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MATERIALISM AND LIFE SATISFACTION AMONG
OLDER PEOPLE IN HONG KONG: A CASE STUDY
AND COMPARISON WITH YOUNGER PEOPLE

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MATERIALISM AND LIFE SATISFACTION AMONG
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by
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ABSTRACT

Materialism and Life Satisfaction among Older People in Hong Kong: A Case Study and Comparison with Younger People

by

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Master of Philosophy

The rapidly ageing global population reminds us to pay attention to the psychology of ageing. As research on materialism among older people is rare, this study aimed to explore the relationships between materialism and life satisfaction among older people in Hong Kong, a rapidly ageing Chinese society. It also suggested a novel concept – intergenerational material expectations (IME) – to understand older people's material expectations regarding their children. The data were compared with a younger group to find out if age differences existed. The study was a survey design among two age groups: older people aged 65+ and younger people aged 15-34. Questionnaires were collected from 170 older people aged 65+ and 186 youths aged 15-34. The Material Value Scale, the Satisfaction with Life Scale and a newly constructed scale measuring intergenerational material expectations (IME) were used. Multiple regression, ANCOVA and t-test were used for data analysis. After controlling for gender, age, education level and socio-economic status: 1) materialism and IME were positively related; 2) both materialism and IME were negatively related to life satisfaction (correlations between IME and life satisfaction disappear after controlling for self materialism); 3) older people scored higher on IME than on materialism; and 4) materialism was significantly lower among the older people than the younger. Although older respondents scored lower on materialism than younger respondents, it was still negatively correlated with life satisfaction. The higher IME score may imply that older people would transmit their material aspirations to their offspring as an expression of generative concerns. Future research might investigate if IME exists in other cultures and how older people's expectations of their children would affect their well-being.

DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

(CHAN Yau Tsang)

20th August 2012

CERTIFICATE OF APPROVAL OF THESIS

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LIST OF ABBREVIATIONS

ADL	Activities of daily living
AWB	Affective well-being
CWB	Cognitive well-being
EFA	Exploratory factor analysis
ELB	Expectancy of Life at Birth
IME	Intergenerational material expectations
LS	Life satisfaction
MVS	Material Values Scale
PWB	Psychological well-being
SES	Socio-economic status
SWB	Subjective well-being
SWLS	Satisfaction with Life Scale
TFR	Total fertility rates
TMT	Terror management theory

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CHAPTER 1 INTRODUCTION

1.1 Background

Almost every country in the Asia-Pacific region is experiencing a more or less rapid change of demographic structure. Most are moving towards an ageing population. This phenomenon occurred in the West over a prolonged period of over a century but many places in the Asia-Pacific have aged over a much shorter period, often only thirty or forty years (Kinsella & Phillips, 2005). By 2050, global life expectancy is projected to have increased from 67.88 years in 2000 to 76.26 years old (United Nations, Department of Economic and Social Affairs [UNDESA], 2011) and this increased life expectancy has also affected many Asian-Pacific countries, especially ones such as Japan, Hong Kong, Singapore, Korea and Taiwan. By mid-century, over one-fourth (25.06%) of the global population will probably be aged 60+ (UNDESA, 2011) and probably an even higher proportion in many Asia-Pacific countries.

In particular, Hong Kong's life expectancy is projected to be even higher than in many other developed regions, so the HKSAR is facing a more rapid demographic ageing than many other economies in the world (Hong Kong Census and Statistics Department, 2010b). It is estimated that about 28% of the Hong Kong population will be 65+ in 2039; and by 2050, as much as 39% of the population will be aged 65+ (Hong Kong Census and Statistics Department, 2010b).

The dramatic change of population structure is increasingly recognized as demanding new ways of coping and adaptation to meet the needs of people of different generations and cultures. However, there are differing views of the consequences of demographic ageing. Some observers portray ageing as a process of

gradual deterioration, as mental and physical capacities may decline when people grow older; others see it as a blessing, as a journey of gaining more life experience and wisdom, and as an indicator of great success for humanity (WHO, 2002). From whatever perspective, to provide a positive meaning for ageing is an important factor in improving quality of life. To achieve the best from ageing, we need to understand more about ageing itself and the changes and consequences that accompany it.

1.2 Materialism as a factor that affects well-being

Studies in both Western (Pryor et al. 2007) and Chinese societies (Leung, 2008; Wei & Talpade, 2009) have suggested that people are becoming more materialistic nowadays, which implies that the value materialism is becoming more predominant in modern societies. Materialism, defined below as “the importance a person place to worldly possessions” (Belk, 1984), has often been found to be negatively correlated with life satisfaction, subjective well-being (Ahuvia & Wong, 1995; Belk, 1984; Dawson, 1988; Dawson & Bamossy, 1991; Roberts & Clement, 2007), quality of life (Roberts & Clement, 2007) and satisfaction with relationships (Nickerson et al., 2003). Strongly internalized materialistic values have been found to be positively correlated with potentially undesirable features, such as increased self-centeredness (Richins & Dawson, 1992), anxiety, unhappiness and physical health symptoms (Kasser & Ahuvia, 2002). Indeed, empirical research has also found that more materialistic consumers would tend to hold more positive attitudes towards borrowing (Watson, 1998; Richins, 2011), would be more willing to have heavier debt levels (Watson, 2003), and would be less likely to perform environment-friendly behaviour (Richins & Dawson, 1992; Saunders and Munro, 2000). The effect of materialism might also be intergenerational and, for example, some research has

found that parenting styles or mothers' materialistic levels will affect their children's materialism (Flouri, 1999).

Most of the findings imply that materialism can have various negative impacts on people's well-being, especially on their psychological well-being. However, most studies on materialism so far have been conducted among the younger age groups and middle-adulthood groups, so that its extent and effect among older groups is largely unexplored. Moreover, most researchers have studied materialism as an individual trait or personal value, but few if any have seen it as a kind of *expectation* about others, which may be more common among older people in a Chinese society. Therefore, this study focuses on the relationships between materialism and life satisfaction, one aspect of psychological well-being, of older people in Hong Kong. Furthermore, older people's materialistic expectations with regard to their children is identified as "intergenerational material expectations (IME)" in this current study. To enable a certain amount of comparison, some elements of the attitudes of younger people are also investigated.

The modern world is rapidly changing and, in particular, financial issues have come to the fore, and global financial crises involving almost every nations have raised concerns about the sustainability of modern capitalism. Many psychologists and sociologists have tried to explore whether consumption, the "vital fuel of the mechanism of highly capitalized economics system", can really boost individual well-being (Ahuvia and Friedman, 1998; Kasser & Ahuvia, 2002). Materialism, as noted, involves the importance people place on acquisition and possessions, and has become an important research topic in the twenty-first century (Burroughs and Rindfleisch, 2002). Therefore, this research is interested in investigating how materialism may be related to life satisfaction among older people in Hong Kong.

1.3 Objectives of the present study

This study aims to examine the relationships between materialism and life satisfaction, an aspect of psychological well-being, among the older population in Hong Kong (the terms “life satisfaction” and “psychological well-being” are further discussed and defined in Chapter 2). It also aims to explore a “different” manifestation of materialism – as an “intergenerational material expectation (IME)” regarding the younger generation – among the older cohorts. There is always the possibility that results could be little different between generations, so data on a sample of Hong Kong young people and young adults were also collected to enable some comparisons to be made. By comparing data from the two groups, the research can test whether materialistic aspirations among older people in Hong Kong may have transformed into a kind of anticipation towards their children. It can therefore be explored if there are indeed variations in attitudes between older and younger groups.

In sum, the objectives and research questions are presented as follows:

Objective 1

To test the applicability of the Material Value Scale (MVS) and the Satisfaction with Life Scale (SWLS) in Hong Kong, a Chinese cultural setting.

Research Question 1

Is a Western measurement of “materialism” and “life satisfaction” meaningful, reliable and valid among the older people in Hong Kong?

Objective 2

To explore the relationships between materialism and life satisfaction of older people in Hong Kong.

Research Question 2

What is the relationship, between materialism and life satisfaction among older people in Hong Kong?

Objective 3

To compare the results of the older group with those obtained from a sample of younger people in Hong Kong.

Research Question 3

Are there intergenerational differences in materialism between older and younger people in Hong Kong?

Research Question 4

Are intergenerational differences in life satisfaction discernible between the older people and youths in Hong Kong?

Objective 4

To explore the intergenerational materialistic expectations (IME) of older people regarding their children.

Research Question 5

Is the IME measurement developed in this study also reliable and valid among the older people in Hong Kong?

Research Question 6

What is the relationship between IME and levels of people's materialism?

Five hypotheses were developed from the research objectives and questions above:

H1: Materialism will be negatively related to life satisfaction

H2: Materialism will be positively related to intergenerational material expectations (IME)

H3a: IME will be negatively related to life satisfaction

H3b: The association of IME and life satisfaction is mediated by materialism

H4: There will be differences in materialism between older people and younger people

H5: The mean of IME will be higher than materialism

The justifications of each hypothesis will be given and elaborated in Chapter 3.

1.4 Significance of the study

Although a number of studies have shown a range of relationships between materialism, psychological well-being and the quality of life of people, studies

involving older people have been very limited. In addition, studying materialism as an “expectation” towards younger generations would be a novel way to explore any manifestation of materialism. Moreover, by comparing data between older and the younger groups, the research will explore the differences between generations and potentially reveal the unique characteristics of older people. This study will therefore hopefully offer deeper insights into the perceptions and values held by older people, and provide more understanding of life satisfaction in older age. Also, the study hopes to illustrate more about intergenerational material expectations and its potential relationships with personal values.

The thesis will also discuss the generalizability of findings from Western research to societies such as Hong Kong, a predominantly Chinese cultural setting. The measure developed also has the potential for intervention purposes for example to promote well-being among older people in Hong Kong and other similar Chinese societies.

The next chapter will review background literature on demographic ageing in Hong Kong, and introduce the three key variables of this study; materialism, psychological well-being, and intergenerational material expectations.

CHAPTER 2 LITERATURE REVIEW

This chapter reviews literature on demographic ageing, materialism, psychological well-being and intergenerational expectations in older age. The key concepts for the research will also be elaborated.

2.1 Demographic ageing

2.1.1 Global ageing trends

The century from 1950 to 2050 will see a trend of global population ageing and we are now half-way through this global ageing phenomenon. Globally, in the more developed regions, numbers of people aged 60+ are likely to increase from about 21.93% in 2000 to 37.69% in 2050 (UNDESA, 2011). The proportion of people aged 60+ in the less developed regions increased from 6.34% to 8.31% between 1950 and 2000, and the proportion is likely to increase to 22.88% in 2050 (UNDESA, 2011). Global life expectancy will increase from around 67.88 years old to 76.26 years old from 2000 to 2050 (UNDESA, 2011). Given these global trends, new concepts concerning the older population are essential. Older people have, to date, often been seen as more dependent and less productive than younger people, whilst persons under 15 and over 65 years old have often been seen as a “dependent group”, to be taken care by the working group (aged 15-64). However, increasingly, older persons have been “actively ageing” and provide support for their adult children in many societies (Morgan, Schuster &

Butler, 1991; Saad, 2001; Magnus, 2009). Older persons might also be becoming more influential to their children or the overall younger generation in more ways than we intrinsically might have expected, especially in terms of socio-economic relations, even if family ties and cohesion are sometimes becoming looser in modernizing societies. So, more understanding of the thoughts, values and behaviour of older people is necessary.

2. 1.2 Ageing in Hong Kong

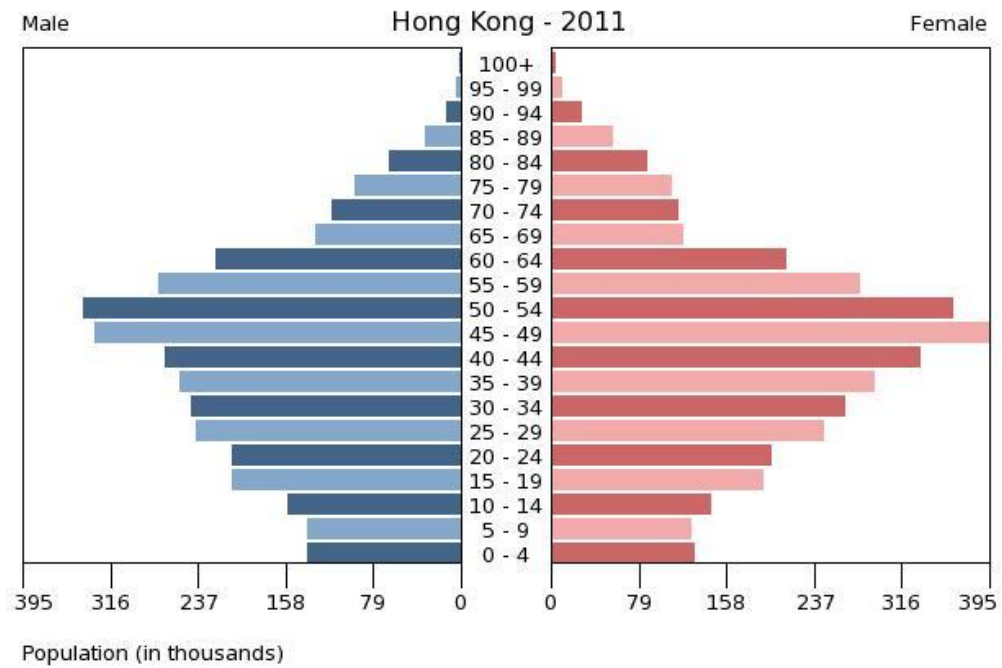
Like most of the developed and high income regions globally, Hong Kong is now experiencing demographic ageing. However, whereas many countries in the West aged over a century or more, Hong Kong has essentially moved into a medium to older age structure within only a few decades since about 1970 (Kinsella & Phillips, 2005). According to the Hong Kong Census and Statistics Department (2007, 2011), 6.6% of Hong Kong's population was aged 65 years or older in 1981, while the figure increase dramatically to 13.3% by 2011. Hong Kong Population Projections 2010-2039 (2010b) estimated that there is likely to be more than 21% of the population aged 65 + in 2024, and the figure would further increase to 28% by 2039. As noted in Chapter 1, by 2050, when those who are now aged 25 enter their older age, the 65+ age group may well compose more than 39% of the population (US Census Bureau, 2010). Hong Kong will be like Japan as one of the worlds' "oldest" age structure societies.

In summary, Figure 2.1 indicates the upper part of the population pyramid in 2039 will be much wider than in the pyramid of 2011, indicating further contracting younger population cohorts, a typical demographic ageing structure.

The dramatic change of population structure in Hong Kong as shown here has been brought by about the both increasing life expectancy and also by the low fertility rates

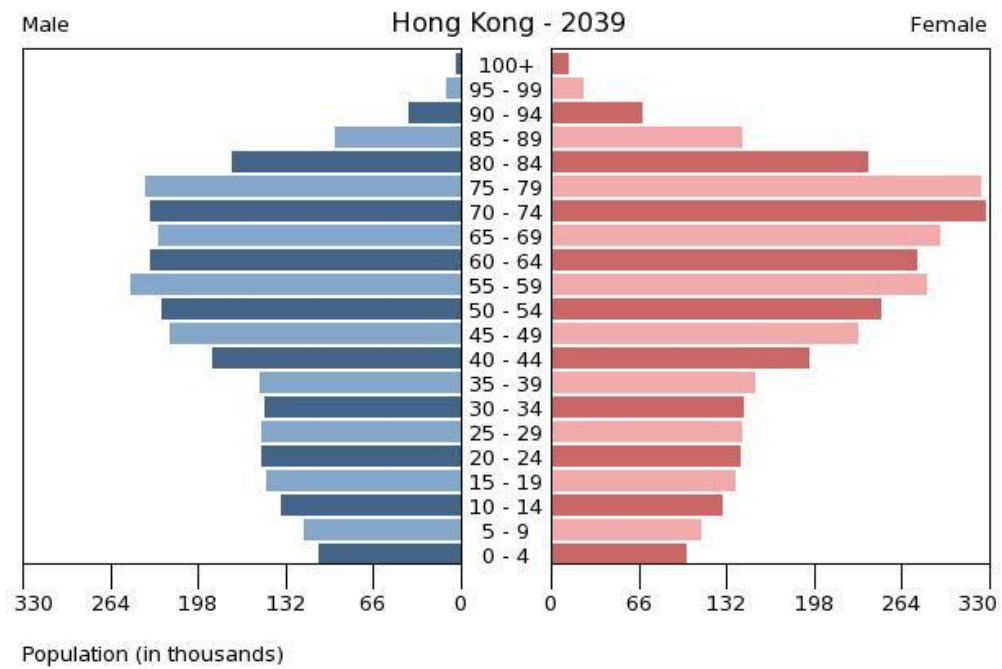
(Kinsella & Phillips, 2005; McCracken & Phillips, 2012). In 2011, life expectancy at birth in Hong Kong was 80.2 for males and 86.4 for females, which is expected to reach 83.7 and 90.1 in 2039 (Figure 2.2) (Hong Kong Census and Statistics Department, 2010a, 2010b, 2011). By contrast, total fertility rates (TFR, the average number of births during the lifetime per 1000 females) in Hong Kong decreased from 1.296 in 1981 to a very low 1.04 in 2009, and is expected to further decrease to 0.936 in 2039 (Figure 2.3) (Hong Kong Census and Statistics Department, 2010b).

Figure 2.1 Population Pyramid (2011 and 2039)



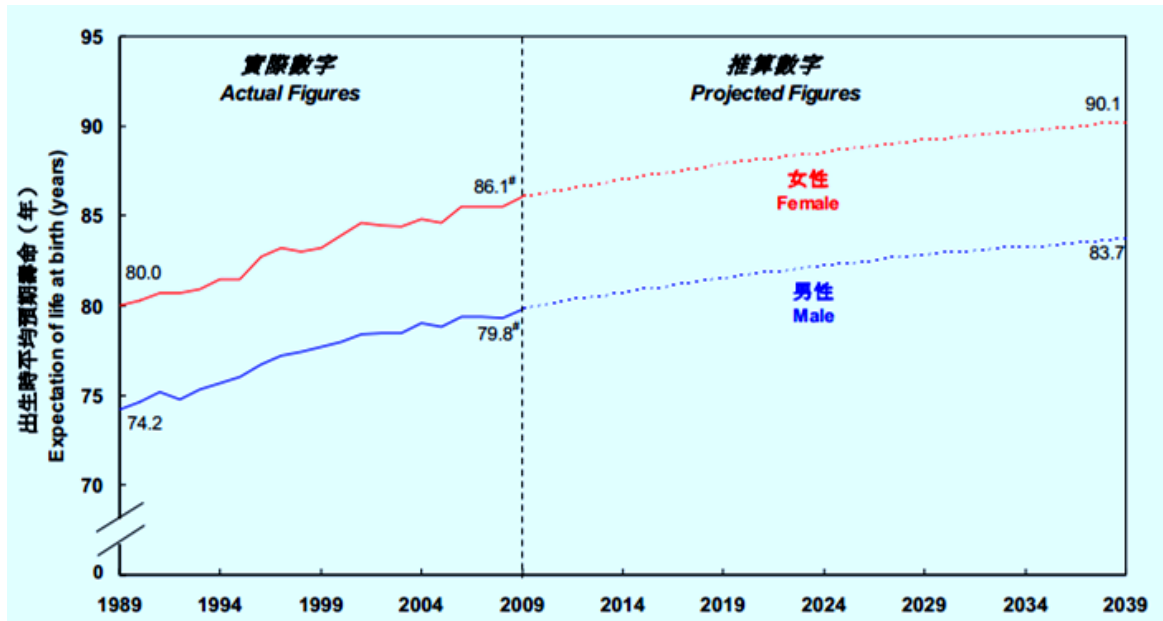
Source: U.S. Census Bureau. *International Data Base*. (2010).

Figure 2.1(Continue) Population Pyramid (2011 and 2039)



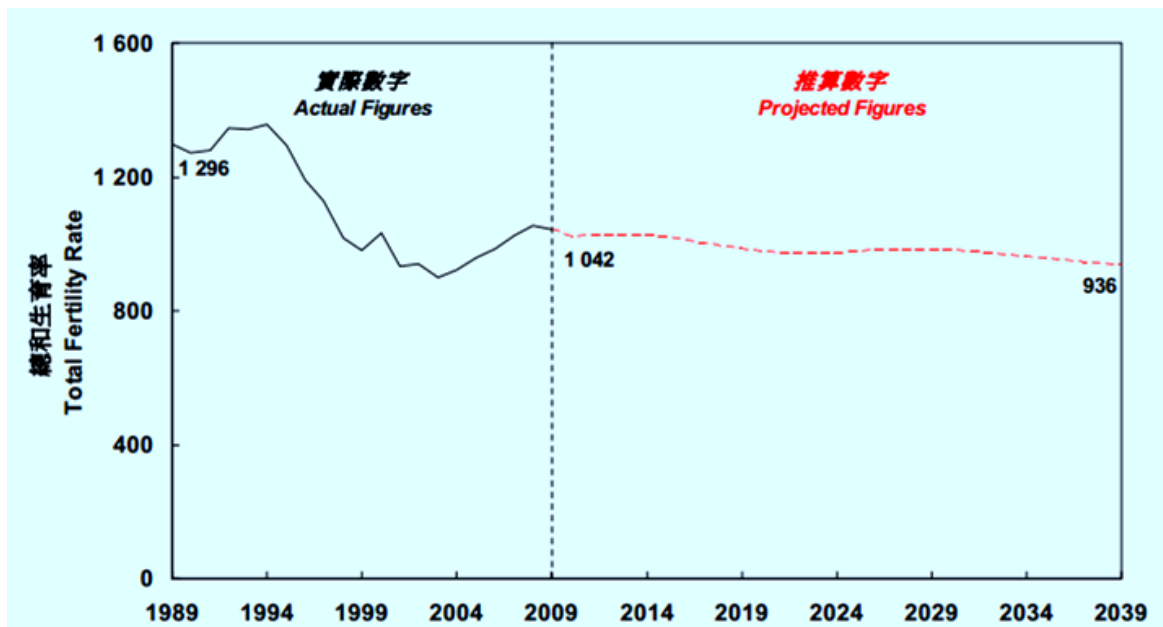
Source: U.S. Census Bureau. *International Data Base*. (2010).

Figure 2.2 Hong Kong Expectancy of Life at Birth (ELB)



Sources: Hong Kong Census and Statistics Department, 2010b

Figure 2.3 Hong Kong Total Fertility Rate (TFR)



Sources: Hong Kong Census and Statistics Department, 2010b

Compared to other developed regions, including many demographically aged countries such as Japan, Sweden and the United Kingdom, “Hong Kongers” are projected to have about the longest life expectancy and also the lowest total fertility rate by 2039 (Table 2.4) (Hong Kong Census and Statistics Department, 2010b). These data indicate that the HKSAR is heading to a rapidly ageing population structure, rather different from the past. It is therefore vital for our society and policy makers to consider the older cohorts from a wider and deeper perspective, and especially how attitudes and inter-generational feelings may be evolving.

Table 2.4
Projected life expectancy and fertility rate in 2039; Hong Kong, Japan, Sweden and the United Kingdom

Economy	Life expectancy (Male)	Life expectancy (Female)	Total fertility rate
Hong Kong	83.7	90.1	0.936
Japan	82.6	89.4	1.25
Sweden	83.3	85.9	1.87
United Kingdom	83.6	87.0	1.84

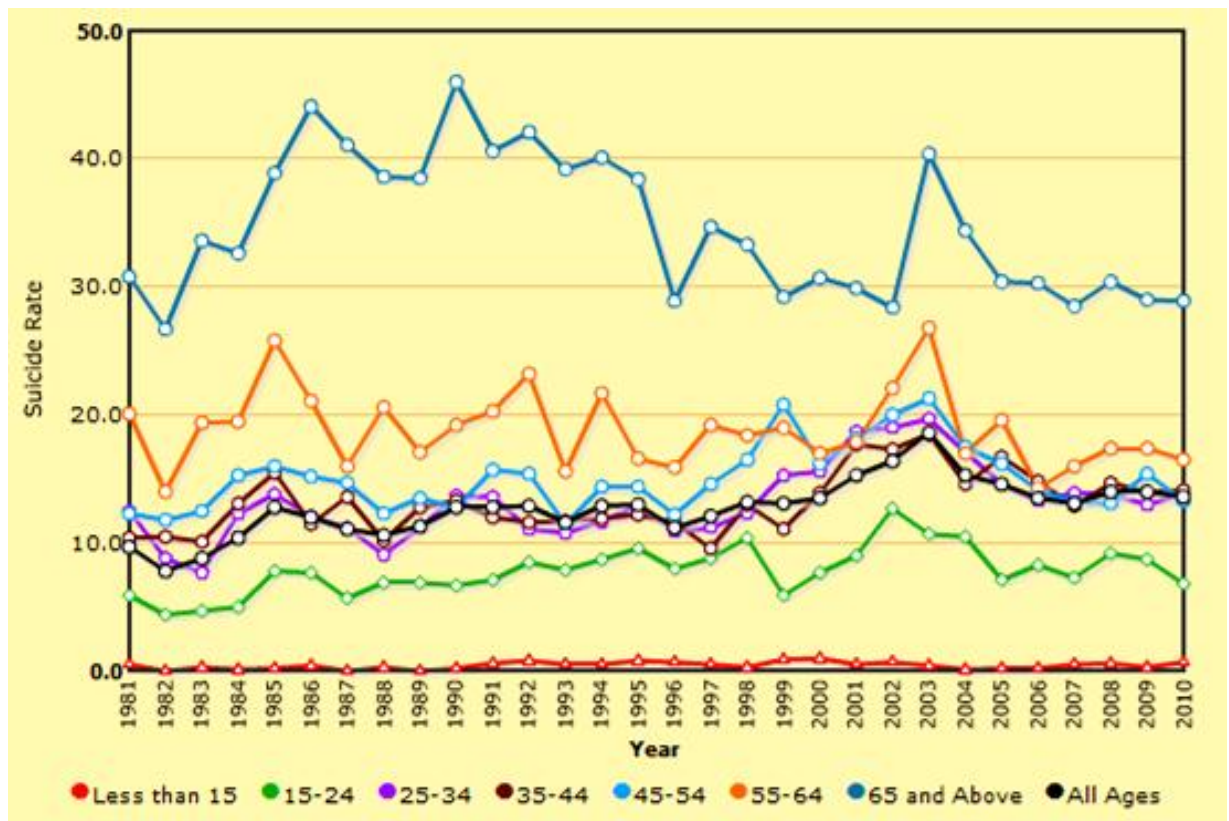
Source: Census and Statistics Department, 2010b

2.1.3 A healthier old age

As people in most countries now have a much longer life expectancy than the past, “adding more years to life” is no longer the only policy priority for the public health sector. The concern for maximizing the number of healthy and productive years becomes even more important. The Hong Kong Census and Statistic Department (2009) projected that, in the year 2011, 68.5% of the disability group were aged 60 or above while 58.8% of Hong Kong’s older people suffered from various kind of chronic

diseases. Moreover, the suicide rate for people aged 60+ was consistently found to be the highest (at 28.9 per 100,000 in 2010) among all age groups, while the overall suicide rate for all age groups was 13.6 per 100,000 in 2010 (Figure 2.5) (Hong Kong Jockey Club Centre for Suicide Research and Prevention, 2010). All of this information reminds us that to age in a healthier and more positive way, to “add life to years”, is as important as to merely live longer and, therefore, successful ageing is an essential topic to be studied.

Figure 2.5
Suicide rates (per 100,000) by age group in Hong Kong 1981-2010



Source: Hong Kong Jockey Club Center for Suicide Research and Prevention, HKU

2.2 Successful ageing and life satisfaction

The 2002 World Assembly on Ageing recognized the challenges of the rapidly ageing world population and the importance of advancing the health and well-being for older people (Huber, 2005). Besides physical health, psychological health was also crucial for active ageing and longevity (WHO, 2002). The concept of “successful ageing” has emerged, which, under various definitions, focuses on people’s adaptation to the ageing processes. The following sections will first introduce the concepts of successful ageing, and then move to focus on the concept of psychological well-being and finally life satisfaction. The importance and utility of studying life satisfaction will also be discussed, and especially its potential relationships with materialism will be considered.

2.2.1 Successful ageing

The definition of successful ageing varies among authors and over time. Increasingly, it is associated with terms such as “positive ageing”, “healthy ageing”, “ageing well” and “optimal ageing”. Early on, Butt and Beiser (1997) defined successful ageing as a positive adaptation reflected by subjective satisfaction with life for older people. Rowe and Kahn’s classic formulation (1997, p.433) defined it as “optimization of life expectancy and minimization of physical and mental disability and deterioration”. Baltes and Baltes (1990) described successful ageing as an adaptive process of selection, optimization, and compensation. Jeste, Depp and Vahia (2010) perceived objective definitions of successful ageing as including being free from disease and disability, while the subjective definitions refer to “attainment or maintenance of goals, positive attitudes toward the self and future, and attainment of social milestones and

connectedness (p.79)”. Indeed, there are various views on what components should be included in the concept of successful ageing, such as physical, psychological and social health; life satisfaction; having sense of purpose; financial security; achieving high quality of life; productivity and spirituality (Bowling & Dieppe, 2005). In this section of the review, two major approaches will be focused on relating to successful ageing: the biomedical approach and the psychosocial approach (Bowling & Dieppe, 2005).

(i) Successful ageing: The biomedical approach

The biomedical approach to successful ageing tends to emphasize a high level of physical and cognitive functioning, with the absence of chronic disease and disability (Bowling & Dieppe, 2005). Rowe and Kahn defined “usual ageing” as “normal decline in physical, cognitive and social functioning”, while “successful ageing” was seen as minimized functional loss, with little or even no age-related decline in functioning (Rowe & Kahn, 1997). Three components of successful ageing were suggested, which included absence of disease and risk factors for disease, maintenance of physical and cognitive functioning, and active engagement with life (Figure 2.6).

Figure 2.6

Rowe & Kahn’s model of successful ageing (1997, p.434).



Although the view of successful ageing from this approach is an “ideal state” for older people, complete absence of any sickness, diseases or deterioration is an unrealistic state for most people. The result of a study in 2002 show that older people with chronic conditions could still rate themselves as ageing successfully (Strawbridge, Wallhagen & Cohen, 2002). Indeed, some older respondents who were interviewed in the present Hong Kong study regarded themselves as very happy and well, even though sickness was present. This suggest that factors such as personal values and attitudes are crucial in the evaluation of whether an older person is ageing successfully and, therefore, the psychosocial approaches to successful ageing will be introduced in the following section.

(ii) Successful ageing: The psychosocial approach

The psychosocial approach to understanding of successful ageing tends to emphasize psychological and social well-being in people’s advancing life. Baltes (1997) described successful ageing from the perspectives of lifespan development and they concerned themselves with older people’s behavioural and psychological adaptation to inevitable losses. Bowling and Dieppe (2005), in a meta-analysis of 170 research papers, noted that successful ageing has many theoretical definitions including personal growth, life satisfaction, psychological resources and social engagement (Bowling & Dieppe, 2005). Engaging in society was found to have a positive effect on ageing, as interacting with others was correlated with sense of self-worth and connection with others, which was associated with lower rates of disability and mortality (Gruenewald et al., 2007; Holstein & Minkler, 2003). In the study by Butt and Beiser (1987), successful ageing for the older generation (aged 50+) related to satisfaction with human relations, material

needs and religiosity, but satisfaction with job relations was found to be not related.

In summary, although the definitions of successful ageing do not show complete consensus, it can still be conceptualized as a multidimensional process which encompassing physical, cognitive, emotion and social functioning. Objective criteria are not the only considerations used by older people to rate their “level” of successful ageing (Strawbridge, Wallhagen & Cohen, 2002), as they also consider other psychosocial criteria such as life satisfaction and social relations in their evaluation. In the current study, the psychosocial aspect of successful ageing will be adopted. In the following part, the importance of psychological well-being and life satisfaction will be discussed.

2.2.2 Psychological well-being and life satisfaction

A growing interest in positive psychology has led to more concern with enhancing the well-being of the general population rather than merely treating people with maladaptive behaviours (Seligman & Csikszentmihalyi, 2000). Besides having a healthy physical body, a healthy psychological state is also increasingly seen as an important element of successful ageing. This section introduces three concepts regarding psychological health: psychological well-being, subjective well-being, and life satisfaction.

(i) Psychological well-being (PWB)

Psychological well-being focuses on human development and existential challenges of life (Keye, Shmotkin, & Ryff, 2002). In the earlier literature, the concept of

psychological well-being was described in various states of human development, which included individuation (Jung, 1933), full functioning (Rogers, 1961), maturity (Allport, 1961) and self-actualization (Maslow, 1968). Erik Erikson (1959) also described PWB as achieving certain virtues in different stage across the life-span. In 1989, Ryff suggested a multidimensional model of PWB which included six components representing six challenges confronted by individuals. In her theory, humans needed to overcome the six challenges – self-acceptance, positive relations with others, environmental mastery, autonomy, purpose in life and personal growth – to achieve positive functioning (Ryff, 1989). Empirical studies have shown that Ryff's model could be used to study well-being outcomes after life challenges like work achievements (Carr, 1997), personal projects (McGregor & Little, 1998) and recovery from depression (Fava, Ranfanellu, Grandi, Conti, & Belluardo, 1998).

(ii) Subjective well-being (SWB)

Similar to, but some say different from PWB, subjective well-being (SWB) is the perception of people about their own lives (Diener, 1984), which does not include the objective evaluation of psychological well-being like behavioural or psychiatric references. Therefore, subjective well-being, also seen by some as one aspect of PWB, accounts for the subjective evaluation of psychological health (Diener, Suh, & Oishi, 1997).

Lucas, Diener & Suh (1996) confirmed that SWB includes three components: positive affect, negative affect and life satisfaction. Although some findings have shown that positive affect and negative affect were negatively correlated, the association was not strong, and both were found to correlate with other different variables (Russell &

Carroll, 1999), therefore, they were suggested as two separate functions affecting SWB. Research in Hong Kong (Phillips, Siu, Yeh & Cheng, 2005) extracted five items from the scale of World Health Organization Quality of Life (WHOQoL) (with 1 item measuring negative affect and 4 items measuring positive affect) and found that the scale is negatively related to dwelling conditions. In yet more recent literature, the three components of SWB were further divided into two dimensions: Affective well-being (AWB) and Cognitive well-being (CWB) (Luhmann, Hofmann, Eid & Lucas, 2011). AWB relates to the presence of positive affect and the absence of negative affect, while CWB refer to one's evaluation either of owns' life overall or of specific domains (e.g. relationship, work, material needs or health).

(iii) Life satisfaction

Life satisfaction is one of the three components of subjective well-being. It is a cognitive component which indicates happiness and positive functioning (Ryff & Keyes, 1995). Some times ago, Campbell et al. (1976) stated that questions on satisfaction would evoke cognitive judgment based on external standards, while questions on positive or negative affect would tend to prompt emotional state. As people may value different emotion states in their own perception, summing emotions may not provide an inevitably evaluation of how people see their lives (Pavot & Diener, 2008). In other words, overall life satisfaction, as a judgment of one's "wellness" in life as a whole, is a more stable measure than positive affect and negative affect. Some studies have measured overall satisfaction with life as a whole, while some have measured satisfaction with specific domains such as living environment, social relationships, work or income (Luhmann et al., 2011). Indeed, life satisfaction not only provides potentially

valuable insights on how people construct the global judgments about their lives, but also predicts their future decisions and important life outcomes (Diener, Oishi & Lucas, 2011). As a contrast with level of satisfaction related to specific domains, overall life satisfaction summarizes a person's life as a whole, and it is likely to capture certain values of that person (Diener et al., 2011). In a study by Siu and Phillips (2002), a 6-item scale was constructed for measuring psychological well-being. Within the scale, 1 item was used to measure overall life satisfaction and it was found to be a good indicator of psychological well-being among older respondents. Another well-developed measurement of life satisfaction is the Satisfaction With Life Scale (SWLS) developed earlier by Diener in 1985.

The Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale (SWLS) is a 5-item scale developed by Diener, Emmons, Larsen and Griffin (1985) to measure "life satisfaction as a cognitive-judgmental process". It was found that high rating of SWLS indicating lives with good adjustment, fewer symptoms of psychopathology (Diener et al., 1985) and lower risk of suicide (Koivumaa-Honkanen, et al., 2001). The SWLS could reflect not only the affective experiences of the respondents, but could also reflect non-affective information such as if the respondents' would succeed at reaching important life goals. (Diener, Scollon, & Lucas, 2003) In additions, the SWLS allows respondents to evaluate their general lives by personal criteria other than a universal standard of "a good life", which may not be appropriate for everyone. Moreover, the SWLS can reflect a long-term perspective of goodness of lives in general, which may reflect the values and goals of a person (Pavot and Diener, 1993). As the SWLS has proved to be useful in

research across different cultures (Kuppens, Realo and Diener, 2008) and age groups with a high consistency, the results obtained in the current study can be compared with other samples to hopefully provide more knowledge about the uniqueness or otherwise of the Hong Kong's respondents. In sum, the Satisfaction with Life Scale (SWLS) by Diener et al. (1985) is adopted by the present study.

The next section introduces different conceptualizations of materialism and the importance of knowing more about it, especially in the context of older people's well-being.

2.3 Materialism

An important topic in the modern world

The American Freshman survey showed that U.S. college students have apparently become more materialistic since the 1960s (Pryor et al., 2007). For example, 81.7% of college students in 1968 rated their top personal objective as “developing a meaningful philosophy of life”, with 50.4% of students thinking “being very well off financially” was an important goal. However, some 40 years later, in 2006, about 74.6% of students rated the goal of “being very well off financially” as essential or very important, while only 46.7% rated “developing a meaningful philosophy” as an important objective (Pryor et al., 2007). In Chinese societies, materialistic achievement has also long been emphasized (Leung, 2008), and even found to have become higher than in some studies in Western countries (Wei & Talpade, 2009), which show the value of materialism is also predominant in Chinese societies. Similar inferences can also be drawn from content analysis of advertisements from Hong Kong, the PRC and Taiwan, undertaken in the 1980s (Tse, Belk & Zhou, 1989). In this longitudinal study, advertisements from

Hong Kong, the PRC and Taiwan were found to emphasize different consumption appeals like utilitarian appeals or hedonistic values. The definitions of materialism and the measurement used in the present study are now discussed.

2.3.1 Definitions of materialism

Although the notion of materialism originates from the philosophical concept that nothing exists except matters and movements (Lange, 1950), its definition in the field of psychology is very different. In general, materialism refers to the importance a person place on worldly possessions (Belk, 1984). Over the years, four main approaches have evolved to the conceptualization of materialism: 1) Inglehart's theory of materialistic socialization, 2) Kasser's Aspiration Index based on the Self-Determination Theory, 3) Belk's theory on materialism as personality trait, and 4) Richins and Dawson's theory on materialism as a personal belief system. There will be considered in sequences as follows:

(i) Materialistic socialization

As a political sociologist, Inglehart (1981) was concerned with the sociopolitical aspects of materialism, which link materialism with social and political issues (Inglehart, 1981). He developed his definition of materialism based largely on Maslow's hierarchy of human needs.

In Maslow's hierarchy, people will seek to fulfill their lower order needs first such as hunger, thirst and safety, before pursuing higher order needs such as a sense of love and belonging, a sense of self-esteem and, finally, self-actualization (Maslow, 1970).

Inglehart regarded materialists as those who place greater importance on lower order than higher order needs. By contrast, post-materialists are those who see higher order needs as of greater important than lower order needs, and such people are generally willing to sacrifice financial success to achieve their higher order needs.

Inglehart suggested that levels of materialism are determined principally by two major elements: pre-adult experiences of scarcity, and socialization of values. Formative experiences of deprivation and the prevailing social values such as a lack of resources to satisfy lower order needs during pre-adulthood will, in this conceptualization, lead to the development of materialism. Research in 1995 on post-materialism in the post-Soviet era bloc confirmed the hypothesis, in which member of the older cohort (who had experienced the Cold War era and its shortages) were found to be more materialistic, while the younger post-Cold War cohort were more post-materialistic, and seemed to be more concerned with higher order needs such as expression of the self and quality of life (Kyvelidis, 2001). This study supports Inglehart's view on materialism and post-materialism, that people's values are related to formative experience more than life cycle effects. It is of considerable of potential relevance to Hong Kong's older cohorts, many of whom have lived though much more difficult times and events such as war, wartime occupation, famine and hard working conditions than the younger generation.

(ii) Materialism as an external aspiration

Based on the proposals in Kasser and Ryan's (1993) "Aspiration Index", goals (and values) can be classified in two types: extrinsic and intrinsic goals. Extrinsic goals were those that "primarily entail obtaining contingent external approval and rewards" (Kasser & Ryan, 1996, p. 280), which suggests that admiration and approval by others was

necessary in assessing if the attainment of goals was worthy. By contrast, intrinsic goals were those leading to psychological satisfaction and well-being simply by achieving them, and any contingent evaluation by others was not necessary. Aspirations for financial success, social recognition and appealing appearance were classified as extrinsic goals, and aspirations for self-acceptance, affiliation, community involvement and physical fitness were classified as intrinsic goals. Results from empirical studies suggested that excessive concerns with extrinsic goals would lead to distraction from intrinsic goals (Kasser & Ryan, 1993). Findings from other research show that extrinsically oriented people reported fewer experiences with positive affect vitality and more experiences involving depression and anxiety (Kasser & Ryan, 1996; Sheldon & Kasser, 1998; Kasser & Ahuvia, 2002). In summary, materialism was conceptualized as an extrinsic goal which had a negative relationship with psychological well-being under this conceptualization. Some sample items in the Aspiration Index are “I will have a committed, intimate relationship” (goal content of affiliation) and “I will be financially successful” (goal content of financial success).

(iii) Materialism as a personality trait

Under Belk's (1984) definition, the highest level of materialism was with regard to obtaining the assumption of possessions as a central place in a person's life, which provides them the greatest sources of satisfaction and dissatisfaction (1984). Belk described materialism as a system of personality traits comprising four components: envy, nongenerosity, possessiveness and preservation (Ger & Belk, 1996), and a 21-item scale measuring materialism as a personality trait was also developed. Two sample items

are “I do not enjoy donating things to the needy” and “I get very upset if something is stolen from me, even if it has little monetary value”.

In Belk’s scale of materialism as a personality trait, materialism was found to be negatively correlated with happiness (Belk, 1985), life satisfaction and well-being (Richins, 1987). Envy was found to have the strongest negative association with life satisfaction (Belk, 1984; Dawson, 1988; Dawson and Bamossy, 1991) and well-being (LaBarbara and Gurhan, 1997), and the effect was found to be moderated by income (LaBarbara and Gurhan, 1997). As many of the items of Belk’s scale contain more of the affective content which is related to one’s emotional experiences, it can be seen as a construct indicating people’s emotional feeling towards possessions or acquisitions of people, which is rather different from Richins and Dawson (1992). They defined materialism as the cognitive evaluation of possessions and acquisitions. As Belk’s personality materialism concerns emotional feelings or reactions of respondents, it was consistently found to have a correlation with Inglehart’s materialism (Ahuvia & Wong, 2002), as Inglehart’s materialism is defined as emotional reactions resulting from early experiences of deprivation.

(iv) Materialism as a personal value

Somewhat different from Belk’s theory, Richins and Dawson’s (1992) definition of materialism includes more cognitive components, in which materialism is seen as the result of cognitive evaluations rather than emotional responses. Richins and Dawson’s theory view materialism as “a set of centrally held beliefs about the importance of possession in one’s life” (p. 308) and “a value that guides people’s choices and conduct

in a variety of situations, including, but not limited to, consumption arenas” (Richins & Dawson, 1992, p. 307).

Richins and Dawson developed the Material Value Scale (MVS), which includes three subscales: Acquisition Centrality, Acquisition as the Pursuit of Happiness, and Possession-defined Success (Richins & Dawson, 1992, P.310).

“Acquisition centrality” describes people who “place possessions and their acquisition at the center of their lives” (Richins & Dawson, 1992, p. 304). For people scoring highly on this subscale, materialism seems to serve as a purpose or a goal to pursue, and it become a major aim of their life meaning. Seven items are included in this subscale, with questions such as “I enjoy spending money on things that aren’t practical”.

“Acquisition as the pursuit of happiness” means ‘an orientation emphasizing possessions and money for personal happiness and social progress” (Richins & Dawson, 1992, p. 304). It describes people who believe that acquisition can lead to happiness or self-satisfaction more effectively than other means such as personal experiences and achievements. There are five items in this subscale including questions such as “my life would be better if I owned certain things I don’t have”.

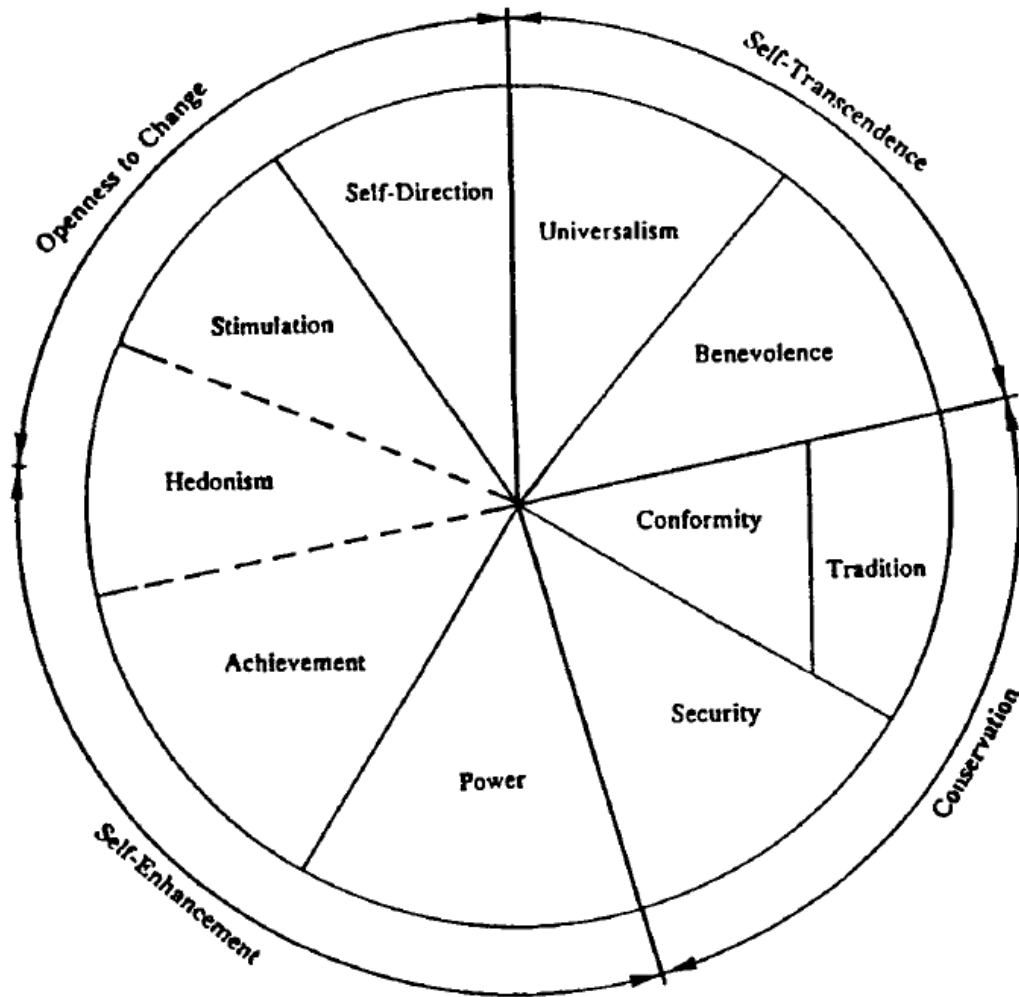
“Possession-defined success” means materialists “tend to judge their own and other success by the number and quality of possessions accumulated” (Richins & Dawson, 1992, p. 304). People scoring highly on this subscale would evaluate their successfulness by looking at how many things they own, but not how satisfied they are. They would admire people who own many expensive things, because they feel it demonstrates how well those people do in life. This subscale includes 6 items such as “I like to own things that impress people”.

The MVS was found to be positively correlated with self-centeredness (Richins & Dawson, 1992), which indicates that people who are “high” in personal value materialism tends to be self-centered and less concerned about others. Moreover, the scale was negatively correlated with environmentalism (Saunders & Munro, 2000), which indicated that high levels of material values is related to less environmental-friendly values. Like Belk’s scale, personal value materialism was also found to be negatively correlated with life satisfaction (Richins & Dawson, 1992; Burroughs & Rindfleisch, 2002). Moreover, MVS was negatively correlated with voluntary simplicity, which indicated that the personal value of materialism was contradicted with people’s underlying values which motivated their behaviours (Richins & Dawson, 1992).

2.3.2 Values, value systems and materialism

As a personal value, some scholars suggested that materialism should be included in the context of a larger value system (Schwartz, 1992). Schwartz and Bilsky (1990) defined values as “concepts or beliefs pertain to desirable end states or behaviors, transcend specific situations, guide selection or evaluation of behavior and events and are ordered by relative importance”. In Schwartz’s Circumplex model of values (1992), there are ten types of universal human values domains under four higher order values (openness to change, self-transcendence, conservation and self-enhancement). Value types adjacent to each others are more similar and those across each others are more contradicted. Figure 2.7 shows the Circumplex model proposed by Schwartz.

Figure 2.7
Circumplex model of values



Source: Schwartz, 1992, p. 14

In Schwartz’s model, human values concerning wealth, social power and ambitions fall among value types of power and achievement (Schwartz, 1992, p.33), which implies that materialism, as a personal value that stress material possession, might be contradictory to values such as benevolence and universalism. Indeed, recent studies (Kilbourne & LaForge, 2010; Kilbourne, Grunhagen & Foley, 2005) have shown that the score of the MVS is positively correlated with self-enhancement values and negatively correlated with self-transcendence values. The correlations indicated that

higher level of materialism means a person might be more concerned about power and achievement, and might be less concerned about benevolent values (such as love and friendship) and universal values (like social justice and world at peace).

In the present study in Hong Kong, Richins and Dawson's definition and model of materialism will be used for a number of reasons. Instead of an emotion-oriented personality trait, the current study would like to focus on the current beliefs and values of the participants, and explore: was there an age difference in the values? How, if at all, did the beliefs express themselves as an expectation of others? How did the personal beliefs relate to life satisfaction? According to the Schwartz's (1992) Circumplex model of values, certain personal values are contradicted by others. The findings of the current study may provide some indications if materialistic values were more common among the participants and what other values might be suppressed as a result (and especially allowing an element of comparison between older respondents and a younger comparison group).

2.3.3 Research on materialism: Limited information about older people

Most research on materialism has been conducted among younger populations, and mainly on children from middle-schools (Ku, Dittmar, & Banerjee, 2011), and college or university students (Belk, 1984; Kasser & Ryan, 1993; Richins & Dawson, 1992). Some studies have adopted heterogeneous samples including participants from different generations, yet, the number of respondents from older groups tends to have been very limited. Sheldon and Kasser (2001) interviewed 23 respondents aged 60+ out of 108; research by Roberts and Clement (2007) included only two 65+ respondents out of 403; and there was no participants aged 60+ in the quantitative studies by Richins (2011).

Only one study were found to be specifically working at materialism among older people (Wei & Talpade, 2009), which focused on relationships between materialism and cognitive age, life satisfaction and health states. In Wei and Talpade's (2009) study, 151 older Chinese and 132 older Americans (with average age of 63.2) were interviewed. The results showed that cognitive age was positively correlated to materialism, while life satisfaction and health status were negatively correlated to life satisfaction. Levels of materialism among Chinese respondents were found to be higher than among American respondents. Wei and Talpade concluded that materialism would be stronger among older people who are less satisfied with life and in poor health.

Related research by Van Hiel and Vansteenkiste (2009) did note that attainment of one's intrinsic goals contributed to subjective well-being and ego-integrity of older people, whereas extrinsic goal attainment was related to death anxiety. However, it is still unclear if older people have a different "level" of materialism compared to other age groups. Sheldon and Kasser (2001) found that age is positively associated with striving for intrinsic orientation and generativity. Furthermore, Butt and Beiser (1987) found that older people were more satisfied with their material needs than the younger cohort. These findings suggest that older people would probably be less concerned with material "acquisition", but, still, empirical data to support this notion are rare. Therefore, the current research intended to obtain more knowledge about materialism among older people, and to place it in the context of younger generations.

The following section will introduce the concept of and related literature on intergenerational expectations, which could be a potentially important concept among local older people in Hong Kong.

2.4 Intergenerational materialistic expectation (IME) and related concepts

In a study by Stewart, Bond, Deeds and Chung (1999), the value priorities of parents is correlated to the value priorities of their teenage children among Asian families in Hong Kong. The present study investigates the materialistic values of older people and looks at the possibility of any material value becoming an “expectation” of older adults toward their offspring. This “transformed” materialistic value is termed “intergenerational material expectations”.

2.4.1 The concept of generativity

In the psychosocial theory of life-span development suggested by Erikson (1959), humans would tend to go through eight stages of development when they grow up. In each stage, different crises will be experienced and individuals would achieve specific “virtues” if able to overcome the challenges. Erikson’s 7th stage refers to the age of about 40-65, the stage of “generativity versus stagnation”, in which people would need to create things that will outlast them, and tend to be more “nurturing”, having perhaps a greater orientation to their “legacy” to younger generation (Erikson, 1959). In this stage, purposive and positive interaction with the younger generation appears to be important. People would tend to be more concerned about rearing, teaching and leading the younger generation, and would also try to extend their interests beyond themselves to become part of the broader society. The key virtue to be developed in this stage is “caring”. If a person failed to develop his or her generativity, he or she might have a sense of stagnation. Although generativity was suggested to reach its peak at a human’s middle ages, some findings showed that overall generativity did not differ among midlife and older adults (McAdams, de St. Aubin & Logan, 1993). Also, in Erikson’s

theory (1959), people who successfully achieve virtues from the previous developmental stages would overcome the developmental crisis and go on to the next stage. Therefore, although older people in the current study are all over 65 years old, the concept of generativity is still applicable because the virtue of “care” they have developed in the previous stage could still influence their views of their children. Therefore, it is still appropriate to study generativity in the older group in the current study.

2.4.2 Socioemotional selectivity theory

According to socioemotional selectivity theory, two main types of psychological goals will be selected by people according to their time perspective, which is the time people perceive to have left in their life (Carstensen, Fung & Charles, 2003). The two types of goals are expansive goals such as gaining new knowledge or new social contacts and emotional goals such as “balancing emotional states or sensing that one is needed by others” (Carstensen et al., 2003, p.106). Older people are generally aware that the time they have left in life is much less than others and they would therefore tend to shift their focus onto emotionally meaningful goal. Therefore, older people would probably be more attached to emotionally meaningful social relationships, and would tend to interact with close families and friends rather than new acquaintances, as close families and friends were more likely to provide emotional comfort in difficult times (Fung & Carstensen, 2004). Although people may define emotional meaning social relationship in different ways, family relationships would probably be strongly valued, and Stewart et al. (1999) suggested that familial interdependence was still a dominant characteristic among modern Chinese. In their study, it was also shown that emotional interdependency could be reflected through parents’ expectations of their children

(Stewart et al., 1999). Therefore, I expected that older people in Hong Kong would tend to value family relationships, and that would be reflected in their concerns about materialistic welfare of and among their children as one of the pathways.

2.4.3 Utilitarianistic Familism - generativity among “Hong Kongers”

Generativity as a term has been used to describe individuals who are concerned about the development of the younger generations (Erikson, 1959), which could be expressed as parenting, teaching, and mentoring. Generative individuals would also participate in broader political or social issues which may facilitate a better future social environment for others (Bradley and Marcia, 1998). However, Lau (1978) pointed out some times ago that people in Hong Kong tended to benefit their own children within the family but remained uninvolved in political and social issues. He proposed the theory of utilitarianistic familism of Hong Kong. In this theory of utilitarianistic familism, familial interests were placed above the interests of society, and materialistic interests were the top priority among all familial interests (Lau, 1978). In Lau's study, the majority of respondents emphasized materialistic satisfaction and they hoped to earn more money. They also rated families as more important than society, and achieving materialistic satisfaction for families was a major concern of people at that time. This is an important local cultural specific phenomenon.

2.4.4 Intergenerational Material Expectations (IME) –

A focus of study in the current study

As older people in Hong Kong, like other older persons in the world, went through the stage of generativity versus stagnation, they would have become more concerned about nurturing their offspring. Yet, solid financial support was not affordable for many local older people at the time due to lack of income and rising costs, so the generativity would perhaps express itself as a form of “expectation” regarding the coming and future material welfare of their children.

In the current Hong Kong study, a 3-item intergenerational material expectations (IME) scale was designed based on the Material Value Scale to measure if older Hong Kongers would indeed be concerned about the materialistic welfare of their close families. It is hypothesized that people who are more concerned about their children’s materialistic welfare may tend to rate the materialistic expectations regarding their children as high as their own material value. Scores for IME are compared with scores MVS to see if the respondents place more importance on possession by themselves or by their children.

CHAPTER 3 METHODOLOGY

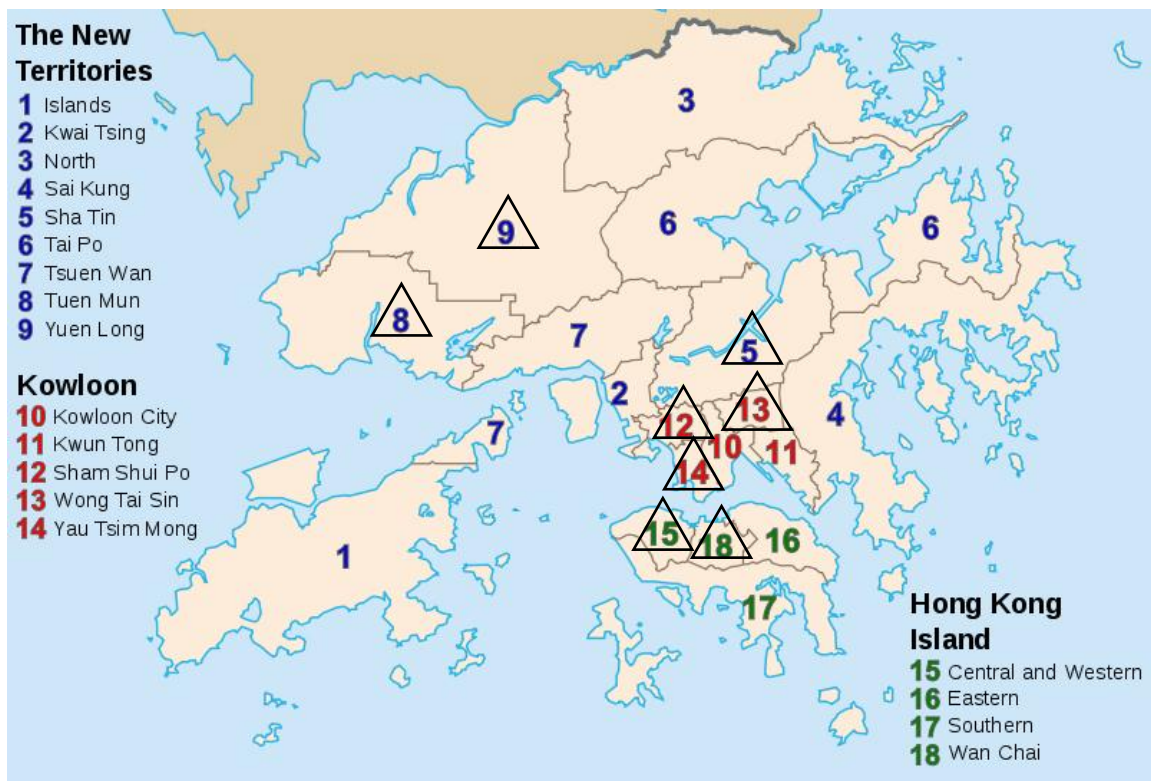
3.1 Research Design

The study adopted two methods of survey for the different groups of respondents: a face-to-face interview survey method for the older participants, and a self-administered questionnaire survey for the younger group.

The major advantage of using personal face-to-face interview surveys to collect data is to achieve a good response rate (though missing items still exist as participants were not willing to answer some questions) (Babbie, 2010) and generally to obtain more detailed and personal information. As the current study concerns personal values of participants, using an interview approach can help to ascertain attitudinal behaviour as has the added benefit of allowing observations by the interviewer for better understanding of the participants. More importantly, as many of the respondents in the current study were in the older cohorts in Hong Kong, among whom illiteracy (in reading and/or writing) and declining visual capability are fairly common, an interview survey is probably more appropriate to collect quantitative data than other methods such as self-administered questionnaires which rely on the respondents' reading and completion of the instrument.

The survey for the older group was conducted from September to November 2011. A purposive sampling method was employed in the study, drawing participants from eight districts (including Central & Western, Wan Chai, Yau Tsim Mong, Sham Shui Po, Wong Tai Sin, Tuen Mun, Yuen Long and Sha Tin, see Figure 3.1 for Hong Kong map with 18 districts).

Figure 3.1 Hong Kong map showing administrative districts and survey sites



△: The eight districts where older respondents were from
(Adopted from Joowwww, 2008)

Inclusion criteria were non-institutionalized people, aged 65 and over, with the ability to communicate generally clearly. Ten elderly centres were contacted and they agreed to assist in recruiting eligible participants. To maximize the variety of participants, senior citizens were also approached to become interviewees on streets or in recreation areas of public housing estates in the chosen districts. One interviewer (the researcher herself) was responsible for collecting the questionnaires. 170 surveys were conducted, each of which lasted from about five to fifteen minutes.

A younger group of respondents was also selected to provide a comparison (this was not a matched sample and nor a formal control group). For the younger group, as all participants were generally in a healthy condition, and were capable of reading Chinese and giving their own responses, written and online self-administered questionnaires

were distributed and collected through personal channels during February of 2012. Respondents were selected, for examples, by personal contacts and snowball recommendations. Although it is acknowledged snowball recommendations has the potential to introduce some elements of bias, this is effective to collect data from specific population (in the present study, younger people aged 15-34 were targeted) in a short duration (Babbie, 2010).

. The instrument for the online questionnaire was constructed based on the information provided by the website www.my3q.com which allows registered users to distribute the questionnaire. In the end, 100 online and 86 written questionnaires were collected.

As questionnaires were only distributed to people who were willing to participate, the response rate was 100% yet there were a few cases with missing demographic data (for example, on education level, housing and marital status, perhaps due to the unwillingness of the participants to divulge such information or to simple omissions in filling their replies.

3.2 Hypotheses

Referring to the objectives and research question mentioned in Chapter 1, and based on the review of previous studies and literature introduced in Chapter 2, five hypotheses are proposed.

Based on previous studies, materialism has been found to have a negative relationship with life satisfaction among various age groups (Richins, 1990; Richins & Dawson, 1992; Burroughs & Rindfleisch, 2002; Richins, 2004). Although past studies

have included very limited data from older people, it is also reasonable to hypothesize that the correlation still exists when people enter older age. It is therefore hypothesized that:

H1: Materialism will be negatively related to life satisfaction

As an expression of generativity regarding the younger generation within the family, intergenerational material expectations might reflect personal perceptions of material acquisitions and possessions. Older people who are more materialistic are expected to have higher IME score than respondents who are less materialistic. Therefore, it is hypothesized that materialism is positively associated with IME.

H2: Materialism will be positively related to intergenerational material expectations (IME)

As a reflection of personal material values, IME is also expected to be negatively correlated with life satisfaction. Yet, it is hypothesized that the association existed because IME reflect personal materialism. Therefore, after controlling for personal material values, relationship between IME and LS should be no more significant to confirm H3b.

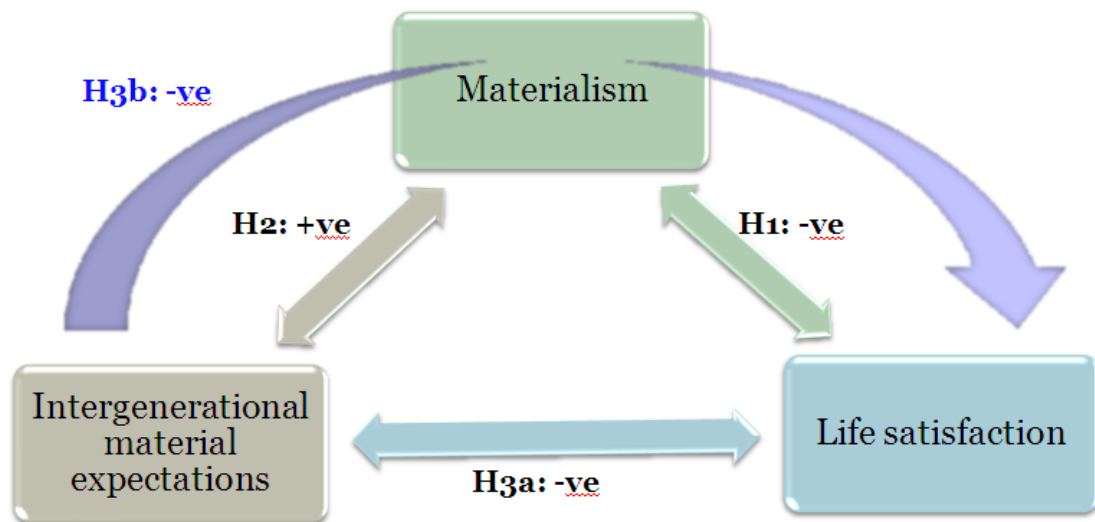
H3a: Intergenerational material expectations (IME) will be negatively related to life satisfaction (LS)

H3b: The association of IME and life satisfaction is mediated by materialism

Figure 3.2 presents the hypothesized model of the study which summarizes H1 to H3 above.

Figure 3.2

A hypothesized model of the study relating materialism, intergenerational material expectations and life satisfaction



Results from previous studies show that materialism tends to decrease with age (Richins & Dawson, 1992; Richins, 1994). Although some researchers have suggested that older people might turn to material possessions as a comfort from the approach of mortality (Arndt et. al, 2004), related data or results of study could not be found in the review. Therefore, based on the available literature, it is hypothesized that older respondents will score lower in materialism than younger respondents (i.e. the mean score of MVS for the older group is lower than the younger comparison group).

H4: There will be differences in materialism between older people and younger people

As stated by the socioemotional selectivity theory (Cartensen et al., 2003), when people enter an older age, they would tend to be more concerned about emotional goals instead of expansive goals. Materialism can be seen as one of the expansive goals as acquisition and possession of more material is important for materialists. Although IME might reflect personal material values, it is still a form of care from the older parents regarding their children. Therefore, IME can be seen as an emotional goal which would be selected by older people over expansive goals like materialism. Therefore, it is proposed that:

H5: The mean of intergenerational material expectations (IME) will be higher than MVS among older respondents

Summary of the hypotheses:

H1: Materialism will be negatively related to life satisfaction

H2: Materialism will be positively related to intergenerational material expectations (IME)

H3a: IME will be negatively related to life satisfaction

H3b: The association of IME and life satisfaction is mediated by materialism

H4: There will be differences in materialism between older people and younger people

H5: The mean of IME will be higher than MVS among older respondents

3.3 The Samples

3.3.1 The older group

Chronological age is used to identify older people as it is relatively objective and easily usable indicator to define different age group. Chronological age is used by society, policy and the law also categorise people by age: for example, according to the Hong Kong Social Welfare Department, local residents aged 65 or over are eligible to apply for the Senior Citizen Card Scheme (Social Welfare Department, 2012). Therefore, this study targeted local people who chronologically aged 65 or above.

Given the consideration that some respondents may be uncomfortable in divulging their exact age, age ranges are commonly provided for selection, and this was the method selected. The older participants ranged in age from 65 to 85 or above (Refer to Table 4.1), which could be further sub-classified as the “young-old” (65-74), “older-old” (75-84) and “oldest-old” (aged 85+). Due to the differences in life expectancy, there were as expected more females than males in the older population. In 2011, there were only 871 males per 1,000 females in the 65+ age group (Hong Kong Census and Statistics Department, 2011). Moreover, females are generally more likely to participate in social activities; thus, more female than male respondents were found.

Among the participants, 24.1% (n=41) were males and 75.9% (n=129) were females. Concerning education level, 45.3% (n=77) of the respondents had received no education, 34.1% (n=58) received very basic primary education, 15.9% (n=27) received secondary education, 3.5% (n=6) received tertiary education, and 1.2% (n=2) of the data was missing. With regard to marital status, 2.4% (n=4) of the participants were single, 47.1% (n=80) were married, 48.8% (n=83) were divorce or widowed and 1.8% (n=3) of the data was missing. As for socio-economic status (SES), housing was used as an indicator,

with those living in public housing or in a Senior Citizen Residence Scheme considered to have lowest SES (50.9%; n=85), those living in private rental housing or private residential housing were consider as medium SES (14.4%; n=24), and those who were living in private-owned house were consider as better well-off (34.7%; n=58). It should be noted that, in the absence of detailed income and occupational information (notoriously hard to gain meaningfully with older people), such a classification of SES is inevitable fairly approximate. 1.8% (n=3) of data concerning housing was missing. Sources of income: income indicated that the income of 25.3% (n=43) of the respondents came from themselves (either from employment or personal saving), 42.4% (n=72) came from their families and 32.4% (n=55) came from social welfare payments. The participants were from eight different districts in Hong Kong providing a good geographic coverage (see figure 3.1). Table 3.3 summarizes the demographic features of the older respondents.

Table 3.3**Descriptive Statistics for Demographic Variables of the Older Participants (N=170)**

Demographic Variables	Sub-categories	Frequency	Percentage (%)
Gender	Male	41	24.1
	Female	129	75.9
Age	65-74	56	32.9
	75-84	89	52.3
	85 or above	25	14.7
Education	No education	77	45.3
	Primary education	58	34.1
	Secondary education	27	15.9
	Tertiary education	6	3.5
	Missing	2	1.2
Marital status	Single	4	2.4
	Married	80	47.1
	Divorce or widowed	83	48.8
	Missing	3	1.8
Housing	Public housing	85	50.9
	Rental housing	24	14.4
	Owned house	58	34.7
	Missing	3	1.8
District of Living	Hong Kong	28	22.9
	Kowloon	83	48.8
	New Territories	59	28.2

3.3.2 The younger group

Among the existing studies on materialism, as noted in Chapter 2, most studies have focused on youth and young adults (Ku et al., 2011; Kasser & Sheldon, 2000; Richins & Dawson 1992; Belk, 1984). In such age groups, concepts and theory are well developed and the construct of materialism has been empirically fairly extensively validated. Therefore, the survey collected data from youths (aged 15-24) and the young professionals (aged 25 – 34) as a comparison group.

The age of younger participants ranged from 15 to 34 years (see Table 3.4). Among the participants, 50.5% (n=88) were males and 47.3% (n=94) were females. With regard to education level, 10.3% (n=19) had received secondary education, 81.1% (n=150) received tertiary education, 8.6% (n=16) received postgraduate education and 0.5% (n=1) of the data was missing. Concerning marital status, 95.2% (n=179) of the respondents were single, 3.7% (n=7) were married and 1.1% (n=2) of the data was missing. Concerning household income, 65.1% (n=121) of the participants' families earned less than HK\$20,000 per month, while 22.6% (n=42) earned HK\$20,000 to HK\$40,000 per month and 10.2% (n=19) earned more than HK\$40,000 per month (2.2%, n=4, of the data were missing). The participants were from eighteen different districts across Hong Kong. Respondents with \$20,000 or lower of household income were considered as having lower socio-economic status (SES) and those with \$20,000 or higher were considered as having higher SES. Table 3.2 depicts the demographic features of the younger sample.

Table 3.4**Descriptive Statistics for Demographic Variables of Younger Participants (N=186)**

Demographic Variables	Sub-categories	Frequency	Percentage (%)
Gender	Male	88	47.3
	Female	94	50.5
	Missing	4	2.2
Age	15-24	139	74.7
	25-34	47	25.3
Education	Secondary education	19	10.3
	Tertiary education	150	81.1
	Postgraduate or above	16	8.6
	Missing	1	0.5
Marital Status	Single	179	96.2
	Married	7	3.8
Household Income	0-4999	29	15.6
	5000-9999	26	14.0
	10000-19999	66	35.5
	20000-29999	25	13.4
	30000-39999	18	9.7
	40000 or above	19	10.2
	Missing	3	2.7
District of Living	Hong Kong	29	15.6
	Kowloon	34	18.3
	New Territories	120	64.5
	Missing	3	1.6

3.4 Procedures: the survey

Both groups of participants received the same basic set of questionnaire questions, but with some minor differences. As noted, since many older people in Hong Kong retire without formal income sources, they sometimes have less knowledge of, or are less willing to give, information of their household income, so I assessed their

socio-economic status by the type of housing they are living in. As seen above, older people owning a private flat were regarded as better well-off, while those living in public housing, private residential housing and private rental housing were regarded as having medium SES. Also, participants from the older group were also asked about their satisfaction with their own financial states and sources of income as supplementary information.

Participants' gender, age range, marital status, education level, type of housing, source of income, and number of family members living together were asked. The original English items for measuring materialism as a value were translated into Chinese by a back-translation method by two graduates majoring in Translation. A cover page indicating the purpose of the study, instructions for completing the questionnaire, measures used in this study and the demographic details were included in the survey booklet. Anonymity and confidentiality were ensured for the responses of the participants who were informed verbally of these issues.

3.5 Measurements

3.5.1 Materialism as a Value

Materialism as a value was measured with the Material Values Scale (MVS) (Richins & Dawson, 1992). The original scale contained 18 items (see Appendix 1); each belongs to one of the three subscales of materialism (possession-defined success, acquisition centrality and acquisition as the pursuit of happiness). The study by Wong, Rindfleisch and Burroughs (2003) found that the three reverse-worded items in the original MVS created problems of understanding and responding among respondents in East Asia, and that caused a poor model fit of the three subscales structure of the MVS.

In 2004, Richins developed and validated short forms of the MVS, with 15, 9, 6 and 3 items respectively. In the shorter forms of the MVS (9-, 6-, 3-item version), most of the reversed-worded items were removed. The reliabilities and validities for these short forms were tested and found acceptable by reliability tests and confirmatory factor analysis (Richins, 2004). In the study by Kilbourne et al. (2005), the nine-item version of the MVS was also found to be a useful measure of materialism as an attitude structure among German, American and Canadian samples.

The 9-item version was used in the present study instead of the 18-item version to reduce the length of questionnaire. The MVS was rated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), and higher scores indicated higher level of materialism. Sample items are as follows: “I admire people who own expensive homes, cars and clothes”, “Buying things gives me a lot of pleasure”, and “My life would be better if I owned certain things I don’t have”. Appendix 2 and 3 provide details of the Chinese translated version and the original version of the MVS respectively.

3.5.2 Intergenerational Material Expectations (IME)

In the current study, a 3-item scale was designed to measure intergenerational expectations. The MVS originally measured the participants’ own materialistic value and, in this study, one item from each of the three subscales were chosen and edited to measure participants’ material expectations on their children. As the scale was measuring respondents’ perception on their children, items concerning specific behaviour (e.g. consumption patterns or life style) would not be very suitable as participants might only have a general idea about materialism on their children. The three items were chosen among others because they concerned on more general thoughts

like “I like a lot of luxury in my life” or “I’d be happier if I could afford to buy more things. A sample items was “I would like my kids to have a lot of luxury in their lives.” A five-point Likert scale (1=strongly disagree, 5=strongly agree) was used for participants to rate on. As most of the younger participants do not have any child, the IME scale is based on their views on their offspring in the future.

3.5.3 Life satisfaction

Life satisfaction was measured by the 5-item Satisfaction with Life Scale (SWLS) devised by Diener (1985) which has been widely used in various research studies on materialism and psychological well-being, and with good internal validity and reliability (Siang and Talib, 2011; Dittmar and Kapur, 2011). One sample item is “In most ways my life is close to my ideal” The SWLS scale was rated by a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

3.5.4 Demographic variables

Information on age range, gender, education level, marital status, work status, source of income, type of housing, number of family members living together were reported.

3.6 Analysis

The results and interpretation are presented in Chapter 4 and 5. Various statistical tests were used in the analysis of data, and the values are verified as appropriate in those chapters.

For all three scales (MVS, IME scale and SWLS), reliabilities were assessed by Cronbach's Alpha. Reliability tests if the measurement would obtain consistent result for the same respondent under similar conditions, and Cronbach's Alpha is a coefficient testing the internal consistency of the scales (George & Mallery, 2008). A cutoff of .70 or above was regard as an acceptable value of the coefficient, which means all items in the scale are measuring the same thing (Cronbach & Shavelson, 2004).

In general, validity tests if an instrument is really measuring what it should measure. Previous studies demonstrate that MVS and SWLS were valid by analyzing their correlations with other scales measuring related outcomes (Richin & Dawson, 1992; Richins, 2004; Diener et al., 1985; Pavot & Diener, 2008). In the current study, validity is tested by confirming the construct of the three scales. To examine the one-factor construct of MVS, IME scale and SWLS, exploratory factor analysis (EFA) was performed by PASW Statistics Version 18.0 (Byrne, 2001). EFA was used because it can examine the inter-relationships of items in the scales (Field, 2009). The constructs were assessed by the eigenvalues, which tell the variances of factors. Percentage of variance was also examined to see how much of the variances could be explained by the one-factor construct.

Multiple regression analysis was used to test the correlations between MVS, IME and SWLS (H1, H2 , H3a and H3b), while controlling for the impact of the covariates (age range, gender, marital status, household income, education level, housing type and

perceived financial states). The significance was assessed by the p-value, which should be less than .05 (with a 95% of significance level), and the effect of independent variable (materialism measured by MVS) was reflected by Beta (β) (George & Mallery, 2008).

ANCOVA (Analysis of Covariance) was used to examine if there was a significant difference between the means of MVS among older and younger respondents (H4) (George & Mallery, 2008). ANCOVA can be used to compare two means while controlling for impacts of covariance like demographic factors. The significance of the F-value ($p < .05$) indicates an acceptable confidence interval (95%) for the mean difference (Field, 2009).

Paired sample t-test was used to test if there was a significant difference between the means of MVS and IME (H5) (George & Mallery, 2008). The significance of the t-value ($p < .05$) indicates an acceptable confidence interval (95%) for the mean difference (Field, 2009).

One-way ANOVA (Analysis of Variance) was conducted to investigate the effects of demographic variables on MVS, IME and SWLS. The significance was assessed by the p-value, which should be less than .05 (with a 95% of confidence interval), and the post hoc test was used to interpret which conditions were significantly different with each other (George & Mallery, 2008).

CHAPTER 4 RESULTS

Prior to the reporting of results, it may be helpful to provide a summary of the hypotheses outlined in Chapter 2, based on the research questions in Chapter 1:

H1: Materialism will be negatively related to life satisfaction

H2: Materialism will be positively related to intergenerational material expectations (IME)

H3a: IME will be negatively related to life satisfaction

H3b: The association of IME and life satisfaction is mediated by materialism

H4: There will be differences in materialism between older people and younger people

H5: The mean of IME will be higher than MVS among older respondents

4.1 Assessment of the psychometric properties of the measurements

4.1.1 Reliability of the three scales –

Material Value Scale (MVS); Intergenerational Material Expectations (IME); and Satisfaction with Life Scale (SWLS)

Reliability was tested by Cronbach's Alpha, for which a cutoff of .70 or above was often regarded as an acceptable value of the coefficient (Cronbach & Shavelson, 2004). Cronbach's Alpha for the Material Value Scale (MVS) was 0.81, which demonstrates a strong internal reliability in this study. Alpha value for the intergenerational material expectations (IME) scale was 0.80 and for Satisfaction with Life Scale (SWLS) is 0.88, which also indicate a strong internal reliability.

4.1.2 Validity of the scales

Exploratory factor analysis (EFA) was conducted to assess the one factor structure of the MVS, IME and the SWLS by using PASW Version 18.0. The one factor solution of the MVS achieved an Eigenvalue of 3.76, which explained 41.75% of the variance; the IME achieved an Eigenvalue of 2.15, which explained 71.53% of the variance, and one factor solution of SWLS achieved an Eigenvalue of 3.49, which explained 69.81% of the variance, therefore, the three scales are acceptable with one factor model structure.

4.2 Testing the hypotheses

4.2.1 Correlation analyses

Bivariate correlation was used to examine the associations between the main variables including age, gender, education level, type of housing, district of living, income source, household income, and number of family members living together, MVS, IME, and SWLS. Due to the heterogeneity between the two groups of respondents, two sets of correlation analyses were conducted. Table 4.1 and Table 4.2 show the correlations among variables of the older group and the younger group of respondents.

From Table 4.1, correlations between MVS and SWLS ($r = -.332, p < .01$), MVS and IME ($r = .571, p < .01$), provide preliminary support to hypotheses 1 and 2. IME was negatively correlated with SWLS ($r = -.248, p < .01$), which provides preliminary support to hypothesis 3a. Other than these correlations between education level and MVS ($r = -.261, p < .01$), education level and IME ($r = -.434, p < .01$), and housing and SWLS ($r = .252, p < .01$) also show significant between-group correlation. Age, gender, marital

status, district of living, source of income and number of family living together were found to have no significant correlation with materialism, IME or life satisfaction.

Among the younger group of respondents, Table 4.2 shows that age and educational level is negatively related to IME ($r=-.191, p<.01$ for age and IME; and $r=-.169, p<.05$ for educational level and IME). In the younger group, it was also found that MVS is positively correlated with IME ($r=.633, p<.01$) and negatively correlated with SWLS ($r=-.332, p<.01$). IME is also negatively related to MVS ($r=-.384, p<.01$).

To perform a more comprehensive assessment on the relationship between MVS, IME, and SWLS, and other demographic variables, multiple regression and ANOVA were conducted.

Table 4.1
Correlation matrix: materialism, intergenerational material expectations, life satisfaction and demographic variables among older respondents (N=170)

Variables	M	Range	SD	1	2	3	4	5	6	7	8	9	10	11
1 Gender	-	-	-											
2 Age	3.01	1-5	1.32	-.029										
3 Education level	-	-	-	-.257**	-.149									
4 Marital Status	-	-	-	.291**	.302**	-.208**								
5 Housing	-	-	-	-.030	.085	.167*	-.117							
6 District	-	-	-	-.074	.000	-.112	.003	-.193*						
7 Source of income	-	-	-	.198**	.076	-.288**	.093	-.348**	.222**					
8 No. of family members	-	-	-	-.172*	.043	.009	-.140	-.045	.111	.032				
9 MVS	2.54	1-5	.80	.043	-.046	-.261**	.126	-.090	-.001	.167*	.134	(.81)		
10 IME	3.52	1-5	1.09	.092	.083	-.434**	.121	-.157	.071	.146	.155	.571**	(.80)	
11 SWLS	3.83	1-5	.75	-.034	.187*	.099	-.064	.252**	-.090	-.075	-.102	-.332**	-.248**	(.88)

Note: * $p<.05$ (2-tailed). ** $p<.01$ (2-tailed).

MVS, Material Value Scale; IME, Intergenerational Material Expectations; SWLS, Satisfaction With Life Scale. Cronbach's alpha reliabilities are in parentheses on the diagonal. Gender was coded as 0 for male, 1 for female. Education level was coded as 1 for below primary education, 2 for primary education, 3 for secondary education, and 4 for tertiary education or above. Marital status was coded as 1 for single, 2 for married, and 3 for divorce or widowed.

Table 4.2**Correlation matrix: materialism, intergenerational material expectations, life satisfaction and demographic variables among younger respondents (N=186)**

Variables	M	Range	SD	1	2	3	4	5	6	7	8	9
1 Gender	-	-	-									
2 Age	22.48	15-34	3.81	-.064								
3 Education level	-	-	-	-.221**	.220**							
4 Marital Status	-	-	-	.116	.385**	-.038						
5 District	-	-	-	.125	-.192**	-.019	.140					
6 Income	3.25	1-8	1.68	-.087	.039	.126	-.008	-.185*				
7 MVS	3.15	1-5	.52	.113	-.133	-.123	-.073	-.052	-.014	(.73)		
8 IME	2.92	1-5	.78	.126	-.191**	-.169*	-.127	.035	.042	.633**	(.74)	
9 SWLS	3.19	1-5	.79	.087	.063	.045	.133	.165*	.000	-.332**	-.348**	(.86)

Note: * $p < .05$ (2-tailed). ** $p < .01$ (2-tailed).

MVS, Material Value Scale; IME, Intergenerational Material Expectations; SWLS, Satisfaction With Life Scale. Cronbach's alpha reliabilities are in parentheses on the diagonal. Gender was coded as 0 for male, 1 for female. Education level was coded as 1 for below primary education, 2 for primary education, 3 for secondary education, and 4 for tertiary education or above. Marital status was coded as 1 for single, 2 for married, and 3 for divorce or widowed.

4.2.2 Multiple Regression

Multiple regression analysis was used to test the correlations between MVS, IME scale and SWLS, while statistically controlling for the impact of the covariates (age range, gender, marital status, education level and housing type). Education level was found to have significant between-group differences (of higher or lower education groups) in MVS and type of housing was found to have significant between-group differences (of groups living in different housing type) in life satisfaction therefore both variables were controlled. In addition to education level and housing type, age range, gender and marital status were also used as control variables as each has been demonstrated to be related to materialism (Roberts and Clement, 2006; Richins, 2011). As noted in Chapter 3, the regression analyses allow the researcher to suggest whether materialism or IME are still significant predictors after controlling for demographic variables (including marital status, education level and housing types).

H1: Materialism will be negatively related to life satisfaction

Table 4.2
Multiple regression of life satisfaction on materialism (N=170)

Steps	Adjusted R ²	ΔR ²	β
1	.047	.106	
Age			.106
Gender			-.132
MS_D1			.373
MS_D2			.250
EL_D1			-.206*
EL_D2			-.227**
EL_D3			-.141
H_D1			-.110
H_D2			-.062
H_D3			-.005
2	.173	.124***	
MVS			-.356***

Note: * $p < .05$. ** $p < .01$. *** $p < .001$.
MS-Marital status; EL-Education level; H-Housing; D1-Dummy Variable 1;
D2-Dummy Variable 2; D3-Dummy Variable 3

Table 4.2 indicates that materialism (MVS) was negatively associated with the Satisfaction with Life Scale (SWLS) ($\beta=-.356, p<.001$). It supports hypothesis 1 that, after accounting for age, marital status, education level and housing, more materialistic older people were less satisfied with their lives.

H2: Materialism will be positively related to intergenerational material expectations (IME)

Table 4.3
Multiple regression of IME on materialism (N=170)

Steps	Adjusted R ²	ΔR^2	β
1	.103	.170**	
Age			.061
Gender			-.120
MS_D1			.100
MS_D2			.117
EL_D1			-.040
EL_D2			-.098
EL_D3			-.037
H_D1			-.042
H_D2			.082
H_D3			.002
Life satisfaction			-.256***
2	.355	.238***	
IME			.533***

Note: * $p<.05$. ** $p<.01$. *** $p<.001$.

MS-Marital status; EL-Education level; H-Housing; D1-Dummy Variable 1; D2-Dummy Variable 2; D3-Dummy Variable 3

The results suggests that materialism is positively correlated with IME ($\beta=.553, p<.001$), after accounting for age, gender, marital status, education level, housing and life satisfaction, which supported hypothesis 2 that when personal materialism is high, IME tends to be higher too.

H3a: IME will be negatively related to life satisfaction (LS)

Table 4.4

Multiple regression of life satisfaction on IME (N=170)

Steps	Adjusted R ²	△R ²	β
1	.038	.103	
Age			.064
Gender			-.122
MS_D1			.358
MS_D2			.245
EL_D1			-.221 *
EL_D2			-.231 *
EL_D3			-.079
H_D1			-.125
H_D2			-.123
H_D3			-.036
2	.101	.064 ***	
IME			-.267 ***

Note: * $p < .05$. ** $p < .01$. *** $p < .001$.

MS-Marital status; EL-Education level; H-Housing; D1-Dummy Variable 1; D2-Dummy Variable 2; D3-Dummy Variable 3

Table 4.4 shows that IME was negatively associated with Satisfaction with Life Scale (SWLS) ($\beta = -.267$, $p < .001$). This result shows that, after controlling for age, marital status, education level and housing, older people who have higher materialistic welfare expectation to their children would tend to be less satisfied with their lives. Therefore, hypothesis 3a can be supported.

H3b: The association of IME and life satisfaction is mediated by materialism

Table 4.5

Multiple regression of life satisfaction on IME (controlling for MVS) (N=170)

Variables	Life satisfaction		
	Model 1	Model 2	Model 3
Step 1: Control variables			
Age	.067	.064	.079
Gender	-.124	-.122	-.151
MS_D1	.455	.358	.361
MS_D2	.368	.245	.263
EL_D1	-.209*	-.221*	-.216*
EL_D2	-.238*	-.231*	-.243**
EL_D3	-.106	-.079	-.084
H_D1	-.099	-.125	-.129
H_D2	-.066	-.123	-.086
H_D3	.013	-.036	-.032
Step 2:			
IME		-.267***	-.069
Step 3:			
MVS			-.329***
<i>Adjusted R²</i>	.038	.101	.171
ΔR^2	.103	.064***	.070***

Note: * $p < .05$. ** $p < .01$. *** $p < .001$.

MS-Marital status; EL-Education level; H-Housing; D1-Dummy Variable 1; D2-Dummy Variable 2; D3-Dummy Variable 3

Coefficients presented in the table are standardized beta-coefficients (β).

Although Table 4.4 shows that IME was negatively related to life satisfaction, the correlation was no more significant after the effect of MVS was taken into account. Table 4.5 shows the results of regression after controlling demographic variables and MVS. Therefore, personal materialism appears to be mediating the correlation between IME and life satisfaction, and hypothesis 3b can be supported.

H4: There will be differences in materialism between older people and younger people

To find out if levels of materialism differed between the older and younger cohorts, an ANCOVA (Analysis of Covariance) was conducted using SPSS (Version 18.0). This method of analysis allows users to compare two means while controlling for various covariance. In the current analysis, important demographic variables including gender, marital status, education level and SES were controlled for as covariance as they might influence one's attitude toward material possessions. The results showed that materialism was statistically significantly different between the two groups with $F(1, 332)=9.05$; $p<.01$. Therefore, hypothesis 4 can be supported that the older respondents scored lower in materialism than the younger respondents.

Another independent ANCOVA was also conducted to compare scores on life satisfaction between the two groups of respondents. There was no difference in life satisfaction between the two groups [$F(1, 332)=1.54$; $p>.05$] (See Table 4.6 and Table 4.7 for results of the ANCOVA).

Table 4.6
Inter-group statistics on materialism and life satisfaction

Variables	Group	N	Mean	Std. Deviation
Materialism	Younger	186	3.1495	.52352
	Older	170	2.5393	.79903
Life satisfaction	Younger	186	3.1898	.78771
	Older	170	3.8276	.75054

Table 4.7
Results of analysis of covariance (ANCOVA) on materialism and life satisfaction between the Older Group (N=170) and the Younger Group (N=186)

Variables	F	df
Materialism	9.05**	332
Life satisfaction	1.54	332

Note: ** $p<.01$

H5: The mean of IME will be higher than MVS among older respondents

To test H5, paired sample t-test was conducted to test if means of IME were significantly different with the means of MVS among the older respondents (George & Mallery, 2008). The significance of the t-value ($p < .05$) indicates an acceptable confidence interval (95%) for the mean difference.

The results of paired sample t-tests shows that mean of MVS(2.53) and means of IME(3.52) was significantly different [$t(156) = -13.542$; $p < .001$] among the group of older respondents. As the number of items in the two scales was different, another paired sample t-test was conducted. The mean of the three corresponding questions for IME (2.94) were chosen from the MVS (item 2, 6 and 8 from the MVS) to compare with the mean of IME, and the result was also significant with $t(156) = -7.152$; $p < .001$. Therefore, hypothesis 5 can be supported (older people are more concern with the material well-being of their children than of their own). Results of the t-tests showed that the older respondents were more concerned about the materialistic welfare of their children than themselves.

4.3 Other results -

4.3.1a Education and Materialism

A one-way ANOVA (Analysis of Variance) was conducted to compare the effect of education on materialism. There was a significant effect of education on materialism at the $p < .05$ level for the four conditions [$F(3, 164) = 4.57$, $p < .01$].

Post hoc comparison was conducted by using the Hochberg's GT2 test which compares for each pair of means. The Hochberg's GT2 test was adopted because the numbers of respondents in each educational group were very different, and the test could control the effect of unbalance sample size (Field, 2009). The post hoc comparison indicated that the mean score on materialism for participants who had received no education ($M=2.74$, $SD=.83$) was significantly different (mean difference=.55; $p<.01$) than the group who had received secondary education ($M=2.19$, $SD=.65$). However, the group who had received primary education ($M=2.45$, $SD=.75$) did not significantly differ from the "no education" group. The possible explanations of the group difference will be discussed in Chapter 5.

4.3.1b Education and IME

Again, a one-way between subjects ANOVA was conducted to compare the effect of education on IME. A significant effect was found for education on IME at the $p<.05$ level for the four conditions [$F(3, 151) = 12.59$; $p < .001$].

Post hoc comparison using the Hochberg's GT2 test indicated that the mean score of IME for participants who had received no education ($M=3.98$, $SD=.95$) was significantly different from the primary education group (mean difference=.62; $p<.01$), the secondary education group (mean difference=1.18; $p<.001$) and the tertiary education group (mean difference=1.53; $p<.01$). However, the group who had received primary education ($M=3.36$, $SD=.97$), secondary education ($M=2.80$, $SD=1.14$) and tertiary education ($M=2.44$, $SD=.66$) did not show any significantly difference. So this suggested that education level was negatively related to IME, but once primary

education had been received, taking further education may not relate to the change of IME among the respondents of the current research.

These results suggest that education does have an effect on both materialism and IME. Specifically, participants who had received less or no education would tend to score higher in IME (i.e. participants receiving no education would have highest material expectation regarding their children). However, among participants receiving secondary education or higher, they did not display significantly lower level of materialism on oneself or on one's children.

4.3.2 Housing and life satisfaction

One-way ANOVA was also conducted to compare the effects of housing on life satisfaction. There was a significant effect of housing on life satisfaction at the $p < .05$ level for the four conditions [$F(3, 163) = 4.21; p < .01$].

Post hoc comparison using the Hochberg's GT2 test (the test was adopted because the sample sizes of each housing group were very different) indicated that the mean score for participants who lived in public housing ($M=3.67, SD=.83$), private rental housing ($M=3.52, SD=.73$) and private residential housing ($M=3.89, SD=.54$) was significantly different from participants who lived in self-owned house ($M=4.08, SD=.61$).

These results indicated that housing does apparently have an effect on life satisfaction. Participants who lived in self-owned house appeared to be achieving a higher sense of subjective well-being; however, subjective well-being for participants living in public housing, private rental housing and private residential housing, did not

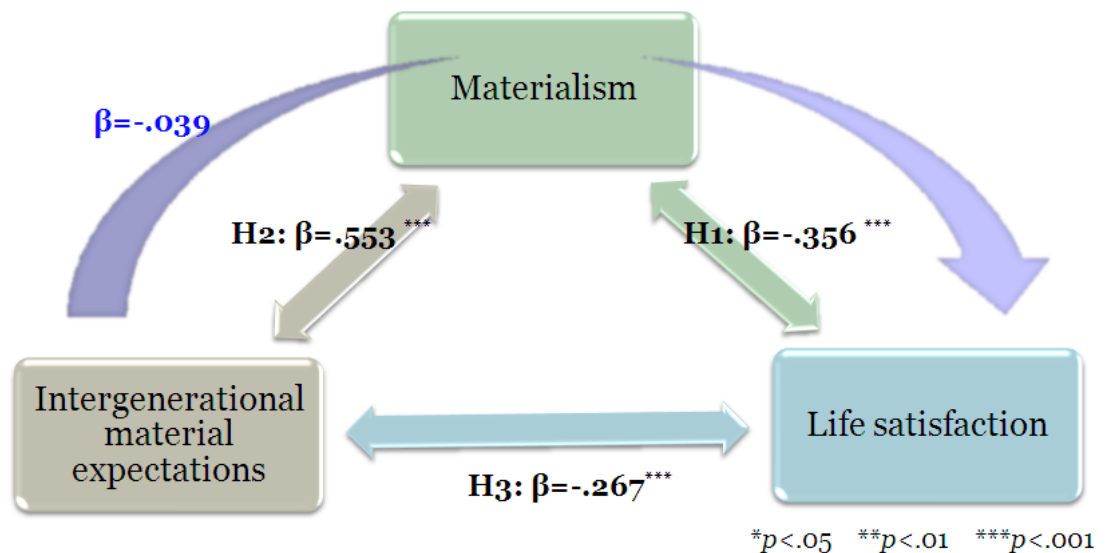
differ significantly. As housing was used as an indicator of socio-economic status (SES) (it will be recalled that respondents living in public housing, private residential housing and private rental housing were classified as having normal SES, and respondents living in self-owned houses were classified as having higher SES), the results above might support the classification. SES has been found to have a direct relationship with life satisfaction in previous studies (Chow et al., 2004).

4.4 Summary of Findings

Results from the analysis show that all of the five hypotheses can be supported. Results of H1, H2, H3a and H3b are presented in the proposed model as shown in Figure 4.8:

Figure 4.8

Results of the relationship of materialism, intergenerational material expectations and life satisfaction (N=170)



In addition to the testing of the five hypotheses, other results were found and are listed as follows:

- No significant difference was found in life satisfaction between older and younger respondents.
- Education level was negatively related to personal materialism and IME, as respondents who received less or no education would tend to score higher in both scales than others.
- Type of housing was positively related to life satisfaction, as participants who lived in self-owned house appeared to be achieving a higher sense of subjective well-being than others.

CHAPTER 5 DISCUSSION

The global ageing of almost all populations has encouraged a growth in research in social gerontology and related subject areas. Successful ageing is an important sub-theme, as it provides insights into how people may or may not age in a more positive, a probably healthier, way. In addition to physical health, psychological health is a crucial component of successful ageing. Personal values or attitudes are thought to be closely related to subjective well-being, therefore, this research aimed to investigate the relationships between life satisfaction and a specific personal value, materialism.

As defined in Chapter 2, materialism was defined as “a set of centrally held beliefs about the importance of possession in one’s life” (Richins & Dawson, 1992, p.308) and “a value that guides people’s choice and conduct in a variety of situations, including, but not limited to, consumption arenas” (p. 307). This study’s aim was to examine the relationships between materialism, life satisfaction and intergenerational material expectations among older people in Hong Kong. Materialism and life satisfaction among younger people was also examined to enable a comparison with an older respondent’s data to see if any generational differences could be discerned. This is probably the first empirical exploration to try to integrate personal material values and intergenerational material expectations in research on older cohorts, especially from a Hong Kong perspective. Within the overall objective, the research had four sub-objectives.

First of all, the research aimed to test the applicability of the Material Value Scale (MVS) and the Satisfaction with Life Scale (SWLS) and the scale of intergenerational material expectations in Hong Kong, a predominantly Chinese cultural setting. The second was to find out the relationships among materialism and life satisfaction among

older and younger people. The third objective was to compare materialism and life satisfaction among older and younger people, to see if any generational differences were evident. Last but not least, by integrating previous concepts on generativity (Erikson, 1959), socioemotional selectivity theory (Carstensen, 1992) and utilitarianistic familism (Lau, 1978), intergenerational material expectations was proposed to reflect a hypothetical tendency for older people to project their own material values expectations onto the next generations.

This chapter will interpret the findings of the study, some possible causes and some implications will be provided.

5.1 The applicability of the MVS, the SWLS and the scale of intergenerational material expectation

As discussed in Chapter 2, the review of the literature, a number of scales related to materialism have been developed over the years. Among them, the MVS is one of the most widely used and validated measures of materialism, which showed good reliability among American respondents (Richins & Dawson, 1992; Richins, 2004; Rindfleisch, Burroughs & Deton, 1997). In a study by Wong, Rindfleisch and Burroughs (2003), the applicability of the cross-cultural MVS was tested among respondents from America, Singapore, Thailand, Japan and Korea. They suggested that reverse-worded items may pose problems in cross-cultural settings and their results showed that the three subscales structure of the MVS displayed a poor model fit by confirmatory factor analysis. Wong et al. (2003) concluded that the conceptualization of material values was cross-culturally applicable even though the reverse-worded items in the MVS caused some problems in understanding and responding among respondents in East Asia. In the current study,

the 9-item version was applied, in which most of the reverse-worded items were eliminated. A one-factor structure was proposed by Richins (2004) for the 9-item version, and this showed a high reliability and validity among respondents. The results from the current study suggest that the 9-item MVS is also applicable among older and younger people in Hong Kong.

As noted in Chapter 2, the 5-item Satisfaction with Life Scale (SWLS) developed by Diener et al. (1985) is well established and has displayed strong psychometric properties in cross-cultural setting (Diener & Diener, 2009). In the current Hong Kong study, the scale also demonstrated good reliability. Yet, many of the older respondents asked for further explanations especially of the fifth item (“If I could live my life over, I would change almost nothing.”), which indicated the item appeared less clear or “understandable” for some local older people in Hong Kong. A simpler and clearer formulation should perhaps be adopted for the item, such as “I don’t have much to regret in my life” when measuring satisfaction of the older cohorts.

For the newly-developed scale of intergenerational material expectation (IME), high reliability was demonstrated using the three items, and a one-factor structure was tested and found acceptable by conducting exploratory factor analysis. Although the scale only contained three items which was not yet verified and may be unable to reflect the comprehensive inner thoughts of the respondents, it still emerged as positively correlated with the MVS and negatively correlated with life satisfaction, which was consistent with the research assumptions. The results implied that intergenerational material expectations are worthy of further exploration with regard to its nature and its relationship with well-being among older people and other age groups.

5.2 Materialism and life satisfaction

After controlling for the effects of demographic variables (age, gender, marital status, education level and socio-economic status), data on the older groups respondents showed a negative association between materialism and life satisfaction, which was consistent with existing findings (Ahuvia & Wong, 1995; Belk, 1984; Dawson, 1988; Dawson & Bamossy, 1991; Roberts & Clement, 2007). This indicated that, if one was more materialistic, one would tend to be less satisfied with one's own life. The negative relationships suggested there is a need to evaluate the impacts of personal material values on life satisfaction, and vice versa, among older people.

In a meta-analysis of research on materialism and life satisfaction by Wright and Larsen (1993), findings from seven studies materialism from 1983 to 1993 showed that materialism was negatively correlated with life satisfaction (with a mean effect size $r = -.25$). Kasser and Ahuvia (2002) also found that internalized materialistic value was related to lowered self-actualization, vitality and happiness, and to increased anxiety, physical symptomatology and unhappiness. Another meta-analysis by Burroughs and Rindfleisch (2002) also yielded similar findings. Their research reviewed 19 published studies from 1984 to 2000, and found that materialism was negatively related to happiness, overall life satisfaction and some specific domains of life satisfaction (such as satisfaction with personal finances, career accomplishments, family, friends, fun, and income), while it was positively related to social anxiety, dependency and self-criticism. Results of the present study also found similar negative associations between materialism and psychological well-being. Possible explanations for such negative relationships were suggested by different researchers. Kasser (2002) pointed out that people who put materialistic values at the top of their priority list would be less happy because their needs for possessions were hard to fulfill for a relatively long time, as new

desires appear consistently. Lower levels of satisfaction can also be caused by being over-concerned about material aspiration and other extrinsic goals, as this has been found to be associated with being less concerned about important life goals like affiliation (Kasser & Ryan, 1993) and self-growth (Kasser, 2002). Ahuvia and Wong (1995) found that the happiness subscale of the MVS was associated most with life dissatisfaction. This means that, if people strongly believed that acquiring more possessions could make them happy, they would be least satisfied with their general life. Diener and Diener (2002) stated that increase of income appears to enhance subjective well-being only when it helps people to fulfill their basic needs. When basic needs are fulfilled, increase of income only has little effect on subjective well-being, as material desires would raise with incomes for more well-off people (Diener & Diener, 2002).

In addition, the value of materialism was found to be conflicting with some other human values which enhance social well-being such as benevolence, universalism, community values, family values (Burroughs and Rindfleish, 2002; Kasser, Cohn, Kanner & Ryan, 2007) and self-transcendence (Kilbourne et al. 2005). These findings may help to explain some of the relationships found between materialism and well-being in the current study.

5.3 Differences between older and younger people

(i) Materialism

In the present study, results obtained from Analysis of Covariance showed that, after controlling for demographic variables such as gender, marital status, education and socio-economic status, materialism was significantly lower among older people than

younger respondents. It corroborates the finding of Butt and Beiser (1987) that older people tend to be more satisfied with their material needs than were the younger cohorts. According to the summary psychometric data from 15 data sets (7 based on the general population, and 8 based on young adults, undergraduate or master students) on the MVS (Richins, 2004), the mean of items average for the 9-item version of MVS was 2.91 (S.D.= 1.14). In the current study, means of the MVS among the older participants was 2.54 (S.D. = .80) and among the younger respondents was 3.15 (S.D. = .52). Although the data in Richins's study were collected in the United States, it is still possible to make a general comparison of the means of MVS among the three groups, which leads to the conclusion that materialism among older people in Hong Kong was the lowest when compared to U.S. data or data for local younger people.

Mortality salience is a method for researchers to activate respondents' sense of insecurity by reminding them of their own death (Arndt et al., 2004). This method is derived from terror management theory (TMT) which describe the human tendency to focus on materialistic goals when overwhelmed by anxiety of death (Arndt et al., 2004). Some studies on materialism and mortality salience have suggested that people who are exposed to death or are being reminded of their own approaching death could turn to materialistic acquisition and possession to cope with the anxiety (Kasser & Sheldon, 2000; Arndt et al., 2004). Arndt et al. further concluded that "the acquisition of wealth represents a culturally sanctioned symbolic testimony to one's value, with the consequent assurance of safety and security in this life and figurative immortality thereafter (p. 203)." Based on this point of view, the oldest-old (aged 85+) should be most materialistic, followed by the 75-84 age group, than the younger-old (aged 65-74). However, similar pattern could not be found in the Hong Kong results, which could be attributed by various reasons. First, chronological age may not precisely indicate

cognitive age for people, as individual differences exist (Settersten & Mayer, 1997). Secondly, as health conditions vary from person to person, older people who are in relatively good health could be less likely to have perceived death in near future; therefore, their sense of mortality salience could be lower. Thirdly, according to socioemotional selectivity theory, older people may seek emotionally meaningful social relationships for emotional support, rather than gaining comfort from material acquisition (Fung & Carstensen, 2004). Therefore, some older people may pay greater concern to close family, and place less focus on material acquisitions.

Although materialism among Hong Kong older people was found in this study to be lower than among younger respondents, its correlation with life satisfaction was still significant. This implies that materialism is an important variable to be studied in the older population.

(ii) Life satisfaction

In our results, although there were no statistical significant differences in life satisfaction among older and younger respondents, it is still possible to compare the data obtained with those in other research findings.

For example, Diener and Diener (2009) summarized results from the Satisfaction with Life Scale (SWLS) of 13,118 college students (among whereas 80% of the respondents were aged 17-25) from Africa, Asia, Europe, Latin America, Middle East, North America and the Pacific. The average score on SWLS across all participants was 4.82 (out of a possible 7), and 70% of female and 63% of male respondents reported a positive level of life satisfaction (higher than 4 out of seven); while only 4% of the total

respondents reported the highest score (=7) for life satisfaction. For respondents less satisfied (a mean score lower than 4), 8% were female and 14% were male.

In the present Hong Kong study, the means for SWLS were 3.83 for older respondents and 3.19 for the younger respondents (out of a possible of 5). Among the respondents, 84.7% of older respondents and 62.9% of the younger respondents reported positive levels of life satisfaction (higher than 3 out of 5); while 10% of older respondents and no youth respondents reported the highest score (=5) of life satisfaction. 12.9% of older respondents and 33% of the younger respondents reported a negative level of life satisfaction (Table 5.1).

Table 5.1

Overall life satisfaction among respondents: Diener and Diener's study (2009) and the Hong Kong study

	Respondents reporting the highest LS (%)	Respondents reporting a positive level of LS (%)	Respondents reporting a negative level of LS (%)
Diener and Diener (2009)	4	F: 70 M: 63	F: 8 M: 14
Current study- Hong Kong older people	10	84.7	12.9
Current study- Hong Kong younger group	0	62.9	33.3

Sources: Diener and Diener (2009) and the Hong Kong study

Although the Hong Kong study used a 5-point scale, which was therefore not directly comparable with the data from Diener and Diener (2009), from the percentages of negative levels, positive levels and highest levels on life satisfaction, a general pattern can still be observed that the older respondents were the most satisfied group among others. This is consistent with previous findings that life satisfaction tends to slightly

increase when people enter their older ages (for example, Diener and Shu, 1998; Ehrlich and Isaacowitz, 2002).

5.4 Intergenerational material expectations (IME)

In the Hong Kong data, intergenerational material expectations (IME) were found to be significantly correlated with the MVS, while it was also at the same time significantly higher than the MVS. The results suggested that parental expectations are not only consistent with parents' own material values, but would be even stronger than their personal material values. For example, a less materialistic older person might still hope that his or her children would have an affluent life. These kinds of hopes were actually explicitly expressed by many older respondents during the present study. This is consistent with the concept of "generativity" (Erikson, 1959) which suggests that humans would tend to be more caring and nurturing after midlife, and they would consider the welfare of the younger generation as more important than their own.

Intergenerational material expectations (IME) were also found in the Hong Kong data to have a significant negative relationship with life satisfaction. Yet, when the MVS was taken into account, the association was no longer significant. This means that the variance in IME can be accounted for by the variance in materialism; therefore, relationships between intergenerational material expectation and life satisfaction could be largely explained by respondents' own levels of materialism. The results again indicated that intergenerational material expectations were formed based on personal material values. Although the older respondents had lower scores on MVS than the younger respondents and respondents from Richins' (2004) data sets, this did not necessarily mean they were less materialistic, as their material aspirations may be reflected on to their children. This concept is consistent with McAdams' thoughts on

generativity (1992). He stated that generativity was different from general altruism and “pro-social” behaviour, as it “involves the creation of a product or legacy ‘in one’s own image,’ a powerful extension of the self” (p.1006). According to McAdams, generativity is an expression of parental care towards younger generation in the family in order to obtain a symbolic extension of one’s own life, which is distinct from general altruism as the offspring contains the parents’ own images. In the present Hong Kong study, if the participants believe that material possessions were important, they may place their material expectation on children so as to extent their own hopes of living an affluent life. From McAdams’s (1992) perspective, these expectations could be classified as intergeneration concerns (the concerns of parent posed to children) and his study found that intergeneration concern was significantly correlated with one’s satisfaction with life. He explained that intergeneration concerns can fulfill humans’ “desires for symbolic immortality” and “the needs of being needed” (P. 1005). By expecting a well-off life for the offspring, older persons may be able to transfer the image of an ideal life onto their children, which may fulfill their desires for symbolic immortality.

Indeed, the results from the current Hong Kong data indicate that, when we want to measure the level of materialism of older people, intergenerational material expectation also needs to be considered as it could reflect their material aspirations.

Although the measurement of intergenerational material expectations used in the present study only contained three items that were yet to be verified, it still showed significant correlations with MVS and SWLS. It indicated that intergenerational material expectations would be a characteristic worth of more research in future studies.

5.5 Materialism, IME and education

Results of ANOVA and post hoc comparison suggest that respondents who received less or no education would tend to score higher in materialism and IME. As existing

literatures provide not much information about relationship between materialism and education level, more research is needed. A possible explanation of the negative correlation between education and both materialism and IME would be: education level might reflect a person's economic background in 1940s to 1960s (when the respondents were in younger ages); it also possibly reflects the income of the respondents. For respondents who had lower income in earlier stage of life, they may consider money as more important to fulfill their basic needs. For respondents who had higher income in earlier time, they may consider money and other materials as less important for themselves and their children if their basic material needs were fulfilled. However, further research is needed to investigate about the correlation.

5.6 Life satisfaction and housing

Older respondents living in self-owned house were found to score significantly higher in life satisfaction than other group. Diener (2002) suggested that subjective well-being can be enhanced when basic needs is fulfilled. The correlation between life satisfaction and housing might imply that the respondents scores higher in life satisfaction because their "basic need" of owning a house is fulfilled, which might be a cultural phenomenon in Hong Kong specifically. Yet, more research has to be done to and verify the relationship between housing and life satisfaction.

5.7 Implications

The results of the current study provide interesting implications for social gerontology, and positive psychology, which will be discussed below.

The Hong Kong study found that materialism is a factor related to subjective well-being for older people. Therefore, to study the well-being of older people, materialism may be considered as a psychological component of successful ageing. Yet,

personal material value may not provide the only perspective from which we can evaluate the level of materialism among older people, as we know from the current study that even “less materialistic” older people may have high expectations towards their children. Hence, their material expectations toward the next generation may be an aspect to be considered or controlled for when future research intends to study materialism of older persons.

Although a causal relationship between materialism and life satisfaction could not be found in the present study due to the cross-sectional design adopted, previous findings still provide some information about the impact of materialism on well-being. Studies on materialism and individual values found materialism to be positively related to the values of self-enhancement (the value which concerns social power, wealth, successfulness, influential power and authority) and to be negatively related to the values of self-transcendence (the value concerning equality, unity with nature, social justice, protecting the environment and world peace) (Kilbourne, et al, 2005). It indicated that materialism is positively related to extrinsic values and negatively associated with intrinsic values. Studies about goal attainment among older persons also concluded that focusing more on extrinsic goals (such as financial success, power, physical appeal and social recognition) over intrinsic goals (such as self-acceptance, affiliation, community feeling and health) would tend to lead to more ill-being and lesser acceptance of death (Van Hiel & Vansteenkiste, 2009). Therefore, higher levels of materialism would tend to lead to less well-being as other important human values or aspirations may be neglected.

As discussed in the literature review in Chapter 2, Lau (1978) proposed the concept of “Utilitarianistic Familism”, which described the tendency of “general” Hong Kongers to be highly concerned about material benefits of core family members and not to show much interest in social participation. The current study provides some empirical data

supporting Lau's (1978) view, as the older parents interviewed were quite concerned about the material welfare of their children. Regardless of their own level of materialism, most older people would like their children to live an affluent life. Therefore, "living well" materially for close family was still a big concern for the older people in Hong Kong culture. As materialism has generally been shown to have little impact on subjective well-being after basic needs have been fulfilled (Diener & Biswas-Diener, 2002), this may suggest the need for a reflection of the well-established concerns with material well-being in Hong Kong.

In fact, older people's material expectations of their children may also influence the values of the younger generation. For example, Stewart et al. (1999) found that mothers' autonomy expectation was correlated with teenagers' autonomy expectation. Study by Kasser, Ryan Zax and Sameroff (1995) also found that teenagers raised by mothers who valued financial success highly were more likely to be materially oriented. These correlations may be caused by various factors including genetic make up or socialization. Genetic factors may be considered to be responsible for 40-50% of the personality variance (Lykken & Tellegen, 1996; Stubbe, Posthuma, Boomsma & Geus, 2005), but further study is needed to examine any causal relationship between parents' and children's level of materialism.

These findings indicated that parents' values and expectations are important socialization factors which influence young peoples' personal values. Although these Hong Kong older respondents scored rather low in their own levels of materialism, their material expectations towards their children or grand children may still have impacts on the actual level of materialism among the younger generations. Therefore, intergeneration material expectations of older parents may be a crucial concept influencing personal material values among the younger generations.

Practical implications

This study adds to the literature which has mainly been done in Western societies by providing evidence in a Hong Kong context, a predominantly Chinese cultural setting. The nine-item version of MVS, the SWLS and the scale for intergenerational material expectations was tested and found reliable and valid among the Chinese older cohorts. Intergenerational material expectations were found to be a characteristic to be further developed among the ageing population. The measures could be further studied and developed to understand older adults' material values and how it would affect their psychological well-being. More insight on the possible intergenerational conflicts of values between older people and their children might also be enhanced, which may be useful to improve intergenerational communications.

5.8 Limitations and recommendations for future study

The present study has a number of limitations. First, it only collected the data from younger respondents as a comparison group. Future studies could compare materialism and life satisfaction among more diverse age groups to enhance understanding of how value differences may occur across generations. Intergenerational material expectation can be compared between parents from different age groups, so as to find out if it is consistent among parents and children of all age groups.

Second, the survey contained a limited number of questions, as older adults could potentially have a lower cognitive concentration threshold, so somewhat limited information is provided about their other characteristics. Qualitative research can be conducted as a follow-up to investigate possible causal relationships between materialism and life satisfaction. Also, other individual values such as universalism, benevolence, altruism and attitudes towards community involvement and social

participation can also be examined to see if materialism and intergenerational material expectations could conflict with other values.

The current study tended to over-represent females and under-represent males in the older persons' group, which could lead to some limitations in evaluating gender differences in materialism, life satisfaction and intergeneration material expectations. Moreover, the findings may be less generalizable to all older adults in Hong Kong because only non-institutional older people, who were generally independent in their activities of daily living (ADL) and who were still relatively socially active, were studied. A more diverse recruitment strategy could help to collect information from institutionalized older people or those who are less socially active, and this would be needed to obtain more comprehensive data on the older cohorts.

The fourth limitation was that the conclusions could only be drawn based on cross-sectional analysis. Longitudinal data are often needed to find out if the differences in materialism found between older and younger persons were caused by age differences or some sort of cohort effect among the current older respondents. Longitudinal data would also help to illustrate the "evolution" of any attitude change over time.

Moreover, in addition to social and environmental influences, genetic factors may also affect the well-being of older people. It was found that heritability could be accounted for up to 40-50% of the variance of subjective well-being (Lykken & Tellegen, 1996; Stubbe, Posthuma, Boomsma & Geus, 2005). A study on twins and siblings also found that the heritability of happiness was estimated at 41% in females and 22% for males (Bartels, Saviouk, Moor, Willemsen, Beijsterveldt, Hottenga, Geus & Boomsma, 2010). In the current research, although genetic influences on subjective well-being and materialism were not measured and evaluated, it is to be noted that the effect of heritability or genetic factor should not be disregarded.

Last but not least, cross-cultural research could be conducted to examine any cultural differences among older people especially in intergenerational material expectations. In addition, the possible effects of parents' material expectations on children could be examined through a parent-child pair research design.

5.9 Conclusion

The central concern of the current study was the relationships between materialism and life satisfaction among older people in Hong Kong, a predominantly Chinese society. In order to investigate and compare whether results were unique to the older group, data were collected from a younger group for comparison. Results from the study showed that the older group respondents generally had significantly lower levels of materialism than the younger group. Yet, this did not necessarily mean older adults were less materialistic than their younger counterparts. The concept of intergenerational material expectations was therefore explored, and it was found that older people would like their children to live a more affluent life, and the level of their expectations was related to their own materialism level. This may indicate the possibility that older people transferred their own materialism into the form of some expectations regarding their children.

The findings of the current study could be practically used for potential intervention programmes such as for counseling purposes with older adults. Although the present study inevitably has limitations, it has provided a contribution to the literature in social gerontology and positive psychology. It is one of the very few research studies to examine materialism among older adults, especially in a Hong Kong context. It also provides a novel perspective to explore relationships between personal material values and intergenerational material expectations. To obtain a more comprehensive picture of

materialism among older adults, future studies may develop longitudinal or parent-child pair designs to explore the casual relationships and intergeneration effects.

Appendix 1

Material Value Scale (MVS)

(Richins & Dawson, 1992, p.310; Richins, 2004, p.217-218)

Subscale - Success:

1. I admire people who own expensive homes, cars, and clothes. (15, 9, 6, 3)'
2. Some of the most important achievements in life include acquiring material possession. (15)
3. I don't place much emphasis on the amount of material objects people own as a sign of success.* (15)
4. The things I own say a lot about how well I'm doing in life. (15, 9, 6)
5. I like to own things that impress people. (15, 9)
6. I don't pay much attention to the material objects other people own.*

Subscale - Centrality:

7. I usually buy only the things I need.*
8. I try to keep my life simple, as far as possessions are concerned.* (15, 9)
9. The things I own aren't all that important to me.* (15)
10. I enjoy spending money on things that aren't practical.
11. Buying things gives me a lot of pleasure. (15, 9, 6)
12. I like a lot of luxury in my life. (15, 9, 6, 3)
13. I put less emphasis on material things than most people I know.* (15)

Subscale - Happiness:

14. I have all the things I really need to enjoy life.* (15)
15. My life would be better if I owned certain things I don't have. (15, 9, 6)
16. I wouldn't be any happier if I owned nicer things.* (15)
17. I'd be happier if I could afford to buy more things. (15, 9, 6, 3)
18. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like. (15, 9)

* Denotes a reverse scale item; 'numbers in parentheses after each item indicate the alternative scale versions (with 15, 9, 6, or 3 items) to which the item belongs

Appendix 2

Sample of the questionnaire (Chinese version)

香港物質主義與身心健康研究

本問卷的目的是為本人陳柔錚的碩士論文收集數據，研究本地居民物質主義與心理健康的關係，全問卷包括封面在內共兩頁。所有問卷均為匿名，調查中將不會收集任何個人辨識資料（除一般性人口統計學變數和生活相關資訊）。所有的參與者都是自願的，其內容將完全保密，而有關資料將於本人畢業後（即一年後）銷毀。

第一部份 以下題目中，1代表「非常不同意」，5代表「非常同意」，請圈出最切合你的想法的數字。

	問題	非常不同意	不同意	一半一半	同意	非常同意	不適用
1	我欣賞擁有豪宅、名車、名牌衣服的人。	1	2	3	4	5	
2	擁有愈多財富，代表我的生活愈成功。	1	2	3	4	5	
3	我喜歡擁有一些令人羨慕、印象深刻的東西。	1	2	3	4	5	
4	我盡量保持生活簡單，只擁有必需的東西。	1	2	3	4	5	
5	購物帶給我很大的樂趣和滿足感。	1	2	3	4	5	
6	我希望過豪華的生活。	1	2	3	4	5	
7	如果我擁有些現在沒有的東西，我的生活會更好。	1	2	3	4	5	
8	如果我有錢買更多東西，我會更開心。	1	2	3	4	5	
9	有時我會因為不夠錢買想要的東西而困擾。	1	2	3	4	5	
10	我覺得如果下一代賺錢愈多，代表他們愈成功。	1	2	3	4	5	6
11	我希望下一代可過豪華的生活。	1	2	3	4	5	6
12	如果我的下一代有錢買更多東西，他們會更開心。	1	2	3	4	5	6
13	從各方面看，我的生活近乎理想。	1	2	3	4	5	
14	我的生活現況很好。	1	2	3	4	5	
15	我對自己的人生感到滿意。	1	2	3	4	5	
16	到目前為止，我已得到人生中重要的東西。	1	2	3	4	5	
17	如果可以從頭活一次，我也不想作任何改變。	1	2	3	4	5	

第二部份 背景資料

1. 年齡(歲)：_____
 2. 性別：
1. 男 2. 女
 3. 教育程度：
1. 小學以下 2. 小學程度 3. 初中 4. 高中
5. 文憑/職業訓練 6. 大專 7. 碩士或以上
 4. 婚姻狀況：
1. 單身 2. 已婚 3. 離婚 4. 喪偶
5. 其他：_____
 5. 工作狀況：
1. 全職/學生 2. 兼職 3. 失業/待業 4. 退休
 6. 住屋：(只用於長者問卷)
1. 護老中心 2. 療養中心 3. 公屋 4. 居屋
5. 彩頤居、樂頤居 6. 私人住宅(租住)
7. 私人住宅(自擁物業) 8. 其他：_____
- 家庭每月收入：(只用於青少年問卷)
1. \$0-\$4999 2. \$5000-\$9999 3. \$10000-\$19999
 4. \$20000-\$29999 5. \$30000-\$39999 6. \$40000-\$49999
 7. \$50000-\$59999 8. \$60000-\$69999 9. \$70000 或以上
7. 同住家人數目(包括你自己)：_____
 8. 居住地區：
1. 中西區 2. 灣仔 3. 東區 4. 南區 5. 油尖旺
6. 深水埗 7. 九龍城 8. 黃大仙 9. 觀塘 10. 葵青
11. 荃灣 12. 屯門 13. 元朗 14. 北區 15. 大埔
16. 沙田 17. 西貢 18. 離島

《問卷完畢 多謝填寫！》

Appendix 3

Sample of the questionnaire (English version)

Research Study on Materialism and Psychological Well-being Among Older People in Hong Kong

The objective of this questionnaire is to collect data for Miss Chan Yau Tsang's research study on materialism and psychological well-being among older people in Hong Kong. There is totally four pages (including this cover page) of the questionnaire.

All questionnaires will be anonymous. No identifying information will be collected (except basic demographic information). All participants will join the study voluntarily, and the content of the questionnaire will be kept confidential. All questionnaires will be destroyed after the study (after one year of the collecting date).

Part One: In the question below, 1=strongly disagree and 5=strongly agree.

Please circle the best number according to your thoughts.

	Questions	Strongly disagree	Disagree	Average	Agree	Strongly agree	Not applicable
1	I admire people who own expensive homes, cars, and clothes.	1	2	3	4	5	
2	The things I own say a lot about how well I'm doing in life.	1	2	3	4	5	
3	I like to own things that impress people.	1	2	3	4	5	
4	I try to keep my life simple, as far as possessions are concerned.	1	2	3	4	5	
5	Buying things gives me a lot of pleasure.	1	2	3	4	5	
6	I like a lot of luxury in my life.	1	2	3	4	5	
7	My life would be better if I owned certain things I don't have.	1	2	3	4	5	
8	I'd be happier if I could afford to buy more things.	1	2	3	4	5	
9	It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.	1	2	3	4	5	
10	I think my kids are successful if they afford to buy more things.	1	2	3	4	5	6
11	I would like my kids to have a lot of luxury in their lives.	1	2	3	4	5	6
12	I think my kids would be happier if they could afford to buy more things.	1	2	3	4	5	6
13	In most ways my life is close to my ideal.	1	2	3	4	5	
14	The conditions of my life are excellent.	1	2	3	4	5	
15	I am satisfied with my life.	1	2	3	4	5	
16	So far I have gotten the important things I want in life.	1	2	3	4	5	
17	If I could live my life over, I would change almost nothing.	1	2	3	4	5	

Part two: Background Information

1. **Age: (Years)** _____

2. **Sex:**
1. Male 2. Female

3. **Education level:**
1. Below Primary Education 2. Primary school 3. Secondary 1-3
4. Secondary 4-7 5. Diploma/vocational training
6. Tertiary Education 7. Postgraduate or above

4. **Marital Status:**
1. Single 2. Married 3. Divorce 4. Widowed
5. Other: _____

5. **Work status:**
1. Retired 2. Unemployed 3. Part-time: _____
4. Full-time: _____

6. **Source of income:**
1. Self 2. Families 3. Welfare (E.g. SFA, OAA etc.)
4. Other: _____

7. **Housing: (For older respondents only)**
1. Public housing 2. Private residential housing
3. Senior Citizen Residence Scheme 4. Private housing (rent)
5. Private housing (owned) 6. Other: _____

- Household income per month: (For younger respondents only)**
1. \$0-\$4999 2. \$5000-\$9999 3. \$10000-\$19999
4. \$20000-\$29999 5. \$30000-\$39999 6. \$40000-\$49999
7. \$50000-\$59999 8. \$60000-\$69999 9. \$70000 或以上

8. **No. of family living together:** _____

<<End. Thanks for answering!!>>

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