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A PRELIMINARY STUDY ON THE RELATIONSHIP BETWEEN PSYCHOGRAPHIC FACTORS AND THE PURCHASE OF LIFE INSURANCE

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Abstract

This was a preliminary study conducted to examine the relationship between psychographic factors (i.e., personal value, risk attitude, and trust) and the purchase of life insurance among Alor Setar city folks. A non-probability convenience sampling technique was used to collect data from early February to mid-March 2015. A sample comprising 108 respondents were subjected to binary logistic regression analysis. The major finding of this study showed that risk attitude has a significant and negative relationship with the purchase of life insurance. Respondents in Alor Setar who are more likely to involve in risky behaviours or activities tend not to buy life insurance. Risk taking individuals do not behave like risk averse individuals who tend to seek protection by buying life insurance as a method to cover their personal risks. Meanwhile, personal value and trust were found to have no significant relationship with the purchase of life insurance among respondents in Alor Setar. It is recommended that a comprehensive study covering wider areas with larger sample sizes be included in future studies to obtain more reliable results that would enable the generalisation of findings.

Keywords: *Life insurance, Psychographic factors, Personal value, Risk attitude, Trust*

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Introduction

Insurance plays a vital role in providing certainty in an uncertain world. Therefore, a rational individual would be willing to pay

premium to life insurers in exchange for protection against unexpected financial risks due to unfortunate events such as premature death. Sethu Karuppan, the former president of National Association of Malaysian Life Insurance and Financial Advisors (NAMLIFA), highlighted that life insurance will play an even more important role and become necessary for breadwinners to protect their beneficiaries against any possible adverse effects when the costs of living have increased over time (Money Compass, 2012). Despite the importance of life insurance for financial security, the market penetration rate (measured by the total number of policies/certificates in force divided by total population) for both conventional life insurance and family Takaful of Malaysia was only about 54% in 2014 (Bank Negara Malaysia, 2015). The current rate is far below the target of 75% by 2020 set by Economic Transformation Programme (ETP) (Performance Management and Delivery Unit, 2013).

Why only about half of the population in Malaysia has purchased life insurance? Do psychographic factors influence a Malaysian individual's consideration when purchasing life insurance? According to Global Consumer Insurance Survey 2012 conducted by Ernst and Young, its findings showed that psychographic factors do have an influence on an individual's consideration in the purchase of life insurance. Its findings revealed that 95% of Malaysian respondents consider personal interaction to be vital when deciding to buy life insurance. Malaysians' consideration of purchasing life insurance is based on their confidence in and the satisfaction of the services provided by life insurers or their agents. Malaysians prefer to buy life insurance from insurers or agents whom they trust after having an established long-term relationship and who can provide convenient services for them.

Many studies examining the relationship between psychographic factors and the purchase of life insurance by individuals were conducted in the past but only a few were related to Malaysia (refer to Literature Review in the second section for more details). Therefore, this study was undertaken to further explore their relationship in the context of Malaysia with extensions made in the following three aspects: (i) a new sample comprising individuals residing in Alor Setar, Kedah (at this initial stage of this study, before a further study could be conducted later to cover a larger sample comprising individuals in the northern region of Malaysia), (ii) the use of an alternative instrument which was deemed more appropriate to measure personal values among individuals (not national cultures) called portrait values questionnaire (PVQ), and (iii) the inclusion of

three additional domains, namely safety, recreational, and medical elements, besides financial domain to measure risk attitudes (refer to Questionnaire Design in the fourth section for more details).

The subsequent parts of this paper are organised as follows: the second section reviews related past studies that examined the relationship between psychographic factors and the purchase of life insurance, the third section outlines the objectives of this study, the fourth section contains the research methodology, the fifth section provides and discusses the results, and the closing section concludes the findings of this study.

Literature Review

Several past studies were conducted to examine the relationship between psychographic factors (i.e., personal values, risk attitude, and trust) and the purchase of life insurance. A brief review of these studies is provided below.

Personal values

An individual's personal values will determine his/her actions and the way he/she is inspired (Hofstede, 1983). Hence, the purchase of life insurance can be influenced by cultural diversity of the society through the personal values of individuals in society. According to the findings of several past studies (Ferber & Lee, 1980; Burnett & Palmer, 1984; Omar, 2007; Chui & Kwok, 2008; Park & Lemaire, 2011), personal values were found to have a significant relationship with the purchase of life insurance.

Ferber and Lee (1980) have examined the purchase of life insurance by couples in their early married life. Their data were collected via 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 showed that a couple is more likely to buy life insurance if the husband is optimistic (a dimension of individualistic value). Ferber and Lee (1980) explained that optimistic individuals are satisfied with life and they consider life is full of opportunities. They plan for their future and are more likely to buy life insurance. Doing so will enable them to secure their financial position and to prepare for financial support for their family members in time of unforeseen events (e.g., premature death) in order to protect them against financial hardships.

Similarly, Burnett and Palmer (1984) conducted a study in the U.S. to examine the relationship between psychographic characteristics of household heads and the amount of life insurance purchased. Their data were obtained from a middle-sized south-western city consumer panel. Their findings showed that household heads who have purchased greater than average amount of life insurance are individuals who 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. Meanwhile, household heads who have purchased significantly larger amounts of life insurance are individuals who have exceptionally low reliance on government support. These findings showed that individuals with high individualistic values tend to buy life insurance as a method to reduce risks in order to be self-reliant. On the other hand, Burnett and Palmer (1984) also found that individuals who consider involvement in community activities to be crucial (a dimension of mixed value) tend to own a larger amount of life insurance than those who do not. This finding highlighted that individuals with mixed values tend to buy life insurance as a protection against financial difficulties that might be faced by their beneficiaries and to reduce the financial burdens of the government in providing for old age and the untimely death of breadwinners.

Meanwhile, in a study that examined individuals' consideration of purchasing life insurance in Nigeria, Omar (2007) found that the culture of Nigerian society discourages Nigerians to buy life insurance. Nigerian society exhibits high fatalism orientation (believing in fate and submitting to destiny) and Nigerians often rely on family members or their relatives for aid in emergencies. The above findings revealed that individuals with high collectivistic values are less likely to buy life insurance. They emphasise on 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 a result, life insurance is not necessarily needed as the risks are pooled among their in-group members.

Meanwhile in a larger setting, two cross-country studies conducted by Chui and Kwok (2008), and Park and Lemaire (2011) discovered a significant relationship between national culture and the purchase of life insurance. Chui and Kwok (2008) conducted a study across 41 countries to examine the relationship between cultural differences and the purchase of life insurance (measured by premium per capita) from 1979 to 2001. Their findings showed that the purchase of life insurance is higher among countries which are more feminine and

exhibit higher individualistic values. Although uncertainty avoidance has a weak positive relationship with the purchase of life insurance, countries with stronger uncertainty avoidance have a slightly higher purchase of life insurance.

Then, Park and Lemaire (2011) extended the work of Chui and Kwok (2008) to examine the purchase of life insurance (measured by the ratio of premium to GDP) of 27 countries from 2000 to 2008. They found that individualism has a weak positive relationship with the purchase of life insurance. Meanwhile, for countries which have stronger uncertainty avoidance and higher femininity index, their purchase of life insurance is greater.

From the two studies above, individuals from a feminine society with strong uncertainty avoidance culture exhibit mixed values, so they are concerned about both self-interest and the well-being of others. They emphasise on quality of life and at the same time they are anxious about uncertainties. Consequently, they seek for security to protect against uncertainties in life so that they can live in a more predictable environment. Hence, individuals with mixed values are more likely to buy life insurance to care for their own welfare and the needs of their dependents as well as society.

Risk Attitudes

According to expected utility theory, a risk averse individual is expected to have a higher tendency to buy life insurance for assured protection against unforeseen events, such as premature death. The findings of Gutter and Hatcher's (2008) study on the purchase of life insurance in the U.S. are in line with expected utility theory. Their findings showed that individuals who are not willing to take investment risk (a proxy for highly risk averse individuals) have a greater tendency to buy life insurance than those who are willing to take moderate investment risk (a proxy for moderately risk averse individuals).

The studies of Baek and DeVaney (2005), Loke and Goh (2012), and Annamalah (2013) showed inconsistent findings. Baek and DeVaney (2005) examined the purchase of term (non-cash value) and cash value life insurance among American households. Their study reported mixed results: (i) individuals who are above-average financial risk takers have a higher tendency to buy term life insurance, and (ii) individuals who are not financial risk takers have a lower tendency to buy cash value life insurance.

Meanwhile on a different continent, the study by Loke and Goh (2012) examined the purchase of life insurance among Malaysians residing in Penang. Their findings unexpectedly showed that risk averse individuals are less likely to buy life insurance. Moreover, in another Malaysian study, Annamalah's (2013) findings revealed that risk attitudes do not have a significant relationship with the purchase of life insurance.

Trust

Trust is required in transactions that involve people's money and life. Life insurance is a savings-cum-investment product that involves both money and life. Therefore, trust is related to the purchase of life insurance. Omar's (2007) study on the purchase of life insurance among Nigerians showed that the main reason Nigerians do not buy life insurance is because of their lack of trust and confidence in life insurance companies. An exploratory study by Wan Aris, Sahak, and Shaadan (2009) reported that the main factors for not buying family Takaful by the Malays residing in Shah Alam are their dissatisfaction with the services provided by Takaful agents and the lack of confidence in Takaful operators.

The study by Siddiqui and Sharma (2010) used analytic hierarchy process (AHP) to rank the relative importance of six service quality dimensions of life insurance agents among Indian consumers who have been approached via shopping mall intercept in various cities, namely Lucknow, Delhi, Mumbai, Bangalore, and Kolkata, from December 2008 to May 2009. Their findings showed that assurance (relative weight = 36%) is perceived to be the most essential dimension followed by others in descending order of importance: competence (relative weight = 26%), personalised financial planning (relative weight = 20%), corporate image (relative weight = 9%), tangibles (the provision of physical facilities and communication materials) (relative weight = 5%), and technology (relative weight = 4%). They concluded that Indian consumers have lofty expectations on life insurance agents. Indian consumers 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.

Meanwhile, Angko (2013) conducted a field survey to examine the policyholders' satisfaction on life insurance which they purchased and the services provided by agents of four life insurance companies (i.e., SIC Life, Vanguard Life, Star-Life, and Capital Express Life)

in Ghana. The findings of the study showed that 70% to 90% of the policyholders agree that their agents (i) are knowledgeable, (ii) can explain life insurance products excellently, (iii) have sold them life insurance that is in the best interest of their needs, (iv) have provided services they are satisfied with, and (v) have managed to gain their trust. However, the overall result of the study does not indicate whether the policyholders are satisfied with their life insurance companies and agents' services.

Recently, the findings of the study conducted by Leary, Kane, and Woods (2014) that examined the potential causes of decline in the purchase of life insurance among households in the U.S. provided further support to Angko's (2013) findings. Their findings showed that prospective policyholders desire a trusted advisor who is knowledgeable and able to provide appropriate financial advice as well as cares for their welfare. The lack of trusted professionals is the main reason prospective policyholders are hesitant to buy life insurance.

Concluding Remarks

Based on the findings of past studies, the following conclusions can be drawn:

(a) There is a significant relationship between personal values and the purchase of life insurance.
    (i) Individuals with high individualistic values are more likely to buy life insurance (Ferber & Lee, 1980; Burnett & Palmer, 1984).
    (ii) Individuals with high collectivistic values are less likely to buy life insurance (Omar, 2007).
    (iii) Individuals with mixed values are more likely to buy life insurance (Burnett & Palmer, 1984; Chui & Kwok, 2008; Park & Lemaire, 2011).

(b) The findings on the relationship between risk attitude and the purchase of life insurance are mixed.
    (i) Gutter and Hatcher's (2008) findings were in line with expected utility theory. Risk averse individuals are more likely to buy life insurance.
    (ii) Baek and DeVaney's (2005) findings were inconclusive.
    (iii) Loke and Goh's (2012) findings were contradictory to expected utility theory.
    (iv) Annamalah's (2013) findings showed that there is no significant relationship between risk attitude and the purchase of life insurance.

(c) Many past studies (Omar, 2007; Wan Aris, Sahak, & Shaadan, 2009; Siddiqui & Sharma, 2010; Angko, 2013; Leary, Kane, & Woods, 2014) found that there is a significant positive relationship between trust and the purchase of life insurance.

Research Objectives

The main purpose of this study was to examine the relationship between psychographic factors and the purchase of life insurance. Specifically, the objectives of this study are to examine whether:

(a) individualistic (personal) values have a positive relationship with the purchase of life insurance;
(b) collectivistic (personal) values have a negative relationship with the purchase of life insurance;
(c) mixed (personal) values have a positive relationship with the purchase of life insurance;
(d) risk attitude has a relationship with the purchase of life insurance; and
(e) trust has a positive relationship with the purchase of life insurance.

Research Methodology

This section describes data collection, questionnaire design, and the methods of analysis of this study.

Data Collection

This study employed primary data collection to obtain information. A non-probability convenience sampling method was used to approach the respondents at their work place and residence. The survey was conducted from early February to mid-March 2015 in Alor Setar, Kedah. Out of 200 sets of structured questionnaires distributed, 140 sets were returned but 112 sets were found to be completed correctly. After screening for outliers, four cases that have out-of-range standardised residual (ZResid) values were removed from the sample. Hence, only 108 cases were available for further analysis.

Questionnaire Design

There are four sections in the questionnaire. The first three sections examined the respondents' personal values and risk attitude, and

their degrees of trust in life insurance agents. The last section gathers information about the respondents' purchase of life insurance and their demographic characteristics (i.e., gender, age, marital status, education level, number of dependents, ethnicity, and monthly income).

The first section of the questionnaire examined personal values. This study used the shorter version of portrait values questionnaire (PVQ) employed by Schwartz (2003) in European Social Survey (ESS). In PVQ, an individual's personal values are measured in the following three dimensions: (i) individualistic values (10 items), (ii) collectivistic values (six items), and (ii) mixed values (five items). The three dimensions in PVQ were deemed more appropriate to measure the personal values of individuals as compared to Hofstede's cultural dimensions employed by Chui and Kwok (2008), and Park and Lemaire (2011) in their cross-countries studies to measure national culture.

In PVQ, 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 measurements then enabled the differentiation of the respondents' personal values as having individualistic, collectivistic, or mixed values.

The second section of the questionnaire examined risk attitude. The instruments employed by most past studies (Baek & DeVaney, 2005; Gutter & Hatcher, 2008; Loke & Goh, 2012) focused only on financial domain (i.e., investment). In this study, three additional domains were included to examine risk attitude, namely safety, recreational, and medical domains. The inclusion of other domains was meant to mirror common life situations that are encircled by many types of risky activities that an individual would possibly encounter in order to better reflect the general risk attitudes of the individual. As such, this study incorporated 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. This instrument was employed 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. This instrument was employed by Rosman et al. (2013), and Schwartz et al. (2013)

in their studies to examine the risk attitudes of U.S. and Japanese citizens in Tokyo, respectively. There is a total of 23 items in the four domains: (i) financial (six items), safety (six items), recreational (five items), and medical (six items). The respondents were 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 section of the questionnaire examined trust. To examine the respondents' degrees of trust in life insurance agents, this study adapted the instrument developed by McKnight, Choudhury, and Kacmar (2002) which was used to examine the consumers' trust in electronic commerce vendors that they have no prior experience with. The instrument has 11 items. The respondents were 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 and last section of the questionnaire gathered information about the purchase of life insurance, where the respondents were requested to answer a question of "Have you purchased life insurance?" to indicate whether they have purchased life insurance or otherwise. This section also gathered demographic background information of respondents. The respondents were required to indicate their (i) gender (male or female), (ii) ethnicity (Malay, Chinese, or Indian), (iii) marital status (married or otherwise), (iv) education (low − completed secondary / high school, average − obtained other academic qualifications, or high – acquired bachelor or master degree and above), and (v) monthly income (either low − earning less than RM2,000, low-middle − earning between RM2,000 and RM4,000, high-middle – earning between RM4,001 and RM6,000, or high − earning more than RM6,000). Meanwhile, for age and number of dependents, the respondents were required to state their age and number of persons in the household who depend on their financial support, respectively.

Methods of Analysis

Binary logistic regression analysis was used to examine the relationship between psychographic factors (i.e., personal values, risk attitude, and trust) and the purchase of life insurance. Prior to

performing binary logistic regression analysis, the items in personal values, risk attitude, and trust were checked for their reliability (based on corrected item-total correlation and Cronbach's alpha values) and interrelatedness (by performing factor analysis).

First, corrected item-total correlation and reliability tests were performed to assess the consistency and stability of items in personal values, risk attitude, and trust in measuring what they have intended to measure. Corrected item-total correlation test provides Pearson correlation between the score for an individual item and the average of the scores for the remaining items (Coakes, 2013). An item that has a low corrected item-total correlation value (less than 0.3) indicates that the item is measuring something distinct from the remaining items. Meanwhile, as a rule of thumb, items which have a Cronbach's alpha value of 0.6 or above are considered reliable. If the Cronbach's alpha value is less than 0.6, the item is to be deleted (Pallant, 2013).

Next, factor analysis was conducted using principal components analysis (PCA) with varimax rotation. It is a data reduction technique which reduces a large number of items to a set of items that are highly interrelated. Prior to performing factor analysis, the items were examined for their suitability to be subjected to factor analysis with Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO index must be greater than 0.6 and Bartlett's test of sphericity must be significant (i.e., $p < 0.05$) in order to proceed with factor analysis (Pallant, 2013).

In factor analysis, for a sample size of 108, items with factor loadings (correlation between item and factor) between 0.50 and 0.55 would be considered to be highly interrelated with the underlying factors (Hair et al., 2010). Meanwhile, communality values provide information about how much of the variance in the underlying factors could be explained by the items. As a guide, items with communality values less than 0.50 would be considered not having sufficient explanation power (Hair et al., 2010).

Finally, binary logistic regression was employed to examine the relationship between psychographic factors (i.e., personal values, risk attitude, and trust) and the purchase of life insurance. It is a regression of the binary choice of owning life insurance or not (i.e., the purchase of life insurance) on the mean scores of the items in individualistic, collectivistic, and mixed values, risk attitudes, and trusts (i.e., psychographic factors) (refer to Tables 3.0 and 4.0 to view the items in

personal values, risk attitude, and trust). Multicollinearity diagnostic test was performed to ensure that the estimated model is free from collinearity problem by examining the two collinearity statistics of tolerance and variance inflation factor (VIF) of the variables. As a rule of thumb, tolerance values less than 0.10 or VIF values above 10 indicate the presence of multicollinearity (Pallant, 2013). Then, Omnibus Tests of Model Coefficients and Hosmer and Lemeshow Test were used to examine the goodness of fit of the estimated binary logistic regression model. The model can be regarded as a good fit model when the Omnibus Tests of Model Coefficients are significant while Hosmer and Lemeshow Test is not significant (Pallant, 2013). Meanwhile, the Cox and Snell, and Nagelkerke R-squared values provide an indication of the amount of variation in the purchase of life insurance that is explained by psychographic factors collectively (Pallant, 2013).

Discussion of Results

This section presents and discusses the results of this study. Firstly, it describes the sample of this study. Next, it provides the results of reliability and factor analyses. Then, discussions are made regarding the goodness of fit of the estimated binary logistic regression model, and the relationship between psychographic factors and the purchase of life insurance.

Demographic Characteristics of the Respondents

This study involved 108 cases in its sample. Male respondents (50.9%) were slightly more than female respondents (49.1%). More than half of the respondents (63.9%) were married and the remaining 36.1% were unmarried. About 58.3% of respondents had low education level, 3.7% average education level, and 38.0% high education level. Chinese respondents comprised 52.8%, while 38.9% were Malay, and only 8.3% were Indian. About 31.5% of respondents had low monthly income, 40.8% had low-middle monthly income, 15.7% had high-middle monthly income, and 12.0% had high monthly income. About 59.3% of respondents reported that they owned life insurance, while 40.7% did not. The respondents in the study were aged between 18 and 64 years old, with the majority (53.7%) were 21-40 years old, 38% were above 40 years old, and 8.3% were below 21 years old. Meanwhile, the number of family members who depend on the respondent's financial support ranged from none to eight persons (refer to Table 1.0).

Table 1.0

Descriptive Statistics (n = 108)

Demographic characteristic (Categorical variable)	Attribute	Frequency	Percent (%)
Gender	Male	55	50.9
	Female	53	49.1
Marital status	Married	69	63.9
	Unmarried	39	36.1
Education level	Low (Secondary / high school)	63	58.3
	Average (Other qualifications)	4	3.7
	High (Bachelor / master degree)	41	38.0
Ethnicity	Chinese	57	52.8
	Malay	42	38.9
	Indian	9	8.3
Income level	Low (< RM2,000)	34	31.5
	Low-middle (RM2,000-RM4,000)	44	40.8
	High-middle (RM4,001-RM6,000)	17	15.7
	High (> RM6,000)	13	12.0
Ownership of life insurance	Yes	64	59.3
	No	44	40.7
Demographic characteristic (Continuous variable)	Average	Minimum	Maximum
Age	37	18	64
Number of dependents	2	0	8

Reliability Analysis

Reliability tests were conducted on the 55 items in the five constructs (i.e., individualistic values, collectivistic values, mixed values, risk attitude, and trust) of this study. Items that have corrected item-total correlation values less than 0.3 were deleted. The deletions reduced the 55 items to 42 items: individualistic values (from 10 to six items), collectivistic values (six items – no deletion), mixed values (five items – no deletion), risk attitude (from 23 to 14 items), and trust (11 items – no deletion). Consequently, the corrected item-total correlation values for the 42 items were between 0.300 and 0.745. Meanwhile, the Cronbach's alpha values for the 42 items were between 0.650 and 0.908. The summary results of reliability tests are shown in Table 2.0.

Table 2.0

Summary Results of Reliability Tests

Construct	No. of Items	Mean (Std. Dev.)	Cronbach's Alpha
Individualistic value	6	3.779 (0.576)	0.799
Collectivistic value	6	3.928 (0.470)	0.650
Mixed value	5	4.187 (0.547)	0.747
Risk attitudes	14	2.340 (0.763)	0.897
Trusts	11	3.448 (0.545)	0.908
Total	42		

Factor Analysis

Prior to performing factor analysis, the 42 items in the five constructs were examined for their suitability to be subjected to factor analysis with KMO measure of sampling adequacy and Bartlett's test of sphericity. The results showed that all KMO indices were greater than 0.6 for the five constructs: (i) individualistic values (0.798), (ii) collectivistic values (0.623), (iii) mixed values (0.776), (iv) risk attitude (0.892), and (v) trust (0.887). The results of Bartlett's test of sphericity are highly significant ($p = 0.000$). Therefore, the 42 items in the five constructs were considered suitable to be subjected to factor analysis. Principal components analysis (PCA) with varimax rotation was employed as an extraction method. A total of 10 items were removed: two items from collectivistic values, five items from risk attitude, and

three items from trust. Ultimately, the 42 items were reduced to 32 items such that (i) six items in individualistic values can explain 50.62% of the variance with eigenvalues at 3.037, (ii) four items in collectivistic values can explain 48.34% of the variance with eigenvalues at 1.934, (iii) five items in mixed values can explain 50.24% of the variance with eigenvalues at 2.512, (iv) nine items in risk attitude can explain 49.98% of the variance with eigenvalues at 4.498, and (v) eight items in trust can explain 54.83% of the variance with eigenvalues at 4.386. The results showed that the factor loadings for the 32 items were significant. Their values were in the range from 0.515 to 0.836 indicating that these items are moderately or highly interrelated to their underlying factors. Meanwhile, for communality values, 20 items had satisfactory values above 0.50. Their values were between 0.502 and 0.699. However, there were 12 items (i.e., I9, I10, C2, C6, M2, M3, M4, R10, R20, R21, T8, and T10) that had communalities values less than 0.50. Although not having satisfactory communality values, these 12 items were retained in this study because they have significant factor loadings. The summary results of factor analysis are shown in Table 3.0 and Table 4.0.

Table 3.0

Summary Results of Factor Analysis for Personal values

Individualistic Value (6 items)			
Code	Attribute	Communalities Value	Factor Loadings
I5	Like surprises and always look for new things to do	0.557	0.747
I6	Like to do things in my own original way	0.515	0.718
I7	Like to be free to plan and choose own activities	0.569	0.754
I8	Seek every chance to have fun	0.573	0.757
I9	Look for adventures and like to take risks	0.449	0.670
I10	Want to enjoy life	0.373	0.611
		Eigenvalues	3.037
		Percentage of total variance (%)	50.621

(continued)

Collectivistic Value (4 items)			
Code	Attribute	Communalities Value	Factor Loadings
C2	Devote myself to people close to me	0.387	0.622
C4	Follow rules at all times	0.534	0.731
C5	Not to draw attention to myself	0.531	0.729
C6	Avoid doing anything people said is wrong	0.482	0.694
		Eigenvalues	1.934
		Percentage of total variance (%)	48.338
Mixed Value (5 items)			
Code	Attribute	Communalities Value	Factor Loadings
M1	Want justice for everybody	0.640	0.800
M2	Want to understand people	0.407	0.638
M3	Want to look after the environment	0.332	0.576
M4	Avoid anything that might endanger my safety	0.473	0.687
M5	Want my country to be strong and can defend its citizens	0.660	0.813
		Eigenvalues	2.512
		Percentage of total variance (%)	50.241

Table 4.0

Summary Results of Factor Analysis for Risk Attitudes and Trusts

Risk Attitudes (9 items)			
Code	Attribute	Communalities Value	Factor Loadings
R10	Not wearing helmet when riding motorcycle	0.406	0.637
R11	Exposing to the sun without using sunscreen	0.502	0.708

(continued)

R12	Walking home alone at night	0.579	0.761
R13	Camping in the wilderness	0.654	0.809
R14	Holidaying in a third-world country without pre-arranged travel and hotel accommodation	0.586	0.766
R15	Engaging in dangerous sport	0.615	0.785
R17	Piloting a small plane	0.520	0.721
R20	Participating in clinical trial for drug effectiveness	0.371	0.609
R21	Taking medication to relieve allergy symptoms	0.266	0.515
		Eigenvalues	4.498
		Percentage of total variance (%)	49.981
Trusts (8 items)			
Code	Attribute	Communalities Value	Factor Loadings
T1	Life agent would act in my best interest	0.571	0.756
T2	Life agent would do his/her best to help me	0.699	0.836
T3	Life agent is interested in my well-being	0.562	0.750
T4	Life agent is truthful in his/her dealings with me	0.601	0.775
T6	Life agent would keep his/her commitments	0.568	0.754
T7	Life agent is sincere and genuine	0.543	0.737
T8	Life agent is competent in providing financial advice	0.418	0.647
T10	Life agent is capable and proficient	0.423	0.650
		Eigenvalues	4.386
		Percentage of total variance (%)	54.829

The Relationship between Psychographic Factors and the Purchase of Life Insurance

Table 5.0 presents the results of the estimated binary logistic regression model in panel A and the results on the goodness of fit of the estimated model in panel B. As a guide for decision, the p-value of 0.05 or lower is considered as significant. To start off, this section highlights and discusses the goodness of fit of the estimated model. Then, it moves on to discuss the relationship between psychographic factors and the purchase of life insurance.

Table 5.0

Estimated Model showing the Relationship between Psychographic Factors and the Purchase of Life Insurance 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 = 0.002)	19.020
Hosmer and Lemeshow Test, Chi-square (df = 8, p = 0.309)	9.409
Cox & Snell R-Squared	0.161
Nagelkerke R-Squared	0.218
Overall Correct Percentage	72.2%

The estimated model was free from multicollinearity problems. No variables in the model had a tolerance value less than 0.10 or a VIF value above 10. From the panel B of Table 5.0, the result of Omnibus Tests of Model Coefficients was significant (Chi-square value = 19.020, df = 5, p = 0.002). This showed that the estimated model is significantly

better than the baseline model. The result of Hosmer and Lemeshow Test was not significant (Chi-square value = 9.409, df = 8, p = 0.309). This indicated that the predicted outcomes for the purchase of life insurance (from the estimated model) are not significantly different from the observed samples for the purchase of life insurance.

The psychographic factors collectively were able to explain 16.1% (Cox & Snell R-squared value) to 21.8% (Nagelkerke R-squared value) of the variance in the purchase of life insurance. The estimated model correctly predicts 72.2% of the cases (i.e., 78 out of 108 cases can be correctly predicted).

The results on the relationship between psychographic factors and the purchase of life insurance showed that risk attitude (B = -0.897, p = 0.003) had a negative and significant relationship with the purchase of life insurance. Individuals more willing to take risks are 0.408 times less likely to buy life insurance. This finding indirectly provided support to Gutter and Hatcher's (2008) findings on highly risk averse individuals having greater tendency to buy life insurance than moderately risk averse individuals.

On the other hand, personal values and trust were found to have no significant relationship with the purchase of life insurance. Despite being insignificant, mixed values showed the expected positive sign. Meanwhile, individualistic values, collectivistic values, and trust were found to have signs that are contrary to expectations. As such the findings on personal values and trust in this study are not in line with the findings of past studies (Ferber & Lee, 1980; Burnett & Palmer, 1984; Omar, 2007; Chui & Kwok, 2008; Park & Lemaire, 2011; Wan Aris, Sahak, & Shaadan, 2009; Siddiqui & Sharma, 2010; Angko, 2013; Leary, Kane, & Woods, 2014).

Conclusion

The major finding of this study showed that risk attitude has a significant and negative relationship with the purchase of life insurance. Respondents in Alor Setar who are more likely to be involved in risky behaviours or activities tend not to buy life insurance. These individuals are risk takers. They do not behave like risk averse individuals who tend to seek protection by buying life insurance as a method to cover their personal risks (e.g., premature death). Meanwhile, personal values and trust were found to have

no significant relationship with the purchase of life insurance among respondents in Alor Setar. It is to be noted that this is merely a preliminary study, so it is too soon at this stage to conclude that personal values and trust do not have a significant relationship with the purchase of life insurance. Focusing on only one area in Kedah is not sufficient. A comprehensive study covering other areas should be included in future study so that a wider coverage with a larger sample size will allow binary logistic regression analysis to produce more reliable results that can enable the generalisation of findings. Besides that, it is suggested that future studies could also include risk perception as another potential factor or as a mediator in explaining the purchase of life insurance.

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