The Relationship of Life Insurance Ownership with Demographic and Psychographic Factors: A Preliminary Study in Alor Setar, Kedah

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ABSTRACT

The life insurance market in Malaysia still remains widely untapped as compared to other countries that have much higher market penetration rates. Therefore this study aims to examine the relationship of life insurance ownership with demographic and psychographic factors, and to identify which of them have a more important relationship with life insurance ownership. A preliminary field work has been carried out in early February to mid-March 2015 using a non-probability convenience sampling technique around Alor Setar, Kedah in Malaysia. A total of 108 respondents participated in this study. Binary logistic regression has been used for data analysis. The major findings show that demographic factors can better explain life insurance ownership among the respondents in Alor Setar relative to psychographic factors. Two demographic factors, namely ethnicity and income, are found to be the predominant factors of life insurance ownership. Life insurance policyholders in Alor Setar tend to be Chinese and those at higher income level. Meanwhile, the psychographic factor of risk attitudes only has a weak negative relationship with life insurance ownership. Risk attitudes are only found to have a significant relationship with life insurance ownership when demographic factors are excluded. Non-policyholders in Alor Setar tend to be individuals who are very likely to engage in risky behaviours or activities. They are risk takers, unlike risk adverse individuals who are more likely to own life insurance for assured protection against personal risks of premature death.

Keywords: Binary logistic regression, ethnicity, demographic factor, income, life insurance, psychographic factor, risk attitude.

1. INTRODUCTION

In an uncertain world with the constant increase of living costs, life insurance has become more important in providing both savings and protection to the policyholders and their beneficiaries. Life insurance plays a vital role in alleviating unforeseen financial stress due to adverse events (e.g. the premature death of primary wage earner). However, the ownership of life insurance in

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Malaysia is not as favourable as other countries such as Japan, Hong Kong, South Korea and Singapore.

The combined market penetration rate for conventional and Islamic life insurance was at 54.4% in 2014. It is still far below the target rate of 75% by 2020 as outlined in Economic Transformation Programme (ETP) (Performance Management and Delivery Unit, 2013). Therefore, the life insurance market (for both conventional and Islamic life insurance) of Malaysia still remains widely untapped as compared to other countries which have much higher market penetration rates such as Japan at 119.5% (Life Insurance Association of Japan, 2015), Hong Kong at 149.3% (Office of Commissioner of Insurance, 2015), South Korea at 165.6% (Korea Life Insurance Association, 2014) and Singapore at 239.6% (Monetary Authority of Singapore, 2014). As such, it is important to conducted studies in order to examine the key determinants of life insurance ownership and to identify the reasons that hinder Malaysians from owning life insurance. In response to the former, this study has been conducted in Alor Setar as a preliminary field work (before a further study is conducted in the northern regions covering other areas in Kedah, Perlis, Penang and Perak) to examine the relationship of life insurance ownership with demographic and psychographic factors, and to identify which of them have a more important relationship with life insurance ownership. By doing so, necessary actions can be taken to increase life insurance market penetration rate by encouraging individuals fitted with the demographic and psychographic characteristics identified in this study, who have not owned life insurance yet, to purchase life insurance.

This paper is structured as follows: Section-2 reviews related past studies which have examined the relationship of life insurance ownership with demographic and/or psychographic factors, Section-3 outlines the objectives of this study, Section-4 describes the research methodology, Section-5 presents and discusses the results and Section-6 concludes the findings of this study.

2. LITERATURE REVIEW

This section provides a brief review of past studies that have examined the relationship of life insurance ownership with demographic (i.e. age, gender, marital status, education, number of dependents, ethnicity and income) and/or psychographic (i.e. personal values, risk attitudes and trusts) factors. The authors have come across only one study conducted by Burnett and Palmer (1984) that have compared the relative importance of demographic and psychographic factors with life insurance ownership among household heads in U.S. Their major findings show that (based on Beta scores) psychographic factors (i.e. work ethic, fatalism, socialization preference, religion salience and assertiveness) are relatively more important than demographic factors (i.e. education, number of

children, income, gender, age and marital status) in explaining life insurance ownership among household heads in U.S.

2.1 Demographic Factors

Gutter and Hatcher (2008) have conducted a study on life insurance ownership among American households using data from the Survey of Consumer Finance for the year 2004. Their findings show that the probability of owning life insurance rises with an increase in total household earning and the age of household heads. The household heads that have completed high school education tend to own life insurance relative to those who did not complete high school education. Likewise, a study by Ćurak, Džaja and Pepur (2013) also indicate that education has a positive and significant relationship with life insurance ownership where approximately 94% of the respondents with a university degree owned life insurance.

Outside of U.S., Ćurak, Džaja and Pepur (2013) have conducted a study to examine life insurance ownership in the Republic of Croatia. Their data was obtained from the survey distributed to the residents of Croatia. Their findings show that age has a significant relationship with life insurance ownership. Most policyholders are found to be in the age groups of 31-43 years old (69%) and 44-56 years old (72%). Almost half (about 47%) of the respondents in the age group of 57-69 years old owned life insurance but only 20% of the respondents in the age group of 70 years old and above owned life insurance. Other demographic factors (i.e. gender, marital status and number of dependents) examined in their study are found to have no significant relationship with life insurance ownership.

Besides that, according to Gutter and Hatcher (2008), household size and the presence of a child are not significant factors of life insurance ownership. Gutter and Hatcher (2008) has also reported that there is a (minor) difference in life insurance ownership between African-Americans and White citizens however ethnicity also found to be not a significant factor of life insurance ownership.

There are a few past studies conducted to investigate the life insurance ownership in Malaysia. Tan, Wong and Law (2009) have examined life insurance ownership by randomly distributing structured questionnaires to individuals throughout Malaysia. Their findings show that yearly household income and age have a positive and significant relationship with life insurance ownership. However, their finding unexpectedly contradicts with the finding from Gutter and Hatcher (2008) in which they found that number of children has a negative and significant relationship with life insurance ownership. The finding on number of children is not in line with expected utility theory which states that individuals with higher bequest intensity (proxied by number of dependents) are more likely to own life insurance. They explained that the unexpected finding might be due to the Malaysians' cultural belief that their children would fulfil their filial duties to

take care of their parents. Hence, the urge to own life insurance is lower when the individuals have many children. However, their findings show that marital status, education and gender are not significant factors.

Loke and Goh (2012) have examined life insurance ownership in Penang. Data was collected by randomly distributing self-administered questionnaires to individuals in shopping mall, commercial areas and offices from mid-March to mid-April 2011. Their findings show that income has a positive and significant relationship with life insurance ownership. Individuals in high income group (> RM6,000) are greater than six times more likely to own life insurance as compared to those in low-middle income group (RM2,000−RM4,000). Individuals aged 20−29 years old are less likely to own life insurance relative to those aged 30−39 years old. Meanwhile, single individuals are less likely to own life insurance relative to married individuals. They have found that Chinese and Indian individuals are more likely to own life insurance as compared to Malay individuals. However, their findings show that number of dependents and gender does not have a significant relationship with life insurance ownership. Unexpectedly, individuals with tertiary education are found to be less likely to own life insurance. Loke and Goh (2012) have explained that it might be due to more highly educated individuals are more attracted to other wealth management and creation products instead of life insurance.

In a different study, Annamalah (2013) has conducted a study to examine life insurance ownership among married couples in Malaysia by distributing self-administered questionnaires to household heads of families from 2012 to 2013. The main findings of the study show that income and education have a positive and significant relationship with life insurance ownership. However, age, ethnicity and number of children are found to be not significant factors.

Based on the review of past studies, the following remarks can be drawn:

a) age (Gutter and Hatcher, 2008; Tan, Wong and Law, 2009), education (Gutter and Hatcher, 2008; Annamalah, 2013; Ćurak, Džaja and Pepur, 2013) and income (Gutter and Hatcher, 2008; Tan, Wong and Law, 2009; Loke and Goh, 2012; Annamalah, 2013) are found to have a positive and significant relationship with life insurance ownership;

b) gender (Tan, Wong and Law, 2009; Loke and Goh, 2012; Ćurak, Džaja and Pepur, 2013) and number of dependents (Gutter and Hatcher, 2008; Loke and Goh, 2012; Annamalah, 2013; Ćurak, Džaja and Pepur, 2013) are found to have no significant relationship with life insurance ownership; and

c) the findings on marital status (Loke and Goh, 2012; Tan, Wong and Law, 2009 and Ćurak, Džaja and Pepur, 2013) and ethnicity (Gutter and Hatcher, 2008; Loke and Goh, 2012; Annamalah, 2013) are mixed and inconclusive.

2.2 Personal Values − Individualistic Value, Collectivistic Value and Mixed Value

Ferber and Lee (1980) have examined life insurance ownership by couples in their early married life by conducting 13 rounds of interviews with 149 couples in two cities of Illinois (i.e. Decatur and Peoria) between the autumn of 1968 and the autumn of 1976. Their findings show that the likelihood of the couples to own life insurance increases when the husbands are optimistic (a dimension of individualistic value). Ferber and Lee (1980) explain that individuals who are optimistic would plan for their future and they tend to own life insurance. By doing so, they are able to secure their financial position and to protect their family members against financial hardships in time of unforeseen events (e.g. premature death) by preparing financial support for surviving family members.

Burnett and Palmer (1984) have conducted a study in U.S. to examine the relationship between the psychographic characteristics of household heads and life insurance ownership (proxied by the amount of life insurance purchased). Their data was obtained from a middle-sized south-western city consumer panel. Their findings show that household heads who owned greater than average amount of life insurance are self-sufficient, do not believe in fate but believe that they are in control of their own welfare, and have a relatively lower interest in religion. Besides that, household heads that have exceptionally low reliance on government support are those who owned significantly larger amount of life insurance. These findings indicate that the tendency to own life insurance is higher among individuals with high individualistic value because life insurance can serve as a method to reduce risks in order to be self-reliance. In addition, their findings also show that household heads that considers the involvement in community activities is important (a dimension of mixed value) tend to own a larger amount of life insurance. This finding shows that individuals with mixed value are more likely to own life insurance to provide protection against financial difficulties which might fall upon their beneficiaries, and to minimize the government's financial burden in providing for old age and the unexpected death of breadwinner.

Omar (2007) has conducted a study to examine consumers' attitudes towards life insurance ownership and their intentions to own life insurance through the distribution of questionnaire in Abuja, the federal capital of Nigeria. The major findings of the study show that Nigerians are less likely to own life insurance. This is because Nigerian society exhibits high fatalism orientation (believing in fate and submitting to destiny) and Nigerian often depends on family members or their relatives for help during emergencies. Nigerian are individuals with high collectivistic value, so they are less likely to own life insurance. They have high commitment to care for the interests of their in-group members (e.g. extended family, tribe or village) by protecting each other when they are in trouble. As

such life insurance is not necessarily needed as the risks are expected to pool among their in-group members.

According to the cross-countries studies by Chui and Kwok (2008) and Park and Lemaire (2011), national cultures are found to have a significant relationship with life insurance ownership. Chui and Kwok (2008) have examined the relationship of life insurance ownership (measured by premium per capita) with cultural differences across 41 countries from 1979 to 2001. Their findings show that countries with greater amount of life insurance are more feminine (a dimension of mixed value) and the individuals in these countries exhibit high individualistic value. Meanwhile, countries with strong uncertainty avoidance (a dimension of mixed value) are found to own a slightly higher amount of life insurance.

The study of Chui and Kwok (2008) is extended by Park and Lemaire (2011). Park and Lemaire (2011) have examined life insurance ownership (measured by premium to Gross Domestic Product (GDP)) of 27 countries from 2000 to 2008. Their findings show that individualistic value has a weak positive relationship with life insurance ownership. On the other hand, countries with strong uncertainty avoidance and high femininity index (which reflects the country has a majority of individuals with mixed value) are found to own a greater amount of life insurance. Individuals with mixed value are concerned about both self-interest and the well-being of others. They emphasize on quality of life and at the same time they are anxious about uncertainties. As a result, they seek protection against uncertainties in life in order to live in a more predictable environment. Thus, the individuals with mixed value tend to own life insurance to care for their own welfare and the needs of their dependents as well as society.

Based on the review of past studies, personal values are found to have a significant relationship with life insurance ownership. Individuals with high individualistic value are more likely to own life insurance (Ferber and Lee, 1980; Burnett and Palmer, 1984). Individuals with high collectivistic value are less likely to own life insurance (Omar, 2007). Individuals with mixed value are more likely to own life insurance (Burnett and Palmer, 1984; Chui and Kwok, 2008; Park and Lemaire, 2011).

2.3 Risk Attitudes

The findings of past studies have shown that the relationship between risk attitudes and life insurance ownership is mixed. By using data from the Survey of Consumer Finance for the year 2001, Baek and DeVaney (2005) have examined the risk attitudes of household heads who owned term or cash-value life insurance (i.e. policyholders) and who have no life insurance (i.e. non-policyholders). Their findings are not in line with expectation that risk averse individuals are more likely to own life insurance for assured protection against

unforeseen events such as premature death. Their findings show that household heads who are above-average financial risk takers are more likely to own term life insurance, while household heads who are not financial risk takers are less likely to own cash-value life insurance. Meanwhile, the findings of Gutter and Hatcher (2008) on risk attitudes and life insurance ownership among American households using data from the Survey of Consumer Finance for the year 2004 are in line with expectation that risk averse individuals are more likely to own life insurance. Household heads that are not willing to take investment risk (i.e. highly risk averse individuals) are found to be more likely to own life insurance as compared to those who are willing to take moderate level of investment risk (i.e. average risk averse individuals).

On the other hand, Loke and Goh (2012) have examined life insurance ownership in Penang and reported unexpected findings on risk attitudes that risk averse individuals are found to be less likely to own life insurance. Meanwhile, the study of Annamalah (2013) who has examined life insurance ownership among married couples in Malaysia has found risk attitudes is not a significant factors of life insurance ownership.

2.4 Trusts

Trusts are found to have a positive and significant relationship with life insurance ownership in most past studies. Omar's (2007) study the life insurance ownership among Nigerians and he found that the main reason Nigerians do not own life insurance is caused by their lack of trusts and confidence in life insurance companies. Similar results have also been reported by an exploratory study conducted by Wan Aris, Sahak and Shaadan (2009) that examine the views (perceptions) of Malay individuals residing in Shah Alam towards Takaful operators in Malaysia. Their findings show that the major reasons for not owning family Takaful among Malay individuals are their dissatisfaction with the services provided by Takaful agents and the lack of confidence in Takaful operators.

Siddiqui and Sharma (2010) have examined the consumers' perceived service quality of life insurance agents in India via shopping mall intercept in the cities of Lucknow, Delhi, Mumbai, Bangalore and Kolkata from December 2008 to May 2009. Analytic Hierarchy Process (AHP) was employed in their study to rank the relative importance of six service quality dimensions of life insurance agents. Their findings show that assurance is perceived to be the most crucial dimension followed by others in descending order of importance: competence, personalized financial planning, corporate image, tangibles (the provision of physical facilities and communication materials) and technology. Siddiqui and Sharma (2010) concluded that Indian consumers have high expectation on life insurance agents. They expect life insurance agents to be trustworthy and able to

make consumers feel assured that they have chosen the right product which meets their needs.

A field survey has been administrated by Angko (2013) in 2011 to examine the policyholders' satisfaction with the life insurance they have purchased and the services provided by agents from four life insurance companies (i.e. SIC Life, Vanguard Life, Star-Life and Capital Express Life) in Ghana. Angko (2013) reported that 70% to 90% of the policyholders agreed that their agents: (i) are knowledgeable, (ii) are able to explain life insurance products extremely well, (iii) have sold the right life insurance that is in the best interest of their needs, (iv) have provided services they are satisfied with, and (iv) have managed to gain their trusts. However, the overall findings of the study do not indicate whether or not the policyholders are satisfied with their life insurance and the agents' services.

Leary, Kane and Woods (2014) have conducted a study to examine the possible causes of a decline in life insurance ownership among American households with data provided by Life Insurance and Market Research Association (LIMRA) for years 2010, 2012 and 2013. Their findings show that prospective buyers desire a trusted advisor who is knowledgeable, able to provide appropriate financial advice and care for their welfare. The main reason prospective buyers are hesitant to purchase (own) life insurance is due to the lack of trusted professional.

3. RESEARCH OBJECTIVES

This study aims to examine the relationship of life insurance ownership with demographic and psychographic factors. Specifically, this study is to examine whether:

1) psychographic factors can better explain life insurance ownership than demographic factors;
2) demographic factors, namely age (positive), gender, marital status, education (positive), number of dependents, ethnicity and income (positive), have a significant relationship with life insurance ownership; and
3) psychographic factors, namely individualistic value (positive), collectivistic value (negative), mixed value (positive), risk attitudes and trusts (positive), have a significant relationship with life insurance ownership.

4. RESEARCH METHODOLOGY

4.1 Data Collection

The survey was conducted from early February to mid-March 2015 in Alor Setar, Kedah. As a preliminary study, non-probability convenience sampling method was employed to approach the respondents at their work places and residences. Subsequent, the study will employ probabilistic sampling. A total of 200 sets of structured questionnaire have been distributed. However, only 108 cases were available for further analysis after filtering out incomplete questionnaires and outliers.

4.2 Questionnaire Design

There are four parts in the questionnaire to gather data about the respondents' personal values, risk attitudes and levels of trust in life insurance agents (i.e. psychographic factors), information on the respondents' life insurance ownership and their demographic characteristics (i.e. age, gender, marital status, education, number of dependents, ethnicity and income).

The first part of the questionnaire examines the respondents' personal values. This study used the shorter version of Portrait Values Questionnaire (PVQ) employed by Schwartz (2003) in European Social Survey (ESS) that examine individuals' personal values in six countries (i.e. Finland, Israel, Poland, Slovenia, Sweden and U.K.). In PVQ, personal values are measured in the following three dimensions: individualistic value (10 items), collectivistic value (6 items) and mixed value (5 items). The respondents are asked how similar each description as compared to their opinions or behaviours based on a five-point interval scale of '(1) – not like me at all' to '(5) – very much like me'.

The second part of the questionnaire examines the respondents' risk attitudes. This study employed the instruments developed by Blais and Weber (2006) and Butler *et al*. (2012). The former instrument is the shorter version of Domain Specific Risk Taking (DOSPERT) scale that contains three domains, namely financial, safety and recreational. It has been used by Blais and Weber (2006) in their study to examine the risk attitudes of English- and French- speaking North Americans. The latter instrument contains four domains, namely financial, safety, recreational and medical. It has been used in the studies of Rosman *et al*. (2013) and Schwartz *et al*. (2013) to examine the risk attitudes of U.S. and Japanese citizens respectively. There are a total of 23 items in the four domains: financial (6 items), safety (6 items), recreational (5 items) and medical (s6 items). The respondents are asked how likely they would engage in each activity or behaviour if they were found to be in that situation based on a five-point interval scale of '(1) – very unlikely' to '(5) – very likely'.

The third part of the questionnaire examines the respondents' levels of trust in life insurance agents. This study adapted the instrument developed by Mcknight, Choudhury and Kacmar (2002) which was used by them to examine the consumers' trust levels in electronic commerce vendors they have no prior experience with. The instrument has 11 items. The respondents are asked to what extent they would agree with each description of the behaviours of life insurance agents as compared to their beliefs based on a five-point interval scale ranging from '(1) – strongly disagree' to '(5) – strongly agree'.

The fourth part of the questionnaire collects information about life insurance ownership which requires the respondents to indicate whether they owned life insurance or not. This part also gathers the respondents' demographic background. The respondents are required to indicate their (i) gender − either male or female, (ii) ethnicity − either Malay, Chinese or Indian, (iii) marital status − either married or unmarried, (iv) education level − either have completed secondary school, have a bachelor's degree, have a master's degree, or have acquired other academic qualifications (e.g. diploma, matriculation or other private certification) and (v) monthly income − either low income ($\leq$ RM2,000), low-middle income (RM2,001−RM4,000), high-middle income (RM4,001−RM6,000) or high income (> RM6,000). For age and number of dependents, the respondents are requested to state their age and number of persons in the family who depend on their financial support respectively.

4.3 Methods of Analysis

This study adopted and adapted instruments developed by others to measure psychographic factors, so the items in personal values, risk attitudes and trusts are being assessed for their reliability (based on corrected item-total correlation and Cronbach's alpha values) and interrelatedness (by performing factor analysis). After going through the rigorous processes, the 55 items of psychographic factors have been reduced to 32 items: individualistic value (from 10 to 6 items), collectivistic value (from 6 to 4 items), mixed value (5 items – no deletion), risk attitudes (from 23 to 9 items) and trusts (from 11 to 8 items). The detailed results of reliability tests and factor analysis are not presented here due to page limit constraint.

Lastly, binary logistic regression analysis is employed to examine the relationship of life insurance ownership with demographic (i.e. age, gender, marital status, education, number of dependents, ethnicity and income) and psychographic (i.e. personal values, risk attitudes and trusts) factors. In order to confirm that the estimated model is free from collinearity problem, multicollinearity diagnostic test is performed to ensure that no tolerance values are less than 0.10 or no Variance Inflation Factor (VIF) values are above 10 (Pallant, 2013). Then, Omnibus Tests of Model Coefficients and Hosmer and Lemeshow Test are used to examine the overall goodness of fit of the estimated

binary logistic regression model. The model is considered as a good fit model when the Omnibus Tests of Model Coefficients is significant while Hosmer and Lemeshow Test is not significant (Pallant, 2013). On the other hand, the Cox & Snell and Nagelkerke R-squared values are used to examine how much variance in life insurance ownership could be explained by demographic and psychographic factors.

5. RESEARCH FINDINGS

5.1 Demographic Characteristics of the Respondents

A total of 108 respondents participated in this study. There are slightly more male respondents (50.9%) as compared to female respondents (49.1%). Married respondents (63.9%) are more than unmarried respondents (36.1%). About 58.3% of the respondents have completed secondary school, 30.6% have a bachelor's degree, 7.4% have a master's degree and 3.7% have acquired other academic qualifications. Majority of the respondents are Chinese (52.8%), followed by Malay (38.9%) and Indian (8.3%). Approximately 31.5% of the respondents have low monthly income, 40.8% have low-middle monthly income, 15.7% have high-middle monthly income and 12.0% have high monthly income. More than half of the respondents (59.3%) have reported that they owned life insurance, while 40.7% do not own any life insurance. The respondents' age ranges from 18 to 64 years old. Meanwhile, number of family members who depend on the respondents' financial support ranged from none to eight persons.

5.2 The Relationship of Life Insurance Ownership with Demographic and Psychographic Factors

The results for the estimated model of life insurance ownership with demographic and psychographic factors combined are presented in Table 1. Further analysis has been conducted to examine the relationship of life insurance ownership with demographic and psychographic factors separately. Table 2 and Table 3 present the results for the estimated models of life insurance ownership with demographic factors only and psychographic factors only respectively.

The estimated models are free from collinearity problem. They are good fit models as they have significant Omnibus Tests of Model Coefficients and insignificant Hosmer and Lemeshow Test.

Table 1: Estimated Model showing the Relationship of Life Insurance Ownership with Demographic and Psychographic Factors and its Goodness of Fit (n=108)

A. Estimated Model

Variable	B		S.E.	Wald	Exp(B)	95% C.I. for Exp(B) Lower	Upper
Female	0.398		0.816	0.238	1.488	0.301	7.360
Age	0.096		0.055	3.049	1.101	0.988	1.226
Married	-0.728		1.275	0.326	0.483	0.040	5.875
Bachelor's degree	0.932		1.002	0.864	2.539	0.356	18.111
Master's degree	0.101		1.201	0.007	1.107	0.105	11.659
Other academic qualifications	-1.536		2.773	0.307	0.215	0.001	49.329
Number of dependents	0.101		0.253	0.160	1.106	0.674	1.815
Chinese	3.676	**	0.976	14.203	39.502	5.838	267.278
Indian	1.564		1.337	1.367	4.777	0.347	65.691
Low-middle income	2.732	**	1.020	7.172	15.364	2.080	113.473
High-middle income	4.701	**	1.738	7.321	110.092	3.654	3316.992
High income	0.339		1.661	0.042	1.403	0.054	36.383
Individualistic value	-0.092		0.689	0.018	0.912	0.236	3.523
Collectivistic value	0.715		0.921	0.603	2.045	0.336	12.429
Mixed value	-0.057		0.800	0.005	0.945	0.197	4.532
Risk attitudes	-0.006		0.594	0.000	0.995	0.311	3.184
Trusts	-0.545		0.709	0.591	0.580	0.145	2.326
Constant	-7.175		5.430	1.746	0.001		

Note: ** indicates significant at 1% level

B. Goodness of Fit of Estimated Model

Omnibus Tests of Model Coefficients, Chi-square (df = 17, p-value = 0.000)	82.109
Hosmer and Lemeshow Test, Chi-square (df = 8, p-value = 0.797)	4.619
Cox & Snell R-Squared	0.532
Nagelkerke R-Squared	0.718
Overall Correct Percentage	85.2%

Table 2: Estimated Model showing the Relationship of Life Insurance Ownership with Demographic Factors and its Goodness of Fit (n=108)

A. Estimated Model

Variable	B		S.E.	Wald	Exp(B)	95% C.I. for Exp(B) Lower	Upper
Female	0.344		0.680	0.256	1.410	0.372	5.345
Age	0.105		0.054	3.733	1.110	0.998	1.235
Married	-1.348		1.190	1.283	0.260	0.025	2.677
Bachelor's degree	0.635		0.829	0.587	1.888	0.372	9.582
Master's degree	0.119		1.126	0.011	1.126	0.124	10.223
Other academic qualifications	-1.228		3.125	0.154	0.293	0.001	133.751
Number of dependents	0.246		0.217	1.294	1.279	0.837	1.956
Chinese	3.611	**	0.915	15.589	37.019	6.164	222.328
Indian	0.910		1.102	0.682	2.484	0.287	21.517
Low-middle income	2.961	**	1.013	8.550	19.318	2.655	140.583
High-middle income	4.668	**	1.609	8.418	106.510	4.548	2494.339
High income	0.891		1.480	0.362	2.437	0.134	44.291
Constant	-7.160		1.930	13.757	0.001		

Note: ** indicates significant at 1% level

B. Goodness of Fit of Estimated Model

Omnibus Tests of Model Coefficients, Chi-square (df = 12, p-value = 0.000)	80.393
Hosmer and Lemeshow Test, Chi-square (df = 8, p-value = 0.981)	1.994
Cox & Snell R-Squared	0.525
Nagelkerke R-Squared	0.708
Overall Correct Percentage	84.3%

Table 3: Estimated Model showing the Relationship of Life Insurance Ownership with Psychographic Factors and its Goodness of Fit (n=108)

A. Estimated Model

Variable	B		S.E.	Wald	Exp(B)	95.0% C.I. for EXP(B)	
						Lower	Upper
Individualistic value	-0.307		0.420	0.535	0.736	0.323	1.675
Collectivistic value	0.036		0.528	0.005	1.037	0.369	2.916
Mixed value	0.801		0.536	2.237	2.228	0.780	6.366
Risk attitudes	-0.897	**	0.298	9.090	0.408	0.227	0.730
Trusts	-0.200		0.407	0.242	0.819	0.369	1.818
Constant	0.918		2.740	0.112	2.504		

Notes: ** indicates significant at 1% level

B. Goodness of Fit of Estimated Model

Omnibus Tests of Model Coefficients, Chi-square (df = 5, p-value = 0.002)	19.020
Hosmer and Lemeshow Test, Chi-square (df = 8, p-value = 0.309)	9.409
Cox & Snell R-Squared	0.161
Nagelkerke R-Squared	0.218
Overall Correct Percentage	72.2%

5.3 Discussion of Findings

Both demographic and psychographic factors combined are able to explain 53.2% to 71.8% of the variance in life insurance ownership. Separately, demographic and psychographic factors are able to explain 52.5% to 70.8% and 16.1% to 21.8% of the variance in life insurance ownership respectively. The inclusion of psychographic factors is just able to explain a small increase of 0.7% to 1.0% of the variance in life insurance ownership that could be explained by demographic factors alone. This shows that demographic factors can better explain life insurance ownership among the respondents in Alor Setar than psychographic factors. The findings of this study do not provide support to the findings of Burnett and Palmer (1984) who have found that psychographic factors are relatively more important than demographic factors in explaining life insurance ownership among household heads in U.S.

Among the demographic factors examined in this study, only ethnicity and income are found to have a significant relationship with life insurance ownership among the respondents in Alor Setar. Chinese in Alor Setar and those at higher income levels are more likely to own life insurance.

The findings on ethnicity are in line with the findings of Loke and Goh (2012) whose found that Chinese in Penang tend to own life insurance as compared to Malay. The possible reason for significantly more Chinese than Malay owning life insurance is because Malay in Malaysia is Muslim and the teachings of Islam prohibit Muslim from purchasing (conventional) insurance. This is because (conventional) insurance contains the elements of Al-gharar (uncertainty), Al-maisir (gambling) and Al-riba (interest) that contravene the decrees of Shariah laws. In addition, Muslim individuals believe that their life is in God's hands. Hence, they are less likely to own life insurance.

The findings on income lend further support to the findings of past studies that there is a greater tendency to own life insurance at higher income levels (Gutter and Hatcher, 2008; Tan, Wong and Law, 2009; Loke and Goh, 2012; Annamalah, 2013) at different degrees of intensity (Loke and Goh, 2012). Respondents in Alor Setar with high-middle income (around 107 to 110 times) and low-middle income (around 15 to 19 times) are found to be significantly more likely to own life insurance than those with low income. When income level increases, the purchase of life insurance becomes more possible corresponding to having bigger purchasing power. As such individuals can afford to purchase (own) life insurance to protect their beneficiaries against financial hardships due to their untimely death, or as a method to transfer wealth to their descendants.

Other demographic factors examined in this study are found to have no significant relationship with life insurance ownership. Although insignificant, the findings on age (Annamalah, 2013), gender (Tan, Wong and Law, 2009; Loke and Goh, 2012; Ćurak, Džaja and Pepur, 2013), education (Tan, Wong and Law, 2009), marital status (Tan, Wong and Law, 2009; Ćurak, Džaja and Pepur, 2013) and number of dependents (Gutter and Hatcher, 2008; Loke and Goh, 2012; Annamalah, 2013; Ćurak, Džaja and Pepur, 2013) are similar to the findings of some past studies.

On the other hand, among the psychographic factors examined in this study, only risk attitudes are found to have a negative and significant relationship with life insurance ownership. Respondents in Alor Setar who are risk-takers (being adventurous in engaging themselves in risky behaviours or activities) are less likely to own life insurance. In other words, risk averse respondents in Alor Setar tend to own life insurance. This finding provides support to Gutter and Hatcher's (2008) finding that risk averse individuals are more likely to own life insurance. However, risk attitudes become insignificant with the inclusion of demographic factors. Risk attitudes have lost their significance to the demographic factors which are more dominant and can better explain life insurance ownership among the respondents in Alor Setar.

Other psychographic factors examined in this study are found to have no significant relationship with life insurance ownership. Hence, the findings on personal values and trusts of this study do not provide support to the findings of past studies (Ferber and Lee, 1980; Burnett and Palmer, 1984; Omar, 2007; Chui and Kwok, 2008; Park and Lemaire, 2011; Wan Aris, Sahak and Shaadan, 2009; Siddiqui and Sharma, 2010; Angko, 2013; Leary, Kane and Woods, 2014).

6. CONCLUSION

The major findings of this study show that demographic factors can better explain life insurance ownership among the respondents in Alor Setar relative to psychographic factors. Demographic characteristics rather than psychological traits of the respondents in Alor Setar tend to dictate their needs of whether they require life insurance or not. Ethnicity and income are found to be the predominant factors of life insurance ownership among the respondents in Alor Setar. Life insurance policyholders in Alor Setar tend to be Chinese and those who are at higher income.

In Malaysia, Malay individuals being Muslim are hesitant to purchase conventional life insurance due to their Islamic teachings and beliefs. Therefore, the marketing and promotion of Islamic life insurance products (i.e. family Takaful products) which are Shariah compliance could be intensified in order to encourage a greater life insurance ownership among Malay individuals. As for the low income earners, an affordable life insurance product should be promoted to them. As such they will no longer use low income as an excuse that will hinder them from owning life insurance. For example, micro-insurance with low premium payments (which has been available in Malaysia since 2010) could be recommended to this target group.

Risk attitudes have a weak negative relationship with life insurance ownership among the respondents in Alor Setar. Risk attitudes are only found to have a significant relationship with life insurance ownership when demographic factors are excluded. Non-policyholders in Alor Setar tend to be individuals who are very likely to engage in risky behaviors or activities. They are risk takers, unlike risk averse individuals who tend to seek protection by purchasing life insurance as a way to cover their personal risks (e.g. premature death).

It is to be noted that this study is confined to Alor Setar. Focusing on one area in Kedah is not sufficient. Future study should consider covering other areas so that a wider coverage with a larger sample size will allow binary logistic regression analysis to produce reliable results that enable the generalization of findings. It is also suggested that comparative studies be conducted in the future to examine the relationship of life insurance ownership with demographic and psychographic factors in order to validate the findings of this study.

REFERENCES

Angko, W. (2013). Social Protection and the Demand for Private Insurance in Ghana. *Research Journal of Finance and Accounting*, 4(13), 130-145.

Annamalah, S. (2013). Profiling and Purchasing Decision of Life Insurance Policies among Married Couples in Malaysia. *World Applied Sciences Journal*, 23(3), 296-304.

Baek, E., & De Vaney, S. A. (2005). Human Capital, Bequest Motives, Risk and the Purchase of Life Insurance. *Journal of Personal Finance*, 4(2), 62-84.

Blais, A-R., & Weber, E. U. (2006). A Domain-Specific Risk-Taking (DOSPERT) Scale for Adult Populations. Judgment and Decision Making, 1(1), 33-47.

Burnett, J. J., & Palmer, B. A. (1984). Examining Life Insurance Ownership through Demographic and Psychographic Characteristics. *Journal of Risk and Insurance*, 51(3), 453-467.

Butler, S., Rosman, A., Seleski, S., Garcia, M., Lee, S., Barnes, J., & Schwartz, A. (2012). A Medical Risk Attitude Subscale for DOSPERT. Judgment and Decision Making, 7(2), 189-195.

Chui, A. C. W., & Kwok, C. C. Y. (2008). National Culture and Life Insurance Consumption. *Journal of International Business Studies*, 39(1), 88-101.

Ćurak, M., Džaja, I., & Pepur, S. (2013). The Effect of Social and Demographic Factors on Life Insurance Demand in Croatia. *International Journal of Business and Social Science*, 4(9), 65-72.

Ferber, R., & Lee, L. C. (1980). Acquisition and Accumulation of Life Insurance in Early Married Life. *Journal of Risk and Insurance*, 47(4), 713-734.

Gutter, M. S., & Hatcher, C. B. (2008). Racial Differences in the Demand for Life Insurance. *Journal of Risk and Insurance*, 75(3), 677-689.

Korea Life Insurance Association. (2014). Annual Report 2014. Retrieved from http://www.klia. or.kr/eng/consumer/consumer_01.do?bCd=&bIdx=0.

Leary, P., Kane, K. M., & Woods, D.F. (2014). Reversing the Decline in Life Insurance Ownership. *Journal of Financial Service Professionals*, 68(4), 33-41.

Life Insurance Association of Japan. (2015). Overview of Life Insurance Industry in Japan. Retrieved from http://www.falia.or.jp/assets/pdf/japan_risk/201512Overview_of_Life_Ins.pdf.

Loke, Y. J., & Goh, Y. Y. (2012). Purchase Decision of Life Insurance Policies among Malaysians. *International Journal of Social Science and Humanity*, 2(5), 415-420.

Mcknight, D. H., Choudhury, V., & Kacmar, C. (2002). The Impact of Initial Consumer Trust on the Intentions to Transact with a Website: A Trust Building Model. *Journal of Strategic Information System*, 11, 297-323.

Monetary Authority of Singapore. (2014). Insurance Statistics 2014. Retrieved from http://www.mas.gov.sg/Statistics/Insurance-Statistics/Annual-Statistics/Insurance-Statisti cs-2014.aspx.

Office of Commissioner of Insurance. (2015). Annual Report 2015. Retrieved from http://www.oci.gov.hk/press/index_01.html.

Omar, O. E. (2007). The Retailing of Life Insurance in Nigeria: An Assessment of Consumers' Attitudes. *Journal of Retail Marketing Management Research*, 1(1), 41-47.

Pallant, J. (2013). SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS. (5th ed.). New York: McGraw-Hill.

Park, S. C., & Lemaire, J. (2011). Culture Matters: Long-Term Orientation and the Demand for Life Insurance. *Asia-Pacific Journal of Risk and Insurance*, 5(2), 1-21.

Performance Management and Delivery Unit (PEMANDU). (2013). EPP 5: Insuring Most, If Not All of Our Population. Retrieved from http://etp.pemandu.gov.my/Financial_Services-@-Financial_Services_-_EPP_5-;_Insuring_Most,_If_Not_All,_of_Our_Popula tion.aspx.

Rosman, A., Garcia, M., Lee, S., Butler, S., & Schwartz, A. (2013). DOSPERT + M: A Survey of Medical Risk Attitudes in the United States. Judgment and Decision Making, 8(4), 470-481.

Schwartz, A., Yamagishi, K., Hirahara, N., Onishi, H., Barnes IV, J., Rosman, A., Garcia, M., Lee, S., & Butler, S. (2013). Risk Perception and Risk Attitudes in Tokyo: A Report of the First Administration of DOSPERT + M in Japan. Judgment and Decision Making, 8(6), 691-699.

Schwartz, S. H. (2003). A Proposal for Measuring Value Orientations across Nations. In Questionnaire Development Report of the European Social Survey. (Chap 7). (pp. 259-319). Retrieved from https://www.europeansocialsurvey.org/docs/methodology/core_ess_questionnaire/ESS_core_questionnaire_human_values.pdf

Siddiqui, M. H., & Sharma, T. G. (2010). Measuring the Customer Perceived Service Quality for Life Insurance Services: An Empirical Investigation. International Business Research, 3(3), 171-186.

Tan, H. B., Wong, M. F., & Law, S. H. (2009). The Effect of Consumer Factors and Firm Efficiency on Malaysian Life Insurance Expenditure. *International Journal of Business and Society*, 10(1), 59-73.

Wan Aris, Y. B., Sahak, S. Z., & Shaadan, N. (2009). A Relook into Awareness, Perceptions, Barriers and Future Insurance Needs: A Case Study of Takaful and the Malays. *Conference of the International Journal of Arts and Sciences*, 1(19), 10-21.