## FACTORS INFLUENCING LIFE INSURANCE CONSUMPTION

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# MASTER OF BUSINESS ADMINISTRATION

# UNIVERSITI TUNKU ABDUL RAHMAN

## FACULTY OF ACCOUNTANCY AND MANAGEMENT

DECEMBER 2015

# Factors Influencing Life Insurance Consumption

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A research project submitted in partial fulfilment of the requirement for the degree of

Master of Business Administration

Universiti Tunku Abdul Rahman

Faculty of Accountancy and Management

December 2015

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## **CHAPTER 1: OVERVIEW OF THE RESEARCH**

# Title:FACTORSINFLUENCINGLIFEINSURANCECONSUMPTION

#### 1.0 Introduction

Life Insurance is an agreement within the insurer and assured where the insurer agree to pay a lump sum of benefit to the assured in exchange for premiums payment upon the death of the assured. The designation of the insurance policy will be based on the needs and aims of the assured, which is also known as the life assured. The owner of the policy will be known as the policy owner or the policy holder.

#### 1.0.1 Type of Life Insurance

Life Insurance policy was being categorized to five main categories, which are term life, whole life, endowment, investment-linked and universal life insurance.

Term life insurance provided coverage for specific time frame. Term insurance will provide insurance coverage to the beneficiaries in terms of financial loss causes by the death of the life assured; it shall pay the sum assured also known as the face amount of the policy, but only provides coverage for a certain limit and amount of time. Term policy usually designated as a non-participation policy, which would not gain any investment surplus of the insurance policy hence, it would not provide any cash value to the policy holder. The designate of the maximum term for term life policy are 30 years in the most of the time. Term policy will be needed by individual who required coverage for certain period and for certain coverage. With the features of non-participation plan, term policy premium are significantly lower than the premium for whole life insurance. This bringing the meaning of term policy is providing higher coverage per dollar spends on life assured as compare to the whole life insurance. Nonetheless, the premium will increase when the life assured getting older and as the end of the specified term years (Life Insurance Quotes, 2014).

Secondly, whole life insurance will provide whole life coverage to the life assured. Once the policy commences, it shall provide guaranteed whole life coverage to the life assured, which in layman it also known as a permanent coverage or entire life coverage. Most of the whole life policy is design as participation policy which policy holder will enjoy the insurance company investment surplus. Hence, it will provides cash value in guaranteed amount (usually a low interest rate) accumulated until the pay out during the death/ total permanent disability of life assured or when policy is surrendered or matured. The premium will be rated based on entry age of the life assured and the sums assured coverage is guaranteed for the entire policy period. (Life Insurance Quotes, 2014).

Portion of the premium will be applied towards the insurance policy charges and investment, while the balance of the premium will applied towards the administrative expenses. Tax would not apply for the interest accumulates in the policy. This means that any withdrawal done is tax-free as well. Premium for whole life policy are tend to be higher compare to term policy, however, the cash value accumulated in the policy can be used for the premium payment provided the cash value is available. Participating elements in the whole life policy combines the life coverage as well as little saving components. This is beneficial to the life assured that provides them some additional payment flexibility (Fidelity Investment, 2013).

Endowment insurance was combining the features of term life and whole life insurance. Endowment plan are usually having a specific time frame and provides cash value, which the cash value shall be higher than the whole life insurance. Besides, the premiums for endowment policy are usually higher than whole life insurance because they provides higher returns, whereas, the premiums are to be paid over the duration of the term (Life Insurance Quotes, 2014).

Investment link insurance is an insurance policy that combines investment and protection. Partial of the premium paid shall goes to the life insurance coverage, a part shall invested in the investment funds that opted by the policy owner. Investment-linked insurance tend to be more flexible compared to other types of life insurance. The increase or decrease the amount of cover and the premium shall be more flexible compare to other types of the insurance. Investment-linked insurance can be regular premium or single premium. Single premium investment-linked insurance is usually for investments. While regular premium plans are generally designed more to provide protection (Life Insurance Quotes, 2014).

Universal life insurance is the most recent insurance plan in Malaysia. It has the features of being flexible as the investment-linked insurance and it has a guaranteed cash value like the whole life insurance (Fidelity Investment, 2013).

## 1.1 Background of Study

Back dating to 1960s, Duker (1969) are among those researchers that starting the interest to study the factors that influencing life insurance consumption. This study has continued for 50 years and the most recent research was completed by Beck and Webb (2003), Hwang and Greenford (2005) and Li, Moshirian, Nguyen and Wee (2007). Therefore this study will examine the key factors that influencing the life insurance consumption in Malaysia market.

Nowadays, more and more people concern about the quality of life of their next of keens if anything unfortunates happen to themselves. They would like to maintain their family current lifestyles although they are not there to support the family financially. This has created an opportunity to an industry know as insurance which able to guarantee their family are protected in terms of financial when they

are not able to provide the support to their family. Insurance plays a very important role in people's life with the guaranteed elements to provide financial support to the loves ones which unable to be provided by any other party. Insurance can improve one's credit rating, prevent from bankruptcy, increase financial security and create of legacy to the next of keens.

Upon the commencement of Life Insurance policy, the insurer i.e. Insurance Company are obligated to pay a sum of money i.e. policy sum assured to the policy's nominee when the Life Assured is death or totally permanent disability. Main intention of life insurance is to cover the family from financial loss due to death and some families buy life insurance as their retirement plan. So, after their death, the insurer will pay out income.

Other than financial protection provided by insurance to individual, life insurance are consider as a main sources of the long term finance and encourage the growth of the money markets (Catalan, Impavido and Musalem, 2000). Besides that, studies showed that the growth of insurance market is correlated with economic growth (Ward and Zurbruegg, 2000; Webb, 2000; Soon, 1996). Increment of the global population, urbanization and reinforcement of economic is kindly link or have a relationship.

Insurance industry in Malaysia has grown tremendously in recent years. The awareness of Malaysian of the important of insurance has increase with the exposure knowledge on insurance protection. Malaysia insurance market has a tremendous growth recent years which can refer from the increase in per capita premium expenditure which also known as premium density. In the past 10 years, the premium per capita has been expanded by 73.8per cent, from RM489 in 2003 to RM850 in 2012. Meanwhile, premium per member of employment had increased by 50.2per cent from RM1, 237 in year 2003 to RM1, 957 in year 2012 (BNM, 2012).

According to the statistic study of Life Insurance Association of Malaysia (LIAM) in year 2011, the total premium for in-force life insurance policy has grown for 9.4 per cent compare with year 2010. The total premium collected from the life

insurance policy, including individual life and group policy has increase from RM21,021,495,518 to RM22,989,435,722 for year 2010 to year 2011 (LIAM, 2011).

Nonetheless, although the penetration rate of insurance and the premiums per capita had been increased over the period of time, the consumption of life insurance in Malaysia are relatively low compare with to those developed countries in Asia. Per capita spending on life insurance was RM850 or USD 330 in year 2012, which are much lower than the world average of USD373. With the same period of time, Singapore logged per capita premium of USD 2, 472, Japan USD 4, 143, Hong Kong USD 4, 025, Taiwan USD 3, 760 and South Korea USD 2, 785. Life insurance penetration rate in Malaysia was 3.08per cent of the country's GDP in year 2012, and comparatively lower than the insurance penetration rate of neighbouring countries. The world average penetration rate in year 2012 is 3.69per cent. These indicators bring the message of the growing opportunities in Malaysian life insurance market (BNM, 2012).

## **1.2 Problem Statement**

This study was mainly focusing on the factors that influencing life insurance consumption in Malaysia. Insurance industry in Malaysia has grown tremendously in recent years, however, factors that driven the consumption of Life Insurance in Malaysia still unclear. In the past, peoples was not believe in insurance as the benefit will only shows when there is something bad happen. Moreover, the cultural contents are not all conducive to espousing life insurance as a new structure of risk management. Among these cultural contents are the forbidden to think and talk about death, peculiarly premature sudden death, and makes selling life insurance extremely difficult (Chan, 2004). Other than that, there are lot of news that reports on miss selling of insurance which the policy holder was not enjoying the benefit as promised by the insurance agent. Nonetheless, the trend had change nowadays as the percentage of peoples being protected by insurance coverage and increase from 20per cent to 41per cent in the past 20 years (LIAM

and UKM, 2013). And hence, this study shall study on what are the factors that indicate the consumption of life insurance.

## **1.3 Research Objectives**

The main objectives of this research are to study and analyse on the factors that influencing the life insurance consumption in Malaysia. The underinsurance rates shall indicate the potential financial difficulty faced by dependents when the precocious death of the family's wage earner. Lacking life insurance coverage would affect the family to maintain their current lifestyle upon the death of the family's breadwinner. Other critical money related outcomes that might be resulted are the failure to make the payment of the housing loan, debts or children education fees (LIAM and UKM, 2013). Hence, it is important to for the insurer to encourage the life insurance consumption by giving the information regarding the importance of life insurance.

Based on LIAM records on year 2012, there is only 41 per cent of Malaysian are covered by life insurance plan which this figure is one of the highest rate being attained by Malaysia insurance market. This figure is bringing the message of Malaysia life insurance market are still under-tapped when compare with other Asian countries such as Singapore, South Korea and Japan.

This research is to study on those who have basic insurance knowledge such as insurance policy holder, insurance agent as well as insurance staff on their consumption factors in insurance. This study shall be act as information for public to understand their needs on insurance and it will be a good indicator for insurer and legislators to auxiliary develop and encourage the Malaysia insurance market, given the comparatively low insurance market penetration rate.

## **1.4** Research Questions

The main research questions of this research are to analysis in the selling and buying trend on life insurance policy in Malaysia. This is to riposte the following research question:

- What is the relationship between the consumption of life insurance and income?
- What is the relationship between the consumption of life insurance and the level of education?
- What is the relationship between the consumption of life insurance and the age?
- What is the relationship between the consumption of life insurance and the gender?
- What is the relationship between the consumption of life insurance and number of dependent?
- What is the relationship between the consumption of life insurance and the insurance policy's basic sums assured?
- What is the relationship between the consumption of life insurance and the level of debts?

## **1.5** Hypothesis of the Study

The hypotheses that develop for this research are as follow:

#### <u>Hypothesis 1</u>

H<sub>0</sub>: There is no association between Life Assured's incomes towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's incomes towards the consumption of life insurance.

#### Hypothesis 2

H<sub>0</sub>: There is no association between Life Assured's levels of education towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's levels of education towards the consumption of life insurance.

#### Hypothesis 3

H<sub>0</sub>: There is no association between Life Assured's ages towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's ages towards the consumption of life insurance.

#### <u>Hypothesis 4</u>

H<sub>0</sub>: There is no association between Life Assured's genders towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's genders towards the consumption of life insurance.

## Hypothesis 5

H<sub>0</sub>: There is no association between Life Assured's numbers of dependent towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's numbers of dependent towards the consumption of life insurance.

## Hypothesis 6

H<sub>0</sub>: There is no association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.

## Hypothesis 7

H<sub>0</sub>: There is no association between Life Assured's levels of debt towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's levels of debt towards the consumption of life insurance.

## 1.6 Significant of Study

Research from the past, scientific study of attitudes was used because of the assumptions that attitude was the key to understand human behaviour (Thomas and Znaniecki, 1918; Watson, 1925). The empirical research provides the ability to evaluate the perception of consumer and measure the attitude towards the consumption of life insurance.

The result of this study will highlight important information of insurance consumption for the policy holder to understand their needs in insurance consumption and also for insurers and legislators to auxiliary develop and encourage the Malaysia insurance industry especially to cater those untapped market. This study able to assist the company to understand the trends of demand of the insurance industry and helping in developing the new insurance products that able to meets with the consumer expectation.

Besides, it shall able to provide some direction to the servicing agent to propose the best insurance policy to consumer that meets with their current needs. Moreover, the information provided in this study may provide the government to identify the type of insurance that needed the most in the industry and able to educate the consumer to select the most suitable insurance to avoid the complaint arise from miss selling issue.

## 1.7 Chapter Layout

#### **Chapter 1: Introduction**

This chapter is an introductory chapter that introduces an overview of the buying and selling trend of insurance policy in Malaysia. Meanwhile, it will outline the research objectives to be accomplished and the research questions to be responded. The connotation of the study and the overall chapter layout of the research project were included as well.

#### **Chapter 2: Literature Review**

Chapter two includes the review of literature, review of relevant theoretical models, proposed conceptual framework to identify the network of relationship and hypotheses development. This chapter will define the independent variable and dependent variable of the research project. In-depth explanation about the variables with the supported studies from other researchers will be inserted as well.

#### Chapter 3: Methodology

This chapter illustrates the research design, data collection, sampling design, research instrument, constructs measurement, data processing, and method of data analysis.

#### **Chapter 4: Data Analysis**

This chapter basically presents the patterns of the results and analyses of the result by using the SPSS version 15 to analyse the descriptive analyses, scale measurement and inferential analyses.

#### **Chapter 5: Discussions Conclusion and Implication**

This last chapter presents the research project summary of statistical analyses, discussions of major findings and implication and limitation of the study, and recommendations for the researcher in future research.

## **1.8 Conclusion Remarks**

Chapter one outlined the foundation for the research project. It also acts as an introductory chapter that presents the research project background, describes the problem statement that will be solved in the research project, addressing the research project's objectives as well as the research questions, and establishing the hypotheses of the study. Finally, the importance of this research and the outlines of each chapter will be presented in the research project.

Next, chapter two wills auxiliary intricate a review of the affiliated literature applicable to the topic of the research project.

## **CHAPTER 2: LITERATURE REVIEW**

## 2.0 Introduction

This chapter will discuss the comprehensive review of the relevant theoretical models. A proposed conceptual framework is developing according to the research objectives and the research questions in the third section. Finally, in the last section, hypotheses on each of the components will be developed and be tested to review the relationship toward the selling and buying trends of life insurance.

## 2.1 Definition of Life Insurance

A life insurance policy is a contract with an insurer. Policy holder will make premium payment to the insurer and as an exchange the insurer will provide a lump sum of payment to the beneficiaries when the life assured death or total permanent disability. (Fidelity Investment, 2013).

Life insurance is one of the ways to provide the income protection to the dependents (beneficiaries) after the life assured dies or total permanent disability. Life insurance is meant to replace the lost income and pay for any extra expenses that are experienced by those dependent family who being left behind when a family member who are the main contributor on income or services to a household is lost. It can also be used for last expenses such as medical bills; lawyer fee, taxes or funeral costs that the family members would have to pay when a death happens.

Life insurance is an important part of financial planning for families, dependents and individual (Life Insurance Quotes, 2014)

Selection of life insurance is based on individual needs and goals. Term life insurance are providing protection for a limited period of time whereas permanent insurance such as universal life insurance and whole life insurance will provides life assured whole life coverage. Generally, the entire benefit payable from the life insurance is tax-free (LDHN, 2010).

According the Life Insurance Quotes (2014), the main aims of life insurance is to provides the financial security to the life assured's family or dependents when unforeseen things happen to the main financial supporter of the family. If the person has others who are financially depends on them, they should have life insurance coverage to protect the dependents in term of financial when there is something bad happen. Nonetheless, life insurance can also be used for the reasons as stated in Table 1.

Purpose	Details
Mortgage Protection	To cover on the mortgage/ housing loan
Retirement	Return on investment to accumulate the cash value for retirement usage
Childcare	Income protection of home-maker's contribution
Estate Protection	Provide coverage on estate taxes
Business Protection	Protection against the key man of the business
Employee Benefits	Group insurance cover the entire company's employees

Table 1 Purpose of the Life Insurance

There are several types of Insurance being offered in Malaysia's market. The insurance types were from term life, whole life, endowment and investment-linked and universal life insurance (Fidelity Investment, 2013).

## 2.2 Dependent Variable

#### 2.2.1 Consumption of Life Insurance in Malaysia Market

Truett and Truett (1990) showed that the consumption of life insurance being affected by factors such as age, education level, and level of income, and Mexico had a higher income elasticity of demand for life insurance consumption compare to United States.

Besides that, Burnett and Palmer (1991) used Multiple Classification Analysis to examine how well the demographic and psychographic characteristics relate to different level of life insurance ownership. In facts, Life Assured are generally having higher education level, larger number of family member and incomes. They might not an opinion leader and risk takers. Prices might not the consideration factors in purchasing life insurance policy. Moreover, they are not relying on the government financial support. The authors had proved that the demographic and psychographic variables are important to predict the life insurance consumption.

Showers and Shotick (1994) examined social and economic factors on insurance purchasing decision. They found that incomes have a significant relationship with the consumption of life insurance. Besides, increase of the family size and the increase of the individual age, it will decrease in insurance spending. The authors also found that the family size and insurance premium expenditures have a positive relationship.

Beck and Webb (2003) studied the factors of consumption for life insurance in 68 countries by using panel data from year 1961-2000. The study found that the economic variable such as inflation, income per capita will affect the life insurance demand.

Hwang and Greenford (2005) examined the factors of life insurance demand in China, Taiwan and Hong Kong. The research found that education, income and economic development have positive relationship with the demand of the life insurance. Besides, social structure and one child policy introduce by China government have negative influence on life insurance demand. Nevertheless, social security and price have no consequential effect on consumption for life insurance.

Li, Donghui, Moshirian , Nguyen, P and Wee (2007) analysed life insurance demand by using cross section data for 30 OECD countries for year 1993 to year 2000. They had indicated that income, higher education level, number of dependents, degree of competition and financial development has a positive relationship with life insurance consumption.

Back to Malaysia market, in year 2012, the largest portion in the insurance market share is life insurance sector, which is 56.05per cent. This has brings the sums assured of RM 516 billion on its year. The figure follows by medical and critical illness policy that is usually attached to the life insurance product with the market share of 22.16per cent and 21.79per cent. The sums assured for the medical and critical illness plan in 2012 is in total of RM195 billion and RM152 billion each to each (LIAM, 2012).

In year 2012, sums assured for in-force policies have grown by 11.43 per cent compare to year 2011 and the annual growth for the past ten years is 7.83 per cent.



Figure 1 Total of Sums Assured In-Force for Life Insurance

Sums assured of a life insurance refers to the financial backup that available for the dependents to continue the current lifestyle in the event of death to the life assured (LIAM, UKM, 2013). Per capita sums assured are referring to the average insurance coverage owned by an individual. In year 2003, the recorded sum assured was RM12, 374 for the past ten years, whereas in year 2012, the per capita sums assured has grown by 63.7 per cent with the average sum assured of RM34, 877. The sums assured per member of employment also grew from RM53, 878 in year 2003 to RM80, 465 in year 2012 as per Figure 2 (BNM, 2102). (BNM, 2102).

Source: BNM (2012)



Figure 2 Sums Assured in-force for Life Insurance

Refer to Figure 2.3, the total premium of the life insurance is amounting RM24,902.5 million in year 2012 which are 67.7 per cent of the total insurance premium in the Malaysia insurance market. The premium of the life insurance has grown for 8.84 per cent and there is average of 5.09 per cent growth in the past 10 years. The relatively under-tapped life insurance market is expected to record a compound annual growth rate (CAGR) of 7.5 per cent over the years 2012 to year 2016 (BNM, UKM, 2013).

Source: BNM (2012)



Figure 3 Premium of Life Insurance

Source: BNM (2012)

According to BNM (2012), insurance industry in Malaysia has grown tremendously in recent years. The awareness of Malaysian of the important of insurance has increase with the exposure knowledge on insurance protection. According to the statistic study of Life Insurance Association of Malaysia (LIAM) in year 2011, the total premium for in-force life insurance policy has grown for 9.4 per cent compare with year 2010. The total premium collected from the life insurance policy, including individual life and group policy has increase from RM 21,021,495,518 to RM 22,989,435,722 for year 2010 to year 2011 (LIAM, UKM, 2013).

## 2.3 Independent Variable

#### 2.3.1 Income

Individual income normally reflects significant relationship on the consumption of the life insurance, by holding others variables constant. Showers and Shotick (1994) found that there is a positive relationship among income and spending on life insurance by using a Tobit analysis. The dependent variable used was premium spending on life insurance coverage. The researcher presumed that the life insurance was a normal good. Besides, Tobit analysis indicated that a significant relationship among income and spending on life insurance premiums. The result shows that when income increased, an individual has a more reason to purchase life insurance due to life insurance is mainly for income protection purpose when there are unforeseen circumstances such as death of the income support of the family.

Besides that, Sibel and Mustafa (2009) study on the factors of consumption for life insurance on cross section of 31 European countries. The result shows that the income is one of the most important variables that affected the consumption of life insurance. The result shows that income per capita has positive and momentous effect on consumption for life insurance, which 1 per cent increase in income per capital will cause the increased of the life insurance the consumption by 1.91per cent.

According to the research of Redzuan, Zuriah and Aidid (2009), they used time series data from the period of 1985-2007 to recognize the factors of family takaful life insurance consumption in Malaysia. Their result showed that the income variable is significantly and robustly predictive of family takaful life insurance consumption within the nation.

- $H_0$ : There is no association between Life Assured's incomes towards the consumption of life insurance.
- *H<sub>I</sub>*: There is an association between Life Assured's incomes towards the consumption of life insurance.

#### 2.3.2 Level of Education

According to Beck and Webb (2003), the level of education will determine a person capability to comprehend the advantage of risk management and savings. A person with higher level of education will bring to higher awareness on the risk aversion and more alert on the needs of the life insurance protection; Browne and Kim (1993) discovered that education level could increase the duration of dependency, which drives to an increase in the consumption for mortality protection, a life insurance. They also predict that with a higher level of education in the population, it will have significant relationship with the consumption of life insurance.

Browne and Kim (1993) used the ordinary least squares (OLS) to evaluate the predicted signs of education level. The results presented that the education level has a significant hypothesized sign with the life insurance consumption. The level of education is positively and significantly interrelated to the life insurance in 1980 force model. Nonetheless, Beck and Webb (2003) carried out a research and found that education is insignificant to the consumption of life insurance. They concluded that schooling is not robust predictors with the life insurance consumption by using the regular years of education in the population over age 25 and the gross secondary enrolment proportion to evaluate the education level.

According to Min (2008), the stock of human capital within a household that correlated with the consumption of life insurance is a sign of education. From the research done, four types of variables level of schooling has been used to test the significant level between education and life insurance, which are lower than high school, high school, degree and college degree or more. In summary, all of these variables level of schooling showed positive effect on life insurance purchase, which mean that it is significantly influence the household overall life insurance purchase behaviour.

In Nesterova (2008), panel estimation denoted that countries with higher level of education will have higher life insurance protection request. The higher education level implied a greater demand of life insurance in the market. Hence, a better

living standard will lead to increase of the life insurance consumption and furthermore encourage the capital accumulation through savings weights for a consumer. A simple OLS estimator is used to define the effect on life insurance consumptions. In the results, it showed that the level of education is positively and significantly determined the consumption for life insurance. They also claimed that the finding has a large impact compared to other researchers, which had emphasized the importance of education among the research countries.

The researchers, Browne and Kim (1993), Nesterova (2008) and Min (2008) found that the level of education are significantly affected the consumption of life insurance. However, Beck and Webb (2003) showed level of education is not important in determining the life insurance consumption. Therefore the expected sign is ambiguous.

- $H_0$ : There is no association between Life Assured's levels of education towards the consumption of life insurance.
- *H<sub>I</sub>*: There is an association between Life Assured's levels of education towards the consumption of life insurance.

#### 2.3.3 Age

As per the Affordable Care Act (ACA), it required the insurer to cover any individual who intended to enrol and control the insurer on how they rated the premium according to the individual characteristic or background. They stated that insurer are not allow to rate the premium according to vary health status and different gender. Premium rated according to the age are restricted to a proportion of three to one (which means the premiums for a 64 years old is three times the premium for a 21 years old). Beforehand, premium differences according to age were around five to one.

The breaking point on age assessment implies that, older age adult will be paying premiums that don't completely shield their normal medical costs, while younger age adult will be paying premiums that more to shield their medical costs. For this framework to work, youngsters need to enlist adequate numbers to deliver a excess in premium incomes that can be utilized to cross-sponsor the shortage made by the enrolment of more established individuals (Larry, Gary and Anthony, 2013).

For age, based on the research, Berekson (1972) had found that positive relationship within age and life insurance consumption; nonetheless, Bernheim (1991) had found that there is no significant relationship among age and life insurance consumption. On the other hand, by using 1984 LIMRA data, Gandolfi and Miners (1996) claimed that life assured age and life insurance demand has no relationship.

Bergheim (1991) used 3 models to estimate the demand of life insurance, which is Probit, Tobit and Heckman model .This researcher also used the 1975 Longitudinal Retirement History Survey data, oldest respondent was 69 year-old and youngest respondent was 64 year-old. And result showed the 3 models used by Bernheim (1991), possibility of life insurance is holding fall with age, which mean that age and life insurance consumption are negative relationship.

This research shall study on is there any relationship on Life Assured's age with the trends of life insurance in Malaysia market. In order to further analyse the relationship between Life Assured's ages toward the trends of life insurance in Malaysia market, this study proposed that;

- *H*<sub>0</sub>: *There is no association between Life Assured's ages towards the consumption of life insurance.*
- *H*<sub>1</sub>: *There is an association between Life Assured's ages towards the consumption of life insurance.*

#### 2.3.4 Genders

As indicated by the Malaysia Statistics Department Labour force study in year 2011, 47.6per cent of the labour force is female. Almost all of the female (97.3per

cent) joined from primary school reached the last grade previous year compared to 97.1per cent of the male joined. The proportion of female to male university graduates is at 60:40. With the increase of the female graduates, found that the number of female participant in paid work had increase with more than half a billion women assembly the world's labour force over the past 30 years (Raina, 2011).

For gender, based on case study on Ethiopian Insurance Corporation(EIC) undertaken by Yigzaw (2010), respondents asked the question by using five point Likert scale the level of agreement, which their gender has relationship between gender and life insurance demand or not.

The important step used to test in relationship between demand of life insurance and gender is chi-square test. Based on the result of bar chart, we can see that, gender has no relationship with the attitude of buying life insurance. Furthermore, the projected marginal effect from probit model: change in predicted likelihood of having life insurance in China is based on the unit change showed that male purchaser have 17.94per cent likelihood to have the life insurance compare to female purchaser Wang (2010). For consumption of life insurance in Malaysia, the result showed that, both male and female has no positive relationship on the consumption for life insurance by Yiing and Yi (2012).

This research shall study on is there any relationship on the increase of female labour force with the trends of life insurance in Malaysia market. In order to further analyse the relationship between female labour forces toward the trends of life insurance in Malaysia market, this study proposed that;

# $H_0$ : There is no association between Life Assured's genders towards the consumption of life insurance.

*H*<sub>1</sub>: There is an association between Life Assured's genders towards the consumption of life insurance.

#### 2.3.5 Numbers of Dependent

Number of dependent is a positive explanatory variable for determining the life insurance consumption. Although with different method of study, few researchers still obtain same result which the number of family or the size of family have significant relationship with the consumption of life insurance (Burnett and Palmer, 1991; Yiing and Yi, 2012; Min, 2008).

According to Burnett and Palmer (1991), they used Multiple Classification Analysis (MCA) to test the relationship among the coverage of life insurance purchased with selected demographic variables. According to the result, they found that three of the demographic variables are statistically significant to the dependent variable. Among these three independent variables, number of children found to be positively related to the dependent variable. As stated by Burnett and Palmer (1991), if the number of children increased, the insurance coverage purchase will be increased. The result may explain the family with more children may need more financial support when unforeseen circumstances happen to the family financial pillar.

Min (2008) applied Heckman selection model to study the relationship between demand for life insurance as well as independent variables, family size. The author indicated that households that have children will purchase more life insurance protection. Besides, Yiing and Yi (2012) found that number of dependents play a significant role in the quantity of insurance protection. According to the results, they found that respondent with more dependents are intended to purchase more life insurance protection. This brings the massage that individual with more children or family members will have intention to purchase more insurance protection.

# *H*<sub>0</sub>: *There is no association between Life Assured's numbers of dependent towards the consumption of life insurance.*

*H*<sub>1</sub>: There is an association between Life Assured's numbers of dependent towards the consumption of life insurance.

#### 2.3.6 Basic Sum Assured

According to Medindia (2014), the insurance policy sum assured is the amount of money an insurance plan guarantees to pay up before any bonuses are counted. Put differently, sum assured is the guaranteed amount the policy holder will receive when unforeseen circumstances happen to the life assured. This is also known as the protection or coverage amount and is the total amount for which an individual is insured.

Nonetheless, the question arises on how much of the Sum Assured is considering sufficient for an individual?

Based on Banyan (2012), the main intention of an insurance policy is to protect the dependents in terms of financial once the insured person dies. The more the insurance policy pays the dependents; the better they can maintain their current lifestyle and their ability to meet their liabilities. Sum assured amount able to be derive with few basic thumbs of rules. First of all, compute the monetary liabilities that are bearing by the family. Second, value of owned assets, which arrive at the value of the assets owned at the time of taking the life protection. Third, arrive at required liquid funds needed. With these steps, one shall able to derive the sum assured required by individual. Liabilities of individual were increase from year to year and hence, the sufficient sum assured was increase as well.

And hence is the demand of the sum assured increase was affected the trends of insurance industry is one of the area to be study in this research. In order to further analyse the relationship between insurance policy's sums assured toward the trends of life insurance in Malaysia market, this study proposed that;

- $H_0$ : There is no association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.
- *H*<sub>1</sub>: *There is an association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.*

#### 2.3.7 Level of Debt

Insurance will act as an income protection to an individual when uncertainty happens which and individual incapable to work through illness or injury. Its main intention is to sustain an individual capability to pay the living expenditures which included rental, mortgage, groceries, utility bills and children's education fees during the recovery period or with the absent of the major financial support in the family (TAL, 2015). The largest portion of the living expenses was fall under mortgage, which consider as a debt of the family and hence insurance should act as an income protection to the family that should be able to cover 75 per cent of the household expenses to maintain the family lifestyle.

Insurance main intention is to provide income protection to an individual when uncertainty happens. Hence, the industry believes that the higher the individual debt will reflect to the decision of individual in insurance consumption. According to Schlag (2003), an individual with mortgage commitments will dedicate a higher portion of its budget to purchase endowment insurance than an individual without debts. Hence, this study proposed that:

- $H_0$ : There is no association between Life Assured's levels of debt towards the consumption of life insurance.
- *H*<sub>1</sub>: There is an association between Life Assured's levels of debt towards the consumption of life insurance.

## 2.4 Review of Relevant Theoretical Models

Locus of control refers to how individuals believe them able to control the event affecting them either externally or internally. It's also referring to an individual belief about how much power they can control over the events in of own life. Julian Rotter developed this study in 1950's. He believed that locus of control is a measurement on personality; it helps to explain an individual traits and behaviour.
Locus of control was separate to internal and external influencing. An internal locus of control brings the belief that the path of life in dependents on themselves. Whereas external locus of control bring the belief of an event happen was beyond of their control regardless on how many affords they have put in. Individuals with internal locus of control are less influenced by other, which they will be more politically active and more proactive to achieve goals.

For an example, individual with strong internal locus of control was tends to compliment or fault themselves and their own capabilities when they receiving exam result. On the other hand, individuals with strong external of control will blame the external factor such as the lecturer or the exam questions when they having bad exam result.

Locus of control was deriving and development based from the personality psychology. Later date, Locus of control created numbers of research in a multiplicity of areas especially in psychology such as educational psychology, health psychology and clinical psychology. There are continuous arguments whether precise or more worldwide measures of locus of control will shows to be more beneficial in practical usage.

Martin, Veer and Pervan (2007) used locus of control in their research of consumer signor that examined the reaction of the female models body shapes and weight that they believe it will be affected by the locus of control of the woman. The research found that most of the women in the range of normal weight are strong in internal locus of control because they have faith in that they are capable to control their own weight. Whereas majority of the women that in the range of overweight, they are mostly strong in external locus of control because they have faith in they are inability to control their own weight which it might cause by the genetic issue. As result, weight locus of control is correlated with an individual willpower and beliefs.

According to Jacobs, Waddell and Webb (2011), health locus of control refers to how individual measure and comprehend how individual correlate their behaviour with their healthiness status and the period of time they will used to get better from the illness. Health locus of control directly influences how individual respond in the direction of their health and health decision. Happen every day that there are visible to possible illness that may affect to one's health. The way individual react to the illness are related to the individual locus of control. Research shows that it is expected to see elderly person experience generously decays in their healthiness; they expected that their health locus of control is affected. Nonetheless, this does not mean that their locus of control will be affected in a bad way but elderly person may experience decay in their health and this can show lesser levels of internal locus of control.

From this, it also shows the age brings a significant role in individual's internal and external locus of control. When relating a youngster with an elderly person on the levels of locus of control in terms of healthiness, the elderly person will have more control over their challenging manner and method to handle the circumstances. As people getting elder, they will be conscious that events are out of their own control occurs and other people can have control of their health results too.

Relate to this research, the chief purpose of this research is to define the correlation between the consumptions of life insurance among the different demographic factors. The locus of control shall assists in those factors that influencing individuals' purchasing decision among the demographic factors in Malaysia with believe that individual tends to have different buying behaviour with different demographics factors.



## 2.5 Proposed Theoretical / Conceptual Framework

Source: Developed for the research.

Adapted from: Min (2008), "Factors Influencing Households" Demand for Life Insurance".

## 2.6 Hypothesis Development

### <u>Hypothesis 1</u>

H<sub>0</sub>: There is no association between Life Assured's incomes towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's incomes towards the consumption of life insurance.

When incomes increase, individual are motivated to buy higher life insurance protection. This will bring positive relationship between income and insurance consumption. (Showers and Shotick, 1994).

### Hypothesis 2

H<sub>0</sub>: There is no association between Life Assured's levels of education towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's levels of education towards the consumption of life insurance.

There is significant relationship among the level of education and the life insurance consumption. Higher education level may bringing a higher level of risk aversion alert and higher attentiveness of the importance of insurance (Browne and Kim, 1993).

## Hypothesis 3

H<sub>0</sub>: There is no association between Life Assured's ages towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's ages towards the consumption of life insurance.

Berekson (1972) study presented that there is significant relationship between ages towards consumption of life insurance; Bernheim (1991) found that there is negative relationship between ages towards consumption of life insurance; Gandolfi and Miners (1996) found no relationship between life insurance consumption and age.

## Hypothesis 4

H<sub>0</sub>: There is no association between Life Assured's genders towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's genders towards the consumption of life insurance.

According to Yigzaw (2010) gender has no significant relationship towards life insurance consumptions.

## <u>Hypothesis 5</u>

H<sub>0</sub>: There is no association between Life Assured's numbers of dependent towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's numbers of dependent towards the consumption of life insurance.

Burnett and Palmer (1991) found that there is positive relationship between numbers of dependent towards the consumption of life insurance. When the number of children depended to life assured increased, the insurance protection purchased also increased.

#### <u>Hypothesis 6</u>

H<sub>0</sub>: There is no association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.

According to Medindia (2014), there is positive relationship between existing policy's basic sum assured towards the consumption of life insurance

### Hypothesis 7

H<sub>0</sub>: There is no association between Life Assured's levels of debt towards the consumption of life insurance.

H<sub>1</sub>: There is an association between Life Assured's levels of debt towards the consumption of life insurance.

According to Schlag (2003), there is positive relationship between levels of debt towards the consumption of life insurance.

## 2.7 Conclusion Remarks

The information discuss in the Chapter 2 is beneficial to provide an all-inclusive view and understanding of this research. The association of the dependent variables with each independent variable is well defined in the hypotheses form. Next chapter will discuss on the entire hypotheses to be with proper research method.

# **CHAPTER 3: METHODOLOGY**

## 3.0 Introduction

In previous chapter, discussion was done on the literature review, conceptual framework and hypotheses on this research. This chapter shall discuss the methodology in data collection for the hypotheses testing which will be done in chapter 4. Besides, this chapter shall also discuss the research design, data collection method, sampling design and method of data analysis.

## 3.1 Research Design

Burns and Bush (2006) defined research design as the master plan specifying the methods and procedures for collecting and analysing the needed information make up by a set of predicted decisions. Hence, in other to gain accurate and reliable result, it is vital to illustrate a clearer depiction to show the progression of carrying out the research in an appropriate and systematic mode. The design of a study defines the study type such as descriptive, correlational, semi-experimental, experimental, review, meta-analytic, research question, hypotheses, independent and dependent variables, experimental design, and, if applicable, data collection methods and a statistical analysis plan.

Qualitative research will be used in this research in order to measure variables that affect the buying and selling trends of insurance in Malaysia market. Qualitative research is to determine the relationship between an independent variable and a dependent or outcome variable in a population (Hopkins, 2008).

Moreover, causal research is conducted to find out the major factors that influence the buying and selling trends of insurance in Malaysia market. Causality studies, also known as explanatory research, are the investigation of cause-and-effect relationship. It can be present in the form of conditional statements: "If X, and then Y." Most social scientists seek causal explanations that reflect tests of hypotheses. When variation in one phenomenon, an independent variable, leads to or results in variation if another phenomenon, the dependent variable, causal effect (nomothetic perspective) take place (Haavelmo, 1943).

## **3.2 Data Collection Methods**

Data collection is an important element in every research study. Inaccurate data collection will influence the research that lead to invalid finding and result. Primary data and secondary resources will be used in this research to get a more consistent result.

### 3.2.1 Primary Data

Primary data are first hand data collected to find the explanation for the problem being studied (Zikmund, 2003, pp. 63). In this research, survey questionnaire will be used as data collection method. Part of the survey will be done online part of the survey will distribute using the hardcopy of the questionnaire. Questionnaire is chosen to be the measurement tools in this study to collect data from a large number of respondents. Questionnaire is the first choice of data collection method due to response on questionnaire is quick, cost saving and efficient if compare to collect the data by interviewing despondence one by one. Questionnaire help to resolve problem due to time constrain in the timeframe given to complete the study compare to other methods being used by other researcher.

#### 3.2.2 Secondary Resources

Secondary resources refer to those data that have been collected previously by that researcher in their own study. Secondary resources that used in this study are books, websites, articles and journals. Google scholar, ProQuest, Scopus are those online database to look for the necessary information, articles and journals. Books that available in library assist the researcher with useful information to describe the theories and models to support the data in this study.

## 3.3 Sampling Design

Sampling design is a method of gathering data and information (Bobbie, 2007). It is to find out an accurate characteristic of the entire population through the process of selecting a sample from a population (Hair, 2003). It is very important for a researcher to design an accurate sampling framework because it allows the researchers to bring down the research costs and conduct a more efficient research with greater flexibility and accuracy (Cochran, 1953).

## 3.3.1 Target Population

To start with sampling design, the researcher has to precisely define the target population that they are interested in studying. The target population is the group of elements or objects that researcher seeks to acquire information and about which inferences are to be made (Malhotra, 2006, p.328). The objective of this study is to explore and factors that influences insurance consumptions in Malaysia market. Therefore, the target population of this study will be the insurance holder in Malaysia without age restriction between the male and female.

### 3.3.2 Sampling Frame and Sampling Location

Zikmund (2003) defined sampling frame as the list of items or elements from which the sample may be drawn. In non-probability sampling, probability of any particular member of the population being chosen is unknown. One of the method of non-probability sampling is judgemental sampling where an experienced individual (normally refer to researcher), select the sample based upon some appropriate characteristics of the sample members. Sampling location is the place where the data being collected. Since we are using the non-probability in this research, hence there will be sampling frame, whereas the sampling location is within the Malaysia.

#### **3.3.3 Sampling Elements**

Sampling elements is the subsection from the entire population that been selected by the sampling process, which may contain one or more population elements (Smith and Albaum, 2005). The target respondents are the employees of insurance company and agent who selling the insurance product since it was believe that they should have enough knowledge to complete the survey questionnaire that contains specific wording that used by insurance industry. These respondents also consist of different qualifications and income level. Different kind of people has various personality and perspective. Hence, we can have a more accurate and common result to analyse.

### 3.3.4 Sampling Technique

Churchill and Iacobucci (2009) categorized sampling technique into two categories: probability sampling and non-probability sampling. Non-probability sampling was used as the sampling technique for this research. This is a sampling technique where the samples are collected in a process that does not give all the individuals in the population equal chances of being chosen (Castillo, 2009). This

is also known as sampling techniques that are cosy type of probability sampling technique in terms of capital and commodity.

Convenient sampling is used to focus on a subset, pre-test the survey questionnaires or for the pilot test (Malhotra, 1996) for this study. Hence, the questionnaires were distributed to the targeted respondents.

## 3.3.5 Sampling Size

Sample size is known as the number of elements or units gathered in the research (Malhotra, 1996). Before actual test conducted, 15 pilot tests have been given to some of the respondents. A sample size of 300 was gathered in data collection stage.

## 3.4 Research Instrument

Questionnaire was used as the research instrument in this study. Survey was done by using questionnaire due to it is a well-known method to gain effectual, precise and worthwhile data from large amount of respondents. Questionnaire is designated as a tenacity of survey and statistical analysis (Leung, 2001). The questionnaire of this study was distributed to respondents in two (2) methods. The first method was distributed to the respondents by sending email with the link of Google form to complete the survey online. The second method was distributing the questionnaire to the targeted respondents that are reachable. A total of 250targeted respondents were contacted with the questionnaire and only 140 respondent's response online and 79 hardcopy questionnaires manage to be collected back after 3 days.

A pilot test was conducted before the actual survey. The purpose of the pilot test is to determine the validity, reliability, and to capture the potential errors of the questionnaires (Lancaster, Dodd and Williamson, 2004). Saunders, Lewis and Thornhill (2009) recommend that the minimum numbers for pilot test are ten (10) sets of questionnaires. Therefore, 15 qualified respondents were selected to carry out the test in order to ensure the reliability of the questionnaire.

## 3.5 Constructs Measurement

Measurement scales are used to classify and quantify variables. Values are significant when they are quantified into specific units and measurement values. The four levels of measurement scale are nominal, ordinal, interval and ratio.

The questionnaire of this study consists of two parts that named as PART 1 and PART 2. PARTS 1 are designated to test on the demographic factors. Nominal and ordinal measurement scales were engage in this part of the questionnaire. Malhotra (2010) stated that nominal measurement scale is a simple identification system and utilized for variables where the respondents must be categorized into a mutually exclusive category. The nominal scale is applied in gender in the questionnaire. For instance, a number is assigned to reflect a respondent's gender where 1 represents male and 2 represents female.

Besides, Malhotra (2010) also analysed that ordinal scale was assigned to items according to characteristics possessed which is to measure the attitude, opinion and measurement on that particular object. Hence, income, level of education, age, numbers of dependent, existing policy's basic sum assured and level of debts are categorized as ordinal measurement scale.

Other than that, interval scales are numeric scales that not only arranged in order, but also the exact differences between the values (Malhotra, 2010). Therefore, consumption of life insurance is fall under interval measurement scale.

PART 2 of the questionnaire are designated for those respondents who have purchased life insurance protection; total of 28 questions will be raised in this part of questionnaire. The entire items in PART 2 are using five-point Likert Scale to allow respondents to express how much they agree or disagree with a particular statement. The scale ranged from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) and 5 (strongly agree).

Table 2 Measurement Used for Each

	Variables	Measurement
Demographics	Consumption of Life Insurance	Interval
	Income	Ordinal
	Level of Education	Ordinal
	Age	Ordinal
	Gender	Nominal
	Numbers of Dependent	Ordinal
	Existing Policy's Sum Assured	Ordinal
	Level of Debts	Ordinal

Source: Developed for the research.

## 3.6 Data Processing

Before analysing the collected data, it shall go through the stage of data checking, editing, coding, transcribing, as well as identifying any special or unusual treatments of data in order to retrieve accurate information and result.

### 3.6.1 Data Checking

Data checking is to ensure the completeness and accuracy of the collected data. The entire question shall be check in details when collected from all of the respondents. This is the prevention step to avoid any issue occur from the questionnaire and take immediate action to correct the problems as soon as possible. Error such as typo error and sequence or logic of the question may affect the result of the study.

#### 3.6.2 Data Editing

According to Cooper and Schindler (2006), data editing is to detect errors on the data collected and correct the errors to ensure the data are uniformly entered, complete, accurate and consistent. In this study, error checked was done on the collected data and efforts were done to adjust the data for omission and to ensure the data are meeting the standard standards and in good quality.

#### 3.6.3 Data Coding

Data coding is appointing representative numbers and other symbols to the answers, hence the responses are grouped into number of categories (Cooper and Schindler, 2006). In this research, gender of the respondents will be code as 1 for male and 2 for female. Once coding completed, Statistical Package for Social Science (SPSS) software is used to analyse the coded data.

#### 3.6.4 Data Cleaning

According to Malhortra and Peterson (2006), data cleaning is the process correct and treatment of missing responses. This process carries out to check the inaccurate data and this process will be done by SPSS software in order to produce the result.

### 3.7 Data Analysis

Computer programs used to analyse the data are SPSS software. This software will assist in data management and calculate the statistics on the data been collected from questionnaires done by the respondents. There are two categories of statistical; these statistical are categorized into non-parametric statistic and

parametric statistic. Descriptive statistic and inferential statistic are fall under parametric statistic.

### 3.7.1 Descriptive Analysis

Descriptive analysis mean raw data are arranged in a form for easy to understanding or to be easy interpretation and ordering, rearranging and manipulating data to provide descriptive information (Zikmund, 2003, pp. 55). He also indicates that descriptive research defines the characteristics of large amount of market research. As a result, descriptive analysis role is to classify the relationship between every variable, for example the data from demographic factors consists in the questionnaire. The result of these data will be converted into graph format, chart or table form, this shall allow the researcher to interpret, read and understand the data easily on the factors that influencing the life insurance consumption.

## 3.7.2 Scale Measurement

### 3.7.2.1 Normality Test

In this study, SPSS is used to run the normality test in order to achieve normal distribution. The shape of distribution can be described with skewness and kurtosis.

Skewness is used to determine the distributional asymmetry. If the data has longer tail to the right from the centre point, it is interpret as positive skewness whereby if the data has longer tail to the left from the centre point, it is interpret as negative skewness.

Kurtosis is a statistical to describe the distribution of observed data, whether they are flat or peaked relative to normal distribution. Based on Wright and Herrington

(2011) study, positive kurtosis showed that a relatively peaked distribution and negative kurtosis indicate flat distribution.

George and Mallery (2005) implies that range for skewness and kurtosis is + 2. Value that falls within +2 means data is normally distributed.

#### 3.7.2.2 Reliability Test

Overall consistency of a measure can be measure with reliability. Reliability is the degree to which a measuring procedure produces consistent or similar result under repeated trials. A measure is said to have high reliability when it is capable of giving similar result under consistent conditions. According to Burns and Bush (2006, p. 290), reliability measure is one for which a respondent answer in the same or in a very similar way to an identical or close-identical question. It is considered reliable if under repeated application yield consistent scores and concerned with the consistency of the research findings (Malhotra, 2006, p. 276). This test is able to verify whether the items in the questionnaire are related to each other or vice versa. Cronbach's Alpha of reliability test is used to examine the reliability of the measurement scale. Scales were analysed in term of their reliability, by means of the internal consistency.

According to the Sekaran (2003), the reliability which less than 0.6 are consider poor, reliability test value that is in the range of 0.7 is consider good acceptable reliability, those more than 0.8 to 0.9 is considered good and the closer the Cronbach's Alpha to 1 the higher the internal consistency.

Cronbach's Alpha	Strength of	Association
Unacceptable		
< 0.5	Unacceptable	
< 0.6	Poor	
0.6 to < 0.7	Moderate	
0.7  to < 0.8	Acceptable	
0.8 to < 0.9	Very Good	
$\geq 0.9$	Excellent	
Source: George and Mallery	(2005).	

Table 3 Rules of thumb about Cronbach's Alpha coefficient size

## 3.7 Inferential Analysis

Inferential analysis is the statistical analyse used to draw the inferences and conclusion about a population based on the sample (Zikmund, 2003, pp. 738).

#### 3.7.1 Spearman Correlation

Relationship between two random variables or data can be measure and analyse with correlation. The value of the correlation coefficient varies between +1 and -1 (Chen, 2002). When the value of the correlation coefficient falls around  $\pm 1$ , it will consider as perfect link between the two variables. When the correlation coefficient values are towards 0, the link between two variables will be weaker. Nonetheless, correlations are limited to linear relationships between variables. Even though the correlation coefficient is near to zero, non-linear relationship might occur (Bonett, 2008).

Spearman Correlation Coefficient (normally denoted with Greek letter rho,  $\rho$ , or as rs) is also known as Spearman Rank Correlation or Spearman's rho. It is one of the few cases where a Greek letter denotes a value of a sample and not the characteristic of the general population (Bobko, 2008). As per other all correlation coefficients, Spearman's rho is a nonparametric measure of statistical dependence of two variables. Hence, Spearman Correlation Coefficient is closely related to Pearson's Bivariate Correlation Coefficient, Point-Biserial Correlation, and the Canonical Correlation.

Unlike Pearson's bivariate correlation coefficient, Spearman Correlation uses ranks instead of assumption of the distribution between the two variables and it does not require interval or ratio such as continuous-level data. With this, it analyse the relationship among variables of ordinal measurement levels (Cheung, 2004). Furthermore, Spearman Correlation is a non-para continuous-level test, which does not assume that the variables are approximate multivariate normal distribution. In statistic, The Spearman correlation coefficient is defined as the Pearson correlation coefficient between the ranked variables or variable converted to ranks. Spearman correlation examines the null hypothesis of independence between two variables. Since both variables are in ordinal scale or ranked data, Spearman's correlation requires converting interval or ratio scales into ranks before it can be examine (Cohen, 2003).

#### 3.7.2 Multiple Linear Regressions (MLR)

Multiple regression analysis is a effective approach that often used for predicting the unknown value of a variable from the known value of two or more variables. According to Burns and Bush (2006, p. 575), the multiple regression analysis involves more than one independent variable to predict a single dependent variable or used in the regression equation. The fundamental of this approach is assuming a straight-line relationship appears between the variable (Burns and Bush, 2006, p. 588).

MLR describes the fraction on two or more independent variable on a single interval-scaled dependent variable. Usage of MLR is to expound self-weighting estimating equation, monitoring the impassable variable to evaluate the involvement of other variable and test and expound the causal theories (Cooper and Schindler, 2006).

By using MLR, researcher can identify independent variables that have greater influence to the dependent variable. Five fundamental questions have been asked when determining the result in this study:

- Is the relationship exists between variables;
- How strong is the relationship;
- Is the relationship is positively or negatively skewed;
- What is the best way to describe the relationship;
- What are the best ways of fitting a straight line to the data

In statistic, R-squares is also named as coefficient of determination which in MLR, it showed the percentage of consumption of life insurance (dependent variable) and explained by the factors that influencing the purchasing decision (independent variable). When the R-square value is nearer to 1, it shows the relationship is stronger. To avoid multicollinearity issue, tolerance score need to be more than 0.1 (O'brien, 2007).

According to Hair (2006) multiple regression analysis is a statistical approach that studies the linear relationship between an independent variable and dependent variables by estimating coefficients for the equation and for a straight line. The equation in multiple regressions has the following form:

$$Y = \beta 1 + \beta 1 X 1 + \beta 2 X 2 + \dots + \beta n X n$$
(1)

To merge with this study, MLR will be used to examine the seven independent variables significantly influencing the consumption of life insurance in Malaysia. Thus, the equation formed for this study will be:

$$CLI = \beta 0 + \beta 1 I + \beta 2 E + \beta 3 A + \beta 4 G + \beta 5 N + \beta 6 B + \beta 7 D$$
(2)

Whereby,

CLI = Consumption of Life Insurance (Dependent Variable)

- *I* = *Income Level (Independent Variable 1)*
- *E* = *Level of Education (Independent Variable 2)*
- A = Age (Independent Variable 3)
- G = Gender (Independent Variable 4)
- *N* = *Number of Dependent (Independent Variable 5)*
- B = Basic Sums Assured (Independent Variable 6)
- D = Level of Debt (Independent Variable 7)

This MLR will assist in the research to identify the explanatory variable (factors) that influencing the dependent variable (consumption of life insurance).

#### 3.7.3 Goalpost

In order to transform the numerical data for dependent variable to jive and run the multiple regression analysis, goalpost formula will be use to calculate the consumption index. Minimum and maximum values are set in order to transform the indicators into indices between 1-100. In goalpost, the higher index, the higher the consumption. The index will be computed with formula as follow:

 $Dimension \ Index = \frac{Actual \ Value - Minimum \ Value}{Maximum \ Value - Minimum \ Value}$ 

# **CHAPTER 4: DATA ANALYSIS**

## 4.0 Introduction

This chapter presents the results and analysis of 215 responses that were administered in the period from October 2015 to November 2015. Total 140 respondents from web-based survey and 75 respondents from face to face survey. All results were obtained from the output of SPSS 20 computation analysis software and testing mediation using bootstrapping in SPSS. The presentation of the results in this chapter includes reliability procedure prior to outline the key descriptive statistics of the characteristic of the respondents and variables in the study.

The result shall show the relationship between the factors discussed in the earlier chapter that influencing the consumption of life insurance.

## 4.1 Pilot Test

### 4.1.1 Normality Test

To test on the normlity for the pilot testm Skewness and Kurtosis was take into account simultaneously. According to George and Mallery (2005), passable level for both Skewness and Kurtosis test is  $\pm 2$ .

	Skewness		Kurt	osis
	Statistic	Std. Error	Statistic	Std. Error
Gender	.788	.580	-1.615	1.121
Number of Dependent Family Members	1.646	.580	1.829	1.121
Age	.547	.580	385	1.121
Educational Qualification	.351	.580	3.271	1.121
Monthly Income	675	.580	-1.191	1.121
Current Level of Debt (Individual)	1.397	.580	1.033	1.121
Current Personal Insurance Sum Assured	.772	.580	607	1.121

#### Table 4 Outcomes of Normality Test

Source: Developed for research

Refer to Table 4 the skewness and kurtosis for all of the variable are within the range of  $\pm 2$ . Therefore, pilot test's data will be consider as normally distributed.

#### 4.1.2 Reliability Test

The reliability and validity procedures are conducted prior to the subsequent statistical analyses. The reliability analysis is carried out to examine the internal consistency of the scale items. The result of the reliability test is revealed in the table below.

 Table 5 Reliability Analysis Result for Pilot Test

Independent Variables	Cronbach's Alpha
Gender	.900
Number of Dependent Family Members	.904
Age	.902
Educational Qualification	.899
Monthly Income	.892
Current Level of Debt (Individual)	.893
Current Personal Insurance Sum Assured	.904
Same a Developed for recease	

Source: Developed for research

Based on the table above, all the variables are reliable due to display Cronbach's Alpha above the threshold of  $\alpha$ =0.70. A generally accepted rule of thumb is that the Cronbach's Alpha should be greater than 0.7 in order for the scale to be

considered reliable (Sekaran,2003).As a result, the questionnaire is reliable and can be used for the target population.

## 4.2 Descriptive Analysis

250 sets of questionnaires have been distributed but only 215 sets are completed and returned (86% response rate). Prior to doing the statistical analyses, it is useful to study the overview description of respondent's demographic background. It is also important to test assumptions about variables. The variable consist of the income level, levels of education, age, gender, number of respondent and levels of debt.

#### 4.2.1 Frequency of Respondents Based on Consumption of Life Insurance

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
	Yes	204	95.0	95.0	950
Valid	No	11	5.0	5.0	100.0
	Total	215	100.0	100.0	
a	D 1	1.0 1			

Table 6 Distribution Table of Respondent's Consumption of Life Insurance

Source: Developed for research



Figure 4 Percentage of Respondent's Consumption of Life Insurance

Referring to Table 4, repondents who bought life insurance is more than respondets who does not purchase life insurance policy. Derived from the total of 215 respondents, total of 101 respondents (95%) of the respondents owned at least one life insurance plann, whereas only 11 respondents (5%) does not owned a life insurance policy.

Source: Developed for Research

4.2.2	Frequency	of Respondents	Based on	Income
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		Frequency	Percent	Valid Percent	Cumulative Percent
	RM 1,000 and below	15	7.0	7.0	7.0
Valid	RM 1,001 - RM 2,500	13	6.0	6.0	13.0
	RM 2,501 - RM 4,000	59	27.4	27.4	40.5
	RM 4,001 - RM 5,500	40	18.6	18.6	59.1
	RM 5,501 - RM 7,000	25	11.6	11.6	70.7
	RM 7,001 and above	63	29.3	29.3	100.0
	Total	215	100.0	100.0	

Table 7 Distribution Table of Respondent's Monthly Income Level

Source: Developed for research



Figure 5 Pecentage of Respondent's Income Level

Source: Developed for Research

Referring to Table 5, the majority of the respondents earning fall RM 7,000 and above which has contributed 29% of respondents while 27% earning fall between RM 2,501 - RM 4,000. 19% respondents earning fall in group RM 4,001 – RM 5,500 whereas 12% respondents earning fall in group RM 5,501 – RM RM 7,000. Balance of 7% and 6% of respondents fall I group RM 1,000 and below and RM 1,001 – RM 2,500 respectively.

4.2.3	Frequency of Respondents Based on Level of Education
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		Frequency	Percent	Valid Percent	Cumulative Percent
	SPM	27	12.6	12.6	12.6
Valid	Diploma/ Advance Diploma	50	23.3	23.3	35.8
	Bachelor Degree	121	56.3	56.3	92.1
	Master Degree	13	6.0	6.0	98.1
	Others	4	1.9	1.9	100.0
	Total	215	100.0	100.0	

Tabla	0	Distribution	Tabla	$-\mathbf{f}$	$D_{\alpha\alpha}$	mandan	+ ? ~	I arral	$-\mathbf{f}$	Educa	ation
rable	0	DISTIDUTION	Table	OI.	Res	Donden	ιs	Lever	OI.	гаис	alion
	~					0 0 0	~ ~				

Source: Developed for research



Figure 6 Percentage of Respondent's Level of Education

Source: Developed for Research

In term of the respondent's education level, 121 respondents (56%) have obtained bachelor degree, 50 respondents (23%) have completed diploma/ advance diploma. 13% (27) of respondents have at least completed SPM. 6% (13) respondents and have other qualification whereas 2% (4) have completed their master degree.

#### 4.2.4 Frequency of Respondents Based on Age

		Fraguanay	Doroont	Valid	Cumulative
		98 89 22 6	reicent	Percent	Percent
	18 - 30 years old	98	45.6	45.6	45.6
Valid	31 - 40 years old	89	41.4	41.4	87.0
	41 - 50 years old	22	10.2	10.2	97.2
	51 years old and above	6	2.8	2.8	100.0
	Total	215	100.0	100.0	

Table 9	Distribution	Table	of Resp	ondent's	Age
1 4010 )	Distribution	1 4010	01 10000	ondenic 5	1150

Source: Developed for research





Source: Developed for Research

The table above shows the respondents' age, 48% (98) respondents are ranging from 18 - 30 years old whereas 41% (89) respondents are ranging from 31 - 40 years old. Follow by 10% (22) respondents are ranging from 41 - 50 years old. Lastly, only 3% (6) respondents are 51 years old and above.

#### 4.2.5 Frequency of Respondents Based on Gender

		Frequency	Percent	Valid Percent	Cumulative Percent	
	Male	105	48.8	48.8	48.8	
Valid	Female	110	51.2	51.2	100.0	
	Total	215	100.0	100.0		
Source: Developed for research						

Table 10 Distribution Table of Respondent's Genders

Source: Developed for research

#### Figure 8 Percentage of Respondent's Gender



Source: Developed for Research

The output presented there are 110 (51%) males and 105 (49)% females in the sample, giving a total of 215 respondents.

#### 4.2.6 Frequency of Respondents Based on Numbers of Dependent

	Frequency	Percent	Valid Percent	Cumulative Percent
1 - 3 members	122	56.7	56.7	56.7
4 - 6 members	64	29.8	29.8	86.5
7 - 9 members	10	4.7	4.7	91.2
Others	19	8.8	8.8	100.0
Total	215	100.0	100.0	
	<ol> <li>1 - 3 members</li> <li>4 - 6 members</li> <li>7 - 9 members</li> <li>Others</li> <li>Total</li> </ol>	Frequency           1 - 3 members         122           4 - 6 members         64           7 - 9 members         10           Others         19           Total         215	FrequencyPercent1 - 3 members12256.74 - 6 members6429.87 - 9 members104.7Others198.8Total215100.0	FrequencyPercentValid Percent1 - 3 members12256.756.74 - 6 members6429.829.87 - 9 members104.74.7Others198.88.8Total215100.0100.0

Table 11 Distribution Table of Respondent's Numbers of Dependent

Source: Developed for research



Figure 9 Percentage of Respondent's Numbers of Dependent

Source: Developed for Research

The table above shows the numbers of dependent available for the respondents. Found that 122 (57%) respondents have 1 -3 families members that financially depend on them, follow by 64 (30%) respondents have 4 - 6 families members financially dependent on them. Only have 29 respondents have more than 7 families members financially rely on them.

#### 4.2.7 Frequency of Respondents Based on Basic Sum Assured

		Fraguanau	Doroont	Valid	Cumulative
		riequency	reicent	Percent	Percent
	NIL [End. Thank you for your participant]	11	5.1	5.1	5.1
	RM 100,000 and below	44	20.5	20.5	25.6
	RM 100,001 - RM 250,000	67	31.2	31.2	56.7
Valid	RM 250,001 - RM 400,000	32	14.9	14.9	71.6
	RM 400,001 - RM 550,000	21	9.8	9.8	81.4
	RM 550,001 - RM 700,000	8	3.7	3.7	85.1
	RM 700,001 and above	32	14.9	14.9	100.0
	Total	215	100.0	100.0	
~					

					~	
Table 12	Distribution	Table of	Respondent'	s Basic	Sums	Assured
	2 10 11 10 11 011		1		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1 100 011 0 00

Source: Developed for research



#### Figure 10 Percentage of Respondent's Basic Sums Assured



In term of respondent's current personal insurance sum assured, 31% (67) respondents owned insurance coverage with sum assured ranging from RM 100,001 - RM 250,000, 20% (44) respondents being covered with sum assured lower than RM 100,000. The results follow by 15% (32) respondents with sum assured coverage of RM 250,001 - RM 400,000 and RM 700,001 and above. The

balance of result will be 10% (21) respondents with RM 400,001 - RM 550,000, 4%(8) respondents with RM 550,001 - RM 700,000 insurance coverage.

#### 4.2.8 Frequency of Respondents Based on Level of Debt

		Fraguanay	Doroont	Valid	Cumulative
		Frequency	reicent	Percent	Percent
	RM 100,000 and below	114	53.0	53.0	53.0
	RM 100,001 - RM 250,000	33	15.3	15.3	68.4
	RM 250,001 - RM 400,000	28	13.0	13.0	81.4
Valid	RM 400,001 - RM 550,000	17	7.9	7.9	89.3
	RM 550,001 - RM 700,000	12	5.6	5.6	94.9
	RM 700,001 and above	11	5.1	5.1	100.0
	Total	215	100.0	100.0	

Table 13 Distribution Table of Respondent's Level of Debt

Source: Developed for research

#### Figure 11 Percentage of Respondent's Level of Debt



Source: Developed for Research

In term of respondent's current level of individual debt, 114 (53%) of respondents have debt level lower than RM 100,000, 33 (15%) respondents have debt level ranging from RM 100,001 - RM 250,000, 28 (13%) respondents have debt level ranging from RM 250,001 - RM 400,000. Follow by 17 (8%) respondents with

debt of RM 400,001 - RM 550,000, 12 (6%) respondents with debt of RM 550,001 - RM 700,000 and only 11 (5%) of respondents with debt higher than RM 700,000.

## 4.3 Hypotheses Testing

#### 4.3.1 Multiple Linear Regression Analysis

In this study, hypotheses H1, H2, H3, and H4 were tested using Multiple Linear Regression analysis. This part of the study shall test on the demographic data of the collected data.

- H1: There is an association between Life Assured's incomes towards the consumption of life insurance.
- H2: There is an association between Life Assured's level of education towards the consumption of life insurance.
- H3: There is an association between Life Assured's ages towards the consumption of life insurance.
- H4: There is an association between Life Assured's genders towards the consumption of life insurance.
- H5: There is an association between Life Assured's numbers of dependent towards the consumption of life insurance.
- H6: There is an association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.
- H7: There is an association between Life Assured's level of debt towards the consumption of life insurance.

#### 4.3.2 Spearman Correlation

		Cons	Inc	Dep	Edu	Age	Gen	Debt	BSA
Spearman 's rho	Consumptio n	1.000	.138	.080	.271*	.303*	.042	.199**	.221*
	Income_Q		1.00 0	.145	.395*	.370*	046	.342**	.419*
	Dependent_		Ū	1.00	.234*	.259*	044	.259**	.065
	Education_Q			Ū	1.00	.383*	- 202**	.431**	.277*
	Age_Q				0	1.00	102	.540**	.452*
	Gender_Q					0	1.000	- 253 <sup>**</sup>	112
	Debt_Q							1.000	.465*
	BSA_Q								1.00 0

Table 14 Correlation for All Variable
---------------------------------------

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

\*. Correlation is significant at the 0.05 level (2-tailed).

Source: Developed for research

Table 14 indicated the level of correlation between the independent variables and the dependent variable, consumption of life insurance. The result shows that the dependent variable, consumption of life insurance is positively correlated with the independent variable except for number of dependent variable and gender variable. Correlation between the variable are positively significant ranging from 0.1 to 0.5, nonetheless the result shows that there is no positive correlation with number of dependent variable and gender variable. Besides, gender variable also show there is no significant correlation with other variables except for level of qualification variable. This bringing the meaning of the gender variable does not affect other variable's value except for level of education variable. Although gender variable (.420) shows the least correlation, however the variable was still maintained for study. The correlation between each of the independent variables is not too high (<.07).

#### 4.3.3 Multicollinearity Analysis

Model R R Squa		R Square	Adjusted R Square	Std. Error of the Estimate
1	.434 <sup>a</sup>	0.188	.159	11.12188
(0)				

Table 15 Model Summary of Independent Variable

a. (Constant), BSA\_Q, Dependent\_Q, Gender\_Q, Education\_Q, Income\_Q, Age\_Q, Debt Q Source: Developed for research

Table 15 showed that  $R^2$  for this study is 0.188 (18.8%). It indicated that the 18.8% variance had been explained by the 7 variables. The remaining 81.2% are contributing by other factors.

#### Table 16 Anova of Independendent Variable

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	5618.295	7	802.614	6.489	.000 <sup>b</sup>
1	Residual	24244.450	196	123.696		
	Total	29862.745	203			
		a				

a. Dependent Variable: Consumption

b. Predictors: (Constant), BSA\_Q, Dependent\_Q, Gender\_Q, Education\_Q, Income\_Q, Age\_Q, Debt\_Q

Source: Developed for research

From the Anova table, the statistical significance is high, P<.001. It can explain that the seven independent variables are able to predict the consumption of life insurance.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		В	Std. Error	Beta	t	Jig.
	(Constant)	25.316	7.560		3.349	.001
	Income_Q	-1.612	1.410	081	-1.143	.255
	Dependent_Q	.325	1.401	.016	.232	.817
1	Education_Q	3.890	1.411	.196	2.756	.006
I	Age_Q	5.852	1.909	.232	3.065	.002
	Gender_Q	3.217	1.630	.133	1.974	.050
	Debt_Q	.886	1.346	.053	.658	.511
	BSA_Q	1.785	.794	.170	2.248	.026
a.	Dependent Variable: Consumption					

Table 17 Coefficient of Independent Variable

Source: Developed for research

From the coefficients table, it is shown that the indpendent variables: Level of Education, Age, Gender and Basic Sum Assured are making a significantunique contribution to the prediction of consumption of life insurance (P<.05). However, Sig. value of Income (.255), Number of Dependent (.817) and Level of Debt (.511) are greater than .05, therefore it does not making a significant unique contribution to the prediction of consumption of life insurance. The standardised Beta value for Level of Education (beta=.196), Age (beta=.232), Gender (beta=.133) and Basic Sum Assured (beta=.17) indicated that age is the most contributer. The unstandardize valie for Level of Education ( $\beta$ =3.890), Age ( $\beta$ =5.852), Gender ( $\beta$ =3.217) and Basic Sum Assured ( $\beta$ =1.785) has a positive relationship with the consumption of life insurance. Hence, the relationship between consumption of life insurance and the four independent variables can explained by developing the equations:

Consumption of Life Insurance = 25.316 + 3.890E + 5.852A + 3.217G + 1.785B

Based from the result above, the H2, H3, H4 and H6 are accepted but H1, H5 and H7 are rejected.

## 4.4 Summary of Hypothesis Testing Results

Table 18 Summary of Hypothesis Testing Results

Hypothesis	Supported (p<0.05)	Not Supported (p>0.05)		
H1: There is an association between Life Assured's				
incomes towards the consumption of life insurance.		·		
H2: There is an association between Life Assured's				
levels of education towards the consumption of life	$\checkmark$			
insurance.				
H3: There is an association between Life Assured's	1			
ages towards the consumption of life insurance.	tion of life insurance.			
H4: There is an association between Life Assured's	1			
genders towards the consumption of life insurance.	v			
H5: There is an association between Life Assured's				
number of dependents towards the consumption of		$\checkmark$		
life insurance.				
H6: There is an association between Life Assured's				
existing policy's basic sums assured towards the				
consumption of life insurance.				
H7: There is an association between Life Assured's				
levels of debt towards the consumption of life		$\checkmark$		
insurance.				

Source: Developed for research

## 4.5 Concluding Remarks

This chapter presented the details interpretation of quantitative analysis. Base of the analysis, the hypotheses testing finding of direct effect to consumption of life insuarnce are concluded. These results will be carried on for the next chapter to further scrutinize for causal and effects.

# **CHAPTER 5: DISCUSSION AND CONCLUSION**

## 5.0 Introduction

In this chapter, the results of the quantitative will be discussed. The discussion and conclusion will be linked to research objective of this study. With these research findings, it provides valuable insights and highlights for the policymaker and insurer to develop and promote insurance to the untapped insurance market

## 5.1 Discussion of Major Findings

The aims of this study are to examine the factors that affecting the consumption of lie insurance in Malaysia market. In this study, researcher focuses on factors such as income level, level of educaton, age, gender, number of dependent, basic sum assured and level of debt.

### 5.1.1 Findings of Hypothesis

#### 5.1.1.1 Income

H1. There is an association between Life Assured's incomes towards the consumption of life insurance.

This research found that there is no significant association between the income and the consumption of life insurance which the p-value shows the in the Multiple
Linear Regression is .255 with is greater than .05. The result bringing the meaning of the level of income does not affect the individual consumption of life insurance although the individual income increase or decrease. The result doest not consistent with the result that done by previous researcher (Showers and Shotick, 1994; Sibel and Mustafa, 2009; Redzuan, Zuriah and Aidid, 2009) that been discuss in chapter 2. The previous researcher believe that the increase of income will increase the consumption of life insurance but the result of this study shows in different way. The result bring the message regardless the income level, life insurance consumption still plays an important role in individual risk planning. One of the reason the result is differ from other researcher was due to the respondents are mainly from insurance industry such as insurance company employee and insurance agent. These peapole understand well on the importance of the life insurance hence, they believe that insurance is a must for individual life no matter the level of income. Besides, Bank Negara Malaysia would like to bring out the need based selling concept which encourage insurance agent to sell product based on customer needs instaed of refering to the budget. To align with the need based concept, insurance employee and insurance agent are well educated that individual needs will be prioritise and financial figure will be the second factors.

#### 5.1.1.2 Level of Education

# H2: There is an association between Life Assured's level of education towards the consumption of life insurance.

The result of this study shows that there is a significant association between the level of education and the consumption of life insurance. The p-value of the Multiple Linear Regression is .006 which is lower than .05 and the correaltion coefficient of 3.890 bringing the positive relationship with the consumption of life insurance. The result indicate that the higher level of educatio will will increase the individual consumption in life insurance. The result shows the consistency with the previous researcher result (Browne and Kim, 1993; Nesterova, 2008; Min, 2008). Browne and Kim (1993) indicated that higher the

individual level of education they are more aware about risk aversion. Hence it will create higher awareness in the importance of life insurance to protect their love ones when unforeseen circumstances happen to them. This also brings the message when the individual are more highly educated, they have more desired to let their family to maintain the current standard of living and they will more agresive to plan for their future.

5.1.1.3 Age

# H3: There is an association between Life Assured's ages towards the consumption of life insurance.

According to the result of the study, there is significant association between the respondents age and their consumption in life insurance. The p-value of the Multiple Linear Regression is .002 which is lower than .05 and the correaltion coefficient of 5.852 bringing the positive relationship with the consumption of life insurance. This bringing the message of the increase of age will higher the individual life insurance consumption. The result is consistence with the previous research (Berekson, 1972) which discussed in chapter 2. This result might due to when the individual are getting older, their commitment will become higher since the dependent rely on them financially will be increase and this has increase their responsibility as well.

#### 5.1.1.4 Gender

# H4: There is an association between Life Assured's genders towards the consumption of life insurance.

This resaerch show that there is significant association between the individual age and their consumption of life insurance. the p-value shows the in the Multiple Linear Regression is .05 and the correlation coefficient of 3.217. The result bringing the meaning of the gender will influence the individual consumption of life insurance. The result is not consistence with the previous research done by Wang (2010). Gender will influencing individual buying behaviour in life insurance consumption. The result might due to number of females join the workforce had increase in recent year and their commitment are almost equal to male and the importance of life insurance for both female and male are same since the are having the same responsibility to their families as well. Besides, the highest diagnose critical illness in Malaysia are breast cancer and government are promoting and educating people on the impact of breast cancer and this has increase the alert on female of the importance of prevention as well as the insurance protection needed when unpredictable circumstances happen.

#### 5.1.1.5 Number of Dependent

# H5: There is an association between Life Assured's numbers of dependent towards the consumption of life insurance.

This research found that there is no significant association between the numbers of dependent and the consumption of life insurance which the p-value shows the in the Multiple Linear Regression is .817 with is greater than .05. The result bringing the message of the numbers of debt does not affect the individual consumption of life insurance although the number of dependents have increase or decrease. The findings are different from previous study done by Burnett and Palmer (1991); Min (2008); Yiing and Yi (2012). Previous research found that when number of children increase, parents is tend to purchase more insurance coverage for themselves due to they wanted to protect their family when any unforeseen circumstances happen to them. However, this study bringing a contradict result which the number of dependents will not affect thir purchasing decision. The result might due to the numbers of dependent are referring to families members that financially rely on them which include parents and spouse. Hence, it lead to different result instead on just focus on the children depending on them.

#### 5.1.1.6 Basic Sum Assured

# H6: There is an association between Life Assured's existing policy's basic sums assured towards the consumption of life insurance.

This resaerch show that there is significant association between the life assured's existing policy's basic sums assured and their consumption of life insurance. the p-value shows the in the Multiple Linear Regression is .026 which is lower than .05 and the correlation coefficient of 1.785. The result bringing the messagethatlife assured's existing policy's basic sums assured will influence the life assured consumption of life insurance. The result is consistence with previous study done by Banyan (2012). When the life assured aware that the existing life insurance policy's basic sum assured are not sufficient to cover the their commitment, they will tends to increase their life insurance consumption.

#### 5.1.1.7 Level of Debt

# H7: There is an association between Life Assured's level of debt towards the consumption of life insurance.

This resaerch show that there is no significant association between the life assured's level of debt and their consumption of life insurance. the p-value shows the in the Multiple Linear Regression is .511 which is lower than .05 and the correlation coefficient of .886. The result is not consistence with previous research done by Schlag (2003). The reason being might due to the largest portion of the individual debts were come from mortgage loan and car loan; however, these loans had been covered by mortgage insurance and car insurance. Hence, life assured does not required life insurance to cover the loans when any unforeseen circumstances happen.

### 5.2 Implication

The main purpose of this study is to provide useful information to the public to understand their needs on insurance and provide useful behaviour of consumer as an indicator for insurer and legislators to auxiliary develop and encourage the Malaysia insurance market.

The study found that factors that strongly influencing the life insurance consumption are level of education, age, gender and existing policy's sums assured. Insurer may predict the buying trend and attitude of consumer in purchasing life insurance consumption. They might create the strategy that favourable to consumer purchasing behaviour when launching a new product into market. With the information, they shall able to gain more market shares in insurance industry in accurate direction.

Although the significant factors able to help insurer to predict consumer behaviour, however, some of the not significant factors might bring useful information to the insurer too. From the low penetration rate in Malaysia indicate that Malaysian have limited understanding on importance of insurance. This study had brought up some different understanding on insurance consumption trends. Previously study indicates that level of income will significantly affect consumer behaviour in purchasing life insurance. Which means that insurance is not in consumer prioritization list, consumer only purchase life insurance when they have excess income after deducting all the living expenses. Nonetheless, due to this study are focuses on those respondents that have strong insurance knowledge, it brought out different result which income is not a significant indicator that influencing the life insurance consumption behaviour. These respondents strongly believe in insurance protection and categorized insurance as a needs basis product. This information is important to legislation and insurer in promoting importance of life insurance to public. The most important aspect is to provide correct insurance knowledge to public and create awareness on the importance of life insurance. With this knowledge, acceptance level of life insurance and demand on life insurance will increase.

Besides, although from the study respondents believe that age is a significant factors that influence the life insurance consumption, nonetheless, policy maker and insurer are obligated to let the public understand that insurability of a young adult will be higher than a older adult due to when individual getting older, health may not as good as when they are young. Hence, when one's health is not ideal, they might enjoy lower or lesser coverage from insurance company due to the risk might be to high to be accepting by the insurance company. Hence, the understand of insurance is more important in old age is just the first part of the factor that will influence the life insurance consumption, knowledge on when to purchase life insurance also a important factors that influencing the life insurance consumption. Therefore, policy maker and insurer shall provide this knowledge to public as well.

## 5.3 Limitation of the Study

#### 5.3.1 Sampling Bias

Majority of the respondents are coming from one of the leading insurance company in Malaysia, hence the there might be a sampling bias issue. The behaviours of the respondents will lead by the insurance company managing direction and the result might not as accurate if the sampling size can be expand to more insurance companies.

### 5.3.2 Weak R<sup>2</sup>

Refer to the result from Table 15; the  $R^2$  is at weak range. According to Mezick (2007), if  $R^2$  is ranging from 0.04 to 0.24 it will be consider as a weak  $R^2$ .  $R^2$  for this research is only 0.188, which means that only 18.8% of the independent variables are influencing the dependent variables, consumption of life insurance. Hence, there are lot more to improve in the research model.

#### 5.3.3 Limitation on Research Model

The reseach is only focus on the life insurance consumption, in fact there are varieties of insurance in Malaysia. Medical insurance is one of the most highly demanded insurance type in Malaysia, hence, if the reseach model model able to include medical insurance as one of the variable will be increase the accuracy of this research.

## 5.4 **Recommendations for Future Research**

Majority of the respondents are focuses on one of the leading insurance company in Malaysia.

Future researcher may broaden to respondents from other insurance companies in Malaysia to have more accurate result.

Besides, researcher might bring broaden the data collectionn method such as interview since there will be more information to be gether when there is a two way communicating. Data collection through questionnaire survey will limit the way respondents provide information especially on the behaviour on consumption. Hence, interview will help the researcher to gether more opinion form respondents and this will increase the accuracy, effectiveness and reliability of the data gathered.

Last but not least, sample size of the study shall be incraese due to the 215 sample size are not sufficient to represent the Malaysia's insurance consumption behaviour. With larger sample size, the accuracy of the outcome will be higher. Hence, the more respondents include in the survey, the result of the study will be more accurate.

## 5.5 Conclusion

This study evaluate the determinants that influencing life insurance consumption in Malaysia market and found that the variables that affecting the determinants are level of education, age, gender and existing policy's sums assured. Among the positively significant independent variables, age represents the most significant association toward the consumption for life insurance in Malaysia insurance market.

Most of the research found that income level is one of the significant variables that influencing the life insurance consumption, nonetheless, this study shows the result in different way, which the income level does not significantly affect the life insurance consumption. This was due to the respondents of this study having insurance background and the having a strong knowledge in the importance of life insurance. Hence, this might be a useful indicator to those policy makers and insurer when they wanted to promote insurance market in Malaysia. This recommendation is different from other research since usually other researcher will not focus on the not significant variables when explaining the research model.

Other than that, implication such as stronger public knowledge in the importance of insurance had been discussed and this will be the major implication can be done by the policy makers and insurers in promoting the insurance industry in Malaysia and hopefully the penetration rate of insurance will be increase as well.

In conclusion, this study has identified the determinants that influencing life insurance consumption such as individual income level, level of education, age, genders, numbers of dependents, existing policy's basic sum assured and level of debt in Malaysia market.

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## **Appendix A**



#### UNIVERSITI TUNKUABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

## MASTER OF BUSINESS ADMINISTRATION FINAL YEAR PROJECT

## TITLE OF TOPIC: FACTORS INFLUENCING LIFE INSURANCE CONSUMPTION

## **Survey Questionnaire**

Dear respondent,

I would appreciate your assistance with this research project on the factors that influencing life insurance consumption and the result will be act as information for public to understand their needs on insurance and it will be a good indicator for insurer and policymakers to further develop and promote the Malaysia insurance industry. This research will help me understand on those who have basic insurance knowledge such as insurance policy holder, insurance agent as well as insurance staff on their consumption factors in insurance.

All you need to do is complete this short questionnaire, which should take approximately 10 - 15 minutes. If you do not wish to participate, simply discard the questionnaire. Responses will be completely anonymous; your name will not appear anywhere on the survey. Completing and returning the questionnaire constitutes your consent to participate.

Keep this letter for your records. If you have any questions regarding the research, contact; Goh Sze Yin, Faculty Of Accountancy And Management, 016-2333733. If you have any questions regarding your rights as a research participant, please contact the University Tunku Abdul Rahman. Thank you again for your help.

### Part 1: Demographic Profile

## Please place a tick " ✓ " on the relevant answers for each of the following:

1.	Ge	nder:	
	a)	Male	
	b)	Female	
2.	Nu	mber of Dependent Family Members:	
	a)	1 - 3 members	
	b)	4 – 6 members	
	c)	7 – 9 members	
	d)	Others	
3	۸œ	<b></b>	
5.	Ag a)	18 - 30 years old	
	u) b)	31 - 40 years old	
	c)	41 - 50 years old	
	d)	51 and above	
4.	Ed	ucational Qualification:	
	a)	SPM	
	b)	Diploma/ Advance Diploma	
	c)	Bachelor Degree	
	d)	Master Degree	
	e)	Others:	
5.	Mo	onthly Income:	
	a)	RM 1,000 and below	
	b)	RM 1,001 – RM 2,500	
	c)	RM 2,501 – RM 4,000	
	d)	RM 4,001 – RM 5,500	
	e)	RM 5,501 – RM 7,000	
	Ð	RM 7,001 and above	
1	1)		
0.	Cu	rrent Level of Debt (Individual):	

	b)	RM 100,001 – RM 250,000	
	c)	RM 250,001 – RM 400,000	
	d)	RM 400,001 – RM 550,000	
	e)	RM 550,001 – RM 700,000	
	f)	RM 700,001 and above	
7.	Cu	rrent PersonalInsurance Sum Assured	1:
	a)	NIL participant]	$\Box$ [End. Thank you for your
	b)	RM 100,000 and below	
	c)	D) ( 100 001 D) ( 050 000	_
	0)	RM 100,001 – RM 250,000	
	d)	RM 100,001 – RM 250,000 RM 250,001 – RM 400,000	
	<ul><li>d)</li><li>e)</li></ul>	RM 100,001 – RM 250,000 RM 250,001 – RM 400,000 RM 400,001 – RM 550,000	
	<ul> <li>c)</li> <li>d)</li> <li>e)</li> <li>f)</li> </ul>	RM 100,001 – RM 250,000 RM 250,001 – RM 400,000 RM 400,001 – RM 550,000 RM 550,001 0 RM 700,000	
	<ul> <li>c)</li> <li>d)</li> <li>e)</li> <li>f)</li> <li>g)</li> </ul>	RM 100,001 – RM 250,000 RM 250,001 – RM 400,000 RM 400,001 – RM 550,000 RM 550,001 0 RM 700,000 RM 700,000 and above	

\*Answer '(b) to (g)' please proceeds to Part 2.

Part 2 [Yes, I have purchased insurance.]

#### I. Independent Variables

Please circle your answer to each statement using 5 Likert scale [(1) = Strongly Disagree; (2) = Disagree; (3) = Neutral; (4) = Agree and (5) = Strongly Agree]

#### Income

Questions	SD	D	Ν	Α	SA
I am satisfied with my current income/salary.	1	2	3	4	5
My income is enough for my monthly spending.	1	2	3	4	5
My income directly affects my purchasing power.	1	2	3	4	5
I have a habit of monthly saving.	1	2	3	4	5
I always spend according to my budget.	1	2	3	4	5

#### The Size of Dependent Family Members

Questions	SD	D	Ν	Α	SA
The more dependent family I have, the higher my expenses.	1	2	3	4	5
The more dependent family, the harder for me to taking care of them in terms of financial.	1	2	3	4	5
The size of my dependent family influences my purchasing decision.	1	2	3	4	5

Questions	SD	D	Ν	Α	SA
Higher education level will lead to greater	1	2	3	4	5
risk aversion.					
Higher education level makes me more					
aware on the importance of financial	1	2	3	4	5
security.					
A society with higher education is likely					
to be more knowledgeable on how to	1	2	3	4	5
prevent the unfortunate events.					
Levels of education increase my					
understanding of living necessities and	1	2	3	4	5
responsibilities.					
I believe with higher education level, the					
higher awareness on the importance of life	1	2	3	4	5
insurance protection.					

## Level of Education

### Age and Gender

Questions	SD	D	Ν	Α	SA
Life insurance is important to all ages.	1	2	3	4	5
Generally when age increase, health risk will increase.	1	2	3	4	5
Generally life insurance is more expensive as I get older.	1	2	3	4	5

### Policy's Sum Assured and Level of Debts

Questions	SD	D	Ν	A	SA
Life insurance is important for debt cancelation/income protection purpose.	1	2	3	4	5
The increased of the amount of debts will increase insurance demand.	1	2	3	4	5
The amount of debts will influence my insurance purchase decisions.	1	2	3	4	5
My current personal sum assured is sufficient for my debt cancelation purpose.	1	2	3	4	5

#### II. Dependent Variable

### **Consumption of Life Insurance**

Questions	SD	D	Ν	А	SA
Purchasing life insurance is a "must" in my life cycle to prevent emergency	1	2	3	4	5
insurance would benefit my future.	1	2	3	4	5
To me life insurance is just "nice to have".	1	2	3	4	5
I think life insurance is a scam.	1	2	3	4	5
If I have a better financial condition, I will purchase higher life insurance coverage.	1	2	3	4	5

- End. Thank You -

## Appendix **B**

Model Summary								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	.434 <sup>a</sup>	.188	.159	11.12188				

a. Predictors: (Constant), BSA\_Q, Dependent\_Q, Gender\_Q, Education\_Q, Income\_Q, Age\_Q, Debt\_Q

	Coefficients <sup>a</sup>							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
	(Constant)	25.316	7.560		3.349	.001		
	Income_Q	-1.612	1.410	081	-1.143	.255		
	Dependent_Q	.325	1.401	.016	.232	.817		
1	Education_Q	3.890	1.411	.196	2.756	.006		
1	Age_Q	5.852	1.909	.232	3.065	.002		
	Gender_Q	3.217	1.630	.133	1.974	.050		
	Debt_Q	.886	1.346	.053	.658	.511		
	BSA_Q	1.785	.794	.170	2.248	.026		

a. Dependent Variable: Consumption

			Consumpti	Income_	Dependent	Education	Age_	Gender_	Debt_	BSA_
Spearma n's rho	Consumpti on	Correlati on Coefficie	1.000	.138*	.080	.271**	.303**	.042	.199**	.221**
		nt Sig. (2- tailed)		.048	.254	.000	.000	.546	.004	.002
	Incomo O	N Corrolati	204	204	204	204	204	204	204	204
	income_Q	on Coefficie	.138*	1.000	.145*	.395**	.370**	046	.342**	.419**
		Sig. (2- tailed)	.048		.033	.000	.000	.502	.000	.000
		N	204	215	215	215	215	215	215	215
	_Q	Correlati on Coefficie nt	.080	.145*	1.000	.234**	.259**	044	.259**	.065
		Sig. (2- tailed)	.254	.033		.001	.000	.517	.000	.342
		N	204	215	215	215	215	215	215	215
	Education_ Q	Correlati on Coefficie	.271**	.395**	.234**	1.000	.383**	202**	.431**	.277**
		nt Sig. (2- tailed)	.000	.000	.001		.000	.003	.000	.000
	A 22 0	N Correlati	204	215	215	215	215	215	215	215
	Age_Q	on Coefficie	.303**	.370**	.259**	.383**	1.000	102	.540**	.452**
		Sig. (2- tailed)	.000	.000	.000	.000		.138	.000	.000
		N	204	215	215	215	215	215	215	215
	Gender_Q	Correlati on Coefficie nt	.042	046	044	202**	102	1.000	.253**	112
		Sig. (2- tailed)	.546	.502	.517	.003	.138		.000	.102
		N	204	215	215	215	215	215	215	215
	Debt_Q	Correlati on Coefficie	.199**	.342**	.259**	.431**	.540**	253**	1.000	.465**
		Sig. (2- tailed)	.004	.000	.000	.000	.000	.000		.000
	L	Ν	204	215	215	215	215	215	215	215
	BSA_Q	Correlati on Coefficie	.221**	.419**	.065	.277**	.452**	112	.465**	1.000
		Sig. (2- tailed)	.002	.000	.342	.000	.000	.102	.000	
		N	204	215	215	215	215	215	215	215

#### Correlations

\*. Correlation is significant at the 0.05 level (2-tailed).

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

SPSS Label	Variable
Consumption	Consumption of Life Insurance (Dependent Variable)
Income_Q	Income
Dependent_Q	Level of Education
Education_Q	Age
Age_Q	Gender
Gender_Q	Numbers of Dependent
Debt_Q	Basic Sum Assured
BSA_Q	Level of Debt