# DETERMINANT OF LIFE INSURANCE CONSUMPTION AMONG UNIVERSITY TUNKU ABDUL RAHMAN STAFFS IN PERAK CAMPUS

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

BACHELOR OF ECONOMICS (HONS) FINANCIAL ECONOMICS

### UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE DEPARTMENT OF ECONOMICS

AUGUST 2013

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#### DECLARATION

We hereby declare that:

- (1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
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#### ACKNOWLEDGEMENT

We are from the Faculty of Business and Finance (FBF) students would like to acknowledge the contribution to a number of people. It would be practically hard to list each and every person who assisted in this study, but certain people must be credited for the magnitude of their contributions and sacrifices of their precious time in assisting us throughout the study.

First and foremost, a thousand thank of gratitude to Universiti Tunku Abdul Rahman (UTAR) by giving us a chance to take part in this final year project. Besides, UTAR provided us facilities such as library and internet lab which eased our process in completing the final year project.

We would like to express our gratitude to our supervisor, Puan Juliana Binti Abu Bakar for her guidance throughout the conduct of the study and 2<sup>nd</sup> examiner Mr Thurai Murugan a/l Nathan. Their encouragement and suggestions given were greatly appreciated by us. We would also like to extend our special thanks to Ms. Tan Yan Teng, Dr. Eng Yoke Kee, and Mr. Wye Chung Khain for their comments and advices in helping us to polish and make the final year project even more complete. Also, we would like to thank Ms. Lim Shiau Mooi, who is our research coordinator of this study. All of them have been helpful in providing timely, insightful and thoughtful advices regarding our final year project.

We are also thankful to all the UTAR staffs in spending their precious time to answer our questionnaires. Without their cooperation and contribution, we would not be able to obtain valuable information for our data analysis.

Last but not least, a special thank to our fellow group members for the joy and fun that they have brought to us and also like to express our gratitude to all contributors who are not mentioned here.

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#### Abstract

The purpose of this exploratory study is to examine the relationship between the demographic factors (independent variables) which were income; size of family; level of education; age; gender and consumption of life insurance (dependent variable) among the staffs of Universiti Tunku Abdul Rahman (UTAR). For this study, 200 copies of self-administered and close-ended questionnaire were distributed to staffs who currently work at UTAR that located in the Perak. IBM SPSS Statistics 20 was used to analyse and interpret the data collected. The questionnaires were analysed using descriptive analysis, reliability test, normality test, Pearson Correlation Coefficient Analysis and Multiple Linear Regressions. The results showed that there is a positive significant relationship between demographic factors and consumption of life insurance. However, there were some limitations and recommendations for this study and were discussed in later chapters.

## **CHAPTER 1: RESEARCH OVERVIEW**

## **1.0 Introduction**

Purpose of this research is to determine the life insurance consumption among University Tunku Abdul Rahman (UTAR) staffs in Perak campus. The flow for this chapter is to show the overview outline of the study contents to the readers. This chapter explain the research background, problem statement, research objectives, research questions and understand the important of hypothesis accordingly, significance of the study, chapter layout and concluding remarks.

## **1.1 Research Background**

Nowadays, life insurance plays a very important role in everyone's life because life insurance can guarantee people or family whom you concern the most, such as children and spouse. Therefore, life insurance can improve your credit rating, exempt from bankruptcy, increase your financial security and so on.

Life insurance means that upon purchase, the insurance company will have paid a lump sum of money at the time of the policy holder's death or when they are still alive. According to University of Illinois Extension, purpose of life insurance is to protect the family from financial loss due to death and some families buy life insurance as their retirement plan. So, after their death, income will be distributed from the insurance company.

Life insurance play an important role for individual, besides life insurer become a key source of long term finance and encourage the development of capital markets (Catalan, Impavido & Musalem,2000). Besides that, some studies showed that, development of insurance is correlated with economic growth (Ward & Zurbruegg, 2000; Webb, 2000; Soon, 1996). Increment of the global population, urbanization and reinforcement of economic is kindly link or have a relationship between

individual, families and societies. Therefore, life insurance is now very important for individual and families to balance their income risk.

There are few types of life insurance policies, which are term life insurance, whole life insurance, universal life policy and variable universal life insurance.

Term life insurance is to provide the short-term and long term protection for people who need a lower initial cost (The Great West Life). Term life insurance is normally sold in 10, 20, 25 or 30 years maturity. Insurer may need to provide evidence of good health to purchase for protection and annual renewable term will remained without further qualification however premium might be increasing over the years. According to Angell (1981), if the insured has discipline to often invest the life premium in difference in term and cash value, the term life insurance will be a good plan to carry out.

Whole life insurance also called straight life, mean that it will follow you until your maturity of lifespan. If policyholder is still alive, they have to pay a premium. The whole life insurance will provide death benefits and accumulate cash value. Policyholder can choose how frequent they would like to make the premium payment, let's say annually, semi-annually, quarterly or monthly, based on the insurers' preference. Whole life insurance is created for long-term. Thus, policyholder must make sure that they are able to make the constant premium payment over the life of the policy.

Universal life insurance is another type of permanent life insurance and it combines both term insurance and investment element. Universal life policy offer more flexibility in death benefits, premiums, cash values and tax advantages to the policyholders. Therefore, policyholders can make the payment with any amount at any time. So, compared with the traditional policy, amount of this universal life policy can be changed more easily.

Variable universal life insurance (VUL) is a life insurance feature with investment, it helps to secure the future of those insured families and managed the investment so they can save for their retirement. Variable universal life insurance also has the features of universal life insurance, which are death benefits, various investment choices, and various methods of accessing cash value and so on. According to (Rejda, 2004), VUL are also sold as investment or tax shelters.

In this research, we going to discuss demographic factors which are size of family, income, level of education, age and gender to examine how are all these factors influence the demand for life insurance among UTAR staffs.

Life insurance is very important to everyone. According to Bank Negara Malaysia, Malaysia life insurance has increased by 128% from RM 338 in 2000 to RM 771 in 2010. Also, number of new life insurance policies increased by 21% from 1,174,517 policies in 2000 to 1,428,280 policies in 2010. Furthermore, in 1990, the number of new policies was just 496,338 per capita insurance expenditure at only RM 92. Compared to other Asian countries, Malaysia density rate and penetration for insurance is rather low. Figure below shows that Malaysia insurance density in 2010 is at United States Dollar (USD) 141 compared to Japan USD 910. Compared to all the Asian countries, Japan insurance density is the highest.



Figure 1.1: Insurance Density (per capita premium income, USD) in 2010

Source: Swiss Sigma Re, 5/2011.

Furthermore, figure below shows the insurance penetration rate measured by life insurance premium income as % of Gross Domestic Product (GDP) in 2010. From the figure, we can see that Taiwan has the highest penetration rate if compared to other Asian countries. Then, followed by Hong Kong, India, Japan, South Korea and so on. According to Beck & Webb (2003), most of the developing countries like Malaysia have the low demand for life insurance.



#### Figure 1.2: Insurance Penetration: Life Insurance Premium as % of GDP in 2010

Source: Swiss Sigma Re, 5/2011.

Other than that, this research also showed that, there are some differences in the factors that define the choice to buy the life insurance and quantity of life insurance policies which customer will buy.

In this study, we choose to conduct the research on the UTAR campus since area is large and convenient for us to conduct the survey. Therefore, the contribution of this study is to provide a better understanding of consumption of insurance and also the factors that influence life insurance consumption among UTAR staffs.

## **1.2 Problem statement**

Due to the importance of life insurance, the study on the determinants of life insurance consumption has become a very important issue for the researchers. Several studies proved that there are significant relationship between growth in insurance industry and economic growth (Ward & Zurbruegg, 2000; Webb, 2000; Soon, 1996).

According to Brainard (2008), by improving the investment climate and promoting a well-organized mix of activities, insurance will contribute materially to economic growth. As stated by Mojekwu, Agwuegbo, and Olowokudejo (2011), a strong insurance industry in a country would greatly boost the country's economic growth, meaning that insurance contribution is positively related to economic growth.

So far, most of the studies on determinants of life insurance consumption have focused on the entire country or even across several countries. Little effort is made to examine the performance for a smaller or specific location to determine whether there is location specific problem or regional factors that influence the insurance consumption. We try to figure out whether the UTAR staffs have a different perceptive toward the determinants of life insurance consumption.

In addition, the limitation that suffered from previous researchers also included the problem of forming the dependent variable. Most of them form the dependent variable in various ways, furthermore they did not focus or specify on what type of insurance they want to study, and therefore it may lead to a problem to make a valid comparisons to the studies. So in this study, we formed our dependent variable as consumption of life insurance in order to have a clearer path of study.

## **1.3 Research Objectives**

### **1.3.1 General Objectives**

The general objective of this study is to understand the factor that influence the consumption for life insurance among UTAR staffs and to identify the relationship between the demand for life insurance and set of theoretically identified variables such as income, size of family, level of education, age and gender.

### **1.3.2 Specific Objectives**

1. Investigate whether a relationship between income and the consumption for life insurance among UTAR staffs.

2. Investigate whether a relationship between the size of family and the consumption for life insurance among UTAR staffs.

3. Investigate whether a relationship between level of education and the consumption for life insurance among UTAR staffs.

4. Investigate whether a relationship between age and the consumption for life insurance among UTAR staffs.

5. Investigate whether a relationship between gender and the consumption for life insurance among UTAR staffs.

## **1.4 Research Question**

In this study, our objectives are determines the relationship between the consumption of life insurance and demographic factors which are income level, size of family, level of education, age, and gender. To determine all the factors, we generate some specific question to displays each factor with or without a relationship and life insurance consumption, which are:

- 1. What is the relationship between the consumption of life insurance and income?
- 2. What is the relationship between the consumption of life insurance and the size of family?
- 3. What is the relationship between the consumption of life insurance and the level of education?
- 4. What is the relationship between the consumption of life insurance and the age?
- 5. What is the relationship between the consumption of life insurance and the gender?

### **1.5 Hypothesis of the Study**

#### Income

- H<sub>0</sub>: Consumption of life insurance has no relationship with the income level.
- H<sub>1</sub>: Consumption of life insurance has a relationship with the income level.

#### Size of family

H<sub>0</sub>: Consumption of life insurance has no relationship with the size of family.

 $H_1$ : Consumption of life insurance has a relationship with the size of family.

#### Level of education

H<sub>0</sub>: Consumption of life insurance has no relationship with the level of education. H<sub>1</sub>: Consumption of life insurance has a relationship with the level of education.

### Age

H<sub>0</sub>: Consumption of life insurance has no relationship with the age.

H<sub>1</sub>: Consumption of life insurance has a relationship with the age.

### Gender

H<sub>0</sub>: Consumption of life insurance has no relationship with the gender.

H<sub>1</sub>: Consumption of life insurance has a relationship with the gender.

## **1.6 Significance of Study**

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

Demographics analysis enables us to get more information about the population's characteristics for many purposes. One of the purposes is the economic market research. The size of different demographic groups will change over time as a result of economic, cultural and political circumstances. Thus, we use demographics factors in determining the consumption for life insurance. By estimating these variables, we are able to get a clear picture of consumer's behaviour. Besides that, it provides a better understanding about the relationship between the demographic factors that influence the consumption of life insurance.

This study provides extra information on the prediction of consumption of life insurance. Therefore, the results of the finding is significant to the insurance companies because it assists the insurers to better develop their marketing strategy and marketing plan as well as offer a better product-mix to meet the consumer desires and needs.

## **1.7 Chapter Layout**

Chapter 1 is the introductory chapter which clearly states an overview of the research context and clarifies about the research problem.

Chapter 2 is the literature review which provides the foundation for developing a conceptual or theoretical framework to carry on with further investigation, using the empirical research that have been done by past researchers who has conducted the relevant work in the field of this project topic.

Chapter 3 is overviews of research methodology which consist of information on research methodology and evaluate how the research is proceed in terms of research design, method of data collection and sampling design.

Chapter 4 is data analysis which shows the patterns of results of descriptive analysis, scale measurement and the inferential analysis that relevant to the research hypotheses.

Chapter 5 is the conclusion that can be drawn from this study. The summary of statistical analysis, discussions of major findings, implications, limitations and recommendations for future study will be presented in this chapter as well.

## **1.8 Concluding Remarks**

After determining the problem statement, research questions and objectives, this study aims to investigate the relationship between the consumption of life insurance and those independent variables. Chapter 2 would then provide the relevant literature review.

## **Chapter 2: LITERATURE REVIEW**

## **2.0 Introduction**

After listing the research background, problem statement, research questions and objectives, and significance of this study in Chapter 1, this chapter aims to provide the relevant literature review.

### 2.1 Review of the Literature

### 2.1.1 Dependent Variable - Consumption of life insurance

Truett and Truett (1990) showed that the demand for life insurance affected by the factors such as age, education, and level of income, and Mexico had a higher income elasticity of demand for life insurance than the 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. The life insurance owners normally have higher in education level, larger number of family member and incomes. They may not be opinion leader and risk takers. They also do not care about the prices. More on, they are not relying on the government. 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 income has a positive relationship with the demand for insurance. Besides, when increase in the size of family and age it will decrease in insurance expenditure. The authors also found that the family size and insurance premium expenditures have a positive relationship.

Beck and Webb (2003) studied the determinants of demand for life insurance in 68 economies by using panel data for the period of 1961-2000. As a result, they found that while economic indicators such as inflation, income per capita, and so on are the most important variables in life insurance consumption.

Hwang and Greenford (2005) examined determinants of life insurance consumption in China, Hong Kong and Taiwan. They found that income, education and economic development have positive effect on demand for life insurance. Social structure and one child policy have negative impact on life insurance consumption. However, social security and price have no significant effect on demand for life insurance.

Li et al. (2007) analyzed life insurance consumption by using cross section data for 30 OECD countries for the period between 1993 and 2000. They indicated that income, number of dependents, highest education level, financial development and degree of competition have a positive relationship with life insurance consumption.

### **2.1.2** 1<sup>st</sup> Independent Variable – Income

Personal income commonly shows a strong positive relationship to the consumption of life insurance, while holding others variables constant. Showers and Shotick (1994) showed that there is a positive relationship between income and expenditures on life insurance by using a Tobit analysis. They explained that household has motivation to purchase more life insurance when income increased because life insurance as the income replacement will be the main pillar in the event of an unexpected death.

Besides that, Sibel and Mustafa (2009) investigated the determinants of demand for life insurance on cross section of 31 European countries. They found that income is the most important variable which affects consumption of life insurance. Their result showed that income per capita has positive and significant effect on demand for life insurance, which 1% increase in income per capital will lead to increase the demand for life insurance increase by 1.91%.

According to the research of Redzuan, Zuriah and Aidid (2009), they used time series data over the period 1985-2007 to identify the driving force of family takaful consumption in Malaysia. Their result showed that the income variable is positively and robustly predictive of family takaful consumptions within the nation.

# 2.1.3 2<sup>nd</sup> Independent Variable – Size of Family

Family size is an important and significant explanatory variable for determining the life insurance consumption. From the previous studies (Burnett & Palmer, 1991; Yiing & Yi, 2012; Min, 2008), the authors used different method of test, but still obtained the same result. They showed that the size of family and the consumption of life insurance have a positive relationship.

According to Burnett and Palmer (1991), they used Multiple Classification Analysis (MCA) to test the relationship between the amount 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 amount of insurance purchased also increased. This can be explained by if something happened to the head of family, then the family with more children might need more financial resources.

Min (2008) applied Heckman selection model to examine the relationship between demand for life insurance and the other independent variables such as family size. The author stated that, households that had a child showed the highest percentage of owning the life insurances. Besides that, Yiing and Yi (2012) found that number of dependents play a significant role in the quantity of insurance purchased but not own the life insurance. According to their results, they found that a respondent who has more dependents are more likely to purchase more life insurance. This is as expected with someone has more children or family members, he or she will going to purchase more insurance to protect them.

## 2.1.4 3<sup>rd</sup> Independent Variable - Level of Education

The level of education can determine a person ability to understand the advantage of risk management and savings (Beck & Webb 2003). When a person with higher education, this can lead them to a higher degree of risk aversion and more alert of the needs of life assured in common. Beck & Webb (2003); Browne & Kim (1993) revealed that education can lengthen the duration of dependency which lead to an increase in the demand for mortality protection, a life insurance. They also expect that a higher level

of education in a population will have a positively associated with the consumption of life insurance.

Browne & Kim (1993) used the ordinary least squares (OLS) to evaluate the predicted signs of the education. The results showed that the education has a positive hypothesized sign with the life insurance consumption. The level of education is positively and significantly correlated to the life insurance in 1980 force model. Nevertheless, Beck & Webb (2003) carried out a research and proved 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 average years of schooling in the population over age 25 and the gross secondary enrolment ratio 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. In his researcher test, four types of variables level of schooling has been used to test the relationship between education and life insurance, which are below 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 better level of education will have larger life insurance purchases. The higher education level implied a greater life insurance in the market. Hence, a better living standard is to increase the life insurance consumption and furthermore encourage the capital accumulation through savings weights for a consumer. A simple OLS estimator is used to determine 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 the other researchers, which had emphasized the importance of education in the research countries. The researchers, Browne & Kim (1993), Nesterova (2008) and Min (2008) found that the level of education have positively and significantly effect to the consumption of life insurance. However, Beck & Webb (2003) showed level of education is not important in determining the life insurance consumption. Therefore the expected sign is ambiguous.

# 2.1.5 4<sup>th</sup> Independent Variable – Age

For age, based on the research, Berekson (1972) had found that positive relationship between age and life insurance demand; however Bernheim (1991) had found that there is a negative relationship between age and life insurance demand. Oppositely, by using 1984 LIMRA data, Gandolfi & Miners (1996) claimed that age and life insurance demand have 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 years old and youngest respondent was 64 years old. And result showed the 3 model used by Bernheim(1991), probability of life insurance is holding fall with age, which mean that age and life insurance consumption are negative relationship.

## 2.1.6 5<sup>th</sup> Independent Variable – Gender

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 their 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 estimated marginal effect from probit model: change in predicted probability of owning life insurance in China based on unit change showed that male purchaser have 17.94% probability to own the life insurance compare to female purchaser Wang (2010). For demand for life insurance in Malaysia, the result showed that, both male and female has no significant relationship on the demand for life insurance by Yiing & Yi (2012).

### **2.2 Review of Relevant Theoretical Models**

A locus of control is a person's belief about how much power one has over the events in one's life. According to psychologist Julian Rotter, who formulated the concept in the 1950's, the locus of control is a dimension of personality; it helps explain one's traits and behaviour. An internal locus of control is the belief that the course of one's life is largely up to oneself. Those with an external locus of control regard the events in their lives as occurring regardless of their own efforts. People who have an internal locus of control tend to be less influenced by others, more politically active, and more motivated to achieve. Many researchers believe an internal locus of control is healthier than an external one.

Locus of control has produced many different studies in the field of psychology. The field of application structures such as educational psychology, health psychology or clinical psychology. It will be possible to continue argue on a specific locus of control measures whether can be proving to be more useful. The concept of locus of control have subtle different with the attribution style, such as self-efficacy. Over the years, the locus of control in psychology has always been popular and important topic.

Locus of control had also been used in the research of the signory of consumer. Martin, Veer & Pervan (2007) examined the reaction of the female models in different body shapes which affected by the weight locus of control of women. The researchers found that most of the responses to slim models are the women who believe that can control their own weight which is internals locus of control, the response is mediated by self-referencing. By contrast, women who feel inability on controlling their weight which is external locus of control, their selfreference will be the fatness models. Weight control willpower and beliefs measurement are correlated to the weight locus of control.

Locus of control can affect the people reaction and think towards their health decisions. Every day we will be faced with a potential impact on health and disease. Doing locus of control will allow us to have a more realistic way. Sometimes people believed that their health locus of control will be affected is due to the reason when they see the health of the elderly declines. Yet it does not necessarily influence their locus of control negatively but elderly may encounter decline in their health, this is only show a lower levels of internal locus of control. Besides, age also plays an important role on internal and external locus of control. Older person have higher levels of locus of control over their approach and attitude to the circumstance than younger person. This is because as the age increase, people will realize that there is a lot of things happen beyond their control and also other people can control their health outcomes (Jacobs, Waddell & Webb, 2011).

The purpose of this study is to determine the relationship between the consumptions of life insurance based on different demographic factors. The locus of control aids us to determine peoples' buying decision among the demographic factors in the insurance market. Because different gender, age, income and so on, people have different minded to making a buying decision.

## 2.3 Proposed Conceptual Framework/Research Model



Figure 2.1: Proposed Conceptual Framework

Source: Developed for the research.

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

## 2.4 Hypothesis Development

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

H<sub>0</sub>: Consumption of life insurance has no relationship with the income level. H<sub>1</sub>: Consumption of life insurance has a relationship with the income level.

A positive relationship between income and consumption of life insurance means that when income increased the household has a motive to buy more life insurance (Showers & Shotick, 1994).

### Hypothesis 2

H<sub>0</sub>: Consumption of life insurance has no relationship with the size of family.H<sub>1</sub>: Consumption of life insurance has a relationship with the size of family.

Size of family is positively related to consumption of life insurance means that when the number of children increased, the amount of insurance purchased also increased (Burnett & Palmer, 1991).

### Hypothesis 3

H<sub>0</sub>: Consumption of life insurance has no relationship with the level of education. H<sub>1</sub>: Consumption of life insurance has a relationship with the level of education.

Level of education is positively correlated with consumption of life insurance. Higher education level may lead to a higher level of risk aversion and more awareness of the necessity of insurance (Browne & Kim, 1993).

#### Hypothesis 4

H<sub>0</sub>: Consumption of life insurance has no relationship with the age.

H<sub>1</sub>: Consumption of life insurance has a relationship with the age.

Based on the researchers, Berekson (1972), Bernheim (1991), Gandolfi & Miners (1996) showed that the result is ambiguous. As Berekson (1972) found positive

relationship; Bernheim (1991) found negative relationship; Gandolfi & Miners (1996) found no relationship between life insurance demand and age.

#### Hypothesis 5

H<sub>0</sub>: Consumption of life insurance has no relationship with the gender.

H<sub>1</sub>: Consumption of life insurance has a relationship with the gender.

Gender has no significant relationship between life insurance demands (Yigzaw, 2010).

### **2.5 Concluding Remarks**

After discovering the independent variables and dependent variable by reviewing relevant literature review and theoretical models, a conceptual framework is proposed along with the developed hypotheses to be tested. In the next chapter, the methodologies used to conduct the research are discussed in details.

## **CHAPTER 3: METHODOLOGY**

## **3.0 Introduction**

Research methodology defined the discussion and analysis in the body of a research report of the research design, data collection methods, sampling method, fieldwork procedure when execute the research and data analysis efforts (Zikmund, 2003, pp. 54). This chapter, we will discuss about the instrument of survey and also discuss about the types of sample we are going to use for data collection methods, the measurement of the variable data analysis and data analysis. Purpose of this chapter is want to generate method being used and testing the hypothesis developed in chapter two.

## **3.1 Research Design**

Research design is the methods that collect and analyze the data. Research can be determined by three categories such as exploratory, causal and descriptive research to specify whether it is a qualitative or quantitative research. In this research, we can conclude that this is a descriptive study. Descriptive research describe characteristics of population and phenomenon and also examine the answer to who, when, where, how and what question (Zikmund, 2003, pp. 65).

Quantitative survey approach and self-administrated questionnaires were used to obtain responses from UTAR staffs. Survey was preferred because it helped in collecting large amount of information from the target population easily without incurring much time and was affordable (Kaplowitz, Hadlock & Levine, 2004).

#### **3.2 Data Collection Methods**

There are many methods that can be used to collect data, generally categorized as primary and secondary source to answer the hypotheses and research questions. In this research, we use primary data and secondary resources 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, we will use survey questionnaire as our data collection method. The questionnaire will be distributed to all UTAR staffs and 200 copies of the questionnaire were provided. In this study, questionnaire will be chosen as measurement tools since we collect data from a large number of respondent. Questionnaire are quick, cost saving and efficient if we compared to collect the data by face-to-face or telephone. Therefore, because of time constraint, questionnaires can save lots of time and fast to collect back the information from UTAR staffs compared to other methods.

#### 3.2.2 Secondary Resources

Secondary resources are the resources for the researcher to collect the data which have been previously collected for some purpose other than the one at hand. Book, websites, articles and journals are the secondary resources that we used in this research. For online databases, we use Google scholar, ProQuest, Scopus and so on to find the necessary information, articles and journals. Moreover, internet provides the researcher with information efficiency, low cost and convenient. Thus, researcher will be able to finish the research effectively and efficiently. Besides, Internet also provides quality and meaningful data for researcher for their own uses. 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 defines is a method of data collection (Bobbie, 2007). Sampling involved the process of selecting a sample from a group of people to find out an accurate characteristic about the entire population (Hair et al., 2003). It is significant to a researcher to design a correct sampling framework, because it allows the researchers the ability to reduce research costs, conduct research more efficiently, have greater flexibility, and provides greater accuracy (Cochran, 1953).

#### **3.3.1 Target Population**

Target population can be defined as a total collection of elements or objects that possess the information sought by the researcher and by which inferences are to be made (Malhotra & Birks, 2006).

Insurance is a service that needs payment with a sum of money in order to insured a person and life insurance consists of a premium which needs to pay by the insured person every month. In this research, the target population will be the staffs who can afford to consume the life insurance. Therefore, we select the staffs from UTAR, Perak campus, as our target sample.

### **3.3.2 Sampling Frame and Sampling Location**

Sampling frame can be defined as a list of people of the target population that can be used to create and/or draw the sample (Oliver, 2004). Sampling location is a place where the data collection has been selected.
We are using non-probability sampling method; therefore there is no sampling frame in this research. Since the target samples are staffs who work in UTAR, Perak campus, then the sampling location would be Kampar, Perak.

#### **3.3.3 Sampling Elements**

Sampling elements is that subgroup of the population that has been selected by the sampling process, which may contain one or more population elements (Smith & Albaum, 2005).

The target respondents are the staffs from UTAR, who consist of different qualifications and income level. Different kind of people has various personality and perspective. Hence, we can have a more accurately and commonly results to be analyze.

### **3.3.4 Sampling Technique**

Sampling technique has been divided into two groups which is probability and non-probability (Churchill & Iacobucci, 2009).

In this research, the non-probability sampling was used as the sampling technique. Non-probability sampling is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected (Castillo, 2009). It is a sampling technique that provides a less costly and effective way than a probability sampling technique in terms of capital and commodity.

We distributed the survey questionnaire by using convenience sampling, which is one of the non-probability sampling methods. Convenient sampling is the most common sampling technique among all (Castillo, 2009). This is due to the reason that it brings an easy sample and data selection. Besides, it also provides a cost efficiency advantage and least time consuming.

This convenient sampling is used to focus on a subset, pre-test the survey questionnaires or for the pilot test (Malhotra, 1996). Hence, the questionnaires were distributed to the target respondents.

### 3.3.5 Sampling Size

Sample size can be explained as the number of elements to be included in the research (Malhotra, 1996). A sample size of 144 was used for data collection. While 30 pilot tests have been given to some of the respondents before the actual test conducted.

# **3.4 Research Instrument**

Questionnaires were used in this research as the research instrument. We conduct the survey by using questionnaires because this is the most commonly used method to obtain efficient, accurate and useful data from huge amount of respondents. Questionnaire is designed as a purpose of survey and statistical analysis (Leung, 2001). Hence, the questionnaires were distributed to the target respondents by hand and were collected from them after three days. A total of 200 sets of questionnaires were distributed to the target respondents and 144 sets of questionnaires were successfully collected back.

A pilot test was conducted before the actual survey. Pilot test is used to determine whether the respondent will give a respond that was expected by the researches and also to ensure the validity, reliability, and to detect the potential errors of the questionnaires (Lancaster, Dodd & Williamson, 2004). Saunders, Lewis and Thornhill (2009) indicated that the minimum number for pilot test is ten sets of questionnaires. Therefore, 30 qualified respondents were chosen to conduct the test in order to access the face validity of the question asked.

### **3.5 Constructs Measurement**

Values are significant when they are quantified into specific units and measurement acts as labels which those values more useful in terms of detail. There are four levels of measurement scale which are nominal, ordinal, interval and ratio..

The questionnaire consists of three parts, which named as PART 1, PART 2, and PART 3. PART 1 is designed to test the demographic factor. Nominal and ordinal measurement scales were employed in it. According to Malhotra (2010), nominal measurement scale is a simple naming system and utilized for variables where the respondents must be placed into one mutually exclusive category. The nominal scale is applied in gender and consumption of life insurance. For instance, a number is assigned to reflect a respondent's gender where 1 represents male and 2 represents female.

Malhotra (2010) also analyzed 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, age, level of education, size of family and income are assigned in ordinal scale.

A total of 24 items will be asked in PART 2 while four questions will be asked in PART 3. In this research, PART 2 is designed for those respondents who have purchased the insurance. All items in PART 2 were used five-point Likert Scale to allow respondents to indicate to what extent they agree or disagree with a statement. The scale ranged from 1 (strongly disagree) to 5 (strongly agree). While PART 3 is designed for respondent that have not purchase any insurance yet. Nominal scale, which also known as dichotomy was used in this part, that only take two values (Yes or No) for the respondents to choose.

However, only PART 1 data were used in order to get the results. This is because we can direct get the relationship between the independent variable and dependent variable from it. Hence, the data collected from PART 2 and PART 3 become meaningless and was ignored.

Variables	Measurement
Consumption of Life Insurance	Nominal
Gender	Nominal
Age	Ordinal
Level of Education	Ordinal
Size of Family	Ordinal
Income	Ordinal
	Variables Consumption of Life Insurance Gender Age Level of Education Size of Family Income

#### Table 3.1 Measurement Used for Each Variable

Source: Developed for the research.

# **3.6 Data Processing**

At this part, we will use the collected data to produce meaningful information. In data processing, it is a data processes such as checking, editing, coding, transcribing, as well as specifying any special or unusual treatments of data before they are analyzed.

### **3.6.1 Data Checking**

Data checking is to make sure that the data are complete and accuracy. All of our questionnaires will be check as detailed and carefully when it collected from all the respondents, this is because want to make sure we can detect the problem earlier and take the possible or correct action immediately. For example, typo error and inaccurate part may affect the result in this study.

### **3.6.2 Data Editing**

According to Cooper & Schindler (2006), data editing is to detect errors and correct the errors wherever possible, so the data are uniformly entered, complete, accurate and consistent. Therefore, we check our error in this process and adjust the data for omission and make sure our data are in good quality and standards.

### **3.6.3 Data Coding**

According to Cooper & Schindler (2006), data coding is assigning numbers and other symbols to the answers, hence the responses are grouped into a limited number of categories. For example, in our research, gender of respondents will be code as 1 for male and 2 for female. After finished with assigning the code, we will use Statistical Package for Social Science (SPSS) software to analyze the code data.

### 3.6.4 Data Cleaning

According to Malhortra & 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 analyze the data are SPSS software. This software allowed us to manage the data and calculate the statistics that we had collect from questionnaires done by the respondents. There are two categories of statistical such as non-parametric statistic and parametric statistic. Descriptive statistic and inferential statistic is under parametric statistic.

### **3.7.1 Descriptive Analysis**

Descriptive analysis mean raw data are arranged in a form which make them easy to understand or interpret 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 of questionnaire. After this, these data will be converted to graph, chart or table form, thus allow researcher to interpret, read and understand the data easily for the factor that influences the demand for life insurance among UTAR staffs.

#### **3.7.2 Scale Measurement**

#### 3.7.2.1 Normality Test

In this research, SPSS used to run the normality test in order to achieve normally distributed. Skewness is used to measure the distributional asymmetry. Positive skewness is long tail on the right and negative skewness is long tail on the left. Kurtosis is a statistical to describe the distribution of observed data. According to Wright & Herrington (2011), positive kurtosis showed that a relatively peaked distribution and negative kurtosis indicate flat distribution.

George & Mallery (2005) implies that range for skewness and kurtosis is  $\pm 2$ . Value is fall within  $\pm 2$  which mean data is normally distributed.

#### 3.7.2.2 Reliability Test

Reliability test is used to detect the strength between dependent variables and independent variables. Cronbach's Alpha reliability test is used to measure degree of data free from mistakes and make sure the result is correct. So, Table 3.2 below shows the rules of thumb for Cronbach's Alpha coefficient size.

Table 3.2: Rules of thumb about Cronbach's Alpha coefficient size

Cronbach's Alpha	Strength of Association
<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 & Mallery (2005).

### **3.7.3 Inferential Analysis**

Inferential analysis is the statistics used to make the inferences and judgments for population on the basis of a sample (Zikmund, 2003, pp. 738).

#### **3.7.3.1 Pearson Correlation Analysis**

Pearson Correlation coefficient is used to examine the strength and relationship of linear relationship between the metric variable. The Pearson Correlation coefficient ranges from + 1 through 0 to -1. According to Saunders, Lewis and Thornbill (2007) correlation coefficient at the range between -1 to +1 represent the two variables has perfect negative and positive association. Therefore, if the probability is more than 0.05, it may considered as not statistically significant but if less than 0.05 mean it is considered statistically significant. In this study, Pearson Correlation analysis is used to measure the relationship between the independent variable.

### 3.7.3.2 Multiple Linear Regressions (MLR)

According to Statsoft (2012), MLR explains the proportion of variance in two or more independent variable on a single interval-scaled dependent variable.

MLR is used to develop self-weighting estimating equation, controlling the confounding variable to evaluate contribution of other variable and test and explain the causal theories (Cooper & Schindler, 2006).

R-squares is also named as coefficient of determination. In MLR, it showed the percentage of consumption of life insurance (dependent variable) that can be explained by the factors that influenced the buying decision (independent variable). The relationship is stronger when R-squares value is nearer to 1. In order to make sure no multicollinearity problem, tolerance score need to be more than 0.1 (O'brien, 2007).

Equation below shows the MLR that can be used to predict other variables:

$$Y = \beta_1 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$
(1)

In this research, we have five independent variables, by using MLR to examine the five independent variables significantly influence the demand for life insurance among UTAR staffs. Thus, the equation that can form is:

$$CLI = \beta_0 + \beta_1 I + \beta_2 S + \beta_3 E + \beta_4 A + \beta_5 G$$
<sup>(2)</sup>

Whereby,

*CLI* = Consumption of Life Insurance (Dependent Variable)

*I* = Income Level (Independent Variable 1)

S = Size of Family (Independent Variable 2)

*E* = Highest Education Level (Independent Variable 3)

A = Age (Independent Variable 4)

G = Gender (Independent Variable 5)

With this MLR, it would be easier for the research to identify which explanatory variable influence the dependent variable.

# **3.8 Concluding Remarks**

In this research, primary data were used to run the test by using the SPSS software. The target respondents are the staffs in UTAR, Perak Campus. Descriptive analysis, normality test, reliability test, Pearson's correlation analysis and multiple linear regressions are used as data analyzed. We then proceed to the next chapter which the data obtained from the questionnaire will be tested and the results of data analysis will be shown.

# **CHAPTER 4: DATA ANALYSIS**

# **4.0 Introduction**

Chapter 4 report the results of the research. 144 set of data collected are reviewed and analysed by using IBM SPSS Statistics 20. The data results showed the relationship between demographic factors and consumption of life insurance were presented through tables in an understandable manner.

# 4.1 Pilot test

### **4.1.1 Normality Test**

Skewness and Kurtosis were used to measure the normality of data for this study. George and Mallery (2005) stated that the acceptable range for skewness and kurtosis is  $\pm 2$ .

Variables	Construct	Skewness	Kurtosis
DV	Consumption of Life Insurance	0.745	-1.554
IV1	Income Level	0.578	-1.479
IV2	Size of Family	-0.298	-0.295
IV3	Highest Education Level	0.293	-1.344
IV4	Age	1.182	-0.207
IV5	Gender	0.430	-1.950

Table 4.1: Normality for Pilot Test

Source: Developed for the research

In Table 4.1, the skewness and kurtosis of each variables fall within the gap of  $\pm$  2. Hence, the data collected from pilot test considered normally distributed.

# 4.2 Descriptive Analysis

#### 4.2.1 Respondent Demographic Profile

This section describes the profile of respondents which consists of different income level, size of family, educational level, age and gender. 144 completed and valid questionnaires were used for this frequency analysis.

#### **4.2.1.1** Consumption of Life Insurance

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	No	42	29.2	29.2	29.2
Valid	Yes	102	70.8	70.8	100.0
	Total	144	100.0	100.0	

Table 4.2: Frequency Table for Consumption of Life Insurance



Figure 4.1: Percentage of Respondents Consumption of Life Insurance

Source: Developed for the research.

According to Table 4.2, the respondents who purchased life insurance are more than those who did not purchased. From 144 respondents, there are 70.8% or 102 respondents who purchased life insurance and the others 29.2 % have no consumption of life insurance.

#### 4.2.1.2 Income Level

Table 4.3: Frequency Table for Income level						
		Frequency	Percent	Valid	Cumulative	
				Percent	Percent	
Valid	RM1000 and below	10	6.9	6.9	6.9	
	RM1001- RM2500	34	23.6	23.6	30.6	
	RM2501- RM4000	61	42.4	42.4	72.9	
	RM4001- RM5500	29	20.1	20.1	93.1	

	Frequency	Percent	Valid Percent	Cumulative Percent
RM5501- RM7000	10	6.9	6.9	100.0
Total	144	100.0	100.0	

Table 4.3: Frequency Table for Income level (Con't)



Figure 4.2: Percentage of Respondents Based on Income Level

Source: Developed for the research.

According to the Figure 4.2, the income level for the majority of 61 (42.4%) respondents fall into the category of RM2501 to RM4000. 34 (23.6%) respondents have the monthly income of RM1001-RM2500 while 29 (20.1%) of respondents earned RM4001 to RM5500 every month. For the category below RM1000 and RM5501-RM7000, we have the same figure where only 10 (6.9%) who fall into these categories respectively.

#### 4.2.1.3 Size of Family

	Table 4.4: Frequency Table for Size of Family					
	Frequency Percent Valid Percent Cumular					
					Percent	
	1-3	28	19.4	19.4	19.4	
Valid	4-6	92	63.9	63.9	83.3	
vanu	7-9	24	16.7	16.7	100.0	
	Total	144	100.0	100.0		

#### Figure 4.3: Percentage of Respondent Based on Size of Family



Source: Developed for the research.

According to Table 4.4, the majority of 92 (63.9%) respondents have 4 to 6 family members. 28 (19.4%) of respondents have family size of 1 to 3 members while 24 (16.7%) fall into the category of 7 to 9 family members.

#### 4.2.1.4 Highest Education Level

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	Advance Diploma	15	10.4	10.4	10.4
	Degree	49	34.0	34.0	44.4
Valid	Master	69	47.9	47.9	92.4
	PhD	10	6.9	6.9	99.3
	Others	1	0.7	0.7	100.0
	Total	144	100.0	100.0	

#### Table 4.5: Frequency Table for Highest Education Level

Figure 4.4: Percentage of Respondents based on Highest Education



Source: Developed for the research.

According to Table 4.5, majority of the respondents' highest education level are Master degree (47.9%) followed by Bachelor degree (34%). There are 10.40% respondents with advance diploma while 6.90% of respondents with their education level of PhD. The minority of 0.70 % of respondents fall into the category of others.

#### 4.2.1.5 Age

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	21-30	47	32.6	32.6	32.6
Valid	31-40	79	54.9	54.9	87.5
vanu	41-50	18	12.5	12.5	100.0
	Total	144	100.0	100.0	

|--|

#### Figure 4.5: Percentage of Respondent Based on Age



Source: Developed for the research.

According to the Table 4.6, majority of the respondents, 79 (54.9%) fall into the age group of 31-40 years old while the respondents from age group of 21-30 years old are 47 (32.6%). There are 18 (12.50%) of respondents are from the age group of 41-50 years old.

#### 4.2.1.6 Gender

		Frequency	Percent	Valid Percent	Cumulative
					Percent
	Male	66	45.8	45.8	45.8
Valid	Female	78	54.2	54.2	100.0
	Total	144	100.0	100.0	

Table 4.7: Frequency Table for Gender



Figure 4.6: The Percentage of Respondent Based on Gender

Source: Devoloped for the research.

According to Table 4.7, female respondents are more than male respondents. For females, there were 78 which consist of 54.2% and the males were 66 which consist of 45.8 %.

#### 4.2.2 Central Tendencies Measurement of Constructs

Measurement of central tendencies is to show the mean score and standard deviation of the construct which have been asked in the survey.

Variables	Construct	Mean	Standard Deviation
DV	Consumption of Life Insurance	0.71	0.456
IV 1	Income level	2.97	0.999
IV 2	Size of Family	1.97	0.602
IV 3	Highest Education Level	2.53	0.801
IV 4	Age	1.80	0.643
IV 5	Gender	1.54	0.500

Table 4.8: Central Tendencies Measurement of Constructs

Source: Developed for the research.

Referring to the Table 4.8, the mean score of the 6 variables has value ranging from 0.71 to 2.97. The highest mean score 2.97 falls under the income level (IV 1), while the lowest means score 0.71 falls under consumption of life insurance (DV).

On the other hand, the standard deviation of the 6 variables has value ranging from 0.456 to 0.999. The larger standard deviation means that the larger the spread of the data. Income level (IV 1) contributes the highest standard deviation of 0.999. Meanwhile, consumption of life insurance (DV) contributes lowest standard deviation of 0.456.

### **4.3 Scale Measurement**

### 4.3.1 Normality Test

Skewness and Kurtosis tests can be done to test the normality of the data collected.

Variables	Construct	Skewness	Kurtosis
DV	Consumption of Life Insurance	-0.926	-1.158
IV 1	Income level	0.070	-0.262
IV 2	Size of Family	0.011	-0.195
IV 3	Highest Education Level	-0.115	0.004
IV 4	Age	0.211	-0.646
IV 5	Gender	-0.169	-1.999

#### Table 4.9: Normality Test

Source: Developed for the research.

In this study, both tests were used to test the normality level of consumption of life insurance (dependent variable) and demographic factors (independent variables).

The lowest skewness shown in Table 4.9 is consumption of life insurance (-0.0926) whereas the highest skewness is age (0.211). On the other hand, gender showed the lowest kurtosis (-1.999) and highest education level contributed the highest kurtosis (0.004). Since the results of skewness and kurtosis of each item falls within the range of  $\pm$  2, this has proved that the variables were normally distributed.

#### 4.3.2 Reliability Test

In this study, Cronbach's Alpha reliability test was used to measure each of the items and also to examine how well the items can correlated to each others. As determined in previous chapters, Cronbach's Alpha needs to be at least 0.7 in order to achieved reliability.

Table 4.10: Re	liability Test

Cronbach's Alpha	Number of Items
0.769	6

Source: Developed for the research.

Table 4.10 showed the reliability results of all the dependent and independent variables. The Cronbach's Alpha has the values of 0.769. Since the value is more than 0.7, this indicated that all items in the survey are reliable and the results generated can be trusted.

According to George and Mallery (2005), the variables fall in the category of acceptable since the result is within the range of 0.7 to 0.8.

# 4.4 Inferential Analysis

### 4.4.1 Pearson Correlation Analysis

	Consumption of Life Insurance	Income level	Size of Family	Highest Education Level	Age	Gender
Consumption of Life Insurance	1.000	0.775**	0.327**	0.659**	0.752**	0.023
Income level		1.000	$0.207^{*}$	0.739**	0.740**	-0.018
Size of Family			1.000	0.248**	0.328**	-0.112
Highest Education Level				1.000	0.577**	-0.082
Age					1.000	-0.006
Gender						1.000

#### Table 4.11: Pearson Coefficient Correlation

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

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

Source: Developed for the research.

Table 4.11 showed the level of correlation between consumption of life insurance and demographic factors. The results indicated that the consumption of life insurance is positive correlation with those demographic factors except gender. This is because the coefficient correlation values of the variables are significant with positive value in the range of 0.3 to 0.8, but there not significant correlation between consumption of life insurance and gender. Apart from that, the gender has also not significant correlation to other variables. That means increases or decreases values in gender do not significantly relate to increases or decreases in other variables.

On the other hand, multicollinearity problem will exist if Pearson Coefficient Correlation value is more than 0.9. In this case, the Pearson Coefficient Correlation values of the variables fall below 0.9. Thus, there is no multicollinearity problem in this study.

#### 4.4.2 Multiple Linear Regressions

R Square	Adjusted R Square	F - test	Probability of F - test
0.695	0.684	62.78	0.00

Table 4.12: Model Summary

Source: Developed for the research.

Table 4.11 showed that  $R^2$  for this study is 0.695. This means that 69.5% of the variation in consumption of life insurance (dependent variable) can be explained by all five demographic factors (independent variables). Furthermore, the F-Value for this study is enormous and p-value is less than 0.05. Thus, the model for this study is fit.

Variables	Parameter Estimate	t - test	Probability for t -test
(Constant)	-0.656	-6.717	0.000
Income level	0.177	4.518	0.000
Size of Family	0.077	2.006	0.047
Highest Education Level	0.088	2.177	0.031
Age	0.244	4.731	0.000
Gender	0.051	1.182	0.239

#### Table 4.13: Coefficients

Source: Developed for the research.

Based on the table 4.13 above, the p-value is less than 0.05 for all the variables except gender. Hence, it indicated that the 4 independent variables are significant to predict consumption of life insurance (dependent variable) and the gender is not significant to predict it. Subsequently, the linear equation is formed.

$$CLI = -0.656 + 0.177 I + 0.077 S + 0.088 E + 0.244 A + 0.051 G$$
(3)

The linear equation above indicates that there is a positive relationship between demographic factors and consumption of life insurance. This can be explained that for every increase in income level, size of family, highest education level, and age, consumption of life insurance will increase by 17.7%, 7.7%, 8.8%, and 24.4% respectively, provided other variables remain unchanged. Due to gender has not significant related to consumption of life insurance, therefore either increase or decrease the value of gender will not affect the consumption of life insurance (Yiing & Yi, 2012).

# 4.5 Concluding Remarks

All the results related to the study are showed in this chapter. All hypotheses proposed have been accepted. Finally, a regression equation has been formed. Further analysis and discussion of the results are discussed in the next chapter.

# CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

# **5.0 Introduction**

Chapter 5 will interpret the results generated by SPSS which was showed in Chapter 4. Next, the implication, limitation, and the recommendation of the research are discussed. At last, a complete conclusion about the study will be made.

# **5.1 Statistical Analysis Summary**

Staffs who are currently working in UTAR are the targeted respondent of this study. For this study, 200 sets of survey questionnaires were distributed to targeted respondents and 144 sets were collected back.

Based on the results generated by SPSS, the constructs in this study met the normality assumption whereby the skewness and kurtosis of each construct falls within the range  $\pm 2$ . Hence, the data is considered as normally distributed.

Hypothesis	Test Independent Variable with Dependent Variable	Significant p - value Significance of Correlation		Result
Hypothesis 1	There is a relationship between the consumption of life insurance and income.	0.000<0.05	Significant	Reject Null Hypothesis (H <sub>0</sub> )
Hypothesis 2	There is a relationship between the consumption of life insurance and the size of family.	0.047<0.05	Significant	Reject Null Hypothesis (H <sub>0</sub> )
Hypothesis 3	There is a relationship between the consumption of life insurance and the level of education.	0.031<0.05	<0.05 Significant Reject Nul Hypothesis (	
Hypothesis 4	There is a relationship between the consumption of life insurance and the age.	0.000<0.05 Significant Re Hypo		Reject Null Hypothesis (H <sub>0</sub> )
Hypothesis 5	There is no relationship between the consumption of life insurance and the gender.	0.239>0.05	No Significant	Do Not Reject Null Hypothesis (H <sub>0</sub> )

Table 5.1: Summar	y of Multiple Linear Regressions

Source: Developed for the research.

According Table 5.1, it indicated that income level, size of family, education level, and age (independent variables) have significant relationships with consumption of life insurance since the p-value of each variable is less than 0.05. The gender factor has no significant relationship with consumption of life insurance since the p-value is more than 0.05. Thus, alternative hypothesis of each variable is accepted in this study except for gender.

# **5.2 Discussions of Major Findings**

### **5.2.1 Income**

H<sub>1</sub>: Consumption of life insurance has a relationship with the income level.

Results generated by SPSS showed that there is a significant relationship between income level and consumption of life insurance as the p-value of MLR is 0.000 which is less than 0.05. Hence, alternative hypothesis ( $H_1$ ) is accepted in this study. In addition, the correlation coefficient value 0.177 means consumption of life insurance is positively related to income. In short, when the income of UTAR staffs increase, they will purchase more life insurance. The results are consistent with the previous researches which were mentioned in Chapter 2(Showers & Shotick, 1994; Sibel & Mustafa, 2009; Redzuan, Zuriah & Aidid, 2009).

In the study of Redzuan, Zuriah and Aidid (2009), the researchers found that as income increases, insurance becomes more affordable and the demand for family takaful and life insurance increases. Furthermore, the need for life insurance increases with income as it protects the dependents against the financial consequences arising from premature death of the primary income-earner.

### 5.2.2 Size of Family

 $H_2$ : Consumption of life insurance has a relationship with the size of family.

Based on the result generated in Chapter 4, there is a significant relationship between size of family and consumption of life insurance as the p-value of MLR (0.047) is less than 0.05. Thus, alternative hypothesis  $(H_2)$  is accepted in this study. In addition, the correlation coefficient value

for this construct is positive which is 0.077. This indicated that when the number of member in a family increases, it will lead to increase the consumption of life insurance. The findings are similar with the previous researches (Burnett & Palmer, 1991; Min, 2008; Yiing & Yi, 2012).

When member of a family increases, the parents will lead to purchase more life insurance. That is because they want to reduce the uncertainty. They can't avoid all the emergency case happen in their life, so that to prevent it like when their children have an emergency operation need a lot of money, the insurance will help them so settle the problem.

### 5.2.3 Level of Education

 $H_3$ : Consumption of life insurance has a relationship with the level of education.

Results generated by SPSS showed that there is a significant relationship between level of education and consumption of life insurance as the pvalue of MLR is 0.031 which is less than 0.05. Hence, alternative hypothesis ( $H_3$ ) is accepted in this study. In addition, the correlation coefficient value 0.088 means consumption of life insurance is positively related to level of education. This indicated that when the UTAR staffs have a higher level of education they will choose to buy more life insurance. Results in this study are consistent with the previous researches which were mentioned in Chapter 2 (Browne & Kim, 1993; Nesterova, 2008; Min, 2008).

The previous researchers Browne & Kim (1993) explain that a higher level of education is a good proxy to measure the risk aversion. An individual's education level higher may lead to a greater degree of risk aversion and more awareness of the necessity of life insurance purchase. It means that a person with higher education level have a more intense desire to protect his family and maintain living standards.

#### 5.2.4 Age

H<sub>4</sub>: Consumption of life insurance has a relationship with the age.

Based on the results computed in Chapter 4, there is a significantly positive relationship between age and consumption of life insurance. The correlation coefficient value of 0.244 indicated that age is positively correlated to consumption of life insurance. There is a significant relationship between the variables since the p-value (0.000) is less than 0.05. Hence, H<sub>4</sub> is accepted and this showed consumption of life insurance will increase when the UTAR staffs are getting older. The result is consistent with the past studies stated in Chapter 2 (Berekson, 1972).

As the age increases, there may be the dependents that need to support. Thus, the household is likely to raise the demand for term life insurance to avoid the risk. Furthermore, individuals as they get older and assume more family responsibilities tend to take up life insurance for the benefit of their beneficiaries in case of death or as a saving and investment.

### 5.2.5 Gender

H<sub>5</sub>: Consumption of life insurance has no relationship with the gender.

Results generated by SPSS showed that there is no significant relationship between gender and consumption of life insurance as the p-value of MLR is 0.239 which is more than 0.05. Hence, alternative hypothesis ( $H_5$ ) is not accepted in this study. In addition, the correlation coefficient value 0.051 does not have any meaning to the relationship between gender and consumption of life insurance. This indicated that even the UTAR staffs are male or female, it will not affect the decision to buy life insurance. The result is consistent with the past studies stated in Chapter 2 (Mekonnen, 2010; Wang, 2010; Loke & Goh, 2012). Gender of buyers is insignificant to influence buyers' attitude for purchase of life insurance policy. Even though the number of female respondents is slightly higher than their male counterpart who said that their sex has no relation with life insurance purchase, for both sexes of buyers, their sex has no significant effect on purchase attitude towards life insurance. This is not surprising as most of buyers taken in this study are aware and conscious enough about life insurance significance regardless of their sex and take active economic roles in their families.

# **5.3 Implications of Study**

### **5.3.1 Managerial Implications**

This research had significantly provided a useful concept for the insurance companies. The demographic analysis allows the insurance companies to make necessary adjustments in order to maintain a high level of consumption of life insurance. Besides, it also enables the insurance companies to have a prediction towards the consumption of life insurance by the extra information that had found in this research.

All of these useful information may assist the insurance companies to have a better understanding towards the consumers' behaviour and hence able to formulate and develop relevant policies or marketing strategy and plan that influencing the consumers' behaviour toward the consumption of life insurance and suit with their needs and preferences. The existing consumers' buying attitude towards the life insurance will tend to increased and other non buyers will start considering about consuming the life insurance after the insurance companies successfully promoted or persuaded, fulfilled and changed the benefits of consuming a life insurance, which match or exceed the consumers' expectations. However, the strategies or plan should be reviewed and updated on a regular basis as human perception and behaviour is subject to change over time.

With the proven of the results in this research, age, level of education, income and the size of family has significantly affect the consumption of life insurance, while gender does not have much impact toward the consumption of life insurance. These factors are playing an important role to determined the consumers' attitude toward the consumption of life insurance which also representing the details or information of a consumer. Hence, this can give an idea or a clear picture to the insurance companies, that is, where they can focus and targeted more on the factors that have significantly affect the life insurance consumption attitude.

# **5.4 Limitation of the Study**

### **5.4.1 Sampling Bias**

As our study is only conduct for UTAR staffs, therefore the problem of sampling bias might be happened. Sampling bias is an unavoidable issue in the process of data collection. Our sample may be bias towards certain criteria. An example for our study would be there are more respondents that are 31-40 years old, having less than RM4000 monthly income, with highest education level of Master, are Chinese and so on. Our samples are more on these groups of respondents. This problem may lead to an inaccurate for our study.

### **5.4.2 Moderately strong R<sup>2</sup>**

Based on our result, the  $R^2$  of the model is at moderately strong level ( $R^2$ =0.695). According to Weil et al. (2007),  $R^2$  ranges from 0 to 1, where 0 indicates that the model explains none of the variation in the DV; and vice. Moreover, Mezick (2007) stated  $R^2$  that ranged from 0.04 to 0.24 is considered weak, while a moderate  $R^2$  is ranged from 0.25 to 0.64 and 0.65 to 0.80 considered moderately strong. Hence, there is still much slot for our model improvement.

### 5.4.3 Limitation of sample size

Since UTAR is a dynamic university with four campuses, which is the campuses in Klang Valley are located at Petaling Jaya, Kuala Lumpur and Bandar Sungai Long, so the sample size is our limitation in our research. The reason is we are not able to distribute questionnaire to other UTAR campuses due to time constraint and far distance, this make respondent from UTAR campuses in Petaling Jaya, Kuala Lumpur and Bandar Sungai Long cannot participant our questionnaire. Therefore, we just distribute the questionnaire in Kampar area only, which are 144 sets. Thus, small population may affect the accuracy of the research.

#### 5.4.4 Limitation of research model

In our research, we only use the demographic factors to examine how these factors influence the demand for life insurance among UTAR staffs. Instead of that, we actually can add more factor such as economic factors and psychographic factors to make our study more attractive.

# **5.5 Recommendations for Future Research**

According to Weil et al. (2007),  $R^2$  would be increased for an addition of significant variables. Therefore, the future researchers should add more significant variables in their study. However, the acceptance and rejection of model is not only solely based on the  $R^2$ . Therefore, the future researchers should not simply add in more variables just only for the purpose of maximizing the  $R^2$ .

Besides, instead of collecting the data only based on the survey questionnaire form, the future researchers can collect the data with other data collection method such as personal interview, focus groups and so on. Unlike the survey questionnaire form, personal interview provides two way communications between researchers and respondents. According to Mishra (2007), personal interview may help the researchers to more understand about the opinions of respondents and reduce the inaccuracy and unreliability of the data collected. Although this method will be more time consumed, but it provides us more cleared and more effective information for our study.

In the future study, we should conduct the large sample size, which is conduct the all campuses located in Klang Valley. Due to few subject we learn from the past, the more respondent involve in the questionnaire, the more accurate for our research. So, it may come out with an expressive and meaningful outcome.

### **5.6** Conclusion

This study aims to examine the determinants of consumption for life insurance among UTAR staffs based on chapter 4 results, we found that all the independent variables are significant toward the dependent variable but except gender. Gender was found to be not significant toward the consumption for life insurance among UTAR staffs for our study. This result is not surprising since as discussed earlier in our literature review, many previous researchers also found an insignificant relationship between gender and consumption for life insurance. Besides that, the other significant independent variable such as income level, highest education level, size of family and age was found to be positively related to the dependent variable. Among the significant independent variables, age represents the most significant factor toward the consumption for life insurance among UTAR staffs following by the income level.

We discussed the implication of our research and we also listed out some of our research's limitations. Moreover, we also suggested some recommendations based on the limitations. We hope it will help for the future researchers to further study on this topic.

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#### Appendix A



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22<sup>nd</sup> May 2013

To Whom It May Concern

Dear Sir/Madam

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their *Bachelor of Economics* (*Hons*) *Financial Economics* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student LIM SHENG CHUO WONG MON TENG CHANG KIM CHUN TAN SZE MEI Student ID 11ABB00521 10ABB01660 10ABB00257 09ABB06994

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely WONG CHIN YOU HEAD. DEPARTMENT OF ECONOMICS MICULTUTG BLEMINESSAND FINANCE UNIVERSITI TUNKU ABDUL RAHMAN Head of Department,

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Appendix B



## UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF BUSINESS AND FINANCE

# BACHELOR OF FINANCIAL ECONOMICS (HONS) FINAL YEAR PROJECT

## TITLE OF TOPIC: DETERMINANT OF LIFE INSURANCE CONSUMPTION AMONG UTAR STAFFS

# **Survey Questionnaire**

Dear respondent,

We are final year undergraduate students of Bachelor of Financial Economics (Hons), from Universiti Tunku Abdul Rahman (UTAR). The purpose of this survey is to understand the factor that influences the demand for Life Insurance among UTAR Staff.

Thank you for your participation.

#### **Instructions:**

- 1) There are **THREE** (3) sections in this questionnaire.
- 2) Completion of this form will take you approximately 10 to 15 minutes.
- 3) Please feel free to share your comment in the space provided. The contents of this questionnaire will be kept **strictly confidential**.

#### PART 1 Demographic Profile

Please place a tick "  $\sqrt{}$  " on the relevant answers for each of the following:

#### 1. Gender :

a) Male	
b) Female	

#### 2. Number of Family Member:

a)	1 - 3 members	
b)	4 – 6 members	
c)	7 – 9 members	

d)	Other:	[	
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#### 3. Age :

a)	21 - 30 years old	
b)	31 - 40 years old	
c)	41 – 50 years old	
4)	51 Above	

d)	51 Above		I
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#### 4. Educational Qualifications :

a)	Advance Diploma	
b)	Bachelor of Degree	

- c) Master
- d) PhD
- e) Other:

#### 5. Category of staff

b)	Administrative Staff
----	----------------------

#### 6. Current employment status

a)	Permanent	
b)	Prohibition	
c)	Contract	
d)	Part Time	

#### 7. Salary per month / monthly income

- a) RM 1000 and Below
- b) RM 1001 RM 2500
- c) RM 2501 RM 4000
- d) RM 4001 RM 5500
- e) RM 5501 RM 7000
- f) Above RM 7001

#### 8. Currently have you purchased any insurance?

- a) Yes [Please proceed to **Part 2**]
- b) No [Please proceed to **Part 3**]

## PART 2 (Yes, I have purchased insurance.)

## I. <u>Independent Variables</u>

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
Incomes directly affect the purchasing power.	1	2	3	4	5
I have a habit of monthly saving.	1	2	3	4	5
My monthly income is proportionally allocated.	1	2	3	4	5

### The Size of Family

Questions	SD	D	Ν	Α	SA
The increased of number of children will increased my spending.	1	2	3	4	5
The more the children, the harder for me to taking care of them.	1	2	3	4	5
The size of family will influenced my purchasing decision.	1	2	3	4	5
The family members who are still in school or unemployed will consider as my burden.	1	2	3	4	5

## Level of Education

Questions	SD	D	Ν	Α	SA
An individual education level is positively related to greater risk adversion.	1	2	3	4	5
With better educated makes me more aware of the risk and the hazard of financial stability.	1	2	3	4	5
A society with higher education is likely to be more knowledgeable about how to prevent the unfortunate events.	1	2	3	4	5
The education would increase my understanding of living necessity and responsibilities.	1	2	3	4	5
I believe with higher education of level it will alert me the importance and benefits of life assured.	1	2	3	4	5

## Age and Gender

Questions	SD	D	Ν	Α	SA
Life insurance is important in all group of age.	1	2	3	4	5
When age increase, health status are more risky.	1	2	3	4	5
Life insurance more expensive as I get older.	1	2	3	4	5
Women live longer life than men.	1	2	3	4	5
Age and Gender will affect the insurance buyer attitude.	1	2	3	4	5

## II. <u>Dependent Variable</u>

## **Consumption of life insurance**

Questions	SD	D	Ν	Α	SA
Purchasing life insurance is a 'must' in my life cycle to prevent emergency.	1	2	3	4	5
I believed that the purchase of life insurance would benefit my future.	1	2	3	4	5
Consumers are not necessary to consume the life insurance.	1	2	3	4	5
I think that life insurance is a fraud.	1	2	3	4	5
If I have a good economic condition, I will purchase a better life insurance.	1	2	3	4	5

#### PART 3 (No, I have not purchase any insurance yet.)

#### Please place a tick " $\sqrt{}$ " on the relevant answers for each of the following:

1. Do you agree age and gender have significant association with buyer's attitude towards life insurance policy purchase?

YES	] NO [	
-----	--------	--

2. Do you agree level of education has a positive relationship to consumption for life insurance?

	Г	
NO		

3. If your monthly income increased, would you purchase more life insurance?

YES [		NO	
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4. Do you think the size of family will affect the demand of life insurance?

YES		NO	
-----	--	----	--

## Appendix C

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Consumption Life Insurance	144	0.71	0.456	-0.926	0.202	-1.158	0.401
Income level	144	2.97	0.999	0.070	0.202	-0.262	0.401
Size of Family	144	1.97	0.602	0.011	0.202	-0.195	0.401
Highest Education Level	144	2.53	0.801	-0.115	0.202	0.004	0.401
Age	144	1.80	0.643	0.211	0.202	-0.646	0.401
Gender	144	0.54	0.500	-0.169	0.202	-1.999	0.401
Valid N (listwise)	144						

## **Descriptive Statistics**

## Appendix D

## **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square F		Sig.
	Regression	20.665	5	4.133	62.780	0.000 <sup>b</sup>
1	Residual	9.085	138	0.066		
	Total	29.750	143			

a. Dependent Variable: Consumption Life Insurance

b. Predictors: (Constant), Gender, Age, Size of Family, Highest Education Level, Income level

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	-0.656	0.098		-6.717	0.000
	Income level	0.177	0.039	0.387	4.518	0.000
	Size of Family	0.077	0.038	0.101	2.006	0.047
1	Highest Education Level	0.088	0.040	0.154	2.177	0.031
	Age	0.244	0.051	0.344	4.731	0.000
	Gender	0.051	0.043	0.056	1.182	0.239

**Coefficients**<sup>a</sup>

## Appendix E

a. Dependent Variable: Consumption Life Insurance

Correlations										
		Consumption Life Insurance	Income level	Size of Family	Highest Education Level	Age	Gender			
Consumption	Pearson Correlation	1	0.775***	0.327**	0.659**	0.752**	0.023			
Life Insurance	Sig. (2- tailed)		0.000	0.000	0.000	0.000	0.784			
	Ν	144	144	144	144	144	144			
	Pearson Correlation	$0.775^{**}$	1	$0.207^{*}$	0.739**	0.740***	-0.018			
Income level	Sig. (2- tailed)	0.000		0.013	0.000	0.000	0.830			
	Ν	144	144	144	144	144	144			
	Pearson Correlation	0.327**	$0.207^{*}$	1	0.248**	0.328**	-0.112			
Size of Family	Sig. (2- tailed)	0.000	0.013		0.003	0.000	0.181			
	Ν	144	144	144	144	144	144			
Highest	Pearson Correlation	$0.659^{**}$	0.739**	0.248**	1	0.577**	-0.082			
Education Level	Sig. (2- tailed)	0.000	0.000	0.003		0.000	0.327			
	Ν	144	144	144	144	144	144			
	Pearson Correlation	$0.752^{**}$	0.740***	0.328**	$0.577^{**}$	1	-0.006			
Age	Sig. (2- tailed)	0.000	0.000	0.000	0.000		0.940			
	Ν	144	144	144	144	144	144			
	Pearson Correlation	0.023	-0.018	-0.112	-0.082	-0.006	1			
Gender	Sig. (2- tailed)	0.784	0.830	0.181	0.327	0.940				
	Ν	144	144	144	144	144	144			

## Appendix F

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

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