

## **Materialism of Mature Consumers in China and USA: A Cross-Cultural Study**

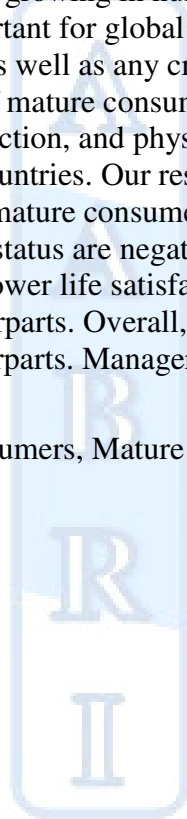
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### **Abstract**

The mature consumer segment is growing in number and income level in both China and the US. It is therefore increasingly important for global marketers to develop an understanding of the consumer behavior of this segment as well as any cross-cultural differences in this behavior. This paper focuses on the materialism of mature consumers in China and the US and examines this in terms of cognitive age, life satisfaction, and physical health status. A total of 283 respondents were surveyed from both countries. Our results show significant support for the following contentions: cognitive age in mature consumers is positively related to materialism, and life satisfaction and physical health status are negatively related. Chinese mature consumers have higher cognitive age perceptions, lower life satisfaction levels, and lower levels of physical health status than their American counterparts. Overall, Chinese mature consumers are more materialistic than their American counterparts. Managerial implications for global marketers are discussed.

Keywords: Chinese consumers, US consumers, Mature consumers, Cross-Cultural, Materialism.



## Introduction

China is a country that has the largest number of mature consumers in the world, with a yearly growth rate of 3.3%. People aged 60 and over accounted for about 11% of the total population in 2005 (about 145 million) and it is estimated that this percentage will reach 12%, 16% and 22% of the population in 2010, 2020 and 2030 respectively (An, 2006). A similar trend has been noted in the United States. The U.S. Census Bureau counted approximately 60 million people 55 years of age or older in the year 2000 and this number is expected to double in size by the year 2030. It will then make up 33% of the U.S. population. The populations of most developed countries in the world are undergoing a similar demographic change. Therefore, the subject of “aging” has recently received a great deal of attention from both governments and researchers worldwide in terms of long-term care for the elderly, Medicare and health insurance for retirees, retirement policy, social security, the maintenance of health through exercise and nutrition, and changes in the occupations and lifestyles of older people (Moschis, 1994, 2003).

This growth in the mature consumer segment is likely to affect businesses greatly in both China and the US. In China, older people as consumers provide enormous opportunities for domestic and international marketers. However, the Chinese mature consumer segment has not been studied much and the consumer behavior of this group of people is unclear to both marketers and researchers. For example, a little known fact is that the demand from this segment in China in 2004 was 600 billion RMB (\$75 billion), while the supply was only 100 billion RMB (\$12.5 billion) (Zhai & Tao 2005).

In the U.S., during the past half century older age segments have gone from being one of the poorest to being one of the wealthiest. This change has occurred through a combination of personal savings, investments, pension programs, and the escalation of the value of their homes (Dawidowska 2004; Dychtwald 2003). Eighty percent of seniors in the U.S. are homeowners and three-quarters have paid off their mortgages. This trend is expected to continue with the baby boomer segment. Adults aged 55 and older control three-fourths of all financial assets and account for half of all discretionary spending power (Economist 2002). Understanding them is therefore of vital importance to global marketers.

This study makes several contributions to the global marketing literature. First, it conducts a cross-cultural comparison between the Chinese and American mature consumer segments, which has not been done before. Second, it examines the relationships between cognitive age, life satisfaction, physical health status and materialism. These variables have surfaced as the most salient characteristics of mature consumers across countries. Third, given the differences in culture and economic development levels between China and the US, this study measures materialism by focusing more on belief based information, rather than simply examining preferences or usage of products and services. This has also not been done before, and should provide valuable insight for global marketers and advertisers targeting older consumers in China and the U.S.

## Literature Review

### Aging and Consumption:

During the last decade, widespread interest has emerged about the behavior of older consumers, on factors such as information processing and shopping behaviors (e.g., Cole and Balasubramanian 1993; Law, Hawkins, and Craik 1998). Previous literature on age-related change in consumption yields two types of explanations: 1) differences attributable to changes

that occur in the external environment as a person grows older, as well as the (perhaps resulting) psychological changes that accompany aging; and 2) differences attributable to changes in the processing abilities, memory, and learning abilities of older people (Gregoire 2003; Laroche et al 2004). In general, previous research suggests that changes in consumption throughout adulthood are inherent in the aging process.

Previous consumer researchers have employed various theories such as aging theories, adult development theories, life-course theories, and mortality salience theories to explain how aging influences consumption behavior. For example, research focusing on aging theories found that older adults change their consumption patterns to adapt to age-related losses (Bakes and Bakes 1990). As people age, they experience gradual decreases in product and brand satisfaction which might lead to changes in consumption behaviors towards higher value, and higher perceived quality products and brands.

Adult development theories were employed by Erikson (1982) and his colleagues to explain human development from birth to age 65. They suggested that at each stage humans experience various crises and conflicts because of potential “radical change in perspectives” resulting from aging. These changes would have an effect on consumption behaviors, especially for those who view personal possessions as a vital component of self identity (Belk 1988).

Another branch of research adopted a life course framework to explain the effect of past life events on human behavior (e.g., George 1993; Reich and Zautra 1988). This framework posits that change is the underlying mechanism of stress and any life change (e.g., loss of family members, unemployment, and chronic diseases) that requires an adjustment should be treated as a stressor (George 1989; Reich and Zautra 1988). Older consumers would therefore adopt various coping strategies and consumption behaviors to deal with life transitions (e.g., George 1989, 1993), or to reduce stress and restore psychological equilibrium (Gierveld and Dykstra 1993; Thoits 1995). For example, Andreasen (1984) found that there was a positive relationship between coping behaviors (e.g., eating out and purchasing clothes), acute stress (i.e., life changes), chronic stress, and product choice. Similar results have also been found by other researchers (e.g., Moschis 1994, 2003).

In recent years, mortality salience (MS) has become another important theme in aging-related consumer research (e.g. Arndt, Solomon, Kasser, and Sheldon 2004; Rindfleisch and Burroughs 2004). Perceived MS is higher as people start to feel that they have fewer years remaining in their lives. MS-based studies suggest that perceived mortality salience serves as motivation to reduce or control this anxiety through engaging in consumption. When mortality salience is high, people tend to consume more and become more materialistic. (Mandel and Heine 1999; Arndt et al 2004).

A few researchers have also explored the relationship between aging and consumption in a cross-cultural setting (e.g., Graham 1981; Maheswaran and Agrawal 2004). Overall they have shown that aging is a part of an individual’s culture and like other parts of culture, it has an important influence on the individual’s world view and subsequent behavior (Graham 1981; Webster and Beatty 1997).

In sum, the aging-related consumer research has indicated that people, willingly or not, change their consumption behavior throughout life (Andreasen 1984; Moschis 2003; Wolfe 1993). Most of the research points to higher levels of materialism with age. However, the mechanism underlying individual consumer’s materialistic preferences remains unclear. Marketing literature has also been particularly silent on cultural differences in materialism.

Better understanding of the cultural differences can help global marketers to find the right target markets and better serve their global customers.

#### Materialism and Consumption:

Belk (1984, 1985) discussed the relevance of materialism to consumer behavior and advanced it as a critical but neglected macro consumer-behavior issue. Since then, materialism has emerged as a central issue among consumer researchers (Rindfleisch and Burroughs 1999). It has been defined as an orientation that reflects the importance that a consumer attaches to worldly possessions (Belk 1985). It reflects emphasis on material benefit and competition (Richins and McKeage 1992).

The impact of materialism on various aspects of consumer behavior has been studied: the influence of materialism on product satisfaction (Richins 2004; Wang and Wallendorf 2006), on life satisfaction (Richins and McKeage 1992), on compulsive purchase (Rindfleisch, Burroughs, and Denton 1997), on status consumption (Eastman et al 1997) and on consumer subjective well-being (Burroughs and Rindfleisch 2002). The results found that materialism as a value not only impacts consumers' reasoning in evaluating their purchases, but also their post purchase satisfaction.

Several cross-cultural studies of materialism have also been conducted (e.g., Ger and Belk 1990; Clarke and Micken 2002; Schaefer, Hermans, Parker 2004; Webster and Beatty 1997; and Wong and Ahuvia 1998). For example, Eastman et al (1997) compared materialism in three countries: US, Mexico and China, finding that there are statistically significant differences in the materialism levels across all three countries, with consumers in China showing higher levels of materialism than in the US.

Sirgy et al (1998) compared five countries in the relationship between watching TV and materialism: United States, Canada, Australia, Turkey, and China. They found that uniformly across all three cultures, watching television caused dissatisfaction with standard of living, which in turn contributes to feelings of dissatisfaction with life and increased levels of materialism.

In sum however, the marketing literature has a great deal of paucity in the research concerning materialism among mature consumers. Only recently have managers and researchers realized the importance of this segment both in domestic and global markets.

Socio-emotional Selectivity Theory (SST) may provide us with some explanation regarding the mechanism underlying the materialistic preferences of mature consumers (Carstensen et al. 1999; Carstensen, Fung, and Charles 2003). SST suggests that people change their life goals because they change time views during their life. In their early years, people hold an expansive time view, and knowledge-oriented goals such as getting a degree and preparing for a good career are given priority. However, as people grow older, two major factors cause a shift in knowledge-oriented goals to emotional meaningful goals: biological aging and physical health status. In later life, people feel that their ability to draw on their reservoir of future time and extend one's temporal horizon may be complicated by evidence of declining health, physical limitations, and by a resource base jeopardized due to retirement.

Therefore, as people get older, their time view changes to that of a limited temporal horizon, and their pursuit of goals changes from skill-or knowledge-related achievements to emotional-meaningful goals such as spending more time with family members and friends, and seeking positive feelings, hedonic enjoyments and materialistic possessions (Rakowski 1986). The SST theory is used in this study to develop several hypotheses related to mature consumers and materialism.

## Hypotheses

### Cognitive age and Materialism:

SST suggests biological aging as being one of the factors associated with the shift in goals and an increase in materialism. There is also some evidence in previous research (Flouri 2004, Lipacomb 1988) showing a positive relationship between age and materialism in adolescents. Ferraro et al (2005) further suggests that advances in age can reduce the guilt that is associated with materialistic possessions.

In terms of the measurement of 'age', however, previous researchers (Settersten and Mayer, 1997) have suggested that chronological age by itself is an "empty" variable because age itself cannot cause a behavior. They suggest that researchers should give more thought to age measures that were "more sensitive to individual differences". This study therefore focuses on cognitive age or the age that the respondents 'feel' they are, in examining the effects on materialism.

Based on the SST theory and previous research, it would seem reasonable to assume that mature consumers who feel they are "older" are more likely to derive emotional satisfaction from material possessions and thus are more materialistic than those believing they are not so "old". It is therefore hypothesized that overall, across both populations, cognitive age is likely to be positively related to materialism.

H1a: Cognitive age will be positively related to materialism across both Chinese and American mature consumers.

In terms of cross-cultural differences, there is also some evidence in previous research (Maheshwaren and Agarwal 2004) to suggest that mature consumers in more traditional cultures like the Asian and Oriental cultures are more likely to view themselves as 'older' than their counterparts in more modern developed countries like the US. Therefore it is further hypothesized that Chinese mature consumers will tend to have higher "cognitive age" levels and to feel older than their actual age than their American counterparts.

H1b: Chinese mature consumers will have higher cognitive age perceptions than American mature consumers.

### Life Satisfaction and Materialism:

Similarly, SST-based studies have suggested that older adults become mostly present-oriented when they age and tend to maximize their desire for emotionally meaningful social goals and tasks. According to Carstensen et al. (2003), "what characterizes old age is not hedonism, but a desire to derive meaning and satisfaction from life... when emotion regulation is prioritized, people attend to the positive, forget the negative, and focus on present experience" (p.108). Therefore, it is hypothesized that across both samples, mature consumers who are less satisfied with life are more likely to derive emotional meanings from materialistic possessions and thus are more materialistic than those who are more satisfied with life.

H2a: Life satisfaction will be negatively related to materialism across both Chinese and American mature consumers.

There is also some evidence to suggest that consumers, especially mature consumers, in developing countries, because of lower levels of financial and other lifestyle resources are likely to have lower levels of life satisfaction than their counterparts in more developed and affluent countries (Wong and Ahuvia 1998). Therefore it is further hypothesized that Chinese mature consumers will tend to have lower life satisfaction levels than their American counterparts.

H2b: Chinese mature consumers will have lower life satisfaction levels than American mature consumers.

#### Physical Health Status and Materialism:

SST suggests that people with poor physical health are more likely to emphasize emotional satisfaction. They are also probably more likely to use material possessions to achieve emotional satisfaction and thus are likely to be more materialistic than those in good or better health status. For example, an individual who has been diagnosed as having cancer may think his/her selection of indulgent foods is well-justified. Also, poor health or limited life time can impact consumer assessment of product attributes by enhancing the importance of certain attributes or even facilitating the adoption of the product or service. For instance, when an older adult, whose last wish is to tour the Great Wall sometime in the future, learns that his best friend who was the same age as him, has died of cancer, he immediately books his flight and prepares for the trip (Carstensen et al., 2003). It is thus hypothesized that physical health status will be negatively related to materialism.

H3a: Physical Health Status will be negatively related to materialism across both Chinese and American mature consumers.

Across countries physical health status is very much related to levels of development and the availability of medical resources and care. Mature consumers in a developing country like China are therefore more likely to have lower physical health status than their counter parts in the US. It is therefore hypothesized that:

H3b: Chinese mature consumers will have lower levels of physical health status than American mature consumers.

#### Cross-Cultural differences in Materialism:

Overall therefore, all three factors associated with higher levels of materialism, cognitive age, life satisfaction and physical health status, and the rationale for the hypotheses developed here, seem to support the contention that Chinese mature consumers are likely to be more materialistic than their American counterparts. Wong and Ahuvia (1998) also found that whether people become more or less materialistic depends on the individual experience of economic deprivation and insecurity during one's formative years. This would also seem to indicate that older consumers from a developing country like China are like to be more materialistic. Therefore, based on SST, previous research, and the hypothesis developed here, involving the comparison between Chinese and American mature consumers, it is hypothesized that mature Chinese consumers adults are more likely to be materialistic than their American counterparts.

H4: Chinese mature consumers will be more materialistic than American mature consumers.

## Methodology

### Sample Selection:

This study used the survey method to gather data from older consumers (50+) in China and U.S. Beijing and Ma'anshan City, Anhui Province were chosen as research sites in China. Respondents were current employees and retirees of two major universities, one in Beijing and the other in Ma'anshan. About 250 older adults were approached on the two campuses and 200 of them agreed to participate in the research and were interviewed on the spot. They were assured of their anonymity to reduce social desirability biases. In China interviewing customers on the street or in the offices has been the most effective method of data collection. The interview took about 30 minutes. The respondents received either ten Chinese Yuan (equivalent to US \$1.5) or a gift worth the same value for compensation.

US participants were recruited from the volunteers of four non-profit organizations in Atlanta and Clayton city, Georgia. There are two reasons for using volunteers as research subjects. First, they are easier to recruit because they keep in relatively close contact with the organizations of which they are volunteers. They are more willing to participate in the data collection if they are requested to do so by the organizations which benefit from the process as well. Second, by donating money in their names to the organizations they are volunteering for, people may be more likely to take the process seriously, answering all the questions and returning the questionnaires in time. Thus, a high response rate and good quality can be expected.

About 200 senior citizens were approached in the four organizations located in Atlanta and Clayton, and 135 of them agreed to participate in the research. For each returned questionnaire, 5 US\$ were donated to the organizations they were volunteering for at the time.

A total of 332 questionnaires were received, resulting in a 73% response rate. After eliminating returned surveys with incomplete responses, the number of usable responses was 283 (151 samples from China and 132 from U.S.A). Approximately 37% of the respondents were male. The age range was from 50 to 86 years old with an overall average age of 63.2. However, the average ages of the two populations were significantly different ( $p < .000$ ), with the Chinese population at 66.25 and the American population at 62.06. Therefore, to ensure meaningful age categories of sufficient sample size, subjects were collapsed into five age group categories. (Table 1).

Table 1: Age Categories

age groups	Chinese	Americans	Total
50-59	29	54	83
60-65	37	39	76
66-69	32	12	44
70-75	40	18	58
76+	13	9	22
Total	151	132	283

### Questionnaire:

The same questionnaire was used for data collection in China and the U.S. The measures

were all adapted from previous research published in English. For the questionnaire used in China, the original items were first translated into Chinese and checked by two native Chinese speakers who also spoke fluent English. Then the Chinese version was back translated into English by two native English speakers who studied in China.

#### Age-related Variables:

Two different types of ages, chronological age, and cognitive age were measured to compare age-related differences in consumer materialism. The operational definitions of the two were adopted from Settersten and Mayer (1997). Chronological age, expressed in days, months or years, was measured using a question “how old are you?” or “your birth date is”. Cognitive age, also called “feel age”, was measured using a statement “I feel as though I am in my...”.

Physical health status was measured twice with two different scales. The first measure used the question, “How many prescription drugs for chronic conditions are you presently taking? \_\_\_\_\_ (number)” This measure has been used by previous researchers (Johnson and Krueger 2005). Scores were obtained by taking the count of number of prescription drugs used by the subjects. Higher scores indicated poorer health. Also, a three 7-item Likert scale called Feeling of Healthiness developed by Lumpkin and Hunt (1989) was used to measure health status, with anchors of 1 as “Completely agree” and 7 as “Completely disagree”. The three items included “Compared to others my age, I take less medicine”, “Compared to others my age, I think I am in better health”, and “I really do not have any physical problems” (Table 2). The measure displayed adequate reliability (.88). Composite scores were computed by taking the sum of the scores on the three items. Lower scores indicate a perception that health is poorer.

#### Materialism:

For this study, materialism was taken to mean the pursuit of one’s own material well-being. We measured materialism using Richins’ (2004) 9-item short form of Materialism Value Scale (Table 2). The measure displayed adequate reliability (.80).

Life Satisfaction was measured using 4-item scale. A composite was computed by taking the sum of the scores on the four items. Lower scores indicate lower life satisfaction. The measure displayed adequate reliability (.798). (Table 2)

Table 2: Scales used and reliabilities

Variables	Items	Alpha
Physical Health Status	<ul style="list-style-type: none"> <li>• Compared to others my age, I take less medicine.</li> <li>• Compared to others my age, I think I am in better health.</li> <li>• I really do not have any physical problems.</li> </ul>	.882
Materialism	<ul style="list-style-type: none"> <li>• I try to keep my life simple (r).</li> <li>• The things I own say a lot about how well I’m doing in life.</li> <li>• I admire people who own expensive houses, cars, and clothes.</li> <li>• I like owning things that impress people.</li> <li>• Buying things give me a lot of pleasure.</li> <li>• I like a lot of luxury in my life.</li> <li>• My life would be better if I owned certain things I don't have.</li> <li>• I'd be happier if I could afford to buy more things.</li> <li>• It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.</li> </ul>	.801



Life Satisfaction	<ul style="list-style-type: none"> <li>• In most ways my life is close to my ideal.</li> <li>• The conditions of my life are excellent.</li> <li>• So far I have gotten the important things I want in life.</li> <li>• If I could live my life again, I would change almost nothing.</li> </ul>	.798
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## Analyses and Results

Hypotheses H1a, H2a, and H3a, which were examining overall relationships across both the Chinese and American mature consumer groups were tested using multiple correlations (Table 3). Hypothesis 1a concerned the relationship between cognitive age and materialism. The correlation between cognitive age and materialism was .501 ( $p < .00$ ) indicating that cognitive age is positively related to materialism. Mature consumers, therefore, who “feel” older are likely to be more materialistic. Hypothesis 2a concerned the relationship between materialism and life satisfaction. The correlation between the two variables is  $-.251$  ( $p < .00$ ) suggesting that life satisfaction is negatively related to materialism. Mature consumers, therefore, who have lower life satisfaction are likely to be more materialistic. Hypothesis 3a concerned the relationship between materialism and physical health status. The correlation between the two variables is  $-.434$  ( $p < .00$ ) suggesting that physical health status is negatively related to materialism. Mature consumers in poorer physical health are likely to be more materialistic. All three hypotheses H1a, H2a, and H3a were therefore fully supported at the highest levels of significance.

Table 3 Multiple Correlations

Variables	1	2	3	4	5
Chronological age	1				
Cognitive age	.501 (**)	1			
Life satisfaction	.022 (.72)	-.128(.031)	1		
Physical Health status	-.232 (**)	-.356 (**)	.335(**)	1	
Materialism	.110 (.064)	.170 (**)	-.251(**)	-.434(**)	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

Our results further showed that chronological age is not related to materialism and life satisfaction but cognitive age is. This confirms that chronological age is an “empty” variable. Both chronological and cognitive age were negatively related to physical health status showing, as expected, that mature consumers in poorer physical health are older or are likely to feel older. And finally, physical health status was positively related to life satisfaction showing that mature consumers in better physical health are more likely to be satisfied with life.

Hypotheses H1b, H2b, H3b and H4 examined cross-cultural differences between Chinese and American mature consumers. A 2 X 5 MANOVA (culture X age categories) was conducted on the variables of cognitive age, life satisfaction, physical health status, and materialism in order to test these hypotheses. Results revealed a significant main effect of country (Chinese and American) on all four variables; cognitive age, life satisfaction, physical health status, and materialism (Table 4). There were no significant interaction effects of culture and age categories on cognitive age, life satisfaction, physical health status, or materialism. Specifically, results

revealed that cognitive age and materialism was significantly higher among the Chinese, whereas physical health status and life satisfaction was significantly higher among Americans (see Table 5 descriptive statistics). All four hypotheses H1b, H2b, H3b and H4 were therefore fully supported.

Table 4: MANOVA Results – Main Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Country	cognitive age	944.340	1	944.340	11.062	.001
	Physical health status	1634.766	1	1634.766	162.195	.000
	life satisfaction	302.023	1	302.023	34.604	.000
	Materialism	301.794	1	301.794	38.658	.000
Corrected Total	cognitive age	33568.431	282			
	Physical health status	5306.113	282			
	life satisfaction	2852.961	282			
	Materialism	2528.438	282			

Table 5: Descriptive Statistics

Dependent Variable	Chinese and Americans	Mean	Std. Error
cognitive age	Chinese	54.819	.815
	Americans	50.522	1.002
Physical health status	Chinese	9.527	.280
	Americans	15.181	.344
life satisfaction	Chinese	12.552	.261
	Americans	14.982	.320
Materialism	Chinese	11.491	.247
	Americans	9.062	.303

Specifically, in terms of hypotheses H1b, our results showed that Chinese mature consumers have significantly higher cognitive age perceptions ( $M=54.82$ ) than their American counterparts ( $M=50.52$ ). In terms of life satisfaction (hypothesis 2b), our results showed that Chinese respondents had significantly lower scores ( $M=12.55$ ) than American respondents ( $M=14.98$ ) suggesting that Chinese, are less satisfied with their life. In terms of physical health status (Hypothesis 3b), our results showed that respondents from China have significantly lower scores ( $M=9.53$ ) than their American counterparts ( $M=15.18$ ) indicating that American respondents felt much healthier than Chinese respondents. The results in terms of hypothesis H4 also indicated that Chinese respondents are significantly more materialistic ( $M=11.49$ ) than American respondents ( $M=9.06$ ).

## Discussion

This study hypothesized that overall, across both cultures, materialism is positively related to cognitive age, but negatively related to life satisfaction and physical health status. Our results confirmed all three hypotheses. The results also indicated that cognitive age is a more reliable variable than chronological age to study age-related differences in consumer behavior. The finding that life satisfaction and physical health status are negatively related to materialism suggests that materialism will be stronger for older adults in poorer health and less satisfied with

their life. These findings serve to confirm the basic principles of SST that aging, physical health status, and life satisfaction regulate human goals which are also reflected in levels of materialism.

Results from this study also support the prediction that cross-cultural differences exist in all four variables, cognitive age, physical health status, life satisfaction and materialism between Chinese and American mature consumers. Our results showed that relative to American older adults, Chinese older adults have higher cognitive age levels, poorer physical health, and are less satisfied with life, and hence are likely to be more materialistic.

In addition to providing a theoretical foundation for global companies in both China and the US to conduct further research on the mature segment and to formulate their marketing strategies, this study also produces several practical and important insights into consumer materialism and cross-cultural differences in materialism of mature consumers.

It suggests that in segmenting and selecting target segments, marketers should not only use income and chronological age as variables, but also physical health status, cognitive age, and life satisfaction. The consumption behaviors of mature consumers do not necessarily correspond with a particular chronological age and income. Our data suggest that mature consumers in poorer physical health might be less satisfied with life and feel and behave like people much older than themselves. They are likely to be more materialistic, and more likely to consume products. Therefore, marketers should develop different marketing strategies and marketing mixes in each of these two countries for older consumers at different cognitive ages, with different physical health status and life satisfaction.

The results from this study must be qualified in terms of some limitations that, in turn, identify opportunities for future research. First, this study used a subject pool that was fairly homogeneous in nature. This improves power in theory testing, but may limit generalizability to other populations. We also used a cross sectional design. Future research may consider using a longitudinal design, especially in light of the rapid economic development currently taking place in the Chinese economy. Most of the variables used here are related to life experiences that mature consumers have gone through during their lifetime, and as the economy changes the life experiences of future mature consumers are likely to be very different. Tracking these changes would therefore prove very helpful for global marketers in understanding their customers.

## References

- An, Y. (2006), "Analysis on behavior of elderly people and its implication on marketing," *Market Modernization*, 5: 174-175 (in Chinese).
- Andreasen, Alan A. (1984), "Life Status Changes and Changes in Consumer Preferences and Satisfaction," *Journal of Consumer Research*, 11(3), 784-795.
- Arndt, Jamie, Sheldon Solomon, Tim Kasser, Kennon M. Sheldon (2004), "The Urge to Splurge: A Terror Management Account of Materialism and Consumer Behavior," *Journal of Consumer Psychology*, 14(3), 198-212.
- Bakes, P. B. and Bakes, M. M. (1990), "Psycho-Logical Perspectives on Successful Aging: The Model of Selective Optimization with Compensation," In P. B. Baltes and M. M. Bakes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1-34). Cambridge, England: Cambridge University Press.
- Belk, Russell W. (1984), "Cultural And Historical Differences In Concepts Of Self And Their Effects On Attitudes Toward Having And Giving," *Advances in Consumer Research*, 11 (1): 753-760.

- Belk, Russell W. (1985), "Materialism: Trait Aspects of Living in the Material World," *Journal of Consumer Research*, 12 (3): 265-280.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (September): 139-68.
- Burroughs, James E.; Rindfleisch, Aric. (2002), "Materialism and Well-Being: A Conflicting Values Perspective," *Journal of Consumer Research*, 29 (3): p348-370.
- Carstensen, Laura. L., D. Isaacowitz, and Susan T. Charles (1999), "Taking Time Seriously: A Theory of Socioemotional Selectivity," *American Psychologist*, 54, 165-181.
- Carstensen, Laura. L. Helen H. Fung, and Susan Turk-Charles (2003), "Socioemotional Selectivity Theory and the Regulation of Emotion in the Second Half of Life," *Motivation and Emotion*, 27 (2), 103-124.
- Clarke III, Irvine and Micken, Kathleen S. (2002), "An Exploratory Cross-Cultural Analysis of the Values of Materialism," *Journal of International Consumer Marketing*, 14 (4): 65-90.
- Cole, Catherine A. and Siva K. Balasubramanian (1993), "Age Differences in Consumers' Search for Information: Public Policy Implications," *Journal of Consumer Research*, 20(1), 157-170.
- Dawidowska, K. (2004). Seniors: defying stereotypes. *Specialty Retail Report*, Winter, 99-103.
- Dychtwald, M. (2003), "Lifecycles and how they impact service," *Bank Marketing*, 35(7), 8.
- The Economist, (2002), "Over 60 and overlooked," 364 (8285), 51-52.
- Eastman, Jacqueline K.; Fredenberger, Bill; Campbell, David; Calvert, Stephen. The Relationship Between Status Consumption And Materialism: A Cross-Cultural Comparison Of Chinese, Mexican, And American Students. *Journal of Marketing Theory & Practice*, Winter97, Vol. 5 Issue 1, p52, 15p
- Erikson, E. H. (1982). *The Life Cycle Completed: A Review*. New York: Norton.
- Ferraro, Rosellina, Baba Shiv, James R. Bettman, Dawn Iacobucci, Barbara Kahn (2005), "Let Us Eat And Drink, For Tomorrow We Shall Die: Effects Of Mortality Salience And Self-Esteem On Self-Regulation In Consumer Choice," *Journal of Consumer Research*, 32 (1), 65-75.
- Flouri, Eirini (2004), "Exploring the relationship between mothers' and fathers' parenting practices and children's materialist values," *Journal of Economic Psychology*, 25 (6), 743-752.
- Gierveld, J. De. J., and P. A. Dykstra (1993), "Life Transitions and the Network of Personal Relationships: Theoretical and Methodological Issues," *Advances in Personal Relationships*, 4, 195-227.
- Ger, G., & Belk, R. (1990). Measuring and Comparing Materialism Cross-Culturally. *Advances in Consumer Research*, 17(1), 186-192.
- Graham, Robert J. (1981), "The Role of Perception of Time in Consumer Research," *Journal of Consumer Research*, 7(March): 335-342.
- Gregoire, Yany (2003), "The Impact of Aging On Consumer Responses: What Do We Know?" *Advances in Consumer Research*, 30: 19-26.
- George, Linda. K. (1993), "Sociological Perspectives on Life Transitions," *Annual Review of Sociology*, 19: 353-373.
- Johnson, Wendy and Robert F. Krueger (2005), "Higher Perceived Life Control Decreases Genetic Variance in Physical Health: Evidence From a National Twin Study," *Journal of Personality & Social Psychology*, 88 (1): 165-173.

- Laroche, M., Cleveland, M., & Browne, E. (2004). Exploring age-related differences in information acquisition for a gift purchase. *Journal of Economic Psychology*, 25: 61-95.
- Lipacomb, Thomas J. (1988), "Indicators of Materialism in Children's Free Speech: Age and Gender Comparisons," *Journal of Consumer Marketing*, 5 (4), 41-46.
- Lumpkin, James R. and James B. Hunt (1989), "Mobility as an Influence on Retail Patronage Behavior of the Elderly: Testing Conventional Wisdom," *Journal of the Academy of Marketing Science*, 17 (winter): 1-12.
- Maheswaren, Durairaj and Nidhi Agrawal (2004), "Motivational and Cultural Variations in Mortality Salience Effects: Contemplations on Terror Management Theory and Consumer Behavior," *Journal of Consumer Psychology*, 14(3): 213-218.
- Mandel, Naomi and Steven J. Heine (1999), "Terror Management and Marketing: He Who Dies With the Most Toys Wins," *Advances in Consumer Research*, 26(1): 527-532.
- Moschis, George P. (1992), "GERONTOGRAPHICS: A Scientific Approach to Analyzing and Targeting the Mature Market," *Journal of Services Marketing*, 6(3): 17-26.
- Moschis, George P. (1993), "Gerontographics," *Journal of Consumer Marketing*, 10(3): 43-54.
- Moschis, George P. (1994), "Consumer Behavior in Later Life: Multidisciplinary Contributions and Implications for Research," *Journal of the Academy of Marketing Science*, 22 (3): 195-204.
- Moschis, George P. (2003), "Marketing to Older Adults: An Updated Overview of Present Knowledge and Practice," *Journal of Consumer Marketing*, 20(6): 516-525.
- Rakowski, William (1986), "Future Time Perception," *American Behavioral Scientist*, 29 (6): 730-746.
- Reich, J.W., and A.J. Zautra (1988), "Direct and Stress-Moderating Effects Of Positive Life Experiences," In Cohen, L. H. (Eds.), *Life Events and Psychological Functioning* (149-180), Newbury Park, CA: Sage.
- Richins, M., & McKeage, K. (1992). An exploration of materialism and consumption-related affect. *Advances in Consumer Research*, 19 (1): 229.
- Richins, Marsha (2004), "The Positive and Negative Consequences of Materialism: What Are They and When Do They Occur?" *Advances in Consumer Research*, 31(1): 232-272.
- Rindfleisch, Aric and Burroughs, James E.. (1999), "Materialism and Childhood Satisfaction: A Social Structural Analysis," *Advances in Consumer Research*, 26 (1): 519-526.
- Rindfleisch, Aric and James E. Burroughs (2004), "Terrifying Thoughts, Terrible Materialism? Contemplations on a Terror Management Account of Materialism and Consumer Behavior," *Journal of Consumer Psychology*, 14(3): 219-224.
- Rindfleisch, Aric, James E. Burroughs, and Frank Denton (1997), "Family Structure, Materialism, and Compulsive Consumption," *Journal of Consumer Research*, 23 (March): 312-325.
- Schaefer, Allen D., Hermans, Charles M. and Parker, R. Stephen, (2004), "A cross-cultural exploration of materialism in adolescents," *International Journal of Consumer Studies*, 28 (4): 399-411.
- Settersten, Richard A. Jr. and Karl Ulrich Mayer (1997), "The Measurement of Age, Age Structuring, and the Life Course," *Annual Review of Sociology*, 23: 233-261.
- Sirgy, M. Joseph; Lee, Dong-Jin; Kosenko, Rustan; Meadow, H. Lee; Rahtz, Don; Cicic, Muris; Xi Jin, Guang; Yarsuvat, Duygun; Blenkhorn, David L.; Wright, Newell. (1998), Does television viewership play a role in the perception of quality of life? *Journal of Advertising*, 27 (1): 125-142.

- Thoits, Peggy A. (1995), "Social Psychology: The Interplay between Sociology and Psychology," *Social Forces*, 73 (4): 1231-1245.
- Wang, Jing and M. Wallendorf (2006, September), "Materialism, Status Signaling, and Product Satisfaction," *Journal of the Academy of Marketing Science*, 34(4): 494-505.
- Webster, Cynthia and Beatty, Robert C. (1997), "Nationality, Materialism, And Possession Importance," *Advances in Consumer Research*, 24 (1): p204-210.
- Wong, Nancy Y. and Ahuvia, Aaron C. (1998), "Personal Taste and Family Face: Luxury Consumption in Confucian and Western Societies," *Psychology & Marketing*, 15 (5): 423-441.
- Zhai, D. & Tao, L. (2005), "Study on several theoretical issues of industry of elders," *Market and Demographic Analysis*, (supplementary issue): 43-46.

