

**SOCIAL SCIENCES & HUMANITIES**Journal homepage: <http://www.pertanika.upm.edu.my/>**Financial Practices and Problems amongst Elderly in Malaysia****Jariah, M.*, Husna, S., Tengku Aizan, T. A. H. and Rahimah Ibrahim***Institute of Gerontology, Universiti Putra Malaysia, 43400 Serdang, Selangor Malaysia***ABSTRACT**

Being old is often associated with poverty, as a result of limited access to financial resources due to retirement or deterioration in health. The high incidence of poverty among the elderly is a global concern. How much the elderly have is important but how they use what they have is equally important. This paper focuses on financial practice and problems of the elderly in Malaysia. Data used in the analysis were collected in 2004 from among 2,327 elderly aged between 55 and 75 years. Samples were selected using multi stage systematic sampling. Financial practice was measured using 12 statements representing four dimensions, namely, planning, cash management, credit and investment. Financial problems were measured using seven items with two dimensions, namely, daily problems and credit management. In general, the elderly in the study performed basic financial practice (planning and cash management) but a lower percentage of these elderly performed credit and investment plans. About one third of elderly had experienced at least one of the seven financial problems listed. Multiple regression analysis conducted to explore the factors explaining variation in financial practice revealed that the model explained 20.7% variation in the financial practice score. The variable significantly explained the variations in the financial practice score were gender, age, region, ethnicity, education, home ownership, health perception, and income. A further research is needed to better understand the dynamic of financial practice among the elderly.

Keywords: Elderly, financial behaviour

ARTICLE INFO*Article history:*

Received: 13 March 2011

Accepted: 19 December 2011

E-mail addresses:

jariahmasud@yahoo.com (Jariah, M.),

husna.sulaiman@gmail.com.my (Husna, S.),

aizan@putra.upm.edu.my (Tengku Aizan, T. A. H.),

imahibrahim@putra.upm.edu.my (Rahimah Ibrahim)

* Corresponding author

INTRODUCTION

Malaysia is one of the developing countries projected to become an aged nation by 2035. In the country's effort to achieve high income and developed nation status by 2020, Malaysia is also facing challenges of being an aged nation. Increased longevity

means the elderly have to have more resources, particularly financial resources to meet the needs during old age. The lack of comprehensive social security system in most developing countries including Malaysia increases vulnerability of the elderly to poverty especially among older women and the self employed (Caraher, 2003). Meanwhile, limited financial resources, coupled with inability to manage financial resource, can lead to financial problems. Mandatory retirement, lack of saving during younger years and declining social support will influence the financial resources accessible to elderly. The financial resources, particularly money accessible to the elderly, will directly influence their purchasing power and well-being. Perry and Morris (2005) asserted that the way in which people manage their financial management behaviour might vary, depending on culturally contextual issues.

In an aging society that is also facing a decline in fertility, the financial security of an elderly person is a critical factor (Suwanrada, 2009). As a medium of exchange, money is undeniably important in today's life. For elderly living in country with mandatory retirement, retirement mean no more earned income flowing into the family, except for those with pension. In the case of Malaysia, among those with pension scheme, the maximum amount received is only 60% of the last basic pay. In addition to how much they have, how the elderly behave financially may have impacts on their well-being. Increased cost of living becomes another factor for

the need to have good financial practices. Good financial practices during younger years can be a factor to ensure financial independence or security in old age since one of the recommended financial goals is savings for old age (Garmen and Fougue, 2004; Kapoor, Dlabay, & Huges, 2004). The financial practices of elderly can also be a reflection of their financial behaviour during younger age. In other words, those with good financial practices when they were young can be expected to continue with the good practices during younger years, the elderly are expected to experience less financial problems. Hence, good financial practices can lead to financial well-being in old age. This paper attempted to answer three main questions: what are the financial practices of the elderly in Malaysia, and to what extent do they experience selected financial problem? In specific, the objectives of the paper were to identify the financial practices of the elderly in Malaysia, determine financial problems experienced by the elderly and explore factors explaining financial practices of the elderly. The results of this study would provide a better understanding of the financial practices and problems experienced by the elderly and to a certain extent, enable us to understand the behaviour of the elderly in efforts to enhance their well-being.

Much of discussions has focused on the poverty and economic status of the elderly (Barrientos, Gorma, & Helsop, 2003) using national dataset and the financial practices of younger groups (Grable, Park, & Joo, 2009). Unfortunately, literature on the

financial practices the elderly particularly in developing countries is rather limited (Hilgert & Hogart, 2003). The results of this study would provide a better understanding of the financial practices and problems experienced elderly as an input to understanding the financial well-being of older persons as well as poverty among the elderly.

REVIEW OF LITERATURE

Population Ageing in Malaysia

Malaysia gained independency from Great Britain in 1959. With an estimated population of 27 millions, Malaysia is on its way of achieving the high income and developed nation status by 2020 (Government of Malaysia, 2010). The development which took place since independence has changed the socio demographic make-up of the nation. Among other, improved infrastructure, increased educational attainment and better living conditions have resulted in an improved quality of life of the population (EPU, 2002). An estimate made by the Department of Statistics (DOSM) revealed that the average life expectancy at birth for Malaysia in 2008 was 71.6 for males and 76.4 for females and this was an increase of 8.4 years for males and 10.4 years for females respectively as compared those in 2003 (Department of Statistics, 2010). On the other hand, the total fertility rates in 2000 were reduced to 2.8 among the Malays and Bumiputera group, 1.9 for Chinese, 2.0 for Indians and 1.3 for other groups in 2005 (DOSM, 2001, 2003, 2008). Malaysia is experiencing a demographic transition due

to the changes in the fertility and mortality rates and thus, will achieve the aged nation status by 2035, where more than 15% of its population will comprise of people aged 60 years and over.

Poverty amongst the elderly has been a global concern, as stipulated in the Madrid International Plan of Action on Ageing 2002 (UN, 2002). In the case of Malaysia, poverty eradication efforts have been instituted since independence and to date, Malaysia has successfully lowered the poverty rate from 7.5 in 1999 to 5.1 in 2002 (UNDP, 2005), and this further declined to merely 3.8% in 2009 (The Government of Malaysia, 2010). The elderly was identified as one of the poverty-prone groups besides women and children (Alecxih & Kennel, 1994; HelpAge International, 1999). In Malaysia, the 22.7% households headed by the elderly (aged 65 years and above) had the highest incidence of poverty (Sharifah *et al.*, 2010). In particular, the lack of access to financial resources due to mandatory retirement, the lack of social security coverage and the lack of planning for old age often limit the access to financial resources to support old age among the elderly. A study among the elderly in Peninsular Malaysia revealed that they received income from various sources, mainly from informal sources where the frequency as well as amount are not guaranteed (Masud *et al.*, 2008). As such, the elderly in Malaysia appear to be quite vulnerable to poverty and how these limited resources are managed is the key focus of this paper. A study conducted in 2003 among 2427 respondents aged

55 years and older who had more than RM10,000 Employee Providence Fund savings revealed that the majority of the respondents received money from their children (University Malaya, 2003). The study also examined the financial and investment status but did not cover the financial practice of the respondents. The same study also discovered that more than half of the respondents exhausted their Employee Providence Fund money after three years.

Money is an essential resource for daily survival mechanism acknowledged globally. The absence of an income could be misery to anyone including the elderly. Increased cost of living adds up to the negative impacts among those with fixed income including pensioners. Money received must to be spent wisely to ensure that present and future needs are taken care off. In the case of Malaysia, the 2005 Household Expenditure Survey indicated that the mean monthly household expenditure for the households headed by 65 years and older was RM1669 (USD477), while the mean monthly expenditure for the households headed by 45-64 years old head was RM2143 (USD612) (Department of Statistics, 2006). Meanwhile, the mean expenditure of the 65 years and older households was 78% of those in the non-elderly households. This could be explained using the life-cycle hypothesis as proposed by Franco Modigliani, Alberto Ando and Richard Brumberg in the 1950's (Modgilini, 1988). They proposed that consumption spending would be smooth throughout

the life-cycle despite income changes. In the absence of mandatory retirement and availability of limited coverage of social security system in the country, the elderly have to depend on whatever financial resources they can get to support their old age living. The number of recipients of older person welfare support increased from 25,524 in 2006 to 124,916 in 2010. The increase in the number of elderly receiving the welfare support reflected the fact that the number of those who are in need of welfare support can be expected to increase as the country's population is ageing (Department of Welfare, 2010).

The increasing number of older persons depending on welfare support can be associated with several factors, such as the small amount of money available to them is small (below the poverty level), no other sources of money or the lack of financial literacy and the failure of the elderly to manage their money wisely. Low financial literacy among the elderly has been acknowledged globally. Lusardi and Mitchell (2006) carried out a study among the American and concluded that older Americans are not particularly and financially literate even though globally they are the group expected to be the most financially literate. Meanwhile, Lusardi and Mitchell (2007a) discovered that the early Baby Boomers displayed not only low numeracy, but also a lack of knowledge of fundamental economic concepts such as interest rate compounding. Those with low level of financial literacy are less likely to plan for retirement. In addition,

minorities and those with low education and low income are more likely to display low levels of financial knowledge (Lusardi & Mitchell, 2007b; Lusardi, 2007b; Smith & Stewart, 2008). Such scenario can also be expected among the elderly in Malaysia who have low education level. Since financial aspect is a major dimension of subjective well being (Hsieh, 2001), good financial practices can contribute to financial well-being and lower chances of encountering financial problems. Financial resources accessible to the elderly will determine how much money available to be spent. Studies conducted in the Asian region revealed that a higher proportion of the elderly depend on their children to support their livelihood (Lee, 1999; Kumar, 2003; Chu *et al.*, 2006; Suwanrada, 2009). Limited access to financial resources will influence the financial behaviour and also increase the risk of falling into poverty in old age, one of the barriers to successful and positive ageing.

Financial Practices

Financial practices refer to the process which people use in managing their financial resources to achieve financial success in the areas of retirement plans, financial planning, as well as credit and money management (Garman & Forgue, 2004). A previous study has shown that financial practices are positively associated with financial status (Weber & Davis, 1986). The study also showed that financial practices are positively associated with financial well-being. Nonetheless, how financial practices are measured varies. For instance, Davis

and Weber (1990) investigated the use of four recommended financial practices, namely, budgeting, cash flow management (record-keeping), comparing the income/expense statement to the budget, and estimating net worth. Meanwhile, Porter and Garman (1993) identified six domains of financial practices: cash management, credit management, capital accumulation, risk management, retirement/estate plan, and general management, using a random sample of Virginian citizens. Both studies showed that those practicing good financial practices have positive net worth are with higher education levels. Those with positive net-worth can be expected to have better financial well-being in old age.

Beutler and Mason (1987) studied the factors associated with financial practices. They found that young, married, and well-educated households with high demand on available resources were more likely to adopt good financial practices. They also discovered that income did not significantly affect financial practices and families who budget their money, compared to families who did not budget, have a higher satisfaction in their personal finance. Good financial practices during younger years enable a person to save for old age and this will contribute to financial security in old age. Meanwhile, the ability to manage finance effectively depends on one's knowledge of financial management or financial literacy.

Lamb (2002), Grace and Haupert (2003), Jackson (2003), Kim (2003) and Tossaint-Comeau (2003) in the United

States and Burgess (2003) in the United Kingdom have expressed concerns over the level of financial literacy with the growing gap between people's long-term needs and their savings. Financial illiteracy can contribute to inefficient management of financial resources. Well-informed, financially educated or financially literate consumers are better able to make good decisions for their families and are thus in the position to increase their economic security and well-being (Hilgert & Hogarth, 2003). Those who score higher on financial literacy tests are more likely to follow the recommended financial practices. Consequently, financially savvy consumers are more likely to save their money, compare financial products and services, and discuss money matters with their children (Miller *et al.*, 2009) and can be expected to experience less financial problems throughout their life. Grable *et al.* (2009) concluded that financial knowledge plays an important role in shaping responsible financial management behaviour among Koreans living in the United States.

Anderson *et al.* (2004) concluded that education, occupational type and income are related to planning and financial security in later life. Financial planning commenced by those in middle age and older age categories would generally determine that they are more likely to be involved in financial planning. Research on financial practice among the elderly is rather scarce. Much of the research (for example, Noone *et al.*, 2009) has focused on retirement planning as

an effort to ensure that people have sufficient resources in later life. An equal important to ensuring the well-being of the elderly is how the money accumulated earlier being used in the later life so as to minimize financial problems and insecurity in old age.

The literatures reviewed revealed that financial behaviour varies by gender, age, education, employment, perceived health, region, family size and income. Financial literacy plays a critical role in equipping consumers to behave responsibly. Studies done in the United States have also showed that financial behaviour also differ by culture. Grable *et al.* (2009) found that the Korean living in the United States exhibited more responsible financial management behaviour than the Americans after controlling for the locus of control, financial knowledge, and income interactions. As in the case of Malaysia, it also projected that the three main ethnic groups, namely, Malays, Chinese and Indian, behave differently in their financial behaviour. Weber and Hsee (1998) hypothesized that the Chinese in the United States are more risk takers compared to the Americans as a result of the cultural bias in favour of collectivist action and support helps that cushion the Chinese against outcomes associated with loss. Malaysia, which aims of becoming high income country, needs to have better understanding of the financial behaviour of the population, particularly the older persons to ensure that the high income will result in improved financial well-being and quality of life.

Financial Problems

Financial problem is also an indicator in measuring financial well-being as financial problems will decrease an individual's financial well-being (Kim, Bagwel, & Garmen 1998). Peirce and Hanna (1996) divided financial problems into two categories: chronic financial problems and acute financial problems. Chronic financial problems were measured by how often the respondents did not have enough money to afford food, medical care, clothing, and family leisure activities, and how the respondents' finances usually worked out at the end of the month. Acute financial problems were measured by financial life events taken from the Psychiatric Epidemiologic Research Inventory Life Events Scale. Five specific events were included: have less money than usual; have to borrow money; going on welfare; experiencing a foreclosure on a loan or mortgage; and reporting a miscellaneous event. Financial events can cause financial stress.

Sporakowski (1979) discussed financial stress events as related to one's stage in the life cycle. At the beginning family stage, expenditures on schooling, the wedding, and establishing a home are potential financial stressors. Having a child is a big financial stressor. Having children includes the expenses of food, clothing, transportation, education, college, wedding, and helping out with gifts or loans. For the middle years of the life cycle, preparing for retirement can be a financial stressor. In the aging stage, adjusting to reduced retirement income,

changing living arrangements, and death of spouse are major financial stress events. In his study, Joo (1998) categorized financial problem into four items, namely, life cycle events, job-related events, unexpected changes and unfavourable financial situations. Joo (1998) also found financial illiteracy, lack of consumer competency, and lack of management skills as well as inadequate education as some causes of financial stress. Meanwhile, previous research generally concerned with financial problems and their impacts on alcohol consumption and marital quality (Conger *et al.*, 1990).

Not having access to resources can be one of the major financial problems facing the elderly especially in the developing countries. Much has been discussed on this issue within the context of poverty (see Barrientos *et al.*, 2003); unfortunately, there is still very limited literature on the financial behaviour and financial practices of older persons (De Vaney, 2008). Knowledge on the financial practices among older persons and the factors associated with such behaviour can help educators and policy makers to develop appropriate programmes to promote a more effective behavior to be adopted by these older persons in light of their efforts to improve their well-being. With the assumption that the older persons' behaviours are spill over of their behaviours during younger ages, knowing the financial behaviour of the elderly can provide us with an overview of their behaviour during their younger years. As such, appropriate behavioural change

intervention programmes can be introduced during younger ages as to minimize financial problems in the old age.

METHODOLOGY

The population of the study was individuals age 55 to 75 in Malaysia. This age group was selected to capture the retirees and those potentially productive. The multi stage sample selection was utilized in this study. For the first stage of sample selection, the researcher had obtained the absolute number of older persons by age group (55-75) in each of the 1,173 sub-divisions/*mukim* (sub district) from the Department of Statistics, Malaysia. With a target covering 6% of the total *mukims* in Malaysia as the sampling frame, a total of 75 out of 1,173 *mukims* were selected. The total population of the 55-75 groups ($N = 2,020,344$) was divided by 75 to have the sampling interval number ($i = 26,000$) and $K^{\text{th}} = 26,938$. The first *mukim* was selected from the range of interval number and then every K^{th} *mukim* of the list was selected for the sample. As for the second stage of selection, four Enumeration Blocks with the highest number of older persons age 55-75 were selected from each *mukim*. From each Enumeration Block, ten households were selected and this resulted in 40 households selected from each Mukim.

The questionnaire that had been pre-tested was used in the data collection in 2004-2005. The data collection through personal interview was carried out by trained enumerators using a set of questionnaire comprising of demographic backgrounds, income and expenditure

pattern, assets and liabilities, employment history, saving and investment behaviour and financial aspects of the respondents. This paper utilized one of the sections in the questionnaire involving questions on financial behaviour and financial problems. Financial behaviour was measured using 12 statements covering financial planning, cash, investment and credit management. The Cronbach Alpha for the instrument was 0.63. The statements used were adapted from a study by Fitzsimmons *et al.* (1993).

Using the framework proposed by Pierce and Hanna (1996) on chronic and acute financial problems, financial problems were measured using a list of seven financial problems representing two domains, namely, daily finances and credit problems experienced by the elderly during the previous year. Three problems were related to daily finances: (1) no emergency fund, (2) borrowed money from others for living cost and (3) cannot afford to pay bill on time. Meanwhile, the four credit problems were: (1) borrowed money from "along" (local label for loan sharks), (2) have been cheated by pyramid scheme, (3) have bad debts, and (4) asset repossession. The Cronbach Alpha for the two scales was 0.526 and 0.508, respectively. The respondents were asked to indicate whether they had ever experienced the problems listed in the past year. A descriptive analysis was used to highlight the financial problems and the multiple regression analysis was utilized to explore the factors that significantly explained the variation in the financial behaviour scores of the respondents. The factors

explored included gender, age, education, ethnicity, working/not working, perceived health, region, family size, income, home ownership, financial problems and financial literacy score. These were the factors identified by Joo and Grable (2004) as the predictors included in the model explaining financial well-being.

FINDINGS AND DISCUSSIONS

Characteristics of the Respondents

A total of 2327 elderly aged 55-75 were successfully interviewed in the study. They comprised of almost equal proportions of the male and female elderly, with a mean age of 64 years old. The profile of the respondents is shown in Table 1. The majority of the elderly were co-residing with their children with a household size of 4.4 persons. The respondents' ethnic distribution is similar to that of the national ethnic composition, with the majority of the respondents were of Malays and Bumiputera groups (including Sabah and Sarawak), followed by Chinese and Indians. About two-third of the respondents were married and a very small portion were single. About one thirds were widowers or divorcees and the majority of them are women. The elderly in this study are those born prior to independent day (1957) and their level of educational attainment was relatively low. More than 80% had primary or no formal education and only one fourth of them are still working.

With low level of education and the lack of comprehensive social protection in the country, majority of the elderly in this

study, especially the women, have to rely on non-formal financial resources, such as children remittance to support their old age living. More than half of the respondents reported receiving money from either son or daughter and the proportion who received pension and other sources income was much lower. These show the importance of children as a reliable source of income in the old age, particularly among the elderly in Malaysia, a scenario which is similar to that of other countries in the region (Chou *et al.*, 2006; Chou, 2010; Suwanrada, 2009). Female elderly tend to have fewer sources of income compared to their male counterparts. The data revealed that men received twice the mean amount of income compared to women (males; mean = 9,038 (US2739); sd = 12,804 (US3880) (females: mean = 4,383 (US1328); sd = 6,036 (US1829)).

TABLE 1
Distribution of respondents by demographic characteristics (n=2 327)

Characteristics	Frequency (%)	
Age		
55-64	1321	(56.8)
≥65	1006	(43.2)
Mean± SD: 63.47± 5.73 years		
Sex		
Male	1178	(50.6)
Female	1149	(49.4)
Household size		
1-3	954	(41.0)
4-6	914	(39.3)
7-9	459	(19.7)
Mean ± SD: 4.39± 2.22 persons		
Ethnic		
Malay	1642	(70.6)
Chinese	523	(22.5)
Indian	162	(7.0)

Table 1 (continued)

Marital status		
Never married	48	(2.1)
Married	1486	(63.9)
Separated/Widow	793	(34.1)
Education		
No formal education	806	(34.6)
Primary education	1085	(46.6)
Secondary and higher education	436	(18.8)
Living arrangements		
Living alone	107	(4.6)
Living with spouse	323	(13.9)
Living with children	1861	(80.0)
Living with others	36	(1.5)
Work status		
Still working	599	(25.7)
Retiree	1250	(53.7)
Never worked	478	(20.5)

SD: Standard Deviation

Financial Practices

This paper focuses on the financial practices of the elderly in Malaysia and explores the financial problems among them. The data showed that the majority of the respondents did perform the basic financial planning behaviour. More than half of the respondents often compare prices and budget their expenses. Comparing prices is practiced by 64% of the respondents (see Table 2). Less than 10% of the respondents in this study indicated they never compared prices. In general, the study showed that most of the respondents in this study spent their money carefully. More than half of the respondents indicated that they prepared a budget. About one third of the respondents had a plan to reach their financial goals although almost one fourth never had a plan to achieve their financial goals. Lack of financial planning during younger days definitely has impacts on one's financial

security in old age since how much money one has upon retirement depends on how much one can accumulate prior to his retirement. Table 2 also shows that a much higher proportion of the respondents never made attempts to maximize returns from their savings. Meanwhile, the inability to manage accumulated savings limits the ability of the elderly to gain benefits from the compounded return of their savings and the time value of money.

The skill in managing limited cash assessable to the elderly is critical to ensure that they are able to meet their old age needs. More than half of the respondents indicated that they always spent more than what they earned while only 17% stated that they never spent more than they earned. The majority of the respondents paid their bills late and as a result they were charged interests, while 71% of the respondents reached the maximum limit on their credit. Though all the respondents passed the retirement age, 42% are still working hard to get extra money. Only one fourth of the respondents indicated they have never had to work hard to get extra money and the rest may have to do extra work to support their living.

As for ethnic groups, a lower percentage of Indians set aside money for investment and compared prices at two or more stores for a product. However, the Indian respondents reported that they always spent more than they earned and paid their bills late with extra charges. In line with the general observation that the Chinese are good at investing, those in this study reported that they always looked for investment

opportunities and set money aside for their savings. In term of financial planning, the Chinese always make their budget and have plans to reach their financial goals. They also calculate the cost of credit to decide on the lowest loan package. For the Malay respondents, a higher proportion of them indicated they reached the maximum limit on their credit. Looking at the age group of the respondents, the younger age group generally tended to perform better financial practices compared to the older group. In contrast, older group always paid bills late and worked overtime to get extra money. Lower health status, coupled with lower income, may have forced to these elderly

people to work harder to get extra money to meet their needs.

In order to grasp the overall financial practices, the score for all the items were computed. In this study, the financial practice scores ranged from 12 to 36, with the mean score of 21.5 (SD=3.4) points. The majority of the respondents (45%) scored between 20-23 (moderate level), 20% scored below 18 (the median score), and only 18% scored between 25-36 (high level). The mean is slightly higher than the median figure of 18 and in general, the data showed that the respondents were performing moderate financial practice. The analysis of variance comparing the mean financial

TABLE 2
Financial Practices of the Respondents (n=2327)

No	Financial practices	Never		Sometimes		Always	
		n	%	n	%	n	%
Planning							
1	I compare prices at two or more stores for product.	179	7.7	709	30.5	1434	61.8
2	I budget my expenses.	193	8.3	826	35.5	1305	56.1
3	I had a plan to reach my financial goals.	551	23.7	983	42.2	791	34.0
4	I try to maximize the returns for my savings.	861	37.0	816	35.1	647	27.8
Cash Management							
5	I spend more than I earned.	387	16.7	745	32.1	1191	51.3
6	I pay my bills late with extra charges.	373	16.1	1009	43.5	940	40.5
7	I work overtime to get extra money.	553	23.8	794	34.2	973	41.9
Credit Management							
8	I make calculations to decide on the lowest loan.	1432	61.6	390	16.8	501	21.6
9	I reach the maximum limit on my credit loan.	1653	71.0	381	16.4	288	12.4
Investment							
10	I set money aside for investment purposes.	1815	78.2	398	17.1	109	4.7
11	I keep a look out for investment opportunities.	1840	79.3	397	17.1	83	3.6
12	I set money aside for savings.	934	40.2	886	38.1	504	21.7

Scale Alpha Cronbach's Value = 0.727

practice scores of different groups is given in Table 3. The table clearly shows that younger males, and those living with others and Malays have higher financial practice scores compared to the other groups. Meanwhile, the data also showed that those with higher education tended to have higher financial practice score as compared to those with primary or no formal education at all.

Meanwhile, the one-way ANOVA test showed that there was a significant difference in the financial practices based on education attainment ($F = 82.258; p = 0.000$). The results indicated that those with higher educational attainment tended to have better financial practices as compared to those with lower levels of education. Independence t-test found a significant difference in the financial practices by gender ($p = 0.000; t =$

5.343), with the male respondents reported to have a higher mean score compared to the female elderly.

Financial Problems

Previous studies have shown that financial problems have negative relationships with financial status and well-being (DeVenay, 1993; Garmen *et al.*, 2004). Table 4 shows the percentage of the respondents who reported experiencing the listed financial problems. A higher percentage of the elderly in this study reported experiencing daily financial problems. This means about one in every four respondents in this study revealed has no emergency fund. In addition, one out of every eight respondents indicated they had borrowed money from others for their living cost

TABLE 3
Result of the Analysis of Variance for Mean Financial Practice Score by Selected Respondents' Background

Selected background		Mean	N	Std. Deviation	F	Sig.
Sex	Male	22.05	1172	3.28	67.13	.000
	Female	20.92	1145	3.37		
Age group	<64	21.82	1316	3.42	28.79	.000
	65>	21.06	1001	3.26		
Living arrangement	Alone	20.87	126	3.38	7.17	.000
	With spouse only	20.98	316	3.46		
	With spouse and children	21.89	995	3.24		
	with children without spouse with others	21.27	765	3.45		
Ethnic group	Malay/ Bumiputera	21.67	1633	3.27	11.63	.000
	Chinese	21.27	522	3.66		
	Indian	20.42	162	3.18		
Education	No formal/lower secondary	21.30	2049	3.31	56.36	.000
	secondary and higher	22.93	268	3.45		

and could not afford to pay bills on time. Meanwhile, 68% of all the respondents reported no daily financial problems and 20% others reported experiencing one out of the three daily financial problems listed. A further analysis revealed that 2.5% of the elderly reported to experiencing all three problems and 10% reported experiencing two out of the three problems listed. The elderly males reported more problems compared to the elderly females. This is in line with the societal expectations for the men as the breadwinners. On the other hand, the “bumiputera” from Sabah and Sarawak, a sub-group of the Malays, reported experiencing more problems compared to the other ethnic groups.

Most of the respondents (97%) reported that they had never experienced any of the credit problems. The data showed that less than one percent of the respondents reported to borrowing money from “along” (Loan shark) (n=20), cheated by pyramid scheme (n=22), bad debts (n=40) and asset repossession (n=11). A total of 76 elderly in this study reported to have serious financial problems, with 67 elderly experiencing one of the four listed problems, five experiencing two and four experiencing all the four listed problems.

The further analysis revealed that young-old group (55-64) experienced more of the financial problems compared to other age group (65 and older). There are two factors which could possibly explain higher financial problems among younger respondents, and these are inter-generational differences in money value and life-styles

and the stages in the life-cycle. Changes in life-styles are generally stronger in younger generations, who are usually better educated and open to institutional innovations in social life (Scannell, 1990). About one fourth of respondents had no emergency fund. One in ten respondents had the experience of being cheated by pyramid scheme and most of them have low level of education. The lack of knowledge regarding market complexity and the Malaysian culture of thrusting people can be the reasons why the elderly are susceptible to market scams. Those who borrowed money from “along” and in bad debt were mostly those with not enough income to sustain their costs of living. Since financial institutions often require collateral and proof of fixed income, the elderly often have to seek help from informal money lenders to meet emergency needs. This is becoming an issue of concern not only with the elderly but also among the younger age groups.

Taking into account all the problems experienced by the elderly, the data revealed that 67% of them in this study have never experienced any of the listed problems, while 33% others have experienced one or more problems. About 61% of the elderly with financial problems had one and 28% had two of the problems listed. There were 85 elderly who reported to have experienced 3 or more problems.

Factors Explaining Financial Practices

The multiple regression analysis was carried out to explore the factors explaining the variation in the financial practices of the

TABLE 4
Financial Problems by Gender, Stratum and Age Group

	Male (n=1178)		Female (n=1149)		Rural (n=1001)		Urban (n=1326)		<60 (n=696)		60> (n=1631)	
	n	%	n	%	n	%	n	%	n	%	n	%
No emergency fund	293	25	254	22	234	23	313	24	176	25	371	23
Borrowed money for living expenses	160	14	126	11	118	12	168	13	94	14	192	12
Cannot pay bill on time	145	12	113	10	105	10	153	12	87	13	171	10
Borrow money from “along” (Loan shark)	15	1	5	-	9	1	11	1	8	1	12	1
Cheated by pyramid scheme	14	1	8	1	6	1	16	1	7	1	15	1
Had bad debt	28	2	12	1	8	1	32	2	13	2	27	2
Asset repossess	7	1	4	-	6	1	5	-	5	1	6	-

elderly. Prior to running the regression analysis, a test of normality was conducted and the 5% Trimmed Mean for the financial practice score was 22.7057, while the mean financial practice score was 22.7515. With such a small difference in these two means, the distribution is considered as normal to enable the researchers to conduct the multiple linear regression analysis. Eight dummy variables and five continuous variables were used in the model and the result is shown in Table 5. The model explains only 20.7% of the variation in the financial practice score; $f= .46.432, p=0.000$. Two of the dummy variables, namely, marital and work status of the respondents, did not enter the model. As for the continuous variables, only age and income entered the model and the literacy scores of other variables, family size and financial problems did not contribute significantly in explaining the variation in the financial practice scores. Table 5 clearly shows that the females’ financial practice scores were significantly

lower as compared to those of the males. There was a negative relationship between age and financial practice score, and this indicated that those who are older tended to perform less of the recommended financial practices compared to younger elderly. This may also explain the reason for the lower level of educational attainment received by the older group compared to the younger groups. The table also shows that there is a negative beta coefficient for educational attainment, reflecting that those with no or primary school tended to have lower financial practice scores compared to those with secondary or higher level of education. The income of the respondents contributed significantly in explaining the financial behaviour of the elderly. The data revealed that those with higher income tended to have higher financial practice score compared to those with lower income.

Looking at the Standardized Beta Coefficient, two variables (region and education) had the highest Standardized

TABLE 5
Regression Analysis Result - Financial Practice Scores

	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
(Constant)	28.081	.904		31.064	.000
Sex (Females)	-.661	.156	-.092	-4.240	.000
Age	-.028	.012	-.044	-2.213	.027
Region (Peninsular)	-3.410	.187	-.386	-18.259	.000
Ethnic (Malays)	.414	.154	.057	2.697	.007
Marital (Married)	-.128	.158	-.017	-.811	.417
Education (Primary)	-1.455	.191	-.158	-7.638	.000
Home Owner	.340	.150	.045	2.276	.023
Work (not working)	-.068	.168	-.008	-.402	.688
Health perception (bad)	-.426	.182	-.045	-2.346	.019
Literacy score	.023	.074	.006	.309	.757
Family size	.016	.033	.009	.492	.623
Respondent's Income	.000	.000	.081	3.922	.000
Financial Problems	.070	.080	.017	.885	.376
R	.455				
R Square	.207				
Adjusted R Square	.203				
Std. Error of the Estimate	3.20642				
F	46.432				
Sig.	.000				

Beta Coefficient. The elderly in Peninsular seemed to be having significantly lower financial practices compared to those in Sabah and Sarawak. The next key variable is education and the results revealed that those with secondary education level tended to have higher financial practice score as compared to those with primary or no formal education at all.

CONCLUSION

Despite the fact that the majority of the respondents reporting moderate to good

financial practices, the data have shown that they are not managing their financial resources effectively, and this it leads to certain financial problems. It was found that one fourth of the respondents have at least one financial problem during the study period. The regression analysis revealed that the model only explains less than one fourth of the variations in the financial practice. Nevertheless, the results have provided some insights into a better understanding of the factors associated with financial behaviour among the elderly. The

respondents' gender, age, education, where they live, ethnicity and income significantly explained the variation in the financial practice scores. As such efforts to provide financial education must be targeted to ensure effective delivery of the educational programmes, financial education for older persons should focus more on addressing their immediate needs and a small group approach should also be used to ensure the effectiveness of the said programmes.

The findings of this research are useful to financial educators, counsellors, and planners. The results can be used to give direction in designing educational programmes as well as in individual counselling or planning sessions. An important caveat, however, is that the implications of this research are for the elderly families in the late stages of their family life cycle. Since the elderly financial practices can also be assumed to be continuation of financial behaviour during younger days, the behaviour portrayed in the study is also a reflection of the behaviour during younger age. As such, financial education should also be targeted to younger persons so as to prepare them for the old age.

This study revealed that the majority of the older respondents did not have enough money in their later life. Without sufficient savings accumulated for use in old age, many will find they do not have enough money to cover needs in old age. This highlights the need for people to start accumulating their financial resources early. In particular, people should accumulate wealth over their working lives to finance consumption after retirement; this means, the earlier they start

to save the larger accumulation of financial resources, it will lead to a positive net worth in their later life. This research has provided crucial information on the financial practices of older persons but much more research is still needed to better understand the dynamic of financial practices among the elderly as well as the young since financial practices during younger years will determine the financial situations in their old age.

REFERENCES

- Alecxih, L., & Kennel, D. (1994). *The Economic Impact of Long-Term Care on Individuals*. Retrieved October from <http://aspe.os.dhhs.gov/daltcp/reports/ecoimpes.htm>.
- Anderson, S. G., Zhan, M., & Scott, J. (2004). Targeting financial management training at low-income audiences. *Journal of Consumer Affairs*, 38(1), 167–177.
- Barrientos, A., Gorma, M., & Heslop, A. (2003). Old age poverty in developing countries: Contributions and dependence in later life. *World Development*, 31, 555-570.
- Beutler, S., & Mason, M. (1987). Family cash flow budgeting. *Home Economics Research Journal*, 16, 3-12.
- Burgess, K. (2003, August 30). FSA to Tackle Financial Literacy, *FT Money*, 26.
- Caraher, K. (2003). Malaysia: Approaches to Income Security in Old Age. *Social Policy and Society*, 2, 295-304
- Chang-Ming, H. (2001). Correlates of financial satisfaction. *International Journal Aging and Human Development*, 52(2), 135–153.
- Chou, K-L. (2010). Number of children and upstream intergenerational financial transfers: evidence from Hong Kong. *Journal of Gerontology: Social Sciences*, 65B(2), 227–235.

- Chou, K.-L., Chow, N. W. S., & Chi, I. (2006). Economic status of the elderly in Hong Kong: Homogeneous or heterogeneous? *International Social Work, 49*(2), 218–232.
- Conger, R. D., Elder, G. H., Lorenz, F. O., Conger, K. J., Simons, R. L., Whitbeck, L. B., Huck, S., & Melby, J. N. (1990). Linking economic hardship to marital quality and instability. *Journal of Marriage and the Family, 52*, 643-656.
- Davis, E. P., & Weber, J. A. (1990). Patterns and obstacles to financial management. *Financial Counseling and Planning, 1*, 42-51.
- Department of Statistics Malaysia. (2008). *Vital Statistics Malaysia 2007*. DOSM: Putrajaya.
- Department of Statistics Malaysia. (2001). *Vital Statistics Time Series, Malaysia, 1963 – 1998*. DOSM: Putrajaya.
- Department of Statistics Malaysia. (2007). *Malaysia Economic Statistics - Time Series*. DOSM: Putrajaya.
- Department of Statistics Malaysia. (2010). *Labor Force Survey Report 2009*. DOSM: Putrajaya.
- Department of Statistics Malaysia. (2003). *Labor Force Survey Report 2002*. DOSM: Putrajaya.
- Department of Statistics Malaysia. (2001). *Labor Force Survey Report 2000*. DOSM: Putrajaya.
- Department of Statistics Malaysia. (2010). *Social Statistics Bulletin 2009*. DOSM: Putrajaya.
- Department of Welfare. (2010). Current Policies Implemented in Relation to The Aging Society in Malaysia. Panel discussion. *Seminar Challenges Faced by the Aging Society in Malaysia: the Legal Perspective*, Putrajaya. 26th October.
- DeVaney, S. A. (1993). Change in household financial ratios between 1983 and 1986: Were American households improving their financial status? *Financial Counseling and Planning, 4*, 31-46.
- DeVaney, S. A. (2008). Financial Issues of Older Adults. In J.J. Xiao (Ed.), *Handbook of Consumer Finance Research*. Springer.
- Economic Planning Unit. (2002). *Malaysian Quality of Life, 2001*. Kuala Lumpur: Prime Minister Department, Kuala Lumpur, Malaysia.
- Fitzsimmons, V. S., Hira, T. K., Bauer, J. W., & Hafstrom, J. L. (1993). Financial management: Development of scales. *Journal of Family and Economic Issues, 14*(3), 257-274.
- Garman, T. E., & Fogue, R. E. (2004). *Personal finance*. New York: Houghton Mifflin Company.
- Government of Malaysia. (2010). *Tenth Malaysian Plan*. Kuala Lumpur: Government Printing.
- Grable, J. E., Park, J.-Y., & Joo, S.-H. (2009). Explaining Financial Management Behavior for Koreans Living in the United States. *Journal of Consumer Affairs, 43*(1), 80-107.
- Grace, H. S., & Hauptert, J. E. (2003). Financial Literacy. *CPA Journal*, June, 8
- HelpAge International. (1999). *Ageing and Development Newsletter 3*: May.
- Hilgert, M. A., & Hogarth, J. M. (2003, July). Household Financial Management: The Connection between Knowledge and Behavior. *Federal Reserve Bulletin*, 319-322.
- Hsieh, C. M. (2001). Correlates of financial satisfaction. *International Journal of Aging and Human Development, 52*, 135-153.
- Jackson, B. (2003). ABA Immigrant – Market Tips. *American Banker, 168*(89), 1-2.
- Joo, S. (1998). *Personal financial wellness and worker productivity* (Unpublished doctoral dissertation). Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Joo, S., & Grable, J. E. (2004). An Exploratory Framework of the Determinants of Financial Satisfaction. *Journal of Family and Economic Issues, 25*(1), Spring.

- Kalyani, M. (1999). Older workers and retirement issues. Singaporeans' Perceptions and Preparations for Retirement: A Cross-cultural Inquiry. *Ageing International*, Winter, 31-46.
- Kapoor, J. R., Dlabay, L. R., & Hughes, R. J. (2004). *Personal Finance (7th ed.)*. New York: McGraw Hill.
- Kim, J., Bagwell, D. C., & Garman, E. T. (1998). Evaluation of workplace personal financial education, *Personal Finances and Worker Productivity*, 2(1), 187-192.
- Kim, J. K. (2003). Home-Schooling Helps Students Manage their Money in College. *The Wall Street Journal*, 20 August p. 1
- Kumar, S. V. (2003). Economic Security for the Elderly in India. *Journal of Aging and Social Policy*, 15(2), 45-65.
- Lamb, E. C. (2002). The Financial Literacy Boom. *Community Banker*, 11(5), 26-31.
- Lee, W. K. M. (1999). Economic and Social Implications of Aging in Singapore. *Journal of Aging and Social Policy*, 10(4), 73- 92.
- Lusardi, A., & Mitchell, O. S. (2006). Financial Literacy and Planning: Implications for Retirement Wellbeing. *MRRC Working Paper*, 2006-144.
- Lusardi, A., & Mitchell, O. S. (2007a). Baby Boomer Retirement Security: The Role of Planning, Financial Literacy, and Housing Wealth. *Journal of Monetary Economics*, 54, 205-224.
- Lusardi, A., & Mitchell, O. S. (2007b, January). Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education. *Business Economics*, p. 35-44.
- Masud, J., & Sharifah A. Haron. (2008). Income differences among elderly in Malaysia: a regional comparison. *International Journal of Consumer Studies*, 32, 335–340.
- Miller, M., Godfrey, N., Levesque, B., & Stark, E. (2009). *The Case for Financial Literacy in Developing Countries. Promoting Access to Finance by Empowering Consumers*. The International Bank for Reconstruction and Development/ The World Bank.
- Modigliani, F. (1988). The role of intergenerational transfers and life cycle saving in the accumulation of wealth. *Journal of Economic Perspectives*, 15-40.
- Noone, J. H., Stephens, C., & Alpass, F. M. (2009) Pre-retirement Planning and Well-Being in Later Life: A Prospective Study. *Research on Aging* Volume, 31(3), 295-317. Sage Publications.
- Perry, V. G., & Morris, M. D. (2005). Who Is in Control? The Role of Self-Perception, Knowledge, and Income in Explaining Consumer Financial Behavior. *The Journal of Consumer Affairs*, 39(2), 299–313.
- Peirce C., & Hanna, S. (1996). Financial stress, social support, and alcohol involvement: A longitudinal test of the buffering hypothesis in a general population survey. *Health Psychology*, 15, 38-47.
- Porter, N. M., & Garman, E. T. (1993). Testing a conceptual model of financial wellbeing. *Financial Counseling and Planning*, 4, 135-165.
- Scannell, E. (1990). Dairy farm families' financial management. *Financial Counseling and Planning*, 1, 133-146.
- Sharifah Azizah Haron, Deanna L. Sharpe, Jariah Masud, & Mohamed Abdel-Ghany. (2010). Health Divide: Economic and Demographic Factors Associated with Self-Reported Health Among Older Malaysians. *Journal of Family and Economic Issues*, 31(3), 328-337.
- Smith, B., & Stewart, F. (2008). Learning from the Experience of OECD Countries: Lessons for Policy, Programs and Evaluations. In Lusardi, A. (Ed.), *Overcoming the Saving Slump: How*

- to Increase the Effectiveness of Financial Education and Saving Programs* (pp. 345 – 367). University of Chicago Press.
- Sporakowski, M. J. (1979). *Financial problems as stress and crisis. Financial Counseling Project*. Blacksburg, Virginia: Polytechnic Institute and State University.
- Suwanrada, W. (2009). Poverty and Financial Security of the Elderly in Thailand. *Ageing International*, 33, 50–61.
- Tossaint-Comeau, M. (2003). Changing Hispanic Demographics: Opportunities and Constraints in the Financial Market, *Chicago Fed Letters*.
- UNDP. (2005). *Malaysia Achieving the Millenium Development Goals: Successes and Challenges*. Kuala Lumpur.
- United Nations. (2002). *Report of the Second World Assembly on Ageing*, Madrid, 8-12 April 2002.
- University Malaya. (2003). *Kajian keberkesanan Skim Persaraan Kumpulan Simpanan Pekerja (KWSP) Terhadap Pesara*. Unpublished Report.
- Weber, J. A., & Davis, E. P. (1986). Patterns and obstacles to financial management. *Financial Counseling and Planning*, 1, 42-51.
- Weber, E. U., & Christopher, H. (1998). Cross-Cultural Differences in Risk Perception, but Cross Cultural Similarities in Attitudes towards Perceived Risk. *Management Science*, 44(9), 1205–1217.
- Woo, J., Ng, S. H., Chong, A. M. L., Kwan, A. Y. H., Lai, S., & Sham, A. (2008) Contribution of Lifestyle to Positive Ageing. *Ageing International*, 32, 269–278.

