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CITY UNIVERSITY OF HONG KONG

**Time perspective, death anxiety and emotional
regulation processes in older adults**

A Report Submitted to
Department of Applied Social Studies
in Partial Fulfillment of the Requirements for
the Bachelor of Social Sciences (Honours) in Psychology

By

CHEN Sze Man, Emily

April, 2011

Abstract

In late life, time perspective was regarded as one of the important variables relating people's well-being. It may also serve as a coping mechanism against death anxiety, a major concern of older adults. A number of previous research were done in Western population to examine the relationship between time and death anxiety of older adults (Dickstein and Blatt, 1966; Hendrick & Hendrick, 1977; Nurmi, Pullianen, & Salmela-Aro, 1992; Quinn & Reznikoff, 1985; Rappaport, Fossler, Bross, & Gilden, 1993), but no such research was done in Chinese population. Thus, the present study aimed at studying the relationship between time perspective and death anxiety in a sample of 165 Chinese older adults residing in Hong Kong. This study adopted three multidimensional inventories in studying time perspective and death anxiety, namely, Zimbardo's Time Perspective Inventory (ZTPI), Transcendental-Future Time Perspective (TFTP) and Chinese Death Anxiety Inventory (CDAI). Results showed that death anxiety was unrelated to future time orientation, while present hedonistic and past negative time perspective was positively related to after-death anxiety. Also, death and dying anxiety was predictive of past positive time perspective. Moreover, transcendental-future time perspective was unrelated with death anxiety. The results discussed in the context of socioemotional selectivity theory. The present study proposed that older adults tended to adjust their time orientation, especially focused on the positive sides, to cope with the death anxiety. Therefore, it is suggested that emotional functioning was not declined, or even improved in late life.

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Thesis Submission Declaration Form

**City University of Hong Kong
Department of Applied Social Studies**

Thesis Submission Declaration Form

Student Name: CHEN SZE MAN

Student No.:

Title of Thesis/Dissertation: Time perspective, death anxiety and emotional regulation processes in older adults

Course Code: SS4708

Programme: BSSPSY

Supervisor's Name: Dr. LI KIN KIT, Ben

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- (V) This paper has not been submitted to any other courses.
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Time perspective, death anxiety and emotional regulation processes in older adults

Chapter 1: Introduction and Literature Review

As the older adults have become one of the fast growing populations in society, more research on gerontology has been done. In the worldwide level, the proportion of older adults aged 60 or above was increased from 8% in 1950 to 11% in 2009 (United Nations Department of Economic and Social Affairs/ Population Division, 2009). As for the Hong Kong's statistic, according to Census and Statistics Department (2006), the older people population in Hong Kong is also rising up. It is expected that this population (aged over 65) will increase from 12% of the total population in 2006 to 26% in 2036. Therefore, it is important to examine the correlates of well-being in this population.

Time perspective was regarded as one of the important factors affecting well-being of people. Zimbardo (1990) stressed the importance of time perspectives in predicting one's behavior as well as their emotional outcomes. Later, several studies also documented the relationship between different temporal orientation and consequences. They found that participants with future time perspective were less likely to report poorer health (Guthrie, Butler, Ward, 2009), but more likely to report a higher level of forgivingness (Allemand, 2008). Besides, future time perspective was also related to other health-related behavior, such as, exercise and healthy eating (Mahon, Yarcheski, & Yarcheski, 1997). In contrast, present orientation was found to be related to negative consequences, for example, juvenile delinquency, addiction and crime (D'Alessio, Guarino, De Pascalis, & Zimbardo, 2003; Keough, Zimbardo, & Boyd, 1999). In view of this, time perspective was believed to be one of the important factors that were related to one's well-being and adversity. The similar effect are also observed in older adults, as a very recent study (Li & Cheng, 2011)

found that limited future time perspective of Chinese older adults predicted less physical activity, drink more, and have less positive social interaction with friends and relatives, even after controlling for demographic data, cognitive functioning, health, and personality. In view of this, time perspective was found to be related to well-being in older adults.

Although time perspective is related to well-being in older adults, older adults tend to take the active role in their well-being rather than the passive ones. There is an obvious relationship between time perspective and emotional regulation of older adults in order to enhance their emotional well-being. According to the socioemotional selectivity theory (Carstensen, Isaacowitz, & Charles, 1999), a lifespan theory of motivation and goal selection in response to ones' time horizons, the realization of restricted time horizon of older adults lead them to prioritize and pursue emotional goals, and put substantial efforts in emotional regulation. In light of this, the present study predicted that older adults will use time perspective as a coping mechanism. More specifically, the present study aims at investigating this coping mechanism (i.e., adjusting time perspective) of older adults in facing the major concern and adversity in late life. Previous studies (Johnson & Barer, 1997; Schroots & Assink, 2005; Tobin, 1996) suggested that the most important concern of older adults is death anxiety because they are preoccupied with the imminent death. Thus, the goal of present study is to examine how time perspective acts as the coping mechanism against death anxiety in late life.

A number of previous research were done in Western population to examine the relationship between time perspective and death anxiety of older adults (Dickstein and Blatt, 1966; Hendrick & Hendrick, 1977; Nurmi et al., 1992; Quinn & Reznikoff, 1985; Rappaport et al., 1993). However, no such research was done in Chinese

population. Thus, this becomes the strong motive of the present study to examine the effect of death anxiety (i.e., anxiety towards death and dying issues and anxiety triggered by uncertainty towards life after death) on time perspective of older adults.

1.1 Time perspectives in older adults

Lewin (1951) postulated that individuals' time orientation was influenced by his or her social backgrounds and motivation. Lewin (1951) viewed time perspective as how individuals perceived his or her psychological past and future existing at a given time. However, previous studies only adopted a one-dimensional time perspective measures, for example, the Consideration of Future Consequences scale (Strathman, Gleicher, Boninger, & Edwards, 1994), future anxiety scale (Zaleski, 1996), and sensation-seeking scale of present-oriented functioning (Zuckerman, 1994). Consequently, Zimbardo and Boyd (1999) criticized the flaws in past measurements that omitted the relative extent of the other time dimensions of individuals. Later, Zimbardo and Boyd (1997, 1999) built on Lewin's ideas and developed two time perspective measurements. One measurement considers psychological time, including one's past, present, and future temporal frames, another one considers time after death or transcendental-future time perspective.

Zimbardo and Boyd (1999) viewed temporal perspective as a non-conscious process which plays an important role in one's personal and social experiences that giving meaning to daily life events. Besides, these cognitive temporal frames help ones to encode, store and recall experiencing events and form expectation and set goals (D'Alessio et al., 2003). Based on their view on individual's perception of time, Zimbardo and Boyd (1999) developed a scale called Zimbardo's Time Perspective Inventory to measure five specific time perspectives of individuals. In this inventory, it not only views time as past, present, and future (Lewin, 1951), but also adds one's

positive and negative evaluation towards present and past time orientation, and obtains five subscales of time perspective, namely, Past Negative, Past Positive, Present Hedonistic, Present Fatalistic, and Future (Zimbardo & Boyd, 1999). This inventory is more precise and unique in a sense that it can tap a fuller picture of individual's time orientation by including positive and negative lights of time perspective.

In human life-course, different ages of people were characterized by different tasks that influence their time perspective. For example, child and adolescent is characterized by school and home, young and middle adult by relations and work, and older adult by health and death (Schroots & Assink, 2005). In general, empirical findings suggested that individuals with future temporal orientation were related to positive outcomes, such as outstanding academic achievements, high socioeconomic status and fewer risk-taking behaviors (e.g., Levine, 1997; Nuttin, 1985; Strathman et al., 1994; Zaleski, 1994). On the contrary, present temporal orientation was related to negative outcomes, for instance, juvenile delinquency, crime and addictions (Hodgins & Engel, 2002; Keough et al., 1999; Zimbardo, Keough, & Boyd, 1997).

A study in 2003 adopted the short version of Zimbardo's time perspective inventory to investigate the time perspective in Italian population (D'Alessio et al., 2003), the research team separated the participants into four age groups in order to do the comparison, they were, 16-27 years old, 28-33 years old, 34-41 years old, and 42-89 years old. The results found that middle-aged adults (28 to 41 years old) were more future oriented than the young-aged adults (16 to 27 years old), while the younger-aged groups (16 to 33 years old) were more oriented to hedonistic present (seeking present pleasure) than the older-aged groups in this study (34 to 89 year old). This gave some evidences that the higher the individuals' age, the more the

orientation to hedonistic present was. Next, individuals aged 34 or above were found to be the most oriented to the present fatalistic (helpless and hopeless towards life). Previous studies also found a general trend that the time orientation was shifted from future to present in advancing age (Johnson & Barer, 1993; Nurmi et al., 1992; Shmotkin, 1991). Consistent with this finding, Fink (1957) examined the time perspectives of older adults and found that people were less likely to focus on future time perspective in advanced age. Later, Spence (1968) proposed that a lack of futurity in older adults was related to higher satisfaction, which led him to conclude that a lack of futurity may help adaptation to aging. Accordingly, it is plausible that the time perspective of older adults, which related to aging adaptation, is distinctive and different from the other age groups.

1.2. Time perspectives and death anxiety

After discussing the time perspective in older adults, it is worth to discuss how the death anxiety is related to time perspective. Several studies were done to examine the relationship of death anxiety and temporal orientation. Dickstein and Blatt (1966) found that death anxiety was negatively related to present time orientation. They explained that people, at least for older adults, tends to adopt foreshortened future to defend against death anxiety. By focusing on the present moment, older adults can escape from the imminent death and coming to terms with mortality. Furthermore, some researchers (Hendrick & Hendrick, 1977; Nurmi et al., 1992; Quinn & Reznikoff, 1985) stated that the present temporal orientation of older adults seems related to optimism because those older adults hold a more realistic attitude towards their life when they age, and lower level of future orientation can be a healthy and adaptive ways for the elderly to deal with death anxiety. Specifically, as proposed by Kastenbaum and Aisenberg (1972), elderly may turn away from future life to cope

with the death anxiety.

In contrast, a study (Rappaport et al., 1993) found that death anxiety was positively related to “present” temporal orientation among older adults but unrelated to future time perspective, and researchers suggested that elderly with present temporal orientation instead of future temporal orientation represent a kind of “disguised death-anxiety”.

On the basis of the inconsistencies results found in previous studies, the present study reiterates the previous findings about positive relationships between death anxiety and future time perspective, and examines whether this finding was applicable to Chinese older adults. More specifically, the present study would examine the connection of the futurity of older adults and their anxiety towards death and dying issues and uncertainty about after-life. It was speculated that older adults with higher level of both after-death and death and dying anxiety was related to less future orientation as a coping mechanism of their anxiety.

Apart from the pre-death time frames, Boyd and Zimbardo (1997) also proposed a post-death time frame, that is, the transcendental-future time perspective. This time frame, distinguishing from the future time perspective, included “the period of time from the imagined death of the physical body to infinity” (Boyd & Zimbardo, 1997, p.36). Consistent with the search-for-meaning theory, a theory developed by Viktor Frankl through his observations and experiences in Nazi death camps (Frankl, 1963), people attempt to develop the sense of continuity and concept of transcendence and eternal life in order to deal with the death anxiety. Therefore, this theory predicted that in order to combat with a high level of death anxiety, older adults would more likely to have transcendental-future time perspective because this time perspective can give them a sense of eternal life. Furthermore, according to

Boyd and Zimbardo (1997), the transcendental-future time perspective may have different purposes for older adults. For instances, reunion with the deceased ones or reincarnation, a belief in Buddhism that commonly held by Chinese population and act as a buffering effect to death anxiety of older adults (Wu, Tang, & Kwok, 2002).

The present study proposed that death anxiety may predict the transcendental-future time perspective of older adults because it can serve as a coping mechanism for older adults to cope with death anxiety. It seems that older adults will use the transcendental-future time perspective to fight against the death anxiety. The details of emotional regulation strategies of older adults will be introduced as follows.

1.3 Death anxiety, time perspective and emotional regulation

According to socioemotional selectivity theory (SST) (Carstensen et al., 1999), there are two set of goals, namely, knowledge-related goals and emotional goals. Time horizons will affect the goal selection of people as well as their motivation.

In early life, people perceive time as open-ended or expansive, which is characterized in youth, and they will focus on future and seeking for knowledge-related goals, that is, acquisition of knowledge. It aims to increase future preparedness by obtaining novel information and developing new skills. This goal dominates in late adolescence to middle adulthood (Carstensen, Fung, & Charles, 2003).

In advanced age or terminal ill patients, they aware that time is running out and limited, and their time perspective will focus on present instead of the future and prioritize the emotional goals and enhance emotional gratifying experiences, which relates to the emotional regulation (Carstensen & Fredrickson, 1998; Scheibe & Carstensen, 2010). Therefore, they are more concerned for intensifying the positive

states, seeking meaning from emotion and experiencing emotional satisfaction due to the immediate payoff (Fung & Carstensen, 2003). For older adults, for example, as they perceive their time as limited, they view future as irrelevant to their choice, and in turn, pay attention to the here and now and optimize the emotional satisfaction in the present moment (Carstensen et al., 1999; Scheibe & Carstensen, 2010).

Socioemotional selectivity theory posits that emotion trajectory is curvilinear. It is the highest during infancy and early childhood for the sake of developing emotional trust and attachment. It drops from middle childhood throughout early adulthood to strive for future success, and then rises from late adulthood as future-oriented striving and success become less relevant and available to them (Carstensen et al., 2003). This theory received empirical supports from studies conducted in western countries (Fredrickson & Carstensen, 1990; Lang & Carstensen, 2002), and eastern countries (Fung, Carstensen, & Lutz, 1999; Fung, Lai, & Ng, 2001).

Recent research found that older adults reported a superior emotional regulation. The emotion of older adults was more stable as compared to younger age groups and their ability of emotional control was also improved (Lawton, Kleban, Rajagopal, & Dean, 1992). This difference was observed even in diverse ethnic elderly groups (Gross et al., 1997). In addition, different empirical and experimental findings suggested that older adults regulate their emotion by allocating more attention to positive information in controlled processing (Carstensen, 2006; Mather, 2006; Mather & Carstensen, 2003, 2005; Mather & Knight, 2006), recalling the positive experience and autobiographical more readily (Charles, Mather, & Carstensen, 2003; Mather, Knight, & McCaffrey, 2005; Sullivan, Mikels, & Carstensen, 2010), and disproportionately preferences for the positive information (Field, 1981; Kennedy,

Mather, & Carstensen, 2004; Levine & Bluck, 1997), of which a phenomenon known as “positivity effect” (Carstensen & Mikels, 2005). The positivity effect not only observed in attention and memory, recent findings using functional brain imaging also found this effect in a neural activation level when encoding emotional stimuli (SamanezLarkin & Carstensen, in press). Therefore, researchers concluded people prioritized the emotion regulation, making them attend to positive, but not negative, and focus on present experience in late adulthood (Carstensen et al., 2003).

Carstensen and Charles (1998) proposed that positivity effect found in older adults because the emotional regulation became their salient emotional goal when they approaching the end of life. Studies showed that if older adults have to divide their attention or being distracted, the positivity effect disappeared (Mather & Knight, 2005; Wurm, Labouvie-Vief, Aycocock, Rebucal, & Koch, 2004). Therefore, the positivity effect was considered as an effortful process that involves the conscious elements of older adults. Thus, it is clear that studying the death anxiety and time perspective is meaningful to investigate the effortful process of older adults.

Building upon the arguments of the socioemotional selectivity theory and the previous research, the present study examined that whether older adults will use time perspective as a tool to regulate the death anxiety encountered by them. Thus, older adults with high level of death anxiety will resort to positive sides of present and past time perspectives, the present hedonistic and past positive time perspectives respectively. However, older adults may simply ignore the negative time perspective and focus on positive time perspective, and therefore, negative time perspective are regards as unrelated to death anxiety.

1.4 The present study

Few research (Wu, Tang, & Kwok 2002) in Chinese cultures focus on the older

adults' fear or anxiety towards the end of life, that is, the death anxiety or death fear. Wu, Tang, and Yan (2004) were pioneer to develop a death anxiety scale for Chinese people known as "The Chinese Death Anxiety Inventory" (CDAI). This scale examined death anxiety in a multidimensional way and it is differed from the traditional death anxiety scale developed by Templer (1970), which measures the fear of death only. Wu and her colleagues (2004) identified two factors of death anxiety, namely "Death and Dying Anxiety" and "After-death Anxiety". Separating the death anxiety into two components can have both theoretical and practical advances.

Theoretically, this separation may enrich the literatures and help revising theories of death anxiety by acknowledging that there were both anxiety issues towards death and dying and uncertainty about after life, not only a general factor called death anxiety. Apart from theoretical advances, this study can give validation to the practical use of death anxiety scale in Chinese older adults' population. The present study would provide the evidence that two components of death anxiety are related but different from each other. This may encourage researchers and practitioners to use the multidimensional scale of death anxiety instead of a one-dimensional scale to tap the death anxiety in their samples. The death anxiety study of Chinese older adults is quite new in the literature. So far, only a few studies examined the death anxiety and its correlates of older adults (e.g., Wu, Tang, & Kwok, 2002). Moreover, the newly developed CDAI was used to investigate college students only. Thus, the present study is the pioneer to study the death anxiety of Chinese older adults with the use of this latest death anxiety scale.

Furthermore, for the time perspective studies, previous studies only defined time as the present, past, and future time dimension (Lewin, 1951). However,

Zimbardo and Boyd (1999) added the positive and negative components of the present and past orientation, and obtained five time perspectives instead. Although Zimbardo and Boyd had developed a more concise inventory, previous studies seldom use this to examine the older adults. Therefore, the present study would be the pioneer to use the Zimbardo's Time Perspective Inventories and Transcendental-Future Time Perspective Inventory, and to link the time perspective with the death anxiety.

Therefore, the present study aimed at investigating how after-death anxiety and death and dying anxiety influence the time perspectives of Chinese older adults after controlling for demographic variables. This study is beneficial in two senses. Firstly, by knowing relationship of specific time perspectives and death anxiety of older adults, the result of this study can refine the existing theories of death anxiety and time perspectives in gerontology. Further, the findings can also provide some indirect support for the emotional regulation mechanisms proposed by socioemotional selectivity theory.

On the basis of the previous studies and literatures, this study aims at examining the relationships of death anxiety and different time perspectives among Chinese older adults. This study hypothesized that after controlling for the demographic data, (1) older adults having higher levels of death anxiety (after-death anxiety and death and dying anxiety) is oriented less towards future time perspective, (2) older adults having higher levels of death anxiety (after-death anxiety and death and dying anxiety) is oriented more towards present hedonistic and past positive time perspectives, and (3) older adults having higher levels of death anxiety (after-death anxiety and death and dying anxiety) is oriented more towards transcendental-future time perspective.

Chapter 2: Methodology

2.1. Participants

A total of 165 Chinese older adults participated in this study, in which 86 were men and 79 were women. All of the participants were residing in Hong Kong and were the permanent residents of Hong Kong. Their age ranged from 60 to 94 ($M = 70.25$, $SD = 8.70$). Around 60% of participants were married while 30% were widowed, and the remaining 10% were singled, divorced, and separated. Most participants were living with family (71.5%) and rated their general health as average or above (83%). The convenient sampling method was used to recruit the Chinese older adults from different sources, such as, elderly community centers, community, Elder Academy in City University of Hong Kong. The participants participated voluntarily in this study and no monetary reward was given after they finished the survey.

2.2. Materials

Death anxiety

The Chinese Death Anxiety Inventory (CDAI) was developed by Wu and her colleagues (Wu et al., 2004), in which two related but different constructs were included, namely, After-death anxiety (ADA) and Death and dying anxiety (DDA). After-death anxiety subscale, containing 11 items, measured the anxiety towards uncertainty about after-life while Death and dying anxiety subscale, containing 12 items, measured anxiety toward the general death-related issues and process of dying. A 5-points Likert scale was being used in this inventory, in which 1 refers to strongly disagree and 5 refers to strongly agree. With higher score indicates that the individual has higher anxiety towards uncertainty about death and death-related issues. As item-total correlation of item 8 was lower than 0.3, it was excluded from

the data analysis. After removing the item 8, the internal consistency of this inventory is satisfactory, with a Cronbach's alpha coefficient of 0.92 for the total Chinese Death Anxiety Inventory, .95 for the subscale of After-death Anxiety, and 0.87 for the subscale of Death and Dying Anxiety. The two subscales, after-death anxiety and death and dying anxiety, are highly correlated with the whole inventory ($r = .82$ and $.86$ respectively, $p < .01$) but moderately related with each other ($r = .40$, $p < .01$). This means, after-death anxiety and death and dying anxiety was two related but different constructs.

Time perspective

The time perspective was measured by both "The Transcendental-Future Time Perspective Scale" (Boyd & Zimbardo, 1997) and "Zimbardo Time Perspective Inventory" (Zimbardo & Boyd 1999). For the transcendental-future time perspective scale (TFTP), it contains 10 statements assessing the degree of belief in each statement, and respondents were required to rate each one from 1 (very uncharacteristic of me) to 5 (very characteristic of me). As this scale has not yet been translated into the Chinese version, back-translation procedure was carried out in order to get a Chinese version of this scale and adopted in the present study. Before adopting the Chinese version, a pilot study was done.

Pilot Study. Thirty college students majoring in psychology participated in the pilot study. After gaining the verbal consent from them, they were asked to complete the Chinese version of TFTP and wrote the four last number of their student identity number for retest purpose. The same participants completed the questionnaires again one month later. No misunderstanding and misinterpretation were reported from participants and the test-retest reliability over one month was 0.91.

After removing the items 5 and 7, which are low in item-total correlation, the

Cronbach's alpha coefficient of the transcendental-future time perspective scale was increased from 0.63 to 0.69. Individuals with higher score in this scale reflected his belief in existence after death (Boyd & Zimbardo, 1997).

As for Zimbardo time perspective inventory, Zimbardo and Boyd (1999) had divided time perspective into five subscales, namely, Past Negative (aversive attitudes toward past, PN), Past Positive (warm attitudes toward past, PP), Present-Hedonistic (orientation toward pleasure in the present and ignore future consequences, PH), Present-Fatalistic (hopeless and helpless attitude toward future and life, PF), and Future (striving for future goals and success). The short version of this inventory, developed by a French researcher, was used in this study (Fieulaine, Apostolidis, & Zimbardo, in preparation). The short version of the inventory contains 15 items with 3 items in each time perspectives, and respondents were required to rate each one from 1 (very uncharacteristic of me) to 5 (very characteristic of me). The Cronbach's alpha coefficient of the three subscales (Past Negative, Future, and Past Positive) ranged from 0.63 to 0.80. A present-Hedonistic subscale has a Cronbach's alpha of 0.54 after dropping item13, which is considered as minimally acceptable level (Nunnally, 1967). Also, the reliability of Present-Fatalistic subscale was low. After removing item 15, its reliability was increased from 0.28 to 0.49, a barely acceptable level. Previous study done in Brazil also showed that item 13 and 15 had non-significant loadings after researchers performed confirmatory factor analysis (Milfont, Andrade, Belo, & Pessoa, 2008). The test-retest reliability over a month ranged from .70 to .80 was reported by previous study (Zimbardo and Boyd, 1999).

2.3. Procedures

This study used self-reported measure and the cross-sectional design was

adopted in the study. At the very beginning of the survey, researcher would get the consent from the respondents before the interview had started and informed the respondents that some distresses may be triggered by this survey, and they were allowed to quit the study at any time if they want. Once the respondents agreed to do the survey, the researcher would briefly explained the purpose of this study and interviewed respondents by verbal administering the questionnaires to the respondents and the researcher have to make sure the respondents have fully understand before they answered each questions. Consistent with the procedure in Wu et al. (2002), after the interview finished, respondents were asked their feeling about the interviews. Researcher would identify respondents who may have some psychological distress regarding the death-related questions during the interview and then comfort them until their emotional state returned to normal. Also, the researcher would refer and report those cases to social workers. However, in the present study, none of the participants reported any emotional distress or uncomfortable towards the death-related questions and did not need any follow-up services. The present study was approved by the ethical review process of the College Research Ethics Sub-Committee of City University of Hong Kong.

Chapter 3: Results

3.1. Descriptive Statistics

The descriptive statistics and bivariate correlations of testing variables are summarized in the table 1. The mean score of past positive and past negative time perspectives was 11.24 ($SD = 3.22$) and 8.73 ($SD = 3.03$) respectively while the mean score of present hedonistic and present fatalistic time perspectives was 4.04 ($SD = 1.89$) and 6.99 ($SD = 2.15$) respectively. Also, the mean score of future and transcendental-future time perspectives was 11.08 ($SD = 2.68$) and 24.52 ($SD = 6.40$) respectively while the mean score of after-death anxiety and death and dying anxiety was 17.07 ($SD = 9.26$) and 28.83 ($SD = 10.32$) respectively.

As for the bivariate correlations, after-death anxiety was significantly and moderately correlated with present-hedonistic time in a positive direction ($r = .43, p < .001$). Also, there were significant but weak correlation with transcendental-future time perspective ($r = .16, p < .05$), and past negative time perspective ($r = .29, p < .001$) in positive directions. As for the death and dying anxiety, it was positively correlated with past negative and past positive time perspective ($r = .29, .25$ respectively, $p < .001$), though the relationships were weak.

Table 1
Descriptive Statistics and Correlations of Variable in the present study (N = 165)

Variables	<i>M (SD)</i>	1	2	3	4	5	6	7	8
1. Past Positive	11.24 (3.22)	-							
2. Past Negative	8.73 (3.03)	.37***	-						
3. Present Hedonistic	4.04 (1.89)	.08	.41***	-					
4. Present Fatalistic	6.99 (2.15)	-.16*	-.18*	-.27***	-				
5. Future	11.08 (2.68)	.03	-.01	.13	.12	-			
6. TFTP	24.52 (6.40)	.11	.14	.29***	.05	.26**	-		
7. ADA	17.07 (9.26)	.12	.29***	.44***	-.13	.06	.16*	-	
8. DDA	28.83 (10.32)	.25**	.29***	.13	-.15	-.07	.07	.40***	-

Note. TFTP = Transcendental-future time perspective, ADA = After-death anxiety, DDA = Death and dying anxiety. The possible range of scores of Past Negative, Past Positive, and Future are from 3 to 15, while of Present Hedonistic and Present Fatalistic are 2 to 10.

* $p < .05$, ** $p < .01$, *** $p < .001$

3.2. Hypotheses Testing

A series of hierarchical regression analyses were performed to test the major hypotheses after controlling for the demographic variables (i.e., age, gender, marital status, education level, living status, and perceived health). The results of hierarchical regression analyses were shown in Table 3. As some of the demographic variables were categorical, they were coded as dummy variables, for example, male participants, living alone, and singled were coded as 0, while female participants, living with family, and married were coded as 1. For educational level, it contained four levels, and its reference group was not received any education. The present model examined the main effects of variables and contained two steps. In step 1, demographic variables were entered first as control variables. Later, the after-death anxiety and death and dying anxiety were entered at step 2 as predictor variables. The five time perspective subscales of Zimbardo's time perspective inventory and transcendental-future time perspective were dependent variable, and thus, six hierarchical regressions analyses were run.

In the hierarchical regression model shown as Table 3, after controlling for some potential confounding variables, the death anxiety was significantly associated with past negative ($\Delta R^2 = .07$, $\Delta F(2, 154) = 6.63$, $p < .01$), past positive ($\Delta R^2 = .04$, $\Delta F(2, 154) = 4.13$, $p < .05$), and present hedonistic time perspective ($\Delta R^2 = .08$, $\Delta F(2, 154) = 9.81$, $p < .001$), but not present fatalistic ($\Delta R^2 = .002$, $\Delta F(2, 154) = .27$, n.s.), future ($\Delta R^2 = .002$, $\Delta F(2, 154) = .19$, n.s.), and transcendental-future time perspective ($\Delta R^2 = .01$, $\Delta F(2, 154) = .53$, n.s.). In other words, the predictor variables (after-death anxiety and death and dying anxiety) explained an additional 7% of the variance in past negative time perspective, 4% of the variance in past positive time perspective, 8% of the variance in present hedonistic time perspective, 0.2% of the variance in present fatalistic and future perspective, and 1% of the variance in transcendental-future time perspective.

Results of hierarchical regression analyses showed that after-death anxiety and death and dying anxiety was not predictive of future time orientation ($\beta = .05, t = .61$ and $\beta = -.03, t = -.29$ respectively, *n.s.*). That was, the death anxiety (after-death anxiety and death and dying anxiety) of older adults did not predict their future time perspective. Therefore, hypothesis 1 was not supported.

With regard to hypothesis 2, interestingly, the present study found a specific pattern between death anxiety and time perspective. The after-death anxiety was significantly related to present hedonistic time perspective ($\beta = .32, t = 4.22, p < .001$) while the death and dying was significantly related to past positive time perspective ($\beta = .22, t = 2.47, p < .05$). However, after-death anxiety was unrelated to past positive ($\beta = .03, t = .35, n.s.$) while death and dying anxiety was unrelated to present hedonistic ($\beta = -.04, t = -.46, n.s.$). Therefore, older adults having higher after-death anxiety is oriented more towards present hedonistic and those having higher death and dying anxiety is oriented more towards past positive time perspective. Hypothesis 2 was partially supported. However, an unpredictable result was found, that was, after-death anxiety was predictive of past negative time perspective ($\beta = .20, t = 2.33, p < .05$).

As for the transcendental-future time perspective, older adults with higher levels of death anxiety was not predictive of transcendental-future time perspective ($\beta = .09, t = .96$, and $\beta = -.01, t = -.06, n.s.$ for after-death anxiety and death and dying anxiety respectively). Thus, the after-death anxiety of older adults did not affect their orientation towards transcendental-future time perspective. Thus, hypothesis 3 was not supported.

Table 2
Results of hierarchical regression analyses in predicting subscales of time perspective and transcendental-future time perspective

	Past Negative	Past Positive	Present Hedonistic	Present Fatalistic	Future	TFTP
Variables	β	β	β	β	β	β
<i>Step 1</i>						
<u>Controlled Variables</u>						
Male ^a	-.01	-.11	-.01	.21*	.11	-.001
Age	-.15	-.05	.03	.19*	.37***	.003
Living alone ^a	-.09	.15	-.19*	.14	.11	-.06
Singled ^a	.12	.16	.14	-.07	.06	.09
Primary ^a	-.01	-.08	-.11	.01	.001	-.06
Secondary ^a	.04	-.02	.06	-.21*	.10	.10
Post-secondary ^a	-.02	-.08	.26**	-.17	.32**	.16
Perceived health	.074	.16*	-.11	.04	.01	-.04
R^2	.11	.15	.27	.28	.16	.07
<i>Step 2</i>						
<u>Predictor Variables</u>						
After-death Anxiety	.20*	.03	.32***	.03	.05	.09
Death and dying anxiety	.15	.22*	-.04	-.06	-.03	-.01
R^2	.18	.19	.35	.28	.17	.08
ΔR^2	.07	.04	.08	.002	.002	.01

Note. ^a Reference groups are male, living with family, married, and not educated. TFTP = Transcendental-future time perspective.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Chapter 4: Discussion and Conclusions

4.1. Discussion

The purpose of the present study was to investigate the relationships between death anxiety and different time perspectives among Chinese older adults after controlling for demographic variable. Socioemotional selectivity theory (Carstensen et al., 1999) proposed that older adults with limited time horizon will prioritize their emotional goals and actively cope with their adversity, which allows them to have better well-being. The present study predicted that older adults would adjust their time perspectives to cope with one of their major concerns, the death anxiety. So far, only a few studies examined the death anxiety of Chinese older adults (e.g., Wu et al., 2002). Also, previous studies seldom treated death anxiety as a multidimensional variable and separated into after-death anxiety and death and dying anxiety. Consistent with the results of Wu et al. (2004), the present study found that the after-death anxiety and death and dying anxiety were moderately correlated with each other. Therefore, the two components of death anxiety scale was not the same construct and death anxiety can be viewed at least in two lights, the after-death anxiety and the death and dying anxiety.

Surprisingly, contradictory to the first hypothesis, the present study cannot find any relations between after-death anxiety and death and dying anxiety and future orientation. Nevertheless, this is consistent with the previous study (Rappaport et al., 1993) that future time perspective was unrelated to death anxiety. Therefore, our results may be explained by the conclusion drawn by Rappaport et al. (1993) that older adults only focused on the present to deal with the death anxiety, which act as a defensive mechanism of older adults. A plausible explanation may be that older adults were actively engaging in positive sides of time orientation to fight against anxiety towards death. However, the future time orientation may not as important as present time orientation in regulating their emotions.

Besides, some older adults may also focus on positive aspects of future time orientation to maintain their well-being, but the future subscale did not divide future time orientation into positive and negative parts. Therefore, this may confound the present results and hide the true and positive effect of future time orientation. It was suggested that viewing future time orientation in positive and negative dimensions can obtain a more precise results in one's future time orientation.

By considering the second hypothesis together with the first one, we were then able to support the notion proposed by Rappaport et al. (1993) that older adults would focus on present rather than future as a defensive process was replicated in the present study. In line with their study (Rappaport et al., 1993), the present study found that after-death anxiety was predictive of one of the present time perspectives (present hedonistic). However, after-death anxiety was not predictive of present fatalistic, another present time perspective. Besides, death and dying anxiety were unrelated to these present time perspectives. As for the past time perspective, consistent with the prediction, the high levels of death and dying anxiety was found to be associated with past positive time perspective only, but not past negative. In short, the second hypothesis was partially supported but a specific pattern was found. That was, older adults having higher levels of after-death anxiety is oriented more towards present hedonistic while those who have higher levels of death and dying anxiety is oriented more towards past positive time perspective. The specific patterns can be explained in the context of socioemotional selectivity theory.

Before moving to the socioemotional selectivity theory, previous research (Lennings, 2000) also found the positive relationship between present time orientation of older adults and death anxiety. Lennings (2000) claimed that focusing on present of older adults was a sense of realism that involved a strong concentration on events occurred at the moment

and obtained the achievable goals. On the contrary, future orientation reflected an unrealistic view of one's life that regarded as irrelevant to the coping strategy of older adults. Moreover, the consistency of the life routine of older adults also reflected the present time orientation, and this predictable routine could in turn confirm their existence (Lennings, 2000). However, this previous study did not divide present time orientation into positive and negative aspects. Thus, it was impossible to ensure whether the present study obtained the same findings or not.

Socioemotional selectivity theory postulates that people with limited time perspective would result in emotional-focused goals (Lang & Carstensen, 2002), which includes the emotional regulation and satisfaction. Consequently, they were motivated to focus on positive information, allocated more attention to positive stimuli and recalled the positive memory for optimizing their well-being, known as "positivity effect" (Carstensen & Mikels, 2005; Carstensen, Mikels, & Mather, 2006; Mather & Carstensen, 2005), and it implies that there will be no effect on the negative time perspective as older adults only focus on positive ones, but not negative ones. They regarded future as less relevant, and focus on the current feeling states instead, and focus on the present only. Therefore, the present study has provided further support to previous studies (Field, 1981; Kennedy et al., 2004; Levine & Bluck, 1997; Mather, 2006) that older adults would "attend to the positive and focus on the present experience" (Carstensen et al., 2003, p.108) in response to prioritized emotional regulation when time was running out.

By focusing on the present hedonistic time perspective, older adults would concentrate on pleasure and excitement at immediate moment, and participated in energy-consuming activities (Zimbardo & Boyd, 1999). This lifestyle could not only reduce their emptiness and boredom after retirement (Denes, 1976), but also distract them from the anxiety towards after-life issues. Therefore, older adults with more present

hedonistic time perspective may regard as adopting a specific strategy to regulate their feelings of fear and relieve the after-death anxiety.

Although the socioemotional selectivity theory did not concern the past orientation, several studies have shown that aging or people with imminent death was related to recollect and boost up the positive sides of past memory and autobiographic memory in response to emotional-focused goals (Carstensen et al., 2006; Charles et al., 2003; Field, 1981; Kennedy et al., 2004; Mikels, Larkin, Reuter-Lorenz, & Carstensen, 2005; Sullivan et al., 2010). Also, scholars proposed that if older adults had positive experiences in the past, they rejoice to recall these experiences when facing the anxiety and unhappiness (D'Alessio et al., 2003). Previous study also gave a rough idea on how older adults tackled their death and dying anxiety. Johnson and Barer (1993) suggested that older adults used present time orientation to cope with their lost of health control. As increasing age, older adults encountered their health issues and contained a sense of external control of their health and even their life. As a result, they adjusted their time perspective to present-focus in order to redefine their attitudes towards health within the constrained time horizon in their life. In contrast, the result of this study showed that to some extents, older adults may even retreat to the past positive memory to deal with the problem that their health getting worse day by day. Therefore, the older adults with anxiety toward the general death-related issues and process of dying will finally retreat to past positive time perspective. Past positive time orientation can alleviate the death and dying anxiety of older adults in two ways. In one way, older adults tried to focus on the sentimental and warm aspects of the past for the sake of dealing with the fear provoked by worsen health or death of relatives and friends. In other way, the older adults recalled and retreated into their past positive and affective memory and denied to think about the reality situations for reducing their fear of dying process.

To sum up, when facing the anxiety towards the uncertainty towards after life, older adults would focus on the present and positive moment, which characterized by pleasure seeking. Also, when facing the anxiety towards general death issues and dying processes, older adults would focus on the positive past memory to retain their emotional well-being. These kinds of temporal orientation adjustment served as ways of reliving the distress and anxiety triggered by death and dying and uncertain after-life issues. This particular pattern of time perspective and death anxiety confirm partially of the second hypothesis.

Nevertheless, one surprising and unpredicted result was found. That was, after-death anxiety was predictive of past negative time orientation in older adults. It is contradictory to positivity effect mentioned above, however, there may be other plausible explanation for this observed results. Older adults with high level of after-death anxiety did not use past negative time perspective in regulating their emotions, rather, this time perspective can be seen as the consequence triggered by after-death anxiety. In other words, high levels of anxiety towards the uncertainty about life after death of older adults will trigger their negative emotions, which result in recalling the negative experiences in their life. A possible explanation of the significant relationships between after-death anxiety and past negative time perspective was the reincarnation proposed by Buddhism, Confucianism and Taoism, and commonly held by Chinese older adults (Tang, Wu & Yan, 2002; Wu et al., 2002). Reincarnation views that how individuals live will affect what happens to their life after death (Burris & Bailey, 2009). Although there are widely shared concept of reincarnation, there is no certain and concrete pictures of afterlife, older adults will then start to worry about the negative experiences and aspects of their past for determining how rewarding or punishing the afterlife will be. Thus, older adults with higher levels of after-death anxiety will trigger them to think of negative experiences in the past and consider whether the past misbehaviors will lead to some pains and adversity in their

afterlife, or in the hell.

The present study also examined the death anxiety and transcendental-future time perspective, and the results showed that death anxiety (after-death anxiety and death and dying anxiety) was not predictive of transcendental-future time perspective. Previous researchers proposed different explanation for the relations between after-death anxiety and transcendental-future time perspective. One plausible explanation may be due to ones' perception of positivity of afterlife (Harley & Firebaugh, 1993). There may be two opposite views on afterlife, one related to rewards of afterlife, such as reunion with loved ones, another related to punishments, for example, belief in hell. Therefore, the present study suggested that transcendental-future time perspective may also be needed to separate into positive and negative components before we can obtain a clear understanding of belief in afterlife and after-death anxiety. As for the death and dying anxiety, results showed that it was not predictive of transcendental-future time perspective. Therefore, it was contradict with previous scholar's (Frankl, 1963) claimed that people try to develop the sense of continuity and concept of transcendence to address their death anxiety. This may be due to the coping mechanism used in older adults. For them, they focus on the positive aspects of time perspective in order to enhance their well-being and combat their death and dying anxiety, but not develop a sense of continuity. Even older adults had developed a sense of continuity and thoughts of their eternal life to cope with death and dying anxiety, they may notice that they still need to face the death and dying issues, which is related to pain and sufferings. Therefore, by focusing the positive time perspective may be a better coping mechanism for them rather than focus on transcendental-future time perspective.

4.2. Conclusions, future studies, and limitations

To recap, death anxiety will lead older adults to different time perspectives as a

solution. This study separated death anxiety and time perspective into a more specific concept. The evidence showed that after-death anxiety was only moderately correlated with death and dying anxiety, this suggested that they were two related but different constructs. Furthermore, by acknowledging positive and negative attitudes towards present and past time orientation, the present study was able to found a specific pattern of death anxiety and time perspective. That was, after-death anxiety was predictive of present hedonistic time perspective while death and dying anxiety was predictive of past positive time perspective. The present study was then discussed the results in the contexts of socioemotional selectivity theory and inferred the time perspective as an emotional coping mechanism of death anxiety. The findings of positivity effect suggested that emotional functioning does not decline, or has even improved in late life. Lastly, the relationship between death anxiety and belief in life after death, and future time perspective was not observed. This study suggests that future research can view future time orientation and transcendental-future time perspective from positive and negative aspects before relating it to death anxiety. By examining the time perspective, emotional regulation, and death anxiety may obtain a more comprehensive models in relation to coping strategy of death anxiety.

The present study also has some limitations, for instance, the low reliability of instruments, especially the subscales of Zimbardo's time perspective inventory because of its small number of items. Therefore, it is suggested that future studies should adopt the full version of Zimbardo's time perspective inventory instead of the short version. Also, this study discussed the emotional regulation process of older adults in facing with death anxiety. However, this study did not measure any emotional regulation capability and emotions of older adults. Thus, future research need to test these plausible explanations.

In addition, the present study was a cross-sectional design that stressed on the role of

time perspective in regulating the anxiety feelings towards death. However, as our results showed, time perspective can sometimes serve as predictors and sometimes serve as consequences. It was not sure in what basis they should be considered as predictors and on what basis they should be considered as consequences. So, this suggests that cross-sectional study was not adequate in studying these relationships. Therefore, a longitudinal design could help to understand the whole processes about how older adults use time perspectives to deal with death anxiety, and have more control over the confounding variables.

Lastly, the present study adopted a self-report method in data collection of older adults. However, self-report method is subject to some biases of the participants, for instance, social desirability (presenting a positive side of them and pretending no anxiety at all) and memory problems (forget some important issues that will affect their responses about time perspective).

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Appendix

研究同意書

敬啟者：

本人是香港城市大學應用社會科學系心理學課程三年級學生。現誠意邀請閣下參與一項有關長者對於死後的焦慮與成因之研究活動，題目為「長者們對死後的焦慮：建立自我定義、對時間的認知和生命意義的貢獻」。是次研究會以問卷調查來收集資料，目的是研究建立自我定義、對時間的認知和生命意義對長者們對死後的焦慮之間的關係。但問卷內容有可能會引致少數長者的不安和壓力。

調查對象是六十歲或以上人士，閣下可以決定自願參加與否。閣下可以決定隨時中斷訪談，並不會對閣下造成任何問題。整個問卷訪談過程長約三十分鐘，每位受訪者在完成問卷後不會得到任何金錢的回贈。

閣下所提供的資料是絕對保密，所得的資料只作研究用途。所得的資料只會以群組分析，即閣下的個人資料不會被抽取作單獨分析。所有資料都會在完成資料分析後銷毀。

如閣下對是項調查有任何查詢或疑問，請聯絡陳詩敏小姐（電郵---@student.cityu.edu.hk）。

謹此多謝閣下撥冗協助是項研究，閣下的寶貴經驗及意見，對了解長者對於死後的焦慮與成因，有莫大的幫助。

祝身體健康

陳詩敏

香港城市大學

應用社會科學系心理學課程三年級學生

二零一一年一月十日

如閣下已瞭解上述內容，請簽名作實。

第一部份

下列有些可能適合於形容你自己的描述。這些問題並沒有正確或錯誤的答案，請按自己個人的意見作答。請以 1 (完全不適合) 到 5 (非常適合) 表明下列描述適用於你的程度。請回答全部問題。

* 小組：你所屬的單位，家庭組織、朋友圈子、工作伙伴、或任何團體 (如：運動、義工小組) 等等

* 工作：你要完成/做妥的事

	完全不適合<---->非常適合				
1. 我的個人身份對我是非常重要的。	1	2	3	4	5
2. 我寧願倚賴自己也不依賴他人。	1	2	3	4	5
3. 我會為了我小組*的利益而犧牲我自己的利益。	1	2	3	4	5
4. 即使困難重重，我也會留在我的小組*。	1	2	3	4	5
5. 我尊重我小組*所作的決定。	1	2	3	4	5
6. 我會保持我小組*的和諧。	1	2	3	4	5
7. 我尊重我小組*多數人的意願。	1	2	3	4	5
8. 我對我自己的行動負責任。	1	2	3	4	5
9. 在作決定前，與好友商量及聽取其意見是重要的。	1	2	3	4	5
10. 對我來說，作為一個行事獨立的人是重要的。	1	2	3	4	5
11. 我的將來應由我自己來決定。	1	2	3	4	5
12. 我享受作為一個獨特及與眾不同的人。	1	2	3	4	5

第二部份

細閱以下的句子，並請按自己個人的意見作答下列這些形容你自己的描述有多適合。請以 1 (非常不正確) 到 5 (非常正確) 表明下列描述適用於你的程度。

	非常不正確<---->非常正確				
1. 只有我的身軀會死亡。	1	2	3	4	5
2. 我的身體只是真正的我暫時的居所。	1	2	3	4	5
3. 死亡只是一個新的開始。	1	2	3	4	5
4. 我相信奇蹟。	1	2	3	4	5
5. 進化論足以解釋人類如何演變。	1	2	3	4	5
6. 人擁有靈魂。	1	2	3	4	5
7. 科學的理論不足以解釋所有事情。	1	2	3	4	5
8. 當我死後，我要為我的生前的行為負責。	1	2	3	4	5
9. 神的定律描述了人應該怎樣生存。	1	2	3	4	5
10. 我相信靈魂。	1	2	3	4	5

第三部份

細閱以下的句子，並請按自己個人的意見作答下列這些形容你自己的描述有多適合。請以 1 (非常不正確) 到 5 (非常正確) 表明下列描述適用於你的程度。

	非常不正確<---->非常正確				
	1	2	3	4	5
1. 熟悉的童年畫面、聲音和氣味常常能勾起我美好的回憶。	1	2	3	4	5
2. 我常常想過去我本應該過得有所不同。	1	2	3	4	5
3. 回憶過去讓我感到快樂。	1	2	3	4	5
4. 我想完成某件事時，會設立目標並考慮達到目標的具體途徑。	1	2	3	4	5
5. 既然一切都是註定，我做了什麼其實並不重要。	1	2	3	4	5
6. 有關美好時光的記憶常常浮現在我的腦海裡。	1	2	3	4	5
7. 我的生活需要充滿刺激。	1	2	3	4	5
8. 我常常想那些生活中錯過的好事情。	1	2	3	4	5
9. 我認為擔憂未來毫無意義，因為我根本無能為力。	1	2	3	4	5
10. 我通常能夠循序漸進地按時完成計畫。	1	2	3	4	5
11. 為了給生活找點刺激，我常常冒險。	1	2	3	4	5
12. 當我知道有工作要做時，我能抵制誘惑。	1	2	3	4	5
13. 我發現自己在興奮時會忘乎所以。	1	2	3	4	5
14. 我常想起那些曾經發生在我身上的壞事情。	1	2	3	4	5
15. 如果必須考慮目標和結果的話，我的活動過程就會失去快樂。	1	2	3	4	5

第四部份

細閱以下的句子，並請按自己個人的意見作答下列這些形容你自己的描述有多適合。請以 1 到 7 表明下列描述適用於你的程度。

1. 我多數是...

沉悶的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	熱情/充滿活力的
	1	2	3	4	5	6	7	

2. 我覺得我的生活是...

完全規律	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	經常令人興奮的
	1	2	3	4	5	6	7	

3. 在生命裏，我...

沒有目標與計劃	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	有清楚明確的目標
	1	2	3	4	5	6	7	

4. 我的一生...

空虛且毫無意義	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	很有意義和目標
	1	2	3	4	5	6	7	

5. 我覺得每一天.....

都是完全一樣的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	不同的
	1	2	3	4	5	6	7	

6. 如果我可以選擇，我寧願...

從未出生	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	再活很多次這樣的人生
	1	2	3	4	5	6	7	

7. 退休後，我會...

整天無所事事	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	做一些我一直渴望做的事
	1	2	3	4	5	6	7	

8. 在實現人生的目標方面，我...

毫無進展	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	完全達成
	1	2	3	4	5	6	7	我的理想

9. 我的生命是...

空虛和只有充斥 著絕望/沮喪	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	生活是多 姿多彩
	1	2	3	4	5	6	7	

10. 如果我今天死了，我會覺得...

此生完全沒有價值的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	非常有價 值的 /不虛 此生
	1	2	3	4	5	6	7	

11. 想到我的生命，我...

常懷疑我為什麼 要存在/活著	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	能了解 自己活 著的理由
	1	2	3	4	5	6	7	

12. 我覺得周圍世界...

很令我感到困惑	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	很有意義 ，而且很適 合我
	1	2	3	4	5	6	7	

13. 我是一個...

很不負責任的人	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	很負責任 的人
	1	2	3	4	5	6	7	

14. 對於”人有選擇的自由”這個觀點，我相信...

完全受制於遺傳 和外在環境	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	人有完全 的自由
	1	2	3	4	5	6	7	

15. 關於死亡，我是...

毫無準備和害怕的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	已有準 備和不 害怕的
	1	2	3	4	5	6	7	

16. 對於自殺，我...

曾認真想過是
解決問題的
一種方法

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7	

從不考慮

17. 我認為自己尋找生命的意義,目標/任務的能力

完全沒有	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

很強

18. 我覺得我的生命...

不是我所能控制	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

掌握在我
的手中

19. 我覺得我日常的工作/任務是...

一個痛苦和沉悶 的經驗	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

快樂和滿足
的來源

20. 我已發現，我的生活...

沒有意義和目標	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	

有一個
7 明確和令
我滿意的
目標

第五部份

請就你最近一年嘅感受，選出一個最切合你嘅答案。

	非常不同意<---->非常同意				
	1	2	3	4	5
1. 我好怕想到要做手術/化療等。	1	2	3	4	5
2. 我完全唔怕死。	1	2	3	4	5
3. 我並唔特別驚會有癌症/絕症。	1	2	3	4	5
4. 對我黎講，見到死屍係非常可怕嘅。	1	2	3	4	5
5. 我覺得將來並冇事情令我害怕。	1	2	3	4	5
6. 棺柩令我覺得不安。	1	2	3	4	5
7. 去殯儀館令我不安。	1	2	3	4	5
8. 如果一個同我好親密嘅人突然死亡，我會傷心痛苦好耐。	1	2	3	4	5
9. 我害怕死於癌症。	1	2	3	4	5
10. 要由路上移走動物屍體會令我覺得煩擾。	1	2	3	4	5
11. 我害怕已死亡嘅東西。	1	2	3	4	5
12. 我對暴斃有恐懼。	1	2	3	4	5
13. 死後會遇到嘅事令我非常憂慮。	1	2	3	4	5
14. 唔知道死後嘅世界係掂樣令我憂慮。	1	2	3	4	5
15. 在死後唔可以再思想呢個念頭令我害怕。	1	2	3	4	5
16. 死後變得唔能夠郁動令我煩擾。	1	2	3	4	5
17. 死後唔再感受到任何事令到我不安。	1	2	3	4	5
18. 我嘅身體喺墓穴中腐化嘅想法令我憂慮。	1	2	3	4	5
19. 我因為覺得自己死後會失去好多嘗試不同事物嘅機會而覺得不安。	1	2	3	4	5
20. 我擔心我死後唔知會有咩事發生係我嘅身上。	1	2	3	4	5

21. 死亡造成嘅完全孤立感覺令我覺得害怕。	1	2	3	4	5
22. 我死後嘅身體會如何並唔困擾我。	1	2	3	4	5
23. 我驚在死後我嘅身體會被損毀。	1	2	3	4	5

第六部份

基本個人資料

1). 你的性別： 男 女

2). 你的年齡是：_____歲

3). 你現時的婚姻狀況是：

未婚 已婚 再婚 離婚 分居

鰥/寡 其他 [請註明]：_____

4). 你的居住狀況：

獨居 院舍 與家人同住

5). 同住人數：_____

配偶 父 母 兄弟姊妹：____兄 ____弟 ____姊 ____妹

子女：____子 ____女 孫：____位

其他 [請註明]：_____

6). 你的教育程度

未接受正規教育 小學 中學程度 副學士或同等學歷

大學或以上 其他 [請註明]：_____

7. Perceived Health：以下問題詢問你的健康狀況，請選擇你合適的答案

1. 一般來說，你會怎樣形容你現在的身體狀況？
 - 1 非常好
 - 2 好
 - 3 一般
 - 4 差
 - 5 非常差

2. 與同年紀和性別的人相比，你會怎樣形容你現在的身體狀況？
 - 1 非常好
 - 2 好
 - 3 一般
 - 4 差
 - 5 非常差

3. 與三年前相比，你會怎樣形容你現在的身體狀況？
 - 1 好很多
 - 2 好一點
 - 3 沒有改變
 - 4 差一點
 - 5 差很多

8. Chronic Diseases

你有否患上以下的長期疾病：(可選多於1項)

- | | | | | |
|--|----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| 1 <input type="checkbox"/> 高血壓 | 2 <input type="checkbox"/> 心臟病 | 3 <input type="checkbox"/> 中風 | 4 <input type="checkbox"/> 糖尿病 | 5 <input type="checkbox"/> 長期肺病 |
| 6 <input type="checkbox"/> 長期腎病 | 7 <input type="checkbox"/> 長期肝病 | 8 <input type="checkbox"/> 尿道炎 | 9 <input type="checkbox"/> 關節炎 | 10 <input type="checkbox"/> 癌症 |
| 11 <input type="checkbox"/> 骨質疏鬆 | 12 <input type="checkbox"/> 骨折 | 13 <input type="checkbox"/> 眼疾 | 14 <input type="checkbox"/> 膽固醇過高 | 15 <input type="checkbox"/> 耳/鼻/喉疾病 |
| 16 <input type="checkbox"/> 哮喘 | 17 <input type="checkbox"/> 胃病 | 18 <input type="checkbox"/> 甲狀腺疾病 | | |
| 19 <input type="checkbox"/> 長期皮膚病 | 20 <input type="checkbox"/> 老人痴呆 | | | |
| 21 <input type="checkbox"/> 其他，請註明：_____ | | | | |
| 22 <input type="checkbox"/> 沒有 | | | | |