

## Factors that Influence Happiness among Sabahans

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### *Abstract*

*The ultimate goal in economics of happiness study was to improve the living conditions of people in their everyday life. The dependent variable in this study was happiness among Sabahans which was measured by the 5-point Likert scale meanwhile the independent variables were family relationship, financial situation, work, community and friends, health and government. Questionnaire from The Happiness Initiative was adapted and modified. The study involved 387 respondents chosen based on convenient sampling method. Initially, a Factor Analysis Test was conducted to investigate variable relationship and 50 respondents were questioned for pilot study. The pilot test results showed the tool was reliable and valid. This was followed by the Partial Least Squares method and a Descriptive Study was run to describe the profile of the respondents as well as the score values (mean, standard deviation) of the respondent. The validity of model had further tested using a Confirmatory Factor Analysis (CFA) to assess the magnitude of each dimension to its construct. Finally, a Structural Model Evaluation was conducted to prove the hypothesis. The findings revealed Sabahans' happiness was found to be influenced by family relationship and work compared to financial situation, community and friends, government and health.*

**Keywords:** *economic of happiness, happiness, family relationship, financial situation, work, community and friends, health, government*

### 1.0 Background of Study

The term economics comes from the Ancient Greek that means household management. It explains how human allocated resources that are limited to fulfill unlimited human wants. Unlimited human wants can create dissatisfaction or unhappiness but if humans are able to manage the resources well, it can create happiness or satisfaction. The ultimate goal of economics is to improve the living conditions of people in their everyday life. When living conditions improve, the quality of life will increase leading to happiness.

There are many ways to measure quality of life. Gross Domestic Product (GDP) is one of the standard indicators used. But unfortunately, GDP is found to be a weak indicator. As the world moves into globalization, other factors should also be included as more reliable factors like population, leisure hours, inflation rate, unemployment and so on. Van Praag and Carbonell (2011) claim that these macroeconomic variables are more for forecasting and can be used as an indicator to determine whether the economy of a nation is healthy. Economist suggests that an individual needs to balance his or her life. This is supported by the study conducted by Sachs (2012). To obtain a balance in life, other factors like social support, personal freedom, effectiveness of public policy, safety, spirituality, mental well-being, family relationship, work environment, health, community and friends should be included to determine the quality of life that influences happiness. In short, happiness should complement income (GDP).

Of late, there has come into life a branch of happiness economics and it is this field that will be our concern. Actually, not only economists are interested in quantifications of happiness but also researchers in other disciplines. According to Graham (2005), happiness economics can be described as quantitative and theoretical study, positive and negative effects, well-being, quality of life, life satisfaction and related concepts, typically combining economics with other fields such as psychology and sociology. A study of happiness comes under behavioural economics. Happiness economics represent one new direction that combines utility and welfare. In the 20th century, it was impossible to measure happiness empirically. Van Praag and Carbonell (2011) claim that with the growing number of researches in the body of economics, happiness is quantifiable. It is not a replacement for income but it expresses preference. This is strongly supported by Veenhoven (1993) that it is now possible to approximate individual utility in a satisfactory way using representative surveys with the help of single question or several questions. These can be used as an indication of individual evaluation of their life satisfaction or happiness. Behind the scores indicates a person's judgement to what extent their general quality of life is judged in an appreciative way. Veehoven (1993) claims that the measurement is consistent and reliable.

National governments had realized the importance of happiness studies and began to formulate happiness policies to improve the quality of life. The Kingdom of Bhutan was the forerunner to introduce the concept of 'Gross National Happiness' to replace 'Gross National Product' by valuing happiness as the objective of governance and promoting harmony with nature and traditional values. In consequence, it aroused many other countries to undertake effort to start measuring the happiness and well-being of their nation. According to Selin and Davey (2012), it is very important for non-Western countries to start the study of happiness as these countries were undergoing economic and social transformation. For the last few decades, it seems that the study on economics of happiness and life satisfaction was mainly focused on the Western countries and cultures.

In 1999, Malaysia first introduced the Malaysian Quality of Life Index (MQLI) which was constructed using 14 components covering both economic and social perspectives such as communications, education, income and distribution, transport, working life, culture, environment, family, governance, health, housing, leisure, public safety and social participation. In 2013, the Economic Planning Unit replaced the MQLI with the Malaysian Well-being Index (MWI) to measure the well-being of the society. It reflected that the qualitative components of human, social and environment started to receive great attention from government of Malaysia.

Generally, economic performance is not intrinsically interesting. People have no innate interest in the money supply, inflation, growth, inequality, unemployment, and the rest. The stolid greyness of the business pages of our newspapers seems to mirror the fact that economic numbers matter only indirectly. The relevance of economic performance is that it may be a means to an end. That end is not the consumption of good and services, nor the vanquishing of some high level of interest rates, but rather the enrichment of mankind's feeling of well-being. Economic things matter only in so far as they make people happier (Oswald, 1997).

### **Problem Statement**

In Malaysia, people are provided with basic need such as food, shelter and comfort. It is harmonious country with no war. Survival is not an issue. On average, Malaysia has an annual economic growth rate between 3 to 4 per cent annually. With the New Transformation Economics programme, it is believed to convert Malaysia into a high income country by 2020. However, World Happiness Report 2016 reported that Malaysia is currently experiencing a decline in happiness from 2010 to 2014 which makes our country fall from the 56th place to the 61st place out of 158 countries.

Besides that, Malaysian Well-being Report 2013 reported that Malaysia's real GDP increases at an average rate of 4.8 per cent per annum whereas the well-being of the society has only enhanced at an average of 1.9 per cent per annum from 2000 to 2012. Helliwell, Layard and Sachs (2016) claim that this is due to our nation's rapid development that focuses on material well-being. This progress has led to imbalance in both material and spiritual life. The researchers also claim that material well-being does not guarantee happiness.

Sachs (2012) claims that a nation needs strength of social support, personal freedom and absence in corruption to be happy. This is supported by the report from Transparency International (2013). The report revealed that households in Malaysia perceive lack of accountability by the government. Study by Kilpatrick (2000) also revealed that public policy is aimed to resolved public problem not to create social unrest.

Moreover, as Malaysia is entering into the arena of globalization by joining trade agreements, it can create single markets controlled by the transnational companies. These companies will be influencing the government, dictate economic policy and change people's view about the world. In other words, the citizen could not share these economic successes because these are confined to only minor groups of people. It can also force social unrest in the country, low wages and neglect the ecosystem. Globalization also encourages discrimination between rich and poor that eventually causes crime to increase. Malaysia Crime and Safety Report (2015) showed an increasing number of crime and assaults in Malaysia.

Furthermore, according to Norberg-Hodge (2010), younger generation are now exposed to consumer culture and start to discriminate their culture. Lack of spirituality practices lead these youths not to feel grateful. They become too materialistic, they have trouble to sustain relationship which causes stress and unhappiness. Eventually, it has led to depression and mental illness. This is confirmed by the national survey conducted by Ng Chong Guan (2014) that shows 8 to 12 per cent of Malaysians in Malaysia have depression. In addition, World Health Organization (WHO, 2015) reported that the suicide rate among Malaysians is 5.8:100,000 which indicated that the prevalence of suicides in Malaysia is becoming more critical with roughly 50 people committing suicides monthly. It believes that the numbers of people committing suicides will still increasing in the future if there is no action taken by the authorities. Hence, it is utmost important to undertake investigation on the factors of happiness in Malaysia to build up a happy society.

Most of the studies on happiness were conducted on Malaysia as a whole. Malaysia is divided into West Malaysia and East Malaysia. The level of development, culture, ethnicity as well as biodiversity differs between the west and the east. Geographically the east and west are also separated by the South China Sea. Sabah and Sarawak are located at the east of Malaysia. It consists of many islands that disperse the population from the mainland. Sabah has the second largest poverty rate, with its own tradition, culture and biodiversity. Moreover, based on the statistics report of household income and basic amenities survey 2016 conducted by The Department of Statistics Malaysia, reported that Sabah's household median income increased from RM3,745 in 2014 to RM4,110 in 2016. However, the report also revealed that Sabah had the most critical income inequality or income gap compared to other states in Malaysia. From 2014 to 2016, the Gini Coefficient of Sabah increased from 0.387 to 0.402. It showed that Sabah had the highest Gini Coefficient in Malaysia despite the national figure averagely declined from 0.401 to 0.399 in 2016. It indicated inequality in Sabah actually became worse from 2014 to 2016. In addition, the quality of life that could influence happiness decreased over the years after the government implemented austerity policy that abolished subsidies on basic

necessities and implemented regressive tax like Government Services Tax, which in turn caused Sabahans to suffer due to high cost of living.

Furthermore, the statistic report also indicated among the states in Malaysia, Sabah has the highest housing unaffordability index and unemployment rate (5.4%) in 2016. According to the latest wage report which was carried out by MIDF Research (2017), it reported that Sabah had the lowest median wage in Malaysia which was RM1,240 compared to the national average median wage of RM1,703. In short, Sabah was experiencing economic growth but with very high unemployment rate and low wages across the board, coupled with increasing inequality. Several measures were taken by the government to upgrade the infrastructure, develop cottage industries, built affordable houses and so on to increase the standard of living among Sabahans which can increase their happiness level. However, doubt arises whether Sabahans were happy with the government policies introduced by the government to sustain their economic well-being or their richness in their tradition and culture, family relationship, health, community and friends and working environment that influence their happiness. Therefore this study aims to identify the factors that influence happiness among Sabahans.

### **Research Questions**

Several research questions have been developed based on the problem statement. By answering the research questions below, the objectives of this study would be fulfilled. The overall research question of this study is as follows:

“What are the factors that influence the happiness among Sabahans?”

The specific research questions of this study were as follows:

- (a) Do family and relationship influence happiness among Sabahans?
- (b) Does financial situation influence happiness among Sabahans?
- (c) Does work influence happiness among Sabahans?
- (d) Do community and friends influence happiness among Sabahans?
- (e) Does health influence happiness among Sabahans?
- (f) Does government influence happiness among Sabahans?

### **Objective of Study**

The overall objective of this study was to identify the factors that influence happiness in Sabah. The specific objectives were as follows:

- (a) To examine whether family relationship influences happiness among Sabahans.
- (b) To identify whether financial situation influences happiness among Sabahans.
- (c) To estimate whether work influences happiness among Sabahans.
- (d) To determine whether community and friends influence happiness among Sabahans.
- (e) To investigate whether health influences happiness among Sabahans.
- (f) To analyze whether government influences happiness among Sabahans.

## **2.0 Literature Review**

### **Theory of Happiness**

In the early 1970s, Richard Easterlin (2004) was the first modern economist to revisit the concept of happiness. A better theory of happiness proved that social comparison and adaption influences utility less in the non-monetary than monetary domain. Individuals tend to allocate excessive amount of time to earn money and overpass non-monetary domain such as health and family life, causing unhappiness. Easterlin (2004) supported the view by claiming happiness will create well-being. Well-being relied on real life circumstances. Real life circumstance can be defined as variables in the empirical studies done on happiness in economics. The real life circumstances variables are income, job, health, marital status and so on.

Many researchers propose the questions on what is happiness and how the happiness can be achieved. Based on Guillen-Royo and Velazco (2006) findings, well-being is a broad idea used in the study of happiness. It encompasses subjective evaluation of an individual's life satisfaction and performance or fulfilment of a given list of capabilities or needs. The term well-being, life satisfaction, happiness, utility and welfare are used interchangeably among researchers. However, there are some researchers who distinguish happiness as affective component whereas life satisfaction as a broad cognitive component of well-being.

The word happiness is synonymous to quantify of life or welfare. Aristotle 2300 years ago indicates that a person will be happy when he reaches his goal. This supports the Nicomachean Ethics Theory. In contrast, Bremner (2011) claims that there are two theories, life satisfaction and desire satisfaction. Life satisfaction supports Aristotle's view that when one fulfils their life's goal, they will be happy. Desire satisfaction theory stresses that a person will be happy when one fulfils their desire. But there were arguments that when one fulfils their desire, it brought them more dissatisfaction.

Seligman and Royzman (2003) introduced three traditional theories, hedonisms desire and objective list. Hedonism means pleasure. Happiness can only be attained when we maximize pleasure and minimize pain. Desire focuses on what we want and getting it. Similar with desire, Objective list will list out all the targets one wants to achieve and when they fulfil it, happiness is attained.

Layard's (2005) way of looking into happiness is to have a meaningful life compare to living from one pleasure to the next. He estimated happiness by looking into meaningful life from different aspects like family relationship, financial situation, work, community and friends, health, personal freedom and personal values.

In 2006, Veenhoven (2006) came up with three theories, set-point, comparison and affect. Set-point theory evaluates what is people's attitude about life, comparison theory deals with the comparison on how life actually is and what it ought to be. Finally, affect theory provides consideration of how one feels usually. This is supported by Suikkanen (2011), when he adopted the Cognitive Whole Life Satisfaction (CWLS) theory which uses the same concept. According to this theory, happiness can represent how well an agent's actual life matches up to his/her life-plan.

Hyman (2011) stressed that happiness can differ according to history and culture or it can also change overtime. This is because in his study some respondents claim happiness is natural that comes from the chemical changes in the body that happens due to surroundings like social. But negative feelings can also be changed to positive feelings through drugs, anti-depressant medicine, drugs and alcohol. This is momentary. This only takes a short time period. Finally in his study, the respondents confirmed that increased consumerism, various lifestyle choices and breakdown of normative framework are the main factors that transform the idea of happiness. Oishi, Granham, Kesebir and Galinha (2013) support the idea of Hyman (2011) that happiness differs based on history and culture. Their study on 30 countries, 24 nations confirms that happiness is related to good luck and fortune.

In this study, it can be concluded that achieving a fulfilling life and a meaningful life need a balance. Therefore family relationship, financial situation, work, community, friends, personal values, personal freedom and health do play an important role. This definition was extracted from Layard (2005). Moreover Layard's Happiness Theory was the only theory where the element of spirituality was included. Spiritual beliefs can form personal values that were only highlighted by Layard (2005).

## **Empirical Evidence on the Economic Happiness**

The study of happiness or subjective well-being is now part of the objective for economics and it has opened new lines of research. Actually, not only economists are interested in quantifications of happiness but also researchers in other disciplines. In this study, we focus on happiness economics, although we will refer to work in other discipline as well.

Study by Gerdtham and Johannesson (1997) aims to investigate the relationship between happiness (utility) and a host of socio-economic variables such as income, education, unemployment, urbanisation, being single, male gender, and age. The data sets consist of a random sample of over 5,000 individuals from the Swedish adult population. Happiness is measured by a three-point categorical to determine general happiness (not happy, happy sometimes, and happy most of the time), and an ordered probit model was used to econometrically estimate the happiness equation. The results revealed that happiness increases with income and education and decreases with unemployment. They also found that women are happier than men and that people living in rural areas are happier than people living in urban area. The relationship between age and happiness is U-shaped, with happiness being lowest in the age group 45 – 64. Lastly, they also showed the importance to consider the fact that many variables affect utility through the impact on health status.

Another studies carried by Oswald (1997) examined how much extra happiness does a nation's economic performance buy its citizen. The study examines the question by using information on well-being in Western countries. Four types of data were used, reported happiness, reported life satisfaction, reported job satisfaction, and the number of suicides. The finding stated that well-being seem to rise as real national income increases. However, they proved that, in a developed nation, economic progress buys only a little amount of extra happiness and in some country it shows a drop. They give evidence such as reported happiness in US has only increased in small amount over the post-war period. Besides that, reported degrees of "satisfaction with life" in Europe are only slightly improved since twenty years ago. They also found that rich countries seem to have higher suicide rate and job satisfaction did not increase. Thus, in a modern country, policies that only aim to raise economic growth may not be very effective and give fairly little value.

According to Bruno and Alois (2002), happiness is not similar to utility, but it well explains people's satisfaction with life. They study how unemployment, income, inflation and democracy affect reported individual well-being and try to provide an impression of new development in economics. They are not using any comprehensive survey but they presented all the most important findings, especially



those that put commonly accepted knowledge into doubt. In the end, they suggested that unemployment strongly reduces subjective well-being, both personally experienced and for society as a whole. On the other hand, both support as well as contradict that higher income leads to higher happiness. In line with common thinking, it is found that at a particular point in time, and within a particular country, higher income is associated with higher individual happiness. In contrast, higher per capita income in society seems not to raise reported satisfaction with life in rich western countries. This can be attributed to the rise in aspiration levels going up with increases in income. Moreover, they suggested that an anti-inflationary policy is rarely worth the cost it entails in terms of additional unemployment and real income loss. In contrast, happiness research finds that inflation systematically and sizeably lowers reported individual well-being. Lastly, they found that increased possibilities to directly participate in public decision-making by decentralizing state significantly contribute to happiness. The insights gained about happiness are in many aspects useful for economic policy undertaken by governments such as welfare policy and tax policy.

Furthermore, Easterlin (2004) discussed two prominent and contrasting theories of well-being, one in psychology, and one in economics. He argued that the accumulating survey evidence indicates that neither the theories are correct. Contrary to set point theory, life events such as marriage, divorce, and serious disability or disease do have lasting effects on happiness. Contrary to what economic theory assumes, more money does not make people happier. He discussed the evidence on the relation to happiness of the material living level, family circumstances, and health. He adopted intensive survey from social psychologist, Hadley Cantril and annual surveys in his study. Besides that, he has a nationally representative random sample of the same group of individuals for almost three decades and using life cycle approach demographers' technique of birth cohort analysis. The survey evidence indicates that over the life cycle family and health circumstances typically have lasting effects on happiness, but more money does not. He suggests that most people could increase their happiness by devoting less time to making money, and more to non-pecuniary goals.

Moreover, Graham (2005) does research that highlights factors other than income that affect well-being. She tried to improve the view that utility was taken to depend only on income as mediated by individual choices within a rational individual's monetary budget constraint. Large-scale surveys had been done, across countries and over time, of hundreds of thousands of individuals who are asked to assess their own welfare. The surveys provide information about the importance of a range of factors which affect well-being, including income but also others such as health, marital and employment status, and civic trust. She stated that the approach relied on expressed preferences rather than on revealed choices, is particularly well suited to answer questions in areas where a revealed preferences approach provides limited information.

In her finding, she suggested that researchers need more and better quality well-being data, particularly panel data, which allows for the correction of unobserved personality traits and correlated measurement errors, as well as for better determining the direction of causality.

Layard (2005) made a bold statement about the potential of happiness research to improve well-being through the modification in public policy. He highlights on the effects of social comparison which resulting in a rat race approach for income gains and to work, the most immediate consequence will be reducing of happiness. He introduced five 'other ways' or principal proposals to tame the rat race. He mentioned that people usually get used to what they have and like comparing themselves with others. Hence, they kept on adapting their values and want more and these comparisons permanently create bigger or smaller gaps between reality and needs with negative or positive effects on happiness. Hence, social comparison always creates external effects in the interaction between other people. He also posits that family relationships, financial situation, work, community and friends, health, personal freedom and personal values are the factors that will affect happiness in adult life. He also notes the strong positive role of security in the workplace, in the home, quality of social relationships and trust plays an important role. He identifies immediate consequences for fiscal and labour market policies imposed by taxation on excessive income gains and reconsidering the qualities of performance-based pay. He also advises economists should focus less on purchasing power and more on the process of how well-being is generated.

Modern-day in America, consumerism has persuaded people to look for happiness via constant expansion of their material standard of living. Consumerism has contributed to a development of status consumption and want-creation, but both have increased the consumption without contributing to happiness. Busch (2008) stated that Smith's views have been often misrepresented by modern commentators. People have forgotten about the three virtues Smith observed that best provide for a tranquil lifestyle and overall social well-being. He aimed to reveal a more satisfying role for consumption in modern life using Smith's view: justice, beneficence and prudence. By embracing Smith's virtues and focusing more on tranquillity, people could become happier at less cost and exertion than they go through now because so much of their labour is spent to acquire goods for status consumption or because of want-creation. He suggests that if Smith's ethics were adopted by modern society, it may decrease overall consumption but will lead to a more satisfied life.

Another similar research studies by Colin (2008) stated that most of the economic policy today's often seems to focus more on the growth of income and creation of wealth. However economists have always viewed Gross National Product (GNP) as an imperfect measure of human welfare. Many recent research on happiness

consistently verifies that there are diminishing marginal returns to income. Studies show that happiness responds more to interpersonal relationship than to income once basic material needs are satisfied. Besides that, she stated that one's personal values and philosophy of life also matters, as do strategies and techniques for mood control and raising each individual's baseline or set-point level of happiness. In her paper, she briefly summarizes the research findings which have led to this gradual and ongoing shift of focus.

On the other hand, Van Praag and Carbonell (2011) suggested a new road to measuring and comparing happiness. In their paper, they gave an overview to the field of happiness economics. They focused on the question which relates to positive economics and normative economics. The main purpose of their paper lies at understanding happiness and thus individuals' preferences with 'life as a whole', with some diversions into health and job satisfaction. The empirical work in this area has emphasized on studying individuals' adaptation ability, their availability to foreseen future outcomes, and the function of the reference group. This can contribute to a better understanding of individuals' behaviour in order to evaluate public policies or predict behaviour.

In addition, religious practices impose an immediate trade-off, as they require time and resources that are then unavailable for production. Campante and Drott (2014) studied the economic effects of religious practices in the context of the observance of Ramadan fasting, one of the central tenets of Islam. They aim to estimate the causal effect of the strictness of a religious practice on economic growth. To establish causality, they exploit variation in the length of daily fasting due to the interaction between the rotating Islamic calendar and a country's latitude. In the end of their studies, they reported that longer Ramadan fasting has a negative effect on output growth in Muslim countries but it increases subjective well-being among Muslims.

In Malaysia, research on happiness is relatively new and limited. Al-Naggar et al. (2010) explored the perceptions and opinions of happiness among university students in Malaysia. Based on their result, they found that the main source of happiness was money followed by good relationship with friends and family, stability of life, good health and success in life.

Ang and Abu Talib (2011) examined the relationship between materialism and satisfaction of life among 360 of Malaysian undergraduate students in Kuala Lumpur. Data analysis was done based on questionnaires and the results of the study affirmed that materialism was statistically correlated to life satisfaction. They highlighted that most undergraduates students reported moderate to high levels of endorsement of materialism values because of materialism-oriented environment. Undergraduate

who reported less satisfaction with life showed more signs of engaging in acquisition of possession, centrality and defined success. They concluded that youth nowadays were being instilled with survival rules that view wealth as a sign of one's own and other's success in life.

Cheah and Tang (2013) investigated the socio-demographic factors of happiness by using an ordered probit model to generate self-rated happiness. Primary survey data with a total of 398 respondents was collected from the state of Penang in Malaysia. The independent variables involved were age, gender, ethnicity, marital status, employment status, income, education and health. Their results showed that ethnicity, marital status and education are statistically significant in determining individuals' happiness but income, gender, age, employment status and presence of chronic diseases are statistically insignificant in determining individuals' happiness but negative externalities provides unhappiness.

Cheryl Teh (2014) investigated the effects of income, health, employment status and marital status on well-being in Malaysia. It provides an insight into the perceived states of well-being of the labour force in Malaysia and the impacts the selected determinants have on these states of well-being. Using the official statistics from 1990 to 2010 published by the government of Malaysia showed that income is the strongest determinants of well-being in Malaysia among the labour force. The results of this study are significant as it let policy makers have a deeper understanding on determinants of well-being of the labour force in Malaysia. Hence, better economic policies were designed and implemented to improve nation well-being and build a more positive and happier workforce.

Boo, Yen and Lim (2016) examined both happiness and life satisfaction of Malaysian citizens which explained by the similar determinants based on a sample size of 1289 adopted from the sixth waves of World Values Survey (2010 – 2014). Based on their study, they indicated that income has strong positive relationship with happiness and life satisfaction which partially in line with Easterlin's paradox. They also found that health status, employment and satisfaction on financial situation of household had positive impact on both happiness and life satisfaction.

### **Determinants of Happiness in Economics**

Most of the research aims to identify what are the drivers of happiness in economics. These drivers differ based on history and the culture of the country. Up to date, based on the literature review following are the factors or drivers identified that could lead to happiness.

### ***Income***

Among the most prominent factors, purchasing power is the most important factor in economics of happiness research. There are many proxy used as an indicator for purchasing power. The most famous is income. This is supported by the study conducted by Gerdtham and Johannesson (1997). Income of individuals was found to be statistically significant in explaining the changes in the economics for happiness. Study by Bruno and Alois (2002) also confirms that the higher the level of income, the higher the level of happiness. This study was conducted in high income countries. The researcher also included inflation. When inflation increases, it reduces purchasing power. Thus the lower income group will be engaged in higher income generating activities compared to the rich. Therefore it reduces happiness. Easterlin (2010) found a causal effect between income and happiness. But issue arises when limited data does not allow consistency in the observation. Thus sample selection is important. In US, there is no correlation between income and happiness in the long run.

In contrast the traditional economics view argues whether GDP is a good indicator to measure purchasing power or income or even welfare. Public expenditure should be a better proxy for income or welfare that could lead to happiness.

### ***Employment***

Employment shows or reflects economic security. Gerdtham and Johannesson (1997) used unemployment to represent the socio-economic variables. This is because employment creates positive externalities like job satisfaction and income. But unemployment can increase the number of suicides which creates negative externalities. Positive externalities supports happiness but negative externalities provide unhappiness. This is supported by the study conducted by Luechinger, Stephan, and Stutzer (2008), unemployment can create negative externality because it induces negative anticipatory feelings of anger and stress due to economic insecurity. Data from 12 European countries between 1975 and 1992, states that aggregate unemployment decreases average life satisfaction and average income. Di Tella, MacCulloch, and Oswald (2003) distinguish effects of unemployment to direct and indirect. Direct effects of unemployment are crime and public finance, changes in working hours and salaries but indirectly reports job insecurity. The findings support the moment to moment outlook theory.

### ***Social Capital***

In order to put the determinant of economic happiness into perspective, the study of alternative sources are also important. Happiness depends on personal relationships like relationship with family, friends, work mates, fellow community, religion based

community (spiritual). If the relationship with these people is good, we can achieve the highest level of happiness. Easterlin (2004) also stresses economic theory supports that non-monetary variables like material living level, family circumstances and life cycle of a family influences happiness. The findings were also supported by Layard (2005), Michael (2006), Landiyanto, Ling, Puspitasari, and Irianti (2011) and Campante and Drott (2014).

### ***Health***

Van Praag and Carbonell (2011) suggested a new road to measuring and comparing happiness. The new road includes health condition. Easterlin (2004) also supports that health condition has a long lasting effect. Money does not guarantee happiness. The author suggested that most people who devote most of their time making money should devote less time in making money and focus on more to non-pecuniary goals. In Indonesia, Landiyant et al. (2011) put more attention to health and found it to be significant in influencing happiness.

### ***Other Factors***

Veenhoven (2012) investigated the impact of social development conducive to happiness within 1990 and 2010. Social development leads to happiness compared to economic development. The researcher did an analysis on 141 contemporary nations using 5 Indices of social development which is civic activism, involvement voluntary associations, harmony among group, individuals and gender equality. The result revealed that social development did not influence happiness.

In addition, there were researchers who claimed that climate change and suitable policies can increase economic and social cost. This was proven when a study was conducted in Bulgaria and Barcelona. Emission of carbon dioxide that affects the greenhouse has insignificant effect to happiness. Researchers like Sujarwoto (2013) argued that economic system also influences happiness because it reflects capacity and accountability. Sujarwoto (2013) uses multi-level analysis to examine the impact of local government. The study revealed that citizens are happier with local government that able to provide better public goods and services for them. They are not happy in the face of local corruption and weak capacity to govern.

### **Valuation Approach on Economic of Happiness**

The study on economics of happiness is a quantitative study that combines the field of psychology and economics. It can also be related to other fields like sociology, health and so on. Since the 20th century, development of various methods, survey and indices

have been a challenge to the economic profession to measure happiness. Happiness is a subjective subject. It can be classified as welfare that covers equity, justice, inequality and so on. In contrast, it can also look into living standards and quality of life.

Happiness is a subjective measure, self-reporting but the reliability and accuracy is questionable. It can also be measured objectively using life span, income and education. But question arises, whether if income, lifespan and education level increase, will it increase the level of happiness. It may not be the case.

The idea of happiness is not new. Many researchers wanted to include or incorporate happiness in their work. Thomas Jefferson claims that pursuit for happiness must be in line with life and liberty. Jeremy Bentham shows that public policy is accountable for happiness. In 1972, Gross National Happiness focused in increasing the citizen's happiness in Bhutan. But the quantitative measurement used was not very clear. In 2005, Med Jones improved the Gross National Happiness and changed its name to Gross National Well-Being. Gross National Well-Being used is measured based on the socio economic development characteristics. In 2006, the Genuine Progress Index included the environmental cost. Another development index was the Human Development Index that covers health (life expectancy), literacy rate and standard of living. To overcome the critics in this index, Hou, Walsh and Zhang (2015) improvised Human Development Index to Human Development Index Flow which made the following changes. Life expectancy was replaced with mortality and literacy with enrolment in school.

In 2009, the Gallup poll system launched a happiness scale in a national survey. The Well-Being Index score at six subsections that include life evaluation, emotional health, work environment, physical health, healthy behaviour and access to basic necessities.

At 2010, the nation of Bhutan further extended four contributors to eight contributors and renamed it Bhutan GNH Index. Similarly in 2010, the Oxford Poverty and Human Development Initiative (OPHI) promoted the collection and analysis of data based on 5 criteria, quality of work, empowerment, physical safety, ability to go without shame and psychological well-being.

In 2011, various indices were formed, happiness towards a holistic approach to development by UN, Better Life Index by OECD, World Happiness Report by UN, and Canadian Index of Well-being by Canada also with similar factors. Only in 2013, a new dimension on how people communicate was included to measure well-being. Finally in 2004, public's contentment and satisfaction with different government service were included by the Dubai government.

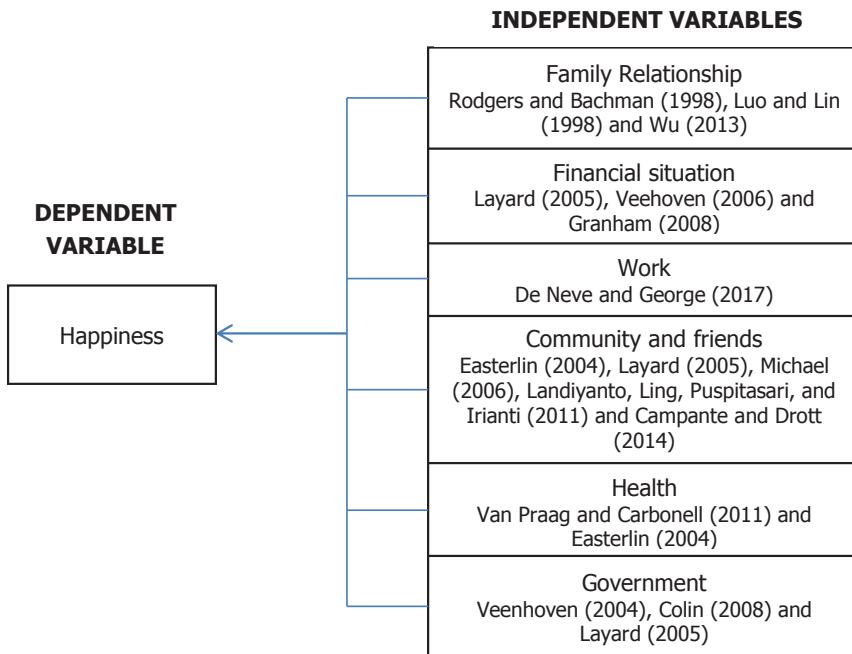
Microeconomic happiness equation have the standard form, .  $W$  reports well-being of individual  $i$  at time  $t$ . is the know vector variables and  $e$  is the other factors not included in the study. Happiness or satisfaction in life is immeasurable in classical and neo classical theory. Van Praag was the first to do a large scale survey using Income Evaluation Question.

**Research Gap**

To date, there are limited studies on happiness in Asia’s developing countries, such as Malaysia. This study focused on the happiness among Sabahans in Sabah which is one of the states in Malaysia. The study aims to examine the relationship between the happiness and the selected determinants, such as family relationship, financial situation, work, community and friends, health, and government. Up to date, none of the researchers in Malaysia used community, friends and government as independent variables to examine the happiness of the peoples but this study will include those variables. In short, these studies aimed to define happiness from the Sabahans’ perspective.

**3.0 METHODOLOGY**

**Research Framework**



Adapted and modified from: The Happiness Initiative 2013

**Figure 1** The theoretical framework



The research framework was adopted from R. Layard (2005) which stated that the seven factors that affect happiness, family relationships, financial situation, work, community and friends, health, personal freedom and personal values. Personal freedom and personal values were seen as important, but drawn out from this study because it was difficult to be valued due to lack of survey evidence. However, government was added in this study because there was some evidence that showed quality of politics can affect happiness level.

Family relationship is expected to create positive impact with happiness. This refers to the impact of family members in one's life. Life of each people closely relates to their lineage with their ancestor. Good family relationship creates no regrets and leads to satisfaction in life and vice versa. The family members would be an emotional and financial support at any time or place. Therefore, family relationship has a positive impact to happiness.

Many studies accumulated over the years that our financial situation have a lot to do with the degree of happiness that we experience in our lives. Besides that, it is found that comparing one's own financial situation with another can affect happiness too. When an individual is in good financial situation, it is believed that their aspirations and expectations rise, and so their happiness will eventually adapt to the higher level of income (Layard, 2005). Therefore, financial situation is expected to have a positive impact to happiness.

Moreover, work is expected to influence our degree of happiness. As a result of increase in cost of living and competition, maintaining happiness at work has become more important. When an individual experiences a high level of satisfaction on work, it is expected that it can produce positive outcome at work and vice versa. Hence, it is very important to notice that good working relationship can create a sense of belonging to group and matching between personal abilities and job demand which has important effects on happiness level. Therefore, work is expected to have a positive impact on happiness.

Community and friends are believed to be so critical to happiness. The quality of the communities and friends influence how one feels. When individuals are able get together with good people and establish trust with others in community, it is believed that one can receive the happiness when taken care by the others and having good interaction with others. Good relationship with community and friends, rather than money, is vital to happiness. Individuals are believed to have a satisfying life by spending time with community and friends rather than striving for higher income.

Furthermore, health can improve happiness level and vice versa. Studies have shown that happiness is good for one's health and at the same time, good health can also increase happiness too. An individual that have both good physical and mental health is believed to have happier life and longer life expectancy than unhealthy individual.

Lastly, a policy implemented by government does not take into account of macroeconomic variables such as unemployment or inflation that affects the happiness. Good public policies can create huge happiness to society but bad public policies can create dissatisfaction to society. Government is able to shape a community that has integrity and transparency which promotes good values such as equal opportunity, honesty which gives positive impact on happiness.

### **Hypothesis of the Study**

Based on the framework of the study as shown in Figure 1, these hypotheses were formed to determine the relationship between happiness and circumstance of lives and societies in Sabah. Based on these variables, six hypotheses are developed for this study as follows:

#### **Hypothesis 1:**

H<sub>1</sub>: Family relationship has a positively significant influence on the happiness among Sabahans.

#### **Hypothesis 2:**

H<sub>2</sub>: Financial situation has a positively significant influence on the happiness among Sabahans.

#### **Hypothesis 3:**

H<sub>3</sub>: Work has a positively significant influence on the happiness among Sabahans.

#### **Hypothesis 4:**

H<sub>4</sub>: Community has a positively significant influence on the happiness among Sabahans.

#### **Hypothesis 5:**

H<sub>5</sub>: Health has a positively significant influence on the happiness among Sabahans.

#### **Hypothesis 6:**

H<sub>6</sub>: Government has a positively significant influence on the happiness among Sabahans.

## Sample Design

These respondents in the research were chosen based on convenient sampling method because it deals with large population from different areas and it was too costly for researcher to spread a sample across the population as a whole. It was a non-probability sampling technique because the samples that are assembled from the population were not given any equal chances of being chosen. By choosing convenient sampling technique, the researcher was able to involve in getting participants wherever convenient. In convenience sampling, no addition criteria identified prior to the selection of respondents. All respondents were invited to participate in the happiness survey. The alternative use of probability sampling was not considered due to limited time and resources.

**Table 1** The population in Sabah

Group	District	Population (2010)
1.	Beaufort	66,406
2.	Beluran	106,632
3.	Keningau	177,735
4.	Kinabatangan	150,327
5.	Kota Belud	93,180
6.	Kota Kinabalu	462,963
7.	Kota Marudu	68,289
8.	Kuala Penyu	19,426
9.	Kudat	85,404
10.	Kunak	62,851
11.	Lahad Datu	206,861
12.	Nabawan	32,309
13.	Papar	128,434
14.	Penampang	125,913
15.	Pitas	38,764
16.	Putatan	55,864
17.	Ranau	95,800
18.	Sandakan	409,056
19.	Semporna	137,868
20.	Sipitang	35,764
21.	Tambunan	36,297
22.	Tawau	412,375
23.	Tenom	56,597
24.	Tongod	36,192
25.	Tuaran	105,435
	Total Sabah population	3,206,742

Source: Department of Statistics Malaysia (2010)

Besides that, if convenient sampling was conducted properly, the sample could represent the entire population. Therefore, using convenient sampling means dividing the population into groups in the first stage. Then, it involves random selection of participants from the groups to take the happiness survey. All members of population were invited to participate in the happiness survey without any discrimination.

The data that was used in this study were randomly collected from the citizens or households head who come from different areas in Sabah such as Beaufort, Beluran, Keningau, Kinabatangan, Kota Belud, Kota Kinabalu, Kota Marudu, Kuala Penyu, Kudat, Kunak, Lahad Datu, Nabawan, Papar, Penampang, Pitas, Putatan, Ranau, Sandakan, Semporna, Sipitang, Tambunan, Tawau, Tenom, Tongod, and Tuaran (Refer to Table 1). The contact with potential respondents was made through telephone and email or face to face asking for the participation in this survey research. The process continued until at least 387 respondents were willing to participate in this research.

In calculating the representative sample as a proportion for large populations, the formula developed by Cochran (1963) was used. The equation was given as:

$$n_0 = \frac{Z^2 pq}{e^2} \quad (3.1)$$

where  $n_0$  was the sample size,  $Z$  was the abscissa of the normal curve that cuts off an area at the tails ( $1 - \alpha$  equals to the desired confidence level like 95%),  $e$  was the desired level of precision,  $p$  was the estimated proportion of an attribute that was present in population, and  $q$  is  $1 - p$ .

According to the Department of Statistics Malaysia (2010) as stated in Table 1, the population size in this study referred to the total population in Sabah that is 3,206,742. Therefore, the desired sample size can be calculated by applying Equation 3.1 at 5 per cent significance level. Suppose we use a 95 per cent confidence level, then the precision will be  $\pm 5$  per cent. For  $p$  will be the proportion of Sabah households to the total households while  $q$  is  $1 - p$ . Assume there is a large population but that we do not know the variability in the proportion that will take on the practice, therefore, assume  $p = .5$  (maximum variability).

With this, the value of each term in Equation 3.1 can be obtained as:

$$\begin{aligned} Z &= 1.96 \\ e &= 0.05 \\ n_0 &= \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} \\ &= 384.16 \\ &\approx 385 \end{aligned}$$

If the population was small then the sample size can be reduced slightly. This was because a given sample size provides proportionately more information for a small population than for a large population. The sample size can be adjusted using Equation 3.2.

$$n = \frac{n_0}{1 + \left(\frac{n_0 - 1}{N}\right)} \tag{3.2}$$

where  $n$  was the sample size and  $N$  is the population size.

Hence, the sample size for Sabah can be estimated by applying Equation 3.2.

$$\begin{aligned} \text{Sample size for Sabah, } n_{\text{sabah}} &= \frac{385}{1 + \left(\frac{385 - 1}{3,206,742}\right)} \\ &= 384.95 \\ &\approx 385 \end{aligned}$$

Finally, the sample size formulas provided the number of respondents that need to be obtained. However, this sample size was added with extra 10 per cent to compensate for person that was unable to contact or questionnaires that need to be rejected. Meanwhile the sample size was also always increased by 30 per cent to compensate for non-response. With this, extra 30 per cent from the calculated sample size which amounted to 116 respondents were added.

Thus, the actual number of questionnaires distributed was 501 and the response rate was 77.2 per cent (387/501) as shown in Table 2:

**Table 2** The number of questionnaires distributed in Sabah

State	Population size	Sample size	Extra 30%	Number of questionnaires distributed
Sabah	3,206,742	385	116	501

According to the Department of Statistics Malaysia (2010), the total number of population in Kota Kinabalu, Sandakan, Tawau, Kudat and Beaufort were 462,963, 409,056, 412,375, 85,404, and 66,406 respectively. Based on the proportion, the sample size for Kota Kinabalu, Sandakan, Tawau, Kudat and Beaufort were estimated as shown in Table 3.

**Table 3** The sample size for each division in Sabah

<b>Division</b>	<b>Population size</b>	<b>Proportion</b>	<b>Sample size</b>
<b>Kota Kinabalu</b>	462,963	0.3224	162
<b>Sandakan</b>	409,056	0.2848	143
<b>Tawau</b>	412,375	0.2871	143
<b>Kudat</b>	85,404	0.0595	30
<b>Beaufort</b>	66,406	0.0462	23
<b>Total</b>	<b>1,436,204</b>	<b>1</b>	<b>501</b>

The contact with potential respondents was made through telephone and email or face to face asking for the participation in this happiness survey research. Translation from English to Malay was needed as quite a number of Sabahans cannot understand and read in English. The process continued until targeted number of respondents was willing to participate in this research.

At the end of the survey research, a formal letter was sent out to each respondent to explain the purpose of this research and the survey was completed between 1st April 2017 and 30th April 2017. Each respondent received a postcard as a gratitude for the participation.

### **Instrument and Measurement**

Part of the survey instrument was adopted from The Happiness Initiative 2013 using single-item or multiple-item questions to study how happiness and well-being were influenced by the circumstances of our lives and societies whereas, the remaining questions were designed by the researcher. The questionnaire was divided into section A and section B.

Section A covers demographics information from Items 1 to 9, it obtained the demographic information about the selected respondent who responded to this survey. The information was required to measure the respondent's perception about how happiness were influenced by the circumstances of our lives and communities according to the variable specified such as age (1), gender (2), ethnicity (3), marital status (4), number of household (5), spirituality (6), education level (7) and household income (8).

Section B consists of seven questions which addressed the circumstances of our lives and societies such as family relationship, financial situation, work, community and friends, health and government policies.

Question 1: Satisfaction with life, items 1 to 3, examined the satisfaction of respondents towards life. Item 1 asked whether the respondents experiencing the best possible life. Item 2 examined the satisfaction of life as a whole and Item 3 determines the happiness of respondents with their life.

Question 2: Family Relationship, items 1 to 4, examined how strong the bond the respondents have with their family members. Item 1 examined the satisfaction of the respondents with their family relationship. Item 2 asked respondents how much freedom to express themselves in their family and Item 3 asked respondents whether they feel themselves as an important part of the family. Item 4 asked how respondents feel they can depend on their family to support them in challenging times.

Question 3: Financial situation, Items 1 to 4, assessed the financial situation of the respondents which eventually influences their happiness. Item 1 asked respondents how much stress they felt about personal finances. Items 2 to 4 asked to what extent the respondents agree have enough money to buy things that desire (5), securing with financial future (6), and could handle a major unexpected expense (7).

Question 4: Work, Items 1 to 4, discovered how the working condition of respondents could affect their happiness. Item 1 asked the satisfaction of respondents toward their current work life. Item 2 asked how often respondents find their current work life interesting. Item 3 indicated the level of agreement with the statement such as job conditions allow respondents to be about as productive as they could be. Whereas, Item 4 asked the level of agreement with considering all efforts and achievements in job feel get paid appropriately (4).

Question 5: Community and friends, Items 1 to 4, discovered the respondent's community vitality and how much they being cared and supported from peoples in community and friends. Items 1 and 2 asked whether the respondents trust their neighbours and businesses in community. Item 4 estimated the satisfaction of respondents toward personal safety in their city or town.

Question 6: Health, Items 1 to 4, detected how good the physical and mental health of the respondents. Item 1 indicated the level of agreement with the statement of "I would say my health (mentally and physically) is healthy". Item 2 and 3 indicated how much of the time during the past week the respondents had a lot physical pain (2) and emotional problems (3) that could prevent them doing what they needed to do. Item 4 showed the level of satisfaction of respondents to perform daily living activities with abilities.

Question 7: Government, Items 1 to 4, assessed the level of trust with the current government and evaluated the accountability, effectiveness, efficiency and transparency of implemented government policy. Item 1 indicated the level of satisfaction with the job being done by the local government officials in the city or town. Item 2 asked the level of agreement with the statements such as the public officials in city pay attention to what people think. Item 3 asked to what extent the respondents think the government's policy produce the intended outcomes and impact. Item 4 determined the level of integrity and transparency of government policy implemented.

### **Data Analysis Procedure Used**

The collected data were analyzed through utilization of the Statistical Package for the Social Sciences Version 20 (SPSS 20) and SmartPLS 3.2.7. The data were analyzed to measure the frequency distributions for the demographic variables, the mean, and standard deviation of the variables. According to Sekaran (2003), the purpose of data analysis were getting a feel for the data, testing the goodness of data and testing the hypotheses developed for the research.

Besides, there were two main steps to carry out data analysis in structural equation modelling (Ramayah, 2014). The first step included analysis of measurement model where assessment of validity and reliability of the items were conducted. Next, the second step involved analysis of structural model where assessment of relationship between the latent constructs and hypotheses were tested. Hence, Partial Least Squares (PLS) was used in this study to run the analysis of measurement model and structural model because PLS does not require normal-distributed input data and can be applied for complex model which is useful for prediction (Urbach & Ahleman, 2010).

At first, model assessment focuses on the measurement model and the structural model. According to Hair, Hult, Ringle, and Sarstedt (2014), two kinds of validity were evaluated in the measurement models which were convergent validity and discriminant validity. The purpose of measurement model evaluation was to ensure the reliability and validity of the construct measures and gave support for the fitness in the path model. It also investigated the degree to which the construct is truly different from the other construct in the study.

With regard to the measurement model, the criteria assessment included the indicator reliability (squared standardized outer loadings), internal consistency reliability (composite reliability and Cronbach's alpha), convergent validity (average variance extracted, AVE) and discriminant validity (Fornell-Larcker criterion and cross loadings) as recommended by Hair, Ringle, and Sarstedt (2011).



There are many scholars have given different cut-off values on the factor loadings for items retention, which varying from 0.35 to 0.70 (Hair, Anderson, Tatham, & Black, 1998; Hair et al., 2011). In this study, loadings of 0.50 or more were considered as minimum acceptable value and significant. Moreover, the recommended value for the composite reliability (CR) which is minimum value of 0.70 (Hair, Black, Babin, & Anderson, 2010) while the Cronbach's alpha accepted at the recommended value of 0.70 (Nunnally, 1978; George & Mallery, 2003). Furthermore, the authors recommended the acceptable value for average variance extracted (AVE) exceeded the value of 0.50 (Bagozzi & Yi, 1988; Hair et al., 2010; Fornell & Larcker, 1981). In addition, the square root of the AVE should exceed the squared correlations between the latent variable and all other latent variables (Chin, 2010; Fornell & Larcker, 1981). Based on the assessment of the structural model, the path coefficients were obtained for the structural model relationships, which testing the hypothesized relationships among the constructs. According to the recommendation guidelines from Chin (1998), the hypotheses of the research model were tested using the bootstrapping procedure with 500 subsamples. The significance of the path coefficients is based on the *t*-values.

#### 4.0 Data Analysis and Findings

##### Descriptive Statistic Method

All the data collected from the questionnaires were interpreted and summarized in the form of summary statistical tables and graphs. It allows describing and comparing variables numerically which improves the statistical analysis and data interpretation.

##### *Profile of the Respondents*

**Table 4** The profile of the respondents

Demographic variables	Categories	Frequency	Per cent
<b>Current age group</b>	19 to 29	173	44.7
	30 to 39	98	25.3
	40 to 49	73	18.9
	50 to 59	31	8.0
	> 60	12	3.1
<b>Gender</b>	Male	228	58.9
	Female	159	41.1
<b>Races or ethnicities</b>	Bumiputera	199	51.4
	Non-Bumiputera	188	49.6

Demographic variables	Categories	Frequency	Per cent
<b>Current marital status</b>	Single	112	28.9
	Married	238	61.5
	Widowed	16	4.1
	Divorced	8	2.1
	Separated	13	3.4
<b>Number of household</b>	1 to 2	21	5.4
	3 to 4	103	26.6
	5 to 6	159	41.1
	7 to 8	78	20.2
	Other	26	6.7
<b>Education level</b>	No formal education	6	1.6
	Secondary education	60	15.5
	Tertiary education	202	52.2
	Postgraduate degree	45	11.6
	Professional degree	72	18.6
<b>Household income</b>	Doctorate degree	2	0.5
	No income	18	4.7
	1,000 to 2,000	11	2.8
	2,001 to 3,000	75	19.4
	3,001 to 4,000	172	44.4
	More than 4,000	111	28.7
	<b>Total</b>	<b>387</b>	<b>100%</b>

Table 4 shows the profile of the respondents involved in this study. Based on the results of the frequency distribution of respondent's age group, 44.7 per cent (173/387) of respondents came from age group of 19 to 29. The age groups of 30 to 39 and 40 to 49 were 25.3 per cent (98/387) and 18.9 per cent (73/387) respectively. There were 8 per cent (31/387) who came from the age group of 50 to 59 and 3.1 per cent (12/387) came from 60 years or older.

Besides that, 58.9 per cent (228/387) of the respondents were male and the remaining 41.1 per cent (159/387) were female as shown in Table 4.

In addition, it shows that 51.4 per cent (199/387) of the respondents were Bumiputera. Bumiputera described Malays and indigenous people of Sabah. The remaining 49.6 per cent (188/387) of the respondents were non-Bumiputera. In Sabah, the main Bumiputera are Kadazandusun, Bajau and Murut.

Moreover, it identified that 28.9 per cent (112/387) of the respondents were single and 61.5 per cent (238/387) of the respondents were married. There were 4.1 per cent (16/387) of the respondents who were widowed and 2.1 per cent (8/387) of the respondents were divorced. The remaining 3.4 per cent (13/387) of the respondents were separated.

On the other hand, it showed that 5.4 per cent (21/387) of the respondents came from the household that consists of 1 to 2 people. Followed by 26.6 per cent (103/387) which consists of 3 to 4 people, 41.1 per cent (159/387) consists of 5 to 6 people and 20.2 per cent (78/387) consists of 7 to 8 people in the household. The remaining 6.7 per cent (26/387) of the respondents came from the household that consists more than 8 people.

Furthermore, Table 4 also showed the frequency distribution of the respondent's education level. Most of the respondents in this survey had received tertiary education and professional degree which was made up of 52.2 per cent (202/387) and 18.6 per cent (72/387) respectively. 15.5 per cent (60/387) of them obtained secondary education and 11.6 per cent (45/387) of them obtained professional degree. Also, 1.6 per cent or 6 of the respondents did not receive any formal education and 0.5 per cent or 2 of the respondents got a doctorate degree.

In order to examine the household income of the respondents, data had been collected as shown in Table 4. It showed that 2.8 per cent (11/387) of the respondents had around RM1,000 to RM2,000 monthly household income and 44.4 per cent (172/387) of the respondents had earned RM3,000 to RM4,000 monthly household income. Followed by 28.7 per cent (111/387) of the respondents had more than RM4,000 monthly household income and 19.4 per cent (75/387) of the respondents had approximately RM2,000 to RM3,000 monthly household income. Only 4.7 per cent or 18 respondents had no monthly household income.

In short, most of the respondents in this study were adults, aged 19 to 49 and married. They got moderate monthly household income that is RM3,000 to RM4,000, and received high education level. It showed that Malaysian highly value the importance of education and it is in line with the government's commitment for the provision of quality education to its societies.

**Descriptive Statistics of the Latent Constructs**

**Table 5** The descriptive statistics

Latent variable	Number of items	Mean	Std. Deviation
Happiness	3	3.8915	.45745
Family relationship	4	3.8030	.59475
Financial situation	4	3.3133	.56323
Work	4	3.6686	.57374
Community and friends	4	3.5155	.46728
Health	4	2.9826	.43097
Government	4	2.7067	.68871

Table 5 shows the descriptive statistics on the responses for happiness, family relationship, financial situation, work, community and friends, health and government. In order to capture the intensity of the respondents feeling for a given item, a typical 5-point Likert scale was used.

For happiness, the respondents were asked to indicate which ladder they stood at the present time. The top of the ladder represents the best possible situation in life and the bottom of the ladder represents the worst possible. Besides that, in each of the items, scale “5” equals to identify the extreme that is “strongly agree”. Correspondingly, scale “1” identifies the opposite extreme that is “strongly disagree” and “poor”. It becomes easier to indicate from the remaining scales and the scale “3” identifies neutral that can be an easy option when a respondent is “unsure”.

Based on the results of Table 5, the total number of respondents was 387. The mean and the standard deviation of the data were obtained. The mean was used to measure the central tendency of a variable by summing up all of the observations divided by the total number of observations. Whereas, standard deviation indicates how close the data is to the mean. A greater standard deviation values indicates greater spread in the data and vice versa.

Overall, the mean of family relationship, financial situation, work, community and friends, health lies between scales of “3” to “4”. It indicated neutral option or “slightly satisfied”. Likewise, the mean of health and government lies between scales of “2” to “3” which indicated neutral option or “slightly dissatisfied”. The government mean was 2.7067 which was the lowest mean among all variables that indicated the existence of dissatisfied trend towards governance of Malaysia.

Government should take several measures and start to transform or adapt to the needs of its people. On the other hand, the family relationship had the highest mean among all variables which was 3.8030. It indicated that citizen in Sabah paid

attention to family and believed family relationship is an important aspect that can lead to happiness in life. Lastly, Table 6 to Table 11 showed the details of each variable.

### Reflective Measurement Models Evaluation

The study conducted a Confirmatory Factor Analysis (CFA) to assess the reflective outer models. The criteria assessment included the indicator reliability (squared standardized outer loadings), internal consistency reliability (composite reliability and Cronbach's alpha), convergent validity (average variance extracted, AVE) and discriminant validity (Fornell-Larcker criterion and cross loadings) as suggested by Hair et al. (2011). The reflective measurement model finding is shown in Table 6.

**Table 6** Loadings, Average Variance Extracted (AVE) and Composite Reliability (CR) Extract

Constructs	Measurement items	Loadings	AVE <sup>a</sup>	CR <sup>b</sup>
Happiness	B1.1	0.827	0.634	0.838
	B1.2	0.769		
	B1.3	0.791		
Family relationship	B2.1	0.839	0.609	0.860
	B2.2	0.884		
	B2.3	0.697		
	B2.4	0.683		
Financial situation	B3.1	0.666	0.556	0.832
	B3.2	0.851		
	B3.3	0.703		
	B3.4	0.750		
Work	B4.1	0.806	0.641	0.877
	B4.2	0.801		
	B4.3	0.783		
	B4.4	0.812		
Community and friends	B5.1	0.638	0.536	0.820
	B5.2	0.716		
	B5.3	0.880		
	B5.4	0.671		
Health	B6.1	0.777	0.590	0.852
	B6.2	0.819		
	B6.3	0.695		
	B6.4	0.778		
Government	B7.1	0.793	0.705	0.878
	B7.2	0.852		
	B7.4	0.873		

Many scholars have given different cut-off values on the factor loadings for items retention, which varies from 0.35 to 0.70 (Hair et al., 1998; Hair et al., 2011). In this study, loadings of 0.50 or more were considered as minimum acceptable value and significant. Table 6 showed that the loadings for all items were ranged between 0.666 and 0.880, which exceeded the cut off value of 0.50. Overall, the loadings were acceptable except B7.3 was deleted because the loadings value was less than 0.50.

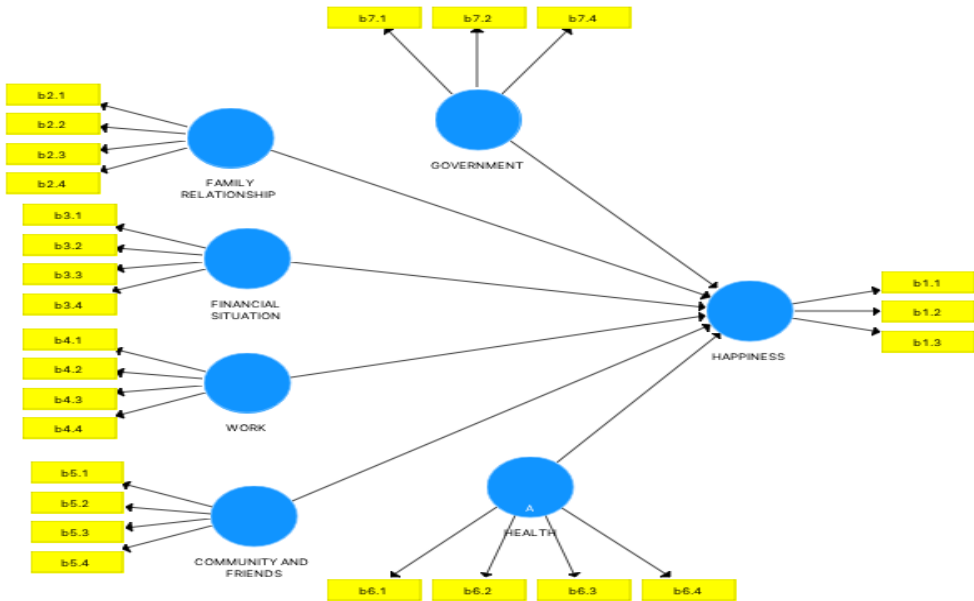
On the other hand, the composite reliability (CR) for all items were ranged between 0.832 and 0.878, which exceeded the recommended value of 0.70 (Hair et al., 2010) while the Cronbach’s alpha ( $\alpha$ ) for all items ranged between 0.714 and 0.814, which means it exceeded the recommended value of 0.70 (Nunnally, 1978).

The findings also showed that all average variance extracted (AVE) were ranged between 0.536 and 0.705, which exceeded the recommended value of 0.50 (Hair et al., 2010; Fornell & Larcker, 1981). Besides that, all the indicators loaded were higher than other latent variables, which means own loading were higher than its loadings on all other latent variables as shown in Table 7.

Moreover, the square root of the AVE exceeded the squared correlations between the latent variable and all other latent variables as shown in Table 7 (Fornell & Larcker, 1981). Overall, it can be concluded that measurement model in this study has showed satisfactory with the evidence of overall reliability, convergent validity and discriminant validity. In addition to that, Table 7 shows the shows the measurement scale of hypothesized relationship among the constructs.

**Table 7** Discriminant Validity of Measurement Model

	Community and friends	Family relationship	Financial situation	Government	Happiness	Health	Work
Community and friends	<b>0.732</b>						
Family relationship	0.231	<b>0.781</b>					
Financial situation	0.191	0.174	<b>0.746</b>				
Government	0.097	0.109	0.063	<b>0.840</b>			
Happiness	0.243	0.358	0.270	0.027	<b>0.796</b>		
Health	0.011	-0.061	0.019	0.219	-0.085	<b>0.768</b>	
Work	0.250	0.336	0.403	0.043	0.325	-0.004	<b>0.801</b>



**Figure 2** The measurement model

### Structural Model Evaluation

With regard to the assessment of the structural model, the path coefficients ( $\beta$ ) are obtained for the structural model relationships, which test the hypothesized relationships among the constructs. The hypotheses of the research model were tested using the bootstrapping procedure with 500 subsamples, which is recommended guidelines from (Chin, 1998). The significance of the path coefficients is based on *t*-value. The Smart PLS 2.0 results for the structural model relationships and the significance of hypotheses testing were shown in Table 8.

**Table 8** The significance testing results of the structural model path coefficients (direct relationship)

	Std. Beta ( $\beta$ )	Std. Error (SE)	<i>t</i> -value <sup>a</sup>	<i>p</i> values	Decision
Family relationship $\geq$ Happiness	0.251	0.057	4.398**	0.000	Accepted
Community and friends $\geq$ Happiness	0.122	0.048	2.551**	0.005	Accepted
Work $\geq$ Happiness	0.153	0.056	2.730**	0.003	Accepted
Financial situation $\geq$ Happiness	0.144	0.052	2.749**	0.003	Accepted
Government $\geq$ Happiness	-0.012	0.063	0.196	0.422	Rejected
Health $\geq$ Happiness	-0.071	0.061	1.154	0.124	Rejected

<sup>a</sup>Notes: *t*-values > 1.65\* (*p* < 0.05); *t*-values > 2.33\*\* (*p* < 0.01)

In this study, there were 6 direct relationships comprises of community and friends on the happiness, family relationship on the happiness, financial situation on the happiness, government on the happiness, health on the happiness and work on the happiness.

Based on Table 8, the relationship between community and friends and happiness was statistically significant at the 5 per cent (one-tailed) and 1 per cent level (one-tailed). It was significant with  $\beta = 0.122$  and  $t = 2.551$  indicating that the community and friends have direct influence on happiness. In other words, a 100% changes in the community and friends will bring 12.2 per cent in happiness. It suggested that we have enough statistical evidence to reject the null hypothesis and come to conclude that community and friends influence the happiness among Sabahans.

Besides, the relationship between family relationship and happiness was statistically significant at the 5 per cent significance level (one-tailed) and 1 per cent significance level (one-tailed). It was significant with  $\beta = 0.251$  and  $t = 4.398$  indicating that the family relationship has direct influence on happiness. In other words, a 100 per cent changes in the community and friends will bring 25.1 per cent in happiness. It suggested that we have enough statistical evidence to reject the null hypothesis and come to conclude that family relationship influences the happiness among Sabahans.

Moreover, the relationship between financial situation and happiness was statistically significant at 5 per cent significance level (one-tailed) and 1 per cent significance level (one-tailed). It was significant with  $\beta = 0.144$  and  $t = 2.749$  indicating that the financial situation has direct influence on happiness. In other words, a 100 per cent changes in the financial situation will bring 14.4 per cent in happiness. It suggested that we have enough statistical evidence to reject the null hypothesis and come to conclude that financial situation influence the happiness among Sabahans.

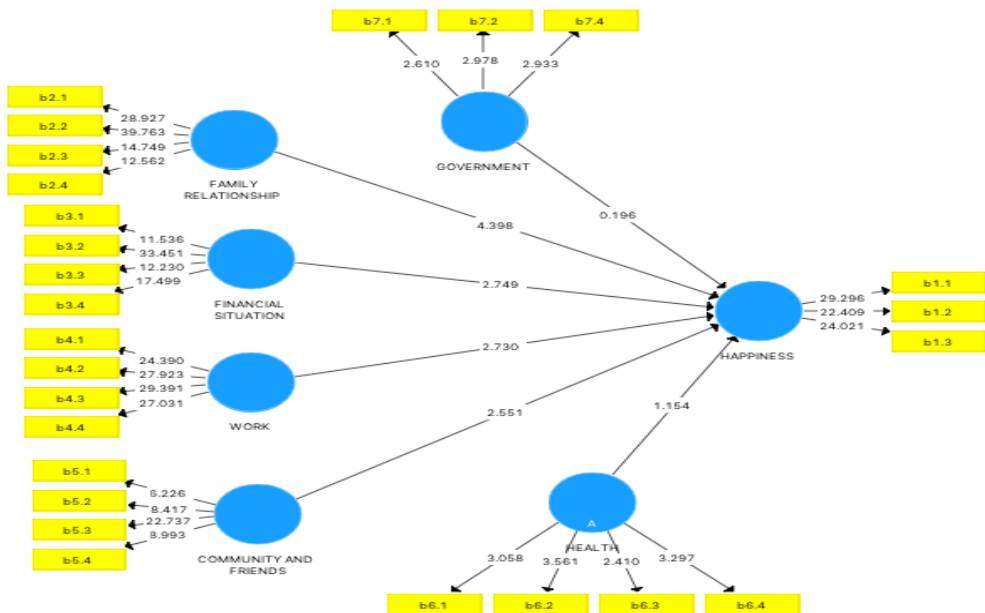
Furthermore, the relationship between work and happiness was statistically significant at 5 per cent significance level (one-tailed) and 1 per cent significance level (one-tailed). It was significant with  $\beta = 0.153$  and  $t = 2.730$  indicating that the work has direct influence on happiness. In other words, a 100 per cent changes in the financial situation will bring 15.3 per cent changes in happiness. It suggested that we have enough statistical evidence to reject the null hypothesis and come to conclude that work influence the happiness among Sabahans.

However, the relationship between government and happiness was not statistically significant at 5 per cent significance level (one-tailed) and 1 per cent significance level (one-tailed). This indicates that government has no direct influence on happiness among Sabahans. In other words, a 100 per cent changes in the government



policies bring zero per cent (0%) changes in happiness, which the value of government does not have the strong influence on happiness among Sabahans. Hence, we need to accept the null hypothesis and come to conclude that government does not influences the happiness among Sabahans.

Whereas, the relationship between health and happiness was not statistically significant at 5 per cent significance level (one-tailed) and 1 per cent significance level (one-tailed) too. It indicates that health has no direct influence on happiness among Sabahans. In other words, a 100 per cent changes in health would bring zero per cent (0%) changes in happiness, which the value of health would not have the strong influence on happiness among Sabahans. Hence, we need to accept the null hypothesis and come to conclude that health does not influences the happiness among Sabahans. Figure 3 shows the hypothesized relationship among the constructs.



**Figure 3** The hypothesized relationship among the constructs (structural scale)

Additionally, the quality of path model can be evaluated by examining the  $Q$ -square ( $Q^2$ ) for predictive relevance of the model (Stone, 1974). The  $Q^2$  values were estimated by the blindfolding procedure and calculated by the cross-validated redundancy approach in order to measure of how well the path model can predict the originally observed values (Hair et al., 2014). If the  $Q^2$  values larger than zero (0), it suggested that the model has predictive relevance whereas, if the  $Q^2$  values less than zero (0) suggested that the model lacks of predictive relevance (Hair et al., 2014; Fornell & Cha, 1994). As a relative measure of predictive relevance, values of

0.02, 0.15 and 0.35 respectively indicated that an exogenous constructs have a small, medium and large predictive relevance for the selected endogenous construct (Hair et al., 2014).

**Table 9** The coefficient of the determination ( $R^2$ )

Total	Original sample (O)
Happiness	0.214

With regards to the quality of the structural model evaluation, the study was examined the coefficient of determination ( $R^2$ ). The coefficient ( $R^2$ ) represented the exogenous latent variables' combined effects on the endogenous latent variable. It means that the  $R^2$  measures the amount of variance in the endogenous latent variable explained by all of the exogenous latent variables in the model to determine how well the model fits the hypothesized relationships (Hair et al., 2014).

Based on the Table 9, the findings suggested that the  $R^2$  value for happiness was 0.214 indicating 21.4% of the variance in happiness was significantly explained by all of the exogenous latent variables such as family relationship, financial situation, work, community and friends, health and government. Hence, this research model can be described as substantial in comparison with the baseline values (0.26 = substantial; 0.13 = moderate; 0.02 = weak) (Cohen, 1988).

**Table 10** The effect size of the latent variables

Exogenous variables	$f$ squared	Effect size
Community and friends	0.017	Small
Family relationship	0.068	Small
Financial situation	0.022	Small
Government	0	None
Health	0.006	Small
Work	0.022	Small

Based on Table 10, the effect size for the variables on financial practices were as follows: family relationship (0.068), financial situation (0.022), work (0.022), community and friends (0.017), health (0.006) and government (0). Therefore, the effect size of these six exogenous variables on happiness can be considered as small (family relationship), small (financial situation), small (work), small (community and friends), small (health) and none (government) respectively based on the guidelines by Cohen (1988).

**Table 11** Construct cross validated redundancy

Total	SSO	SSE	$Q^2 (= 1 - SSE/SSO)$
Happiness	1,161	1025.66	0.117

Based on Table 11, the findings suggested that the  $Q^2$  value for happiness was 0.117 indicating that the model has predictive relevance for this construct. Meaning to say, the exogenous constructs have predictive relevance for the endogenous construct under consideration. As a relative measure of predictive relevance, the exogenous constructs have a large predictive relevance for happiness.

**5.0 Discussion and Conclusion**

Happiness was highly valued in today’s society. According to Bentham (1789), human not only wanted happiness in their own life but hope to spread the love around the world. They care for the happiness of other people and the government should promote the happiness of the society. Meaning to say, public awareness on what makes them happy can be strengthen and aligned with policies to promote happiness. He also stated that happiness consists of enjoyment of pleasures and security from pains. In general, happiness was understood as the degree of human evaluates their satisfaction with life or quality of life.

The results have been encouraging because the study found that family relationship has the greatest positive impact on happiness in Sabah. It showed that Sabah citizen were found to be encountering their happiest moment with family relationship, followed by financial situation, community and friends, health, work and government. It indicated that Sabah citizens maintained strong ties and commitment in spending time with family. However, it could also explain why unemployment in Sabah was high compared to other states in peninsular Malaysia, because most of the Sabahans tend to attach themselves to their family, hence they refuse to work at outland. They would stay with their family which provide them comfort zone and pay less attention on other aspects such as health, work, friends and community and government which are the very important factors to build up a happy nation.

Furthermore, attachment to family would also cause reduction in the mobility of labour. Hence, they will not go to foreign lands which able to improve their prospects and raise themselves economically sound. In the end, they cannot communicate with outside world and cannot feel the sense of belonging to the society which could contribute greater happiness.

The study also found that happiness of Sabahans was highly contributed by financial situation compared to community and friends and health. It indicated that Sabahans continually travel on the high way to wealth in the chase of happiness. Eventually, it slowly transformed Sabah into materialistic societies that were associated with the negative well-being such as anger, hatred, depression, anxiety and broken relationships. As a result, Sabahans tend to become self-interests and lack compassion. Galbraith (1998) claimed that increasing the wealth of the society did not necessary implied people were happier. He stated that materialisms bred discontentment. As mentioned repeatedly, one of objectives of this research is to bring happiness and well-being into the public awareness. Sabah government should aware holding wealth or materials only contributed to temporary happiness because external things were actually impermanent and cannot fulfil human's unlimited desires. Human should focus less on possessions and put more focus on health, community and friends. As discussed by Easterlin (2004), it proved that social comparison and adaption affect utility less in the non-monetary than monetary domain. Individuals tend to allocate an excessive amount of time to earn money and overpass non-monetary domain such as health and family life causes unhappiness. Also, he suggested that the policies need to be revised to produce a better-informed individual preference, and thus increase happiness.

Similarly, Busch (2008) stated that consumerism has contributed to a development of status consumption and want-creation by expanding material standard of living, but both have increased the consumption without contributing to happiness. He suggested that Smith's ethics should be adopted by modern societies although it may decrease overall consumption but will lead to a more satisfied life. Ending materialism does not mean to give up all the possessions but develop a healthier and balancing life which contributed to happiness.

Health can be explained as a condition of good physical and mental health in which human can live their life healthily and able to cope with the normal stresses of life. In an opposite dimension view, poor physical and mental health seem to have greatest impact on happiness also. However, there were many reasons that cause someone to be vulnerable while experiencing a period of poor physical and mental health because everyone has their own life journey and subject to illness. Hence, to maintain a good state of health, this study suggests people to maintain a healthy lifestyle and it believed to have great effects in the long term. According to Jeff Olson (2003), minor habit changes and daily choices could lead to the success and happiness. He

suggested the three main ideas to a healthy life are by consuming rich nutrition food, exercise regularly, and quality sleep. Easterlin (2004) also suggested that most people who devote most of their time making money should devote less time in making money and focus on more to non-pecuniary goals.

To live a happy life, people build a good relationship or construct a relationship system with community and friends. Constructing and maintaining good relationship with people are an important part of staying happy in live. Humans are the architect and creator of their own life. By building and maintaining good relationship with virtuous and supportive people especially wise one, people will be more confident to face difficulties and the happiness and well-being will be magnified when being shared. Eventually, people can create a better society with full of love, kindness and trust. Many studies found that economic development greatly determines the circumstances of the society or vice versa. Marshall (1890) defined that economics is a study of man in the ordinary business of life. Thus, it explained economics studies on both individual and social actions to promote economic welfare of people. Hence, people were advised to increase social contact and associates with more wise persons around the world.

Last but not least, the findings of the study also showed that government and health contributed the least on happiness and well-being of Sabahans. Firstly, it indicated that Sabahans' were too busy and lack of time to do what they desired as they need to sacrifice most of their time to work and making money. Poor work-life balances causing imbalances in lives and stressed. In the end, it causes a lot of negative impacts such as mental health problems, relationships problem and so on. People should organize their time more effectively and achieve a happy equilibrium between life and work. Secondly, the results also indicated the existence of dissatisfaction trend towards governance of Sabah's authority. Government should implement policy interventions that improve different aspect of people's happiness such as health, financial situation, works, social's relationship and family relationship. Policy interventions may not directly affect happiness, but these interventions may still affect happiness through trust. Early education programmes should be implemented in school to educate children the right way of livings and not just aim high score in examination. Besides that, government could improve the environment quality, promoting social networks and encouraging people to involve in social activities. In conclusion, government should revise the current legislation and law to align with the policies that could promote social interaction, equality and antidiscrimination. Eventually, the happiness of the nation could increase.

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