sorabji, R. (2006). *Self: Ancient and modern insights about individuality, life, and death.* Oxford: Clarendon Press.

Sorlie, T., & Sexton, H. C. (2001). The factor structure of 'The Ways of Coping Questionnaire' and the process of coping in surgical patients. *Personality and Individual Differences, 30, 961-975.*

Spilka, B., Hood, R. H. Jr., Hunsberger, B., & Gorsuch, R. (2003). *The psychology of religion: An empirical approach* (3rd ed). NY: The Guilford Press.

Spilka, B., Hood, R. W., Jr., & Grosuch, R. L. (1985). *The psychology of religion: An empirical approach.* Englewood Cliffs, NJ: Prentice-Hall.

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.

Stanley, T. R., & Burnham, K. P. (1999). Information-theoretical model selection and model averaging for closed-population capture-recapture studies. *Biometrical Journal, 40(4)*, 475-494.

Steinhauser, K. E., Clipp, E. C., McNeilly, M., Christakis, N. A., McIntyre, L. M., & Tulsky, J. A. (2000). In search of a good death: Observations of patients, families, and providers. *Annals of Internal Medicine, 132*, 825-832.

Stillion, J. M. (1995). Death in the lives of adults: Responding to the tolling of the bell. In H. Wass & R. A. Neimeyer (Eds.), *Dying: Facing the facts* (pp. 303-322). Washington, DC: Taylor & Francis.

Stillion, J. M., McDowell, E. E., & May, J. H. (1989). *Suicide across the life span: Premature exits.* Washington, DC: Hemisphere.

Strachan, E., Pyszczynski, T., Greenberg, J., & Solomon, S. (2001). Coping with the inevitability of death: Terror management and mismanagement. In C. R. Snyder (Ed.), *Coping with stress: Effective people and processes* (pp. 114-136). NY: Oxford University Press.

Stricherz, M., & Cunnington, L. (1981-1982). Death concerns of students, employed persons, and retired persons. *OMEGA, 12*, 373-380.

Stromberg, A., & Jaarsma, T. (2008). Thoughts about death and perceived health status in elderly patients with heart failure. *European Journal of Heart Failure, 10*, 608-613.

Swenson, W. M. (1961). Attitudes toward death in an aged population. *Journal of Genrontology, 16*, 49-66.

Taft, L. B., & Nehrke, M. F. (1990). Reminiscence, life review, and ego integrity in nursing home residents. *International Journal of Aging and Human Development, 20*, 189-196.

Tarakeshwar, N., Vanderwerker, L. C., Paulk, E., Pearce, M. J., Kasl, S. V., & Prigerson, H. G. (2006). Religious coping is associated with the quality of life of patients with advanced cancer. *Journal of Palliative Medicine, 9*, 646-657.

Tate, L. A. (1982). Life satisfaction and death anxiety in aged women. *International Journal of Aging and Human Development, 15*, 299-305.

Templer, D. R. (1970). The construction and validation of a death anxiety scale. *Journal of General Psychology, 82*, 165-177.

Templer, D. R. (1971). Death anxiety as related to depression and health of retired persons. *Journal of Gerontology, 26*, 521-523.

The WHO Group. (1998). The World Health Organization Quality of Life Assessment (WHOQOL): Development and general psychometric properties. *Social Science and Medicine, 46*, 1569-1585.

Thebigview.com (2010). *Karma and rebirth*. Retrieved February 19, 2010, from http://www.thebigview.com/buddhism/karma.html

Thompson, P. (2007). The relationship of fatigue and meaning in life in breast cancer survivors. *Oncology Nursing Forum, 34(3)*, 653-660.

Thorson, J. A., & Powell, F. C. (1988). Elements of death anxiety and meanings of death. *Journal of Clinical Psychology, 44*, 691-701.

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

Thorson, J. A., & Powell, F. C. (1994). A Revised Death Anxiety scale. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 31-43). Washington, DC: Taylor & Francis.

Thorson, J. A., & Powell, F. C. (2000). Death anxiety in younger and older adults. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 123-136). Philadelphia, PA: Brunner-Routledge.

Thune-Boyle, I. C., Stygall, J. A., Keshtgar, M. R., & Newman, S. P. (2006). Do religious/spiritual coping strategies affect illness adjustment in patients with cancer? A systematic review of the literature. *Social Science and Medicine, 63*, 151-164.

Tillich, P. (1964). *Systematic theology: Vol. 3 Life and the spirit: History and the Kingdom of God*. Chicago: University of Chicago Press.

Tix, A. P., & Fraser, P. A. (1998). The use of religious coping during stressful life events: Main effects, moderation, and mediation. *Journal of Consulting and Clinical Psychology, 66*, 411-422.

Tomer, A. (1994). Death anxiety in adult life: Theoretical perspectives. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 3-28). Washington, DC: Taylor & Francis.

Tomer, A. (2000). Death-related attitudes: Conceptual distinctions. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 87-94). Philadelphia, PA: Brunner-Routledge.

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

Tomer, A., & Eliason, G. (2000a). Attitudes about life and death: Toward a comprehensive model of death anxiety. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 3-22). Philadelphia, PA: Brunner-Routledge.

Tomer, A., & Eliason, G. (2000b). Beliefs about self, life and death: Testing aspects of a comprehensive model of death anxiety and death attitudes. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp.137-153). Philadelphia, PA: Brunner-Routledge.

Tomer, A., & Eliason, G. T. (2008a). Existentialism and death attitudes. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 7-37). NY: Lawrence Erlbaum Associates.

Tomer, A., & Eliason, G. T. (2008b). Existentialism and death attitudes. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 7-37). NY: Lawrence Erlbaum Associates.

Tomer, A., Eliason, G., & Smith, J. (2000). The structure of the Revised Death Anxiety Scale in young and old adults. In A. Tomer (Ed.), *Death attitudes and the older adults* (pp. 109-122). PA: Brunner-Routledge.

Torges, C. M., Stewart, A. J., & Miner-Rubino, K. (2005). Personality after the prime of life: Men and women coming to term with regrets. *Journal of Research in Personality, 39*, 148-165.

Torges, C. M., Stewart, A. J., & Nolen-Hoeksema, S. (2008). Regret resolution, aging, and adapting to loss. *Psychology and Aging, 23(1)*, 169-180.

Tornstam, L. (1997). Gerontranscendance in a broad cross-sectional perspective. *Journal of Aging and Identity, 2*, 17-36.

Tsai, J. H-C. (1999). Meaning of filial piety in the Chinese parent-child relationship: Implications for culturally competent health care. *Journal of Cultural Diversity, 6*, 26-34.

Tsai, J-S., WWu, C-H., Chiu, T-Y., Hu, W-Y., & Chen, C-Y. (2005). Fear of death and good death among the young and elderly with terminal cancer in Taiwan. *Journal of Pain and Symptom Management, 29(4)*, 344-351.

Underwood, L. G., & Teresi, J. A. (2002). The daily spiritual experience scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annals of Behavioral Medicine, 24*, 22-33.

Ungar, L., Florian, V., & Zernitsky-Shurka, E. (1990). Aspects of fear of personal death, levels of awareness, and professional affiliation among dialysis unit staff members. *OMEGA, 21*, 51-67.

Unruh, D. R. (1983). Death and personal history: Strategies of identity preservation. *Social Problems, 30*, 340-351.

US Department of State. (2007). International religious freedom report 2007: Reports on China (includes Tibet, Hong Kong, and Macau). Retrieved August 27, 2009, from *http://www.state.gov/g/drl/rls/irf/2007/90133.htm*

Vail, K. E., Rothschild, Z. K., Weise, D. R., Solomon, S., Pyszczynski, T., & Greenberg, J. (2010). A terror management analysis of the psychological functions of religion. *Personality and Social Psychology Review, 14(1)*, 84-94.

Van Ranst, N., & Marcoen, A. (2000). Structural components of personal meaning in life and their relationship with death attitudes and coping mechanisms in late adulthood. In G. T., Reker & K. Chamberlain (Eds.), *Exploring existential meaning: Optimizing human development across the life span* (pp. 59-74). CA: Sage Publications, Inc.

Vigilant, L. G., & Williamson, J. B. (2003). Symbolic immortality and social theory: The relevance of an underutilized concept. Retrieved on 21 August, 2009 from *http://www.sage-ereference.com/death/Article_n18.html*

Walker, W. L., Diliberto-Macalous, K. A., & Altarriba, J. (2011, May 23). Priming and assimilation effects in the automatic activation of religious schema. *Psychology of Religion and Spirituality*. Advance online publication. doi: 10.1037/a0022960

Ware, J. E. Jr., & Sherbourne, C. D. (1992). The MOS 36-item short form health survey (SF-36). I. Conceptual framework and item selection. *Medical Care, 30*, 473-483.

Wass, H., & Myers, J. E. (1982). Psychosocial aspects of death among the elderly: A review of the literature. *The Personnel and Guidance Journal, 61*, 131-137.

Wass, H., Christian, M., Myers, J., & Murphey, M. Jr. (1978-1979). Similarities and dissimilarities in attitudes toward death in a population of older persons. *OMEGA, 9*, 337-354.

Watson, P. J., Howard, R., Hood, R. W. Jr., & Morris, R. J. (1988). Age and religious orientation. *Review of Religious Research, 29*, 271-280.

Webster, J. D. (1993). Construction and validation of the Reminiscence Functions Scale. *Journal of Gerontology: Psychological Sciences, 48*, 256-262.

Weisman, A. D. (1972). *On dying and denying: A psychiatric study of terminality.* NY: Behavioral Publications.

Weisman, A. D., & Hackett, T. P. (1961). Predilection to death: Death and dying as a psychiatric problem. *Psychosomatic Medicine, 23*, 232-256.

West, S. G.., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 56-75). Thousand Oaks, CA: Sage Publications, Inc.

Westman, A. S., & Canter, F. M. (1985). Fear of death and the concept of extended self. *Psychological Reports, 56*, 419-425.

Williams, L. J., Gavin, M. B., & Hartman, N. S. (2004). Structural equation modeling methods in strategy research: Applications and issues. *Research Methodology in Strategy and Management, 1*, 303-346.

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: Psychological Sciences, 60*, 207-214.

Wittkowski, J. (1988). Relationships between religiosity and attitudes towards death and dying in a middle-aged sample. *Personality and Individual Differences, 9*, 307-312.

Wittkowski, J. (2001). The construction of the Multidimensional Orientation Toward Dying and Death Inventory (MODDI-F). *Death Studies, 25(6)*, 479-495.

Wong, P. T. P. (1998). Implicit theories of meaningful life and the development of the Personal Meaning Profile. In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 111-140). Mahwah, NJ: Lawrence Erlbaum Associates.

Wong, P. T. P. (2000). Meaning of life and meaning of death in successful aging. In A. Tomer (Ed.), *Death attitudes and the older adult: Theories, concepts, and applications* (pp. 23-35). Philadelphia, PA: Brunner-Routledge.

Wong, P. T. P. (2008). Meaning making theory and death acceptance. In A. Tomer, G. T. Eliason, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 65-87). New York: Lawrence Erlbaum Associates.

Wong, P. T. P., & Watt, L. M. (1991). What types of reminiscence are associated with successful aging? *Psychology and Aging, 6*, 272-279.

Wong, P. T. P., Reker, G. T., & Gesser, G. (1994). Death Attitude Profile – Revised: A multidimensional measure of attitudes toward death. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 121-148). Washington, DC: Taylor & Francis.

Wong, P. T. P., Reker, G. T., & Peacock, E. J. (2006). A resource-congruence model of coping and the development of the Coping Schemas Inventory. In P. T. P. Wong & L. C. J. Wong (Eds), *Handbook of multicultural perspectives on stress and coping* (pp. 223 – 283). NY: Springer Science+Business Media Inc.

Wrosch, C., & Heckhausen, J. (2002). Perceived control of life regrets: Good for young and bad for old adults. *Psychology and Aging, 17*, 340-350.

Wrosch, C., Bauer, I., Scheier, M. F. (2005). Regret and quality of life across the adult life span: The influence of disengagement and available future goals. *Psychology and Aging, 20*, 657-670.

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.

Xin-Yun, Venerable Master. (2005). *Sheng ming de zhong ji guan huai* [The ultimate concern for life]. Hong Kong: Been Yuann Shan Hong Kong Amitabha Recitation Association.

Zastrow, C., Kirst-Ashma, X. X. (2010). *Understanding human behavior and the social environment* (8th ed.). CA: Brooks/Cole.

Zhan, H. J. (2004). Through gendered lens: Explaining Chinese caregivers' task performance and care reward. *Journal of Women and Aging, 16*, 123-142.

Zisook, S, & Downs, N. S. (2004). Death, dying, and bereavement. In B. J. Sadock & V. A. Sadock (Eds.), *Kaplan's comprehensive textbook of psychiatry* (7th ed.) (pp. 1963-1981). Philadelphia: Lippincott Williams & Wilkins.

Footnotes

[1]Protestant doctrines emphasize relatively more on belief and less to action than that of Catholic. Such doctrinal difference leads to different beliefs about entry into heaven and hell between Protestants and Catholics. The first denominational difference concerns who is eligible to go to heaven. Exline and Yali (2007) found that Catholics were more likely to believe most people were going to heaven than Protestants. They were more likely to believe there is a Purgatory than the Protestants (Lester et al., 2001-2002). Catholics believe that Purgatory is a place that is designed to purify a person's unconfessed sins through temporary punishment so as to give this person a second chance to be eligible for entry into heaven (Exline & Yali, 2007). Once the purification is completed, the person will be admitted to heaven (Exline & Yali, 2007). In contrast, since faith in Christ is central to Protestant belief in salvation, Exline and Yali (2007) found that Protestants were less likely to believe heaven was open for people who were morally upright but disbelieved in God than their Catholic counterparts.

Second, Catholics and Protestants differ in who they believe will go to hell. Exline and Yali (2007) found that Protestant students were more likely to believe that people would go to hell if they disbelieved in God or rejected God than their Catholic counterparts. In contrast to Protestant teaching, Catholics believe that eternal damnation in hell is only for a small number of people who do not repent for their extremely heinous sins (Exline & Yali, 2007). McBrien remarked that Catholic holds the possibility that no human being will really enter hell because of the extension of Christ's grace to the whole world (as cited in Exline & Yali, 2007).

The third doctrinal difference relates to their belief about ways to avoid going to hell. Exline and Yali (2007) found that Catholics were more likely to believe that hell could be avoided through a good life than Protestant; while Protestant students were more likely to believe that the only way to avoid going to hell was to accept Jesus as the Lord and Saviour.

Fourth, Catholics' views about duration of suffering in the hereafter differ from that of the Protestants. Catholics believe that their prayer can shorten a person's length of purification in Purgatory (Exline & Yali, 2007). Moreover, Catholics believe that eternal damnation in hell is only reserved for a small group of people (Exline & Yali, 2007). In contrast, Protestants believe that once a person dies, he or she will either go to heaven or hell and stay there forever (Exline & Yali, 2007). Protestants believe that if a person is sent to hell, he/she will experience eternal suffering in the afterlife.

[2]In Buddhism, the realm of heaven has many levels and is one of bliss. It sounds like a nice place to live, but their happiness is, in a way, a curse. Because of their rich and happy lives, the gods don't recognize the truth of suffering and have little motivation to seek liberation from reincarnation. Eventually when their wholesome karma is exhausted, they must face rebirth in another, less happy, realm. In other words, the realm of heaven is transitory and so is imperfect.

The other upper realm is known as the realm of asura. In Buddhism, asuras are generally considered evil and fearsome spirits fond of fighting. Unlike humans, they can clearly see the superior situation of the gods in the heavens above them. Driven by their dissatisfaction and envy, they constantly compete and struggle with the gods. Because they are largely consumed by jealousy, most asuras will never seriously consider religious training to liberate themselves from reincarnation.

If we have accumulated more wholesome than unwholesome karma, Buddhists believe that we can be reincarnated in the realm of human after we die, which is also one of the three upper realms of existence. In the realm of human, there is constant attempt to maximize pleasure and minimize pain. The vacillation between pleasure and pain can lead to existential frustration which motivates the humans to come in religious quest for liberation from reincarnation.

In Buddhism, if our cumulative unwholesome karma outweighs our wholesome karma, we may be reincarnated in the realm of animals, which is one of the three lower realms of existence. The realm of animals is characterized by ignorance of our true spiritual state and by domination of basic instincts.

The realm of hungry ghosts is another lower realm of existence. Greed leads to reincarnation as a hungry ghost. The hungry ghosts are usually shown with enormous stomachs and tiny necks. They want to eat, but cannot swallow; when they try to drink, the liquid turns to fire, so they are constantly hungry and exhaust themselves in their fruitless searching.

The realm of hell is often depicted as a horrific torture chamber where beings born there experience a constant state of searing pain for aeons of time. There is virtually unlimited number of hells as there are infinite types of evil deeds. However, it is not a place for eternal damnation. Those beings punished in this realm are not trapped forever. Rather, they remain there until their unwholesome karma is used up, at which point they will be reincarnated into another realm.

[3]Among Christians, there are denominational differences on 'whether salvation depends on grace alone, good work alone or a combination of both' (Chen, 2006, p.

87). Protestant doctrines and practices assign more weight to faith and less to behaviour when compared to that of the Catholic (Exline & Yali, 2007). Hence, Protestants typically view salvation as being conditioned on faith alone (Exline & Yali, 2007). In order to be saved from one's sins, Protestants believe that one must recognize one's innate sinfulness and have faith in Jesus Christ whose death and resurrection provides the only channel for God's forgiveness of sin (Exline & Yali, 2007). Some Protestants believe that it is impossible to lose one's salvation once it has been granted through one's faith in Jesus Christ (Exline & Yali, 2007). In contrast, Catholics place greater emphasis on the practice of certain behaviours, such as going to Holy Communion, and refraining from specific heinous sins, such as murder (Exline & Yali, 2007), as prerequisite for salvation.

[4]The eight aspects of the Eightfold Path are not to be understood as a sequence of single steps, but to be pursued all together, with each step reinforcing the others. The first component, wisdom, is concerned with intellectual development and conviction. It is acquired through right view and right intention. Right view begins with the intuitive insight that all beings are subject to suffering and it ends with complete understanding of the origin of suffering and the way leading to the cessation of suffering. Right intention means to have thoughts free from lust and attachment (resistance to greed and the pull of desires), from ill-will (resistance to feelings of anger and resentment), and from cruelty (development of compassion and resistance to harm).

The second component, virtue, is concerned with the discipline and cultivation of one's morality for enlightenment. It is acquired through right speech, right action and right livelihood. Right speech requires that we refrain from falsehood, slander, harsh words and frivolous speech. Right action dictates that we refrain from killing any living beings (including suicide), stealing, and sexual misconduct. Right livelihood means we should earn our living in a righteous way and that we should refrain from trading in arms, human beings (such as slavery and prostitution), flesh (breeding animals for butchery), intoxicants and poison (such as alcohol and drugs).

The third component, concentration, is concerned with the development of a perfect and attentive mental state. It is acquired through right effort, right mindfulness, and right concentration. Right effort consists of endeavour to prevent the arising of unwholesome states, to discard the unwholesome states that have already arisen, to develop wholesome states that have not yet arisen, and to promote the wholesome states that have arisen. Right mindfulness involves contemplation of the body, feelings, mental formation and the phenomena (ideas, thoughts, conceptions and things). Right concentration refers to the development of one-pointedness of mind free of disturbances.

[5]The Buddha taught that impermanence was the core characteristic of the phenomenal world. According to the Buddha, all phenomena undergo a cycle of formation, abiding, destruction, and emptiness. However, the transition from the baseline to the next state is not chaotic or random. There are unchanging causal laws governing the process of all change, which are known as the Law of Causality. In other words, governed by the Law of Causality, all phenomena come into existence due to the combination of the right causes and conditions; and all phenomena cease to exist due to the disintegration of the right causes and conditions.

However, because of impermanence, even the cause and condition themselves are in flux and thus are always in the state of becoming: from non-existence it arises to existence, then ceases back into non-existence. Such dynamic transference and counter-transference of influence among all phenomena is known as the Dependent Originality. Because of Dependent Originality, a single phenomenon cannot exist or disappear on its own. All phenomena exist in dependence upon its own parts, but they are empty of their own separate essence. Here, emptiness does not mean nothingness (nihilism is just one phase of an impermanent cycle of existence) but forms the basis of all existence. Emptiness nature of all phenomena is analogous with space, it has no form or shape and will not obstruct any material existence. For example, we need empty space to build a house.

Ignorance about the emptiness nature of all phenomena is the fundamental cause of suffering. Since all phenomena are essentially impermanent and undergo a constant process of change which is conditioned upon the Law of Causality, there are no independent permanent substances. Therefore, the Buddha argued that there was no substantial atemporal unifying self, or non-self. The Buddha believed that what we call the self is composed of five aggregates: 'material form ([the material body with its sense organs] especially our sense organs), feelings or sensations (as pleasant, unpleasant, or neutral), perceptions or cognition (involving judgments about the world), mental formations (desires, wishes, and volitions), and consciousness (awareness [of the six senses – sight, hearing, smell, taste, touch plus mental events]) ' (Gowans, 2003, p. 34). When the five aggregates interact, a mental state arises. It is the rising of this mental state that creates the feeling of a sense of a subjective self and an objective mind (Daya, 2000). The fallacy of giving attributes to a belief in a subjective self reifies its existence and forms a personality of its own: existence of 'a permanent and stable sense of self with only the mental states being considered transient' (Daya, 2000, p. 262).

Gowans (2003) used an analogy from modern science to explain the illusion of a self behind the five aggregates. 'Everything in our ordinary experience tells us that the sun rises each morning in the east, travel across the sky through the day, and sets in the evening in the west. This is as obvious as it can be. It is a matter of common sense.

But it is also completely false. The sun only appears to be going through these motions because, unbeknown to ordinary experience [the illusive subjective self], the earth revolves [transient mental states arising from the interaction of the five aggregates]. Likewise, the Buddha maintained, it seems obvious that we are selves, but this belief is an illusion…In calling this reality [i.e. to claim a permanent self truly exists], we misdescribe it (just as we misdiscribe what is real by saying the sun rises)' (Gowans, 2003, p. 33). As a result, attachment to this false notion of an abiding self is an active state of 'misknowning', rather than 'unknowing' (Jinpa, 1999, p. 11). In Buddhism, the reality of what is immortal is the stability of process, not the stability of world (Gowans, 2003).

Due to the delusion of a permanent self, all phenomena are "self-referential" (Jinpa, 1999, p. 17). Karma arises from volitional impulses to attach to and preserve this illusive self who becomes the inheritor of karma. Consequently, we see an endless cycle of karmatic formation and dissipation of a sense of self (changing mental state arising from the interplay between the five aggregates - bodily form, sensations, perceptions, mental formations, and consciousness) across the six realms of existence.

[6]A Bodhisattva is 'one who is becoming a Buddha…who reaches Nirvana but out of compassion vows to remain in the samsara cycles of birth and death [or endless conditioned existence] to help all other sentient beings. Bodhisattvas willingly are reborn in all of the realms of rebirth, to provide spiritual and physical help to beings suffering in these realms' (Ludwig, 2004, p. 157).

[7]Regarding the Buddhist practice, there has been some debate as to whether attainment of liberation from suffering is based on 'own mental discipline to develop the potentials for enlightenment rather than praying the Buddhas for spiritual empowerment' within different schools of Buddhism (Chen, 2006, p. 87). The former is clearly advocated by Zen School practitioners while the latter is the essence of the Pure Land School practice (Chen, 2006). Zen Buddhism emphasizes the simple practice of meditation as the direct way to enlightenment, because its believers believe that everyone possesses the Buddha nature which can be seen clearly by mindful concentration (Chen, 2006; Ludwig, 2004). Hence, adherents of Zen Buddhism believe in the 'self power' to achieve spiritual liberation (Chen, 2006, p. 87). In contrast, Pure Land Buddhism believes in the power of total surrender to the sacred power of Buddha (Chen, 2006). Adherents of the Pure Land School consider that spiritual liberation is possibly only through the grace of 'the other power' of Amitabha Buddha who promised to welcome those who call on his name to the bliss of his Pure Land (Chen,

2006; Ludwig, 2004). Hence, Pure Land Buddhism stresses on simple practice of chanting the name of 'Amitabha Buddha' as the means of salvation from earthly perils (Ludwig, 2004).

[8]SEM is largely a confirmatory technique to determine whether a certain specified theoretically plausible model is valid by testing and estimating its relationships among constructs of interest against the observed data. SEM deals with both observed and latent variables. Observed variables are measurement items and can be observed directly. They are also known as indicators of latent variables. Latent variables are abstract psychological variables that are not measured directly, but could be inferred from multiple observed variables (indicators) underlying the corresponding latent variable. They are also known as latent factors. For example, depression is a latent factor that can be measured by multiple indicators such as the extent to which one experienced loss of appetite and thought pessimistically over the past six months.

SEM models are usually displayed in flow charts. Latent factors are represented by ovals or circles, while indictors are represented by rectangles or squares. Residuals of latent factors are called disturbances. Residues of indicators are called measurement errors. Both disturbances and measurement errors are represented by ovals or circles because they are unobservable. Correlations and covariances are represented by double arrows while defined relationships among latent factors and indicators specified in a SEM model are represented by one-way arrows.

SEM models have two basic components, namely, a measurement model and a structural equation model. The measurement model shows the relations between the latent factors and their indicators. In testing a measurement model, SEM has the ability to capture unbiased estimates for the latent constructs by taking into account the measurement errors of multiple indicators. SEM allows multiple indicators to be associated with a single latent factor. This corresponds to a confirmatory factor analysis. The structural model delineates the direct and indirect relationships between various indicators, and their relationships to the latent factors. SEM allows the examination of the extent to which the observed data agree with or refute a specified hypothesized model of causality. In order to identify a measurement or structural model, the number of indicators needs to be equal to or larger than the number of estimated parameters. In other words, the degree of freedom of any specified measurement or structural model needs to be equal to or greater than zero.

[9]Non-normality leads to inflated X^2 which increases Type I error rate. Consequently, fit indices which are a function of X^2 such as CFI and RMSEA are underestimated. While parameter estimates are unaffected by the violation of normality assumptions, non-normality produces underestimated standard errors of parameter estimates, yielding too many significant estimates of truly zero parameters included in the model. For discussion on the impact of non-normality, please see Finney & DiStefano (2006) and West et al. (1995).

[10]Additional analyses have been conducted to re-examine the three religious pathways after removing two personal death anxiety items that may overlap with the belief in an unpleasant afterlife beliefs construct. These two items are "27. I fear death because of fear of heavenly punishment" and "34. I fear death because of fear of hell and doomsday". I could confirm that the removal of these two personal death anxiety items did not alter: (a) the afterlife beliefs and psychosocial maturity joint mediation (Model A), S-B scaled X^2(53, Listwise $N = 133$) = 89.94, $p = .001$, Mardia's coefficient = 31.76, NNFI = .92, CF = .94, RMSEA = .07, indirect effect of intrinsic religiosity ($z = -.39$) was significant; (b) the afterlife beliefs, psychosocial maturity and neuroticism joint mediation (Model B), S-B scaled X^2(62, Listwise $N = 133$) = 101.07, $p = .001$, Mardia's coefficient = 29.94, NNFI = .92, CFI = .94, RMSEA = .06, indirect effect of intrinsic religiosity ($z = -.39$) was significant; (c) the finding that mortality acceptance was the only significant additional predictor of personal death anxiety, over and above intrinsic religiosity, afterlife beliefs, psychosocial maturity and neuroticism; and (d) the finding that negative emotional regret appraisal was unrelated to personal death anxiety, thus the lack of support for the efficacy of religious management of regret in coping with personal death anxiety.

[11]Three separate regression-based Sobel tests related to testing single mediation of afterlife beliefs, psychosocial maturity and neuroticism using Kenny's (2009) 4-step procedure were performed. The Sobel test for afterlife beliefs was marginally significant ($z = 1.74$, $p = .08$). The Sobel tests for psychosocial maturity ($z = -3.03$, $p < .05$) and for neuroticism ($z = -2.70$, $p < .05$) were significant.